



COMMONWEALTH of VIRGINIA
DEPARTMENT OF LABOR AND INDUSTRY

C. Ray Davenport
COMMISSIONER

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DRAFT AGENDA

SAFETY AND HEALTH CODES BOARD MEETING

Tuesday June 29, 2021 Emergency Electronic meeting

This date is tentative and subject to change.

9:15 a.m.

******Refer to the Third and Fourth Page of the Agenda for Instructions on Registering to Make Public Comment and Virtual Meeting Access Information******

1. **Call to Order**
2. **Approval of Agenda**
3. **Opportunity for the Public to Address the Board on the issues pending before the Board today, as well as any other topics that may be of concern to the Board and within its scope of authority.**

This will be the only opportunity for public comment at this meeting. Remarks will be limited to 5 minutes in consideration of others wishing to address the Board.

NOTE: Any proposed changes to or proposed revocation of the Final Permanent Standard (FPS), for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19 16VAC25-220 voted upon by the Safety and Health Codes Board at its upcoming meeting will go through a similar notice and comment process to that used for adoption of the FPS. This includes a written comment period for the public and stakeholders to provide written feedback to the Board about the proposed changes or proposed revocation, at least one public hearing, and development of an Economic Impact Analysis (EIA). The Board will then hold a second meeting and vote to accept or reject the proposed changes or proposed revocation as final. During both the proposed and final change stages, the Governor will have the opportunity to review the changes per 16VAC25-220-20.A.

4. **New Business**
 - a) Consider for adoption OSHA's Occupational Exposure to COVID-19, Emergency Temporary Standard (COVID-19 ETS), 1910.502, et. seq.

Presenter – *Jay Withrow*

- b) Proposed Amendments to the Final Permanent Standard (FPS), for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, 16VAC25-22.

c) *(If requested by the Board)* Closed Meeting for the Purpose of Consultation with Legal Counsel Regarding Specific Legal Matters Pursuant to § 2.2-3711.A.8 of the Code of Virginia

5. **Items of Interest from the Department of Labor and Industry**
6. **Items of Interest from Members of the Board**
7. **Meeting Adjournment**

PUBLIC PARTICIPATION

Members of the public may listen to the meeting via the Cisco WebEx platform by using the weblink, access code, and password below, or audio conference only by using the telephone numbers and access code below.

Participation capacity is limited and is on a first come, first served basis due to the capacity of CISCO WebEx technology.

Event address for attendee:

<https://covaconf.webex.com/covaconf/onstage/g.php?MTID=e14676da4c9945614539503cf88db9bee>

Event number (access code): 161 859 8342

Event password: DOLI2021

To join the audio conference only:

Call this number: 1-517-466-2023 or **US Toll Free** 1-866-692-4530

Enter this Access Code: 161 859 8342

If you wish to make an Oral Public Comment during the “Opportunity for the Public to Address the Board” period of this meeting, you must follow the instructions below:

- Oral public comment will be received from those persons who have submitted an email to **Princy.Doss@doli.virginia.gov** no later than **12:00 PM (NOON)** on **June 28, 2021** indicating that they wish to offer oral comment. Comments may be offered by these individuals when their name is announced by Ms. Doss. Oral comments will be **restricted to 5 minutes** each.
- When logging onto WebEx each person **must provide their full name** during the registration process upon entering the meeting. Do not use the default username as it is imperative that the meeting organizer be able to determine who is in attendance based on their registration name. Failure to follow these specific registration instructions will restrict your ability to participate with oral remarks.
- If you wish to make an oral comment and will be utilizing the “audio conference only” option to witness the hearing, **you must provide the phone number you will be calling in from in your email to Ms. Doss** so that the administrator will know whom to unmute at the appropriate time.
- Other important information:
 - All parties will be muted until Ms. Doss announces the name of the person who is next to provide an oral comment.

- All public participation connections will be muted following the public comment periods.
- Please login from a location without background noise.
- Individuals participating in the Virtual meeting on June 29, 2021 are encouraged to submit a written version of any comments by email to **Princy.Doss@doli.virginia.gov** no later than **5:00 PM on June 30, 2021**.

Should any interruption of the broadcast of this meeting occur, please call 804-371-2318 or email **Brian.Jaffe@doli.virginia.gov** to notify the agency. Any interruption in the broadcast of the meeting shall result in the suspension of action at the meeting until repairs are made and public access is restored.

FOIA Council Electronic Meetings Public Comment form for submitting feedback on this electronic meeting may be accessed at:

<http://foiacouncil.dls.virginia.gov/sample%20letters/welcome.htm>



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DRAFT: JUNE 25, 2021

Virginia Safety and Health Codes Board

BRIEFING PACKAGE

For June 29, 2021

Occupational Exposure to COVID-19; Emergency Temporary Standard

I. Action Requested

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board (SHCB) consider for adoption federal OSHA's Occupational Exposure to COVID-19; Emergency Temporary Standard ("COVID-19 ETS"), 1910.502, et seq., as published in 86 FR 32376 on June 21, 2021, as authorized by Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c).

This briefing package provides an overview of the preamble to Federal OSHA's COVID-19 ETS. A link to the entire preamble can be found here:

<https://www.govinfo.gov/content/pkg/FR-2021-06-21/pdf/2021-12428.pdf>

The proposed effective date is August 2, 2021, and the COVID-19 ETS, and Virginia standard will remain in effect for the duration of the Federal emergency temporary standard, which may not exceed six (6) months.

For reasons explained further below, the Department recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-

19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

The Department also recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

The Department further recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

II. Summary of the Emergency Temporary Standard

Federal OSHA is issuing an emergency temporary standard (ETS) to protect healthcare and healthcare support service workers from occupational exposure to COVID-19 in settings where people with COVID-19 are reasonably expected to be present. During the period of the emergency standard, covered healthcare employers must develop and implement a COVID-19 plan to identify and control COVID-19 hazards in the workplace.

Covered employers must also implement other requirements to reduce transmission of COVID-19 in their workplaces, related to the following:

- patient screening and management;
- Standard and Transmission-Based Precautions;
- personal protective equipment (PPE), including facemasks or respirators;
- controls for aerosol-generating procedures;
- physical distancing of at least six feet, when feasible;
- physical barriers;
- cleaning and disinfection; ventilation;
- health screening and medical management;
- training;
- anti-retaliation;
- recordkeeping; and
- reporting.

The standard encourages vaccination by requiring employers to provide reasonable time and paid leave for employee vaccinations and any side effects. It also encourages use of respirators, where respirators are used in lieu of required facemasks, by including a “mini respiratory protection program” that applies to such use.

Finally, the standard exempts from coverage certain workplaces where all employees are fully vaccinated and individuals with possible COVID-19 are prohibited from entry; and it exempts from some of the requirements of the standard fully vaccinated employees in well-defined areas where there is no reasonable expectation that individuals with COVID-19 will be present.

III. **History of COVID-19**¹

The global pandemic of respiratory disease (coronavirus disease 2019 or “COVID-19”) caused by a novel coronavirus (SARS-CoV-2) has been taking an enormous toll on individuals, workplaces, and governments around the world since early 2020.

According to the World Health Organization (WHO), as of May 24, 2021, there had been 166,860,081 confirmed cases of COVID-19 globally, resulting in more than 3,459,996 deaths.² In the United States as of the same date, the CDC reported over 32,947,548 cases in the United States and over 587,342 deaths due to the disease.³

¹ For an in depth analysis of the history of COVID-19, see pgs. 9-13 of the preamble to the COVID-19 ETS.

² World Health Organization (WHO). (2021, May 24). WHO Coronavirus Disease (COVID-19) Dashboard. <https://covid19.who.int/table>. (WHO, May 24, 2021).

³ Centers for Disease Control and Prevention (CDC). (2021a, May 24). COVID data tracker. Trends in number of COVID-19 cases and deaths in the US reported to CDC, by state/territory: Trends in Total COVID-19 Deaths in the United States Reported to CDC. https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases. (CDC, May 24, 2021a) and Centers for Disease Control and Prevention (CDC). (2021c, May 24). COVID data tracker. Trends in number of COVID-19 cases and deaths in the US reported to CDC, by state/territory: Trends in Total

Among healthcare workers specifically, as of May 24, 2021, 491,816 healthcare workers in the United States had contracted COVID-19, and at least 1,611 of those workers had died; both of those figures are likely an undercount.⁴

Despite the relatively rapid distribution of vaccines in many areas of the U.S., a substantial proportion of the working age population remains unvaccinated and susceptible to COVID-19 infection, including approximately a quarter of all healthcare and healthcare support workers.⁵

And, as discussed in more detail in the section entitled “Grave Danger” (Section V.A. of this briefing package), because workers in healthcare settings where COVID-19 patients are treated continue to have regular exposure to SARS-CoV-2 and any variants that develop, they remain at an elevated risk of contracting COVID-19 regardless of vaccination status.

Therefore, federal OSHA has determined that a grave danger to healthcare and healthcare support workers remains, despite the fully-vaccinated status of some workers, and that an ETS is necessary to address this danger (see “Grave Danger” and “Need for the ETS” (Sections V.A. and V.B. of this briefing package)).

IV. Legal Issues⁶

A. The OSH Act states that the Secretary “shall” issue an emergency temporary standard (ETS) if he finds that the ETS is necessary to address a grave danger to workers. See 29 U.S.C. 655(c). In particular, the statute reads:

The Secretary shall provide, without regard to the requirements of chapter 5, title 5, United States Code, for an emergency temporary standard to take immediate effect upon publication in the Federal Register if he determines –

(A) that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and

COVID-19 Cases in the United States Reported to CDC. https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases. (CDC, May 24, 2021c).

⁴ Centers for Disease Control and Prevention (CDC). (2021b, May 24). Cases & Deaths among Healthcare Personnel. <https://covid.cdc.gov/covid-data-tracker/#health-carepersonnel>. (CDC, May 24, 2021b)

⁵ King, WC, et al. (2021, April 24). COVID-19 vaccine hesitancy January-March 2021 among 18-64 year old US adults by employment and occupation. medRxiv;

<https://www.medrxiv.org/content/10.1101/2021.04.20.21255821v3>. (King et al., April 24, 2021).

⁶ For an in depth analysis of legal pertinent authority, see pgs 13-19 of the preamble to the COVID-19 ETS.

(B) that such emergency standard is necessary to protect employees from such danger. 29 U.S.C. 655(c)(1).

The Secretary must issue an ETS in situations where employees are exposed to a “grave danger” and immediate action is necessary to protect those employees from such danger. 29 U.S.C. 655(c)(1); *Pub. Citizen Health Research Grp. v. Auchter*, 702 F.2d 1150, 1156 (D.C. Cir. 1983). The determination of what exact level of risk constitutes a “grave danger” is a “policy consideration that belongs, in the first instance, to the Agency.” *Asbestos Info. Ass’n/N. Am. v. OSHA*, 727 F.2d 415, 425 (5th Cir. 1984). (accepting OSHA’s determination that eighty lives at risk over six months was a grave danger); *Indus. Union Dep’t, AFL-CIO v. Am. Petroleum Inst.*, 448 U.S. 607, 655 n.62 (1980).

However, a “grave danger” represents a risk greater than the “significant risk” that federal OSHA must show in order to promulgate a permanent standard under section 6(b) of the OSH Act, 29 U.S.C. 655(b). *Int’l Union, United Auto., Aerospace, & Agr. Implement Workers of Am., UAW v. Donovan*, 590 F. Supp. 747, 755-56 (D.D.C. 1984), adopted, 756 F.2d 162 (D.C. Cir. 1985); see also *Indus. Union Dep’t, AFL-CIO*, 448 U.S. at 640 n.45 (noting the distinction between the standard for risk findings in permanent standards and ETSS).

Although Congress waived the ordinary rulemaking procedures in the interest of “permitting rapid action to meet emergencies,” section 6(e) of the OSH Act, 29 U.S.C. 655(e), requires federal OSHA to include a statement of reasons for its action when it issues any standard. *Dry Color Mfrs. Ass’n, Inc. v. Department of Labor*, 486 F.2d 98, 105-106 (3d Cir. 1973) (finding OSHA’s statement of reasons inadequate). By requiring the agency to articulate its reasons for issuing an ETS, the requirement acts as “an essential safeguard to emergency temporary standard-setting.” *Id. at 106*.

ETSS are, by design, temporary in nature. Under section 6(c)(3), an ETS serves as a proposal for a permanent standard in accordance with section 6(b) of the OSH Act (permanent standards), and the Act calls for the permanent standard to be finalized within six months after publication of the ETS. 29 U.S.C. 655(c)(3); see *Fla. Peach Growers Ass’n, Inc. v. U. S. Dep’t of Labor*, 489 F.2d 120, 124 (5th Cir. 1974).

The ETS is effective “until superseded by a standard promulgated in accordance with” section 6(c)(3). 29 U.S.C. 655(c)(2). It is crucial to note that the language of section 6(c)(1) is not discretionary: the Secretary “shall” provide for an ETS when OSHA makes the prerequisite findings of grave danger and necessity. *Pub. Citizen Health Research Grp. v. Auchter*, 702 F.2d 1150, 1156 (D.C. Cir. 1983) (noting the mandatory language of section 6(c)).

B. The Department of Labor and Industry’s Virginia Occupational Safety and Health (VOSH) program is charged with ensuring the protection of Virginia employees and employers from occupational safety and health hazards under Va. Code §40.1-1. VOSH standards and regulations are adopted by the Virginia Safety and Health Codes Board (“Board”) in accordance with Va. Code §40.1-22(5) and -22(6a).

As a state plan for occupational safety and health under the OSH Act of 1970, Virginia is required to maintain occupational safety and health standards that are “at least as effective as” that of OSHA. 29 U.S.C. 667(c)(2).⁷

On January 21, 2021, President Biden issued an Executive Order⁸ on Protecting Worker Health and Safety which directed OSHA, among other things, to:

Sec. 2. Protecting Workers from COVID-19 Under the Occupational Safety and Health Act. The Secretary of Labor, acting through the Assistant Secretary of Labor for Occupational Safety and Health, in furtherance of the policy described in section 1 of this order and consistent with applicable law, shall:

....

(b) consider whether any emergency temporary standards on COVID-19, including with respect to masks in the workplace, are necessary, and if such standards are determined to be necessary, issue them by March 15, 2021:

OSHA submitted a proposed national Emergency Temporary Standard (OSHA’s ETS) for COVID-19 to the Office of Information and Regulatory Affairs (OIRA), Office of Management and Budget (OMB), on April 26, 2021.

On June 10, 2021, OSHA announced that it was issuing COVID-19 ETS and posted it, along with a preamble, on its website.⁹ The COVID-19 ETS becomes effective immediately upon publication in the Federal Register.

C. Code of Federal Regulations (CFR) Parts 1953(b)(1) and (b)(2) addresses state plan adoption of federal OSHA emergency temporary standards:

1953.5(b). Emergency temporary standards.

1953.5(b)(1). Immediately upon publication of an emergency temporary standard in the Federal Register, OSHA shall advise the States of the standard and that a Federal program change supplement shall be required. This

⁷ <https://www.govinfo.gov/content/pkg/USCODE-2011-title29/html/USCODE-2011-title29-chap15-sec667.htm>

⁸ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/21/executive-order-protecting-worker-health-and-safety/>

⁹ <https://www.osha.gov/coronavirus/ets>

notification must also provide that **the State has 30 days after the date of promulgation of the Federal standard to adopt a State emergency temporary standard if the State plan covers that issue. The State may demonstrate that promulgation of an emergency temporary standard is not necessary because the State standard is already the same as or at least as effective as the Federal standard change. The State standard must remain in effect for the duration of the Federal emergency temporary standard which may not exceed six (6) months.**

1953.5(b)(2). Within 15 days after receipt of the notice of a Federal emergency temporary standard, the State shall advise OSHA of the action it will take. State standards shall be submitted in accordance with the applicable procedures in § 1953.4(b) -- Federal Program Changes, except that the required documentation or plan supplement must be submitted within 5 days of State promulgation. (Emphasis added).

C. The COVID-19 ETS is being adopted pursuant to Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c):

§ 2.2-4006. Exemptions from requirements of this article.

A. The following agency actions otherwise subject to this chapter and § 2.2-4103 of the Virginia Register Act shall be exempted from the operation of this article:

....

4. Regulations that are:

....

c. Necessary to meet the requirements of federal law or regulations, provided such regulations do not differ materially from those required by federal law or regulation, and the Registrar has so determined in writing. Notice of the proposed adoption of these regulations and the Registrar's determination shall be published in the Virginia Register not less than 30 days prior to the effective date of the regulation. (Emphasis added).

D. 16VAC25-220, Final Permanent Standard (FPS) for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50,¹⁰ currently applies to healthcare and healthcare support service workers and their employers where there is the potential for occupational exposure to the SARS-CoV-2 virus and COVID-19 disease.

¹⁰ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/Final-Standard-for-Infectious-Disease-Prevention-of-the-Virus-That-Causes-COVID-19-16-VAC25-220-1.27.2021.pdf>

The Department has conducted an “at least as effective as” (ALAEA) review and comparison of the COVID-19 ETS and the FPS and determined that in certain limited respects, the FPS does not provide protections to healthcare and healthcare support service workers in a manner that would be ALAEA the COVID-19 ETS. See “Side by Side Comparison of OSHA ETS to FPS,” DRAFT 6.21.2021, provided with this briefing package.

Therefore, the Department is recommending the adoption of the COVID-19 ETS in Virginia.

However, there is a long history of legal challenges in court to OSHA emergency temporary standards. “Six of the nine emergency standards that were issued [by OSHA] also were challenged. Of those six, only one was allowed to go into effect.”¹¹

Although the Department is proposing that the COVID-19 ETS be adopted as a federal identical standard as authorized by Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c), the Department also agrees with federal OSHA’s findings that the SARS-CoV-2 virus (including its mutations/variations) and COVID-19 disease continue to present a grave danger to healthcare and healthcare support service workers (see discussion of “grave danger” below).

If OSHA’s COVID-19 ETS is challenged in court and becomes the subject of a federal court stay, or should OSHA issue an administrative stay, the legal basis for adopting the COVID-19 ETS as “necessary to meet the requirements of federal law or regulations” under Va. Code § 2.2-4006.A.4(c) would no longer be valid.

In addition, the COVID-19 ETS could be challenged in a Virginia court of law and be similarly stayed, or could lapse for any number of other reasons, any of which could result in healthcare and healthcare support service workers losing workplace safety and health protections provided not only by the COVID ETS, but also the FPS.

Accordingly, to avoid any potential lapse in workplace protections for healthcare and healthcare support service workers, the Department recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia’s 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

¹¹ <https://news.bloomberglaw.com/daily-labor-report/analysis-osh-emergency-covid-rule-imminent-but-vulnerable>

The Department also recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

The Department further recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-9, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

V. Rationale for the COVID-19 ETS

A. Grave Danger

On January 31, 2020, the Secretary of Health and Human Services (HHS) declared COVID-19 to be a public health emergency in the U.S. under section 319 of the Public Health Service Act. The World Health Organization declared COVID-19 to be a global health emergency on the same day. President Donald Trump declared the COVID-19 outbreak to be a national emergency on March 13, 2020.¹²

¹² The White House. (2020, March 13). Proclamation on declaring a national emergency concerning the novel coronavirus disease (COVID-19) outbreak. <https://web.archive.org/web/20200313234554/https://www.whitehouse.gov/presidentialactions/proclamation-declaring-national-emergency-concerning-novel-coronavirusdisease-covid-19-outbreak/>. (The White House, March 13, 2020).

HHS renewed its declaration of COVID-19 as a public health emergency effective April 21, 2021.¹³ Consistent with these declarations, and in carrying out its legal duties under the OSH Act, federal OSHA has determined that healthcare employees face a grave danger from the new hazard of workplace exposures to SARS-CoV-2 except under a limited number of situations.

The virus is both a physically harmful agent and a new hazard, and it can cause severe illness, persistent health effects, and death (morbidity and mortality, respectively) from the subsequent development of the disease, COVID-19. Federal OSHA bases its grave danger determination on evidence demonstrating the lethality of the disease, the serious physical and psychiatric health effects of COVID-19 morbidity (in mild-to-moderate as well as in severe cases), and the transmissibility of the disease in healthcare settings where people with COVID-19 are reasonably expected to be present.

The protections of the COVID-19 ETS—which will apply, with some exceptions, to healthcare settings where people may share space with COVID-19 patients or interact with others who do—are designed to protect employees from infection with SARS-CoV-2 and from the dire, sometimes fatal, consequences of such infection.

The fact that COVID-19 is not a uniquely work-related hazard does not change the determination that it is a grave danger to which employees are exposed, nor does it excuse employers from their duty to protect employees from the occupational transmission of SARS-CoV-2. The OSH Act is intended to “assure so far as possible every working man and woman in the Nation safe and healthful working conditions,” 29 U.S.C. 651(b), and there is nothing in the Act to suggest that its protections do not extend to hazards which might occur outside of the workplace as well as within.

Moreover, employees have more freedom to control their environment outside of work, and to make decisions about their behavior and their contact with others to better minimize their risk of exposure. However, during the workday, while under the control of their employer, healthcare employees providing care directly to known or suspected COVID-19 patients are required to have close contact with infected individuals, and other employees in those settings also work in an environment in which they have little control over their ability to limit contact with individuals who may be infected with COVID-19 even when not engaged in direct patient care.

¹³ United States Department of Health and Human Services (US DHHS). (2021, April 15). Renewal of Determination That A Public Health Emergency Exists. <https://www.phe.gov/emergency/news/healthactions/phe/Pages/COVID15April2021.aspx>. (HHS, April 15, 2021).

Accordingly, even though SARS-CoV-2 is a hazard to which employees are exposed both inside and outside the workplace, healthcare employees in workplaces where individuals with suspected or confirmed COVID-19 receive care have limited ability to avoid exposure resulting from a work setting where those individuals are present. Federal OSHA has a mandate to protect employees from hazards they are exposed to at work, even if they may be exposed to similar hazards before and after work.

Federal OSHA's previous ETSs addressed physically harmful agents that had been familiar to the agency for many years prior to the ETS. In most cases, the ETSs were issued in response to new information about substances that had been used in workplaces for decades (e.g., Vinyl Chloride (39 FR 12342 (April 5, 1974)); Benzene (42 FR 22516 (May 3, 1977)); 1,2-Dibromo-3-chloropropane (42 FR 45536 (Sept. 9, 1977))).

Unlike any of the hazards addressed in previous ETSs, SARS-CoV-2 was not known to exist in the United States until January, 2020. Since then, more than 3 million people have died worldwide and nearly 600,000 people have died in the U.S. alone.¹⁴

This monumental tragedy is largely handled by healthcare employees who provide care for those who are ill and dying, leading to introduction of the virus not only in their daily lives in the community but also in their workplace, and more than a thousand healthcare workers have died from COVID-19. Clearly, exposure to SARS-CoV-2 is a new hazard that presents a grave danger to workers in the U.S.

The section of the preamble of the COVID-19 ETS that deals with the discussion of what constitutes a "grave danger" includes a lengthy discussion on the nature of COVID-19 and its adverse effects to the general population. See "Nature of the Disease" on pages 30-79 of the preamble to the COVID-19 ETS. This Board already considered this information when adopting Virginia's ETS and the Final Permanent Standard ("FPS") so this briefing package does not include this information.

The following sections focus on vaccines which were not available at the time of the adoption of the Virginia ETS and FPS as well as the Impact of COVID-19 on Healthcare workers specifically.

1. The Effect on Vaccines on the Grave Danger Presented by SARS-CoV-2

¹⁴ World Health Organization (WHO). (2021, May 24). WHO Coronavirus Disease (COVID-19) Dashboard. <https://covid19.who.int/table>. (WHO, May 24, 2021).

The development of safe and highly effective vaccines and the on-going nationwide distribution of these vaccines are encouraging milestones in the nation's response to COVID-19. Although there was initial uncertainty attached to the performance of authorized vaccines outside of clinical trials, vaccines have been in use for several months and they have proven effective in reducing transmission as well as the severity of COVID-19 cases.

Data now available clearly establish that fully-vaccinated persons (defined as two weeks after the second dose of the mRNA vaccines or two weeks after the single dose vaccine) have a greatly reduced risk compared to unvaccinated individuals. This includes reductions in deaths, severe infections requiring hospitalization, and less severe symptomatic infections.

However, in healthcare settings where workers are vaccinated, as discussed below, the best available evidence establishes a grave danger *still* exists, given the greater potential for breakthrough cases in light of the greater frequency of exposure to suspected and confirmed COVID-19 patients in those settings.¹⁵

In addition, the best available evidence shows that vaccination has not eliminated the grave danger in mixed healthcare workplaces (i.e., those where some workers are fully vaccinated and some are unvaccinated) or in those healthcare workplaces where no one has yet been vaccinated.

The Effectiveness of Authorized Vaccines

There are currently three vaccines for the prevention of COVID-19 that have received EUAs from the FDA, allowing for their distribution in the U.S.: the PfizerBioNTech COVID-19 vaccine, the Moderna COVID-19 vaccine, and the Janssen COVID-19 vaccine.

Pfizer-BioNTech and Moderna are mRNA vaccines that require two doses administered three weeks and one month apart, respectively. Janssen is a viral vector vaccine that requires a single dose.¹⁶ The vaccines were shown to greatly exceed minimum efficacy standards in preventing COVID-19 in clinical trial participants.¹⁷

¹⁵ Birhane, M et al. (2021, May 28) COVID-19 Vaccine Breakthrough Infections Reported to CDC — United States, January 1–April 30, 2021. *MMWR* 70: 792–793. <http://dx.doi.org/10.15585/mmwr.mm7021e3>. (Birhane et al., May 28, 2021).

¹⁶ Centers for Disease Control and Prevention (CDC). (2021, April 2). Science brief: background rationale and evidence for public health recommendations for fully vaccinated people. <https://www.cdc.gov/coronavirus/2019-ncov/science/sciencebriefs/fully-vaccinated-people.html>. (CDC, April 2, 2021).

¹⁷ Food and Drug Administration (FDA). (2021, February 26). Janssen COVID-19 vaccine. Vaccines and Related Biological Products Advisory Committee February 26, 2021 Meeting Briefing Document. <https://www.fda.gov/media/146219/download>. (FDA, February 26, 2021).

Data from clinical trials for all three vaccines and observational studies for the two mRNA vaccines clearly establish that fully vaccinated persons have a greatly reduced risk of SARS-CoV-2 infection compared to unvaccinated individuals. This includes severe infections requiring hospitalization and those resulting in death, as well as less severe symptomatic infections.¹⁸

On the other hand, healthcare workers treating suspected and confirmed COVID-19 patients are expected to have higher exposures to the SARS-CoV-2 virus than others in the workforce, because such work involves repeated instances of close contact with infected patients.¹⁹ Exposure can be even higher in aerosol generating activities. Indeed, one study reported higher infection rates among vaccinated healthcare workers during a regional COVID-19 surge.²⁰

Thus, the CDC has not relaxed infection control practices or PPE intended to protect healthcare workers, including respirator use.²¹ NIOSH has stated that the “available evidence shows that healthcare workers are continuing to become infected with SARS-CoV-2 . . . including both vaccinated and unvaccinated workers, and the conditions for the transmission of the virus exist at healthcare workplaces.”²²

Grave Danger Exists in Healthcare Workplaces Where Unvaccinated Workers Are Present.

The evidence shows that the advent of vaccines does not eliminate the grave danger from exposure to SARS-CoV-2 in healthcare workplaces where less than 100% of the workforce is fully vaccinated. Unvaccinated workers can transmit the virus to each other and can become infected as a result of exposure to persons with COVID-19 who enter the healthcare facility.

¹⁸ For more on the efficacy of the vaccines, see pages 81-87 of the preamble to the COVID-19 ETS.

¹⁹ Howard, J. (2021, May 22). “Response to request for an assessment by the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, of the current hazards facing healthcare workers from Coronavirus Disease-2019 (COVID-19).” (Howard, May 22, 2021).

²⁰ Keehner et al. (2021, May 6). SARS-CoV-2 infection after vaccination in health care workers in California. *New England Journal of Medicine* 384(18). (Keehner et al., May 6, 2021).

²¹ Centers for Disease Control and Prevention (CDC). (2021a, April 27). Updated healthcare infection prevention and control recommendation in response to COVID-19 vaccination. [https://www.cdc.gov/coronavirus/2019-ncov/healthcare workers/infection-control-aftervaccination.html](https://www.cdc.gov/coronavirus/2019-ncov/healthcare%20workers/infection-control-aftervaccination.html). (CDC, April 27, 2021a).

²² Howard, J. (2021, May 22). “Response to request for an assessment by the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, of the current hazards facing healthcare workers from Coronavirus Disease-2019 (COVID-19).” (Howard, May 22, 2021).

An outbreak of COVID-19 due to an unvaccinated, symptomatic healthcare workers was recently reported in a skilled nursing facility in which 90.4% of residents had been vaccinated.²³ The outbreak, due to the R.1 variant, caused attack rates that were three to four times higher in unvaccinated residents and healthcare workers as among those who were vaccinated. Additionally, unvaccinated persons were significantly more likely to experience symptoms or require hospitalization. Therefore, unvaccinated employees at these workplaces remain at grave danger of infection, along with the serious health consequences of COVID-19.

Even in the healthcare industry, where distribution has enabled entire worker populations to be completely vaccinated by now, some workers exhibited reluctance to getting vaccinated. On January 4, 2021, a study of 1,398 U.S. emergency department health care personnel found that 95% were offered the vaccine, with 14% declining.²⁴ |

In February of 2021, the CDC released a study of initial vaccine efforts at skilled nursing facilities offering long-term care.²⁵ The study found that only 37.5% of eligible staff were vaccinated, leaving a potentially significant population vulnerable to SARS-CoV-2 infections and capable of transmission.

That unvaccinated healthcare workers remain in grave danger is emphasized by the fact that thousands of new hospital admissions still occur each day in the midst of significant distribution of over three hundred million effective vaccine doses.²⁶ These factors indicate that transmission remains robust and significant portions of the population remain vulnerable to COVID-19.

Spread of the disease within the healthcare workforce may start with a worker becoming ill through community transmission or an ill patient seeking treatment. The rate of new cases, hospitalizations, and deaths peaked in

²³Cavanaugh, AM et al. (2021, April 30). COVID-19 outbreak associated with a SARSCoV-2 R.1 lineage variant in a skilled nursing facility after vaccination program — Kentucky, March 2021. *MMWR* 70: 639-643. <http://dx.doi.org/10.15585/mmwr.mm7017e2>. (Cavanaugh et al., April 30, 2021).

²⁴Schrading, WA et al. (2021, February 19). Vaccination rates and acceptance of SARSCoV-2 vaccination among U.S. emergency department health care personnel. *Acad Emerg Med* 28: 455-458. (Schrading et al., February 19, 2021).

²⁵ Gharpure, R et al. (2021, February 5) Early COVID-19 first-dose vaccination coverage among residents and staff members of skilled nursing facilities participating in the pharmacy partnership for long-term care program — United States, December 2020– January 2021. *MMWR* 2021; 70: 178–182. DOI: <http://dx.doi.org/10.15585/mmwr.mm7005e2>. (Gharpure et al., February 5, 2021).

²⁶ Centers for Disease Control and Prevention (CDC). (2021b, May 24). COVID data tracker. New Admissions of Patients with Confirmed COVID-19, United States. <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>. (CDC, May 24, 2021b).

January 2021, just before vaccines became more widely available outside of healthcare settings.

The January to February decline, however, is likely not attributable in large part to the new vaccines alone, because only a small portion of the population had received them. During this time, variants of concern, such as B.1.1.7, that are more transmissible and may result in worse health outcomes, have become the majority source of infection.²⁷ Hundreds of people each day are still dying of COVID-19 in early May 2021, many of them working-age adults.²⁸

2. Impact on Healthcare Employees

Data on SARS-CoV-2 infections, illnesses, and deaths among healthcare employees supports federal OSHA's finding that COVID-19 poses a grave danger to these employees. Even fairly brief exposure (i.e. 15 minutes during a 24-hour period) can lead to infection, which in turn can cause death or serious impairment of health.

Employees in healthcare settings include healthcare employees, who provide direct patient care (e.g., nurses, doctors, and emergency medical technicians (EMTs)), and healthcare support employees, who provide services that support the healthcare industry and may have contact with patients (e.g., laundry, janitorial/housekeeping, and food service employees). Employees who perform autopsies are also considered to work in healthcare. Most employees who work in healthcare perform duties that put them at elevated risk of exposure to SARS-CoV-2.

Healthcare employees who provide direct patient care are at high risk of exposure to SARS-CoV-2 because they have close and sometimes prolonged contact with patients who are infected or potentially infected with SARS-CoV-2.

This contact occurs when conducting physical examinations and providing treatment and medical support. The risk can be amplified when examining or treating a COVID-19 patient who has symptoms such as coughing and difficulty breathing (leading to more forceful inhalation and exhalation), both of which can result in the release of more droplets that can be propelled further.

²⁷ Centers for Disease Control and Prevention (CDC). (2021c, May 24). Variant Proportions. <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>. (CDC, May 24, 2021c).

²⁸ Centers for Disease Control and Prevention (CDC). (2021d, May 24). COVID-19 Weekly Deaths per 100,000 Population by Age by Age, Race/Ethnicity, and Sex. <https://covid.cdc.gov/covid-data-tracker/#demographicsovertime>. (CDC, May 24, 2021d).

Healthcare employees who conduct, or provide support during, aerosol-generating procedures on persons with suspected or confirmed COVID-19 also face a greater risk of infection.²⁹ Examples of procedures that can produce aerosols include intubation, suctioning airways, use of high-speed tools during dental work, and use of power saws during autopsies. A complete list of aerosol-generating procedures, as defined by the COVID-19 ETS, is included in 29 CFR 1910.502(b).

Employees in healthcare are also at risk of exposure to SARS-CoV-2 if they have close contact with co-workers while providing patient care or performing other duties in enclosed areas such as a nursing station, laundry room, or kitchen.

Conclusion

Federal OSHA finds that healthcare employees face a grave danger from exposure to SARS-CoV-2 in the United States. The best available evidence on the science of transmission of the virus makes clear that SARS-CoV-2 is transmissible from person to person in these healthcare settings, which can result in largescale clusters of infections.

Transmission is most prevalent in healthcare settings where individuals with suspected or confirmed COVID-19 receive care, and can be exacerbated by, for example, poor ventilation, close contact with potentially infectious individuals, and situations where aerosols containing SARS-CoV-2 particles are likely to be generated.

Every healthcare workplace exposure or transmission has the potential to cause severe illness or even death, particularly in unvaccinated healthcare workers in settings where patients with suspected or confirmed COVID-19 receive care. Taken together, the multiple, severe health consequences of COVID-19 and the evidence of its transmission in environments characteristic of the healthcare workplaces where the COVID-19 ETS requires worker protections demonstrate that exposure to SARS-CoV-2 represents a grave danger to employees in these workplaces throughout the country.

The existence of a grave danger to employees from SARS-CoV-2 is further supported by the toll the pandemic has already taken on the nation as a whole. Although federal OSHA cannot estimate the total number of healthcare workers in

²⁹ Heinzerling, A et al. (2020, April 17). Transmission of COVID-19 to Health Care Personnel During Exposures to a Hospitalized Patient — Solano County, California, February 2020. *MMWR Morb Mortal Wkly Rep* 2020; 69: 472–476. DOI: <http://dx.doi.org/10.15585/mmwr.mm6915e5>. (Heinzerling et al., April 17, 2020).

our nation who contracted COVID-19 at work and became sick or died, COVID-19 has killed 587,342 people in the United States as of May 24, 2021.³⁰

That death toll includes 91,351 people who were 18 to 64 years old.³¹ Current mortality data shows that unvaccinated people of working age have a 1 in 217 chance of dying when they contract COVID-19. As of May 24, 2021, more than 32 million people in the United States have been reported to have infections, and thousands of new cases were being identified daily.³² One in ten reported cases of COVID-19 becomes severe and requires hospitalization.

This analysis satisfies the OSH Act's requirements for finding a grave danger. Having made the determination of grave danger, as well as the determination that an ETS is necessary to protect these employees from exposure to SARS-CoV-2 (discussed in the next section of this briefing package), Federal OSHA is required to issue this standard to protect these employees from getting sick and dying from COVID-19 acquired at work. See 29 U.S.C. 655(c)(1).

B. Need for the COVID-19 ETS

The COVID-19 ETS is necessary to protect the healthcare workers with the highest risk of contracting COVID-19 at work. Healthcare workers face a particularly elevated risk of contracting COVID-19 in settings where patients with suspected or confirmed COVID-19 receive treatment, especially those healthcare workers providing direct care to patients.

The COVID-19 ETS is necessary to protect these workers through requirements including patient screening and management, respirators and other personal protective equipment (PPE), limiting exposure to aerosol-generating procedures, physical distancing, physical barriers, cleaning, disinfection, ventilation, health screening and medical management, access to vaccination, and anti-retaliation provisions and medical removal protection.

³⁰ Centers for Disease Control and Prevention (CDC). (2021a, May 24). COVID data tracker. Trends in number of COVID-19 cases and deaths in the US reported to CDC, by state/territory: Trends in Total COVID-19 Deaths in the United States Reported to CDC. https://covid.cdc.gov/covid-datatracker/#trends_dailytrendscases. (CDC, May 24, 2021a).

³¹ Centers for Disease Control and Prevention (CDC). (2021b, May 24). Demographic Trends of COVID-19 cases and deaths in the US reported to CDC: Deaths by age group. <https://covid.cdc.gov/covid-data-tracker/#demographics>. (CDC, May 24, 2021b).

³² Centers for Disease Control and Prevention (CDC). (2021c, May 24). COVID data tracker. Trends in number of COVID-19 cases and deaths in the US reported to CDC, by state/territory: Trends in Total COVID-19 Cases in the United States Reported to CDC. https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases. (CDC, May 24, 2021c).

Below is a discussion of why the existing OSHA framework, guidance, and status of the vaccination program in the United States is currently inadequate to protect healthcare workers at high risk of contracting COVID-19, thus necessitating the adoption of the COVID-19 ETS.

The Current Standards and Regulations are Inadequate

In updated enforcement guidance issued in March 2021, federal OSHA identified a number of current standards and regulations that might apply when workers have occupational exposure to SARS-CoV-2 (Interim Enforcement Response Plan).³³ In addition to the standards listed there, federal OSHA has also cited the Hazard communication standard (29 CFR part 1910.1200) during COVID-19 investigations. Accordingly, the complete list of potentially applicable standards and regulations follows:

- 29 CFR Part 1904, Recording and Reporting Occupational Injuries and Illnesses. This regulation requires certain employers to keep records of work related fatalities, injuries, and illnesses and report them to the government in specific circumstances.
- 29 CFR part 1910.132, General requirements — Personal Protective Equipment (PPE). This standard requires that appropriate PPE, including PPE for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, be provided, used, and maintained in a sanitary and reliable condition.
- 29 CFR part 1910.134, Respiratory protection. This standard requires that employers provide, and ensure the use of, appropriate respiratory protection when necessary to protect employee health.
- 29 CFR part 1910.141, Sanitation. This standard applies to permanent places of employment and contains, among other requirements, general housekeeping and waste disposal requirements.
- 29 CFR part 1910.145, Specification for accident prevention signs and tags. This standard requires the use of biological hazard signs and tags, in addition to other types of accident prevention signs and tags.

³³ Occupational Safety and Health Administration (OSHA). (2021, March 12). Enforcement Memo: Updated Interim Enforcement Response Plan for Coronavirus Disease 2019 (COVID-19). <https://www.osha.gov/memos/2021-03-12/updated-interim-enforcementresponse-plan-coronavirus-disease-2019-covid-19>. (OSHA, March 12, 2021).

- 29 CFR part 1910.1020, Access to employee exposure and medical records. This standard requires that employers provide employees and their designated representatives access to relevant exposure and medical records.
- 29 CFR part 1910.1200, Hazard communication. This standard requires employers to keep Safety Data Sheets (SDS) for chemical hazards, provide SDSs to employees and their representatives when requested, and train employees about those hazards. The standard does not apply to biological hazards, but hazard communication becomes an issue for the SARS-CoV-2 virus when chemicals are used to disinfect surfaces. OSHA notes that, when such chemicals are used in the workplace, the employer is required to comply with the hazard communication standard. The agency has not incorporated hazard communication requirements in the COVID-19 ETS, but has included related training and notification requirements. Section 1910.1200 compliance is only peripherally related to protection against SARSCoV-2 hazards, employers are generally aware of those requirements, and the requirements of § 1910.1200 are enforceable without being repeated in the COVID-19 ETS.

Through its enforcement efforts to date, federal OSHA has encountered significant obstacles, demonstrating that existing standards and regulations are inadequate to address the COVID-19 hazard for healthcare workers, and has determined that a COVID-19 ETS is necessary to address these inadequacies. Current CDC guidance does not indicate that respirators are generally needed outside of direct patient care, but CDC does support the protective measures the COVID-19 ETS would require for the workers it covers.³⁴

Finally, the remaining listed standards and regulations—for recordkeeping and reporting, accident prevention signs and tags, access to employee records, and hazard communication—while applicable to the COVID-19 hazard and important in the overall scheme of workplace safety, do not require employers to implement specific measures to protect workers from COVID-19.³⁵

The General Duty Clause

Section 5(a)(1) of the OSH Act, or the General Duty Clause, provides the general mandate that each employer “furnish to each of [its] employees employment and a place of employment which are free from recognized hazards that are causing or

³⁴ Howard, J. (2021, May 22). “Response to request for an assessment by the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, of the current hazards facing healthcare workers from Coronavirus Disease-2019 (COVID-19).” (Howard, May 22, 2021).

³⁵ For an extensive explanation as to why federal OSHA found these existing standards were inadequate 161-166 of the preamble to the federal COVID-19 ETS.

are likely to cause death or serious physical harm to his employees.” 29 U.S.C. 654(a)(1).

While federal OSHA has attempted to use the General Duty Clause to protect employees from COVID-19 related hazards, federal OSHA has found that there are significant challenges associated with this approach and therefore the COVID-19 ETS is necessary to protect the workers covered by this standard from the grave danger posed by COVID-19.

While the General Duty Clause can be used in many contexts, in federal OSHA’s experience over the past year, the clause fell short of the agency’s mandate to protect employees from the hazards of COVID-19 in the settings covered by the standard. As explained more fully below, federal OSHA finds the COVID-19 ETS will more efficiently and effectively address those hazards.

Several characteristics of General Duty Clause enforcement actions limit how effectively federal OSHA can use the clause to address hazards associated with COVID-19. Most important, the General Duty Clause is not a good tool for requiring employers to adopt specific, overlapping, and complementary abatement measures, like those required by the COVID-19 ETS, and some important worker-protective elements of the COVID-19 ETS (such as payment for medical removal) would be virtually impossible for federal OSHA to require and enforce under the General Duty Clause.

The COVID-19 ETS will enable federal OSHA to issue more meaningful penalties for willful or egregious violations, thus facilitating better enforcement and more effective deterrence against employers who intentionally disregard their obligations under the Act or demonstrate plain indifference to employee safety.

Lastly, the General Duty Clause does not provide complete protection to employees at multi-employer worksites, which are common situations in hospitals, where more than one employer controls hazards at the workplace. The COVID-19 ETS will permit more thorough enforcement in these situations.³⁶

Federal OSHA and Other Entity Guidance is Insufficient

Federal OSHA has issued numerous non-mandatory guidance products to advise employers on how to protect workers from SARS-CoV-2 infection. (See <https://www.osha.gov/coronavirus>). Even the most comprehensive guidance makes clear, as it must, that the guidance itself imposes no new legal obligations,

³⁶ For more information on how Federal OSHA found the General Duty in practice to be insufficient to protect workers, see pages 166-179 of the preamble to the COVID-19 ETS.

and that its recommendations are “advisory in nature.” (See OSHA’s online guidance, *Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace* (January 29, 2021); and OSHA’s earlier 35-page booklet, *Guidance on Preparing Workplaces for Covid-19* (March 9, 2020)).

This guidance, as well as guidance materials issued by other government agencies and organizations, including the CDC, the Centers for Medicare & Medicaid Services (CMS), the Institute of Medicine (IOM), and the World Health Organization (WHO), help protect employees to the extent that employers voluntarily choose to implement the practices they recommend. Unfortunately, federal OSHA’s experience shows that does not happen consistently or rigorously enough, resulting in inadequate protection for employees.³⁷

Recent Vaccine Developments Demonstrate the Importance of the COVID-19 ETS; They do not Obviate the Current Need for the COVID-19 ETS

The development and availability of safe and highly effective vaccines is an important development in the nation’s response to COVID-19. The very low percentage of breakthrough cases (illness among vaccinated people) have led to recent updates to CDC guidance acknowledging vaccination as an effective control to prevent hospitalization and death from COVID-19 to such an extent that the CDC has concluded that most other controls are not necessary to protect vaccinated people outside healthcare settings.

In the United States, all people ages 12 and older are eligible to be vaccinated, and vaccines are readily available in most parts of the country. However, despite the success of this vaccine program and the substantial promise that vaccines hold, federal OSHA does not believe they eliminate the need for this standard.

Federal OSHA embraces the value of vaccination and views the COVID-19 ETS as essential to facilitating access to this critical control for those workers who wish to receive it while still protecting those who cannot be, or will not be, vaccinated.³⁸

However, for vaccines to be effective, workers need first to actually receive them. While the supply of vaccines and their distribution continues to increase, as of the date of the promulgation of this standard, approximately a quarter of healthcare

³⁷For more discussion on how the current guidance has proved inadequate to protect healthcare workers, see pages 179-183 of the preamble to the COVID-19 ETS.

³⁸ By excluding certain workplaces and well-defined work areas where all employees are fully vaccinated from all requirements of the standard (paragraphs (a)(2)(iv) and (v)), and exempting fully vaccinated workers in certain settings where not all employees are vaccinated from several requirements of the standard (paragraph (a)(4)), the COVID-19 ETS encourages vaccination for employers and employees who do not want to follow those requirements.

workers have not yet completed COVID-19 vaccination with many of those expressing vaccine hesitation.³⁹

Although a majority of Americans over 65 are vaccinated, the percentage among the working-age population is much lower (44%).⁴⁰ There are several barriers to vaccination for the working-age population. Many employees who want to be vaccinated may be unable to do so unless the employer authorizes time off work, or may be financially unable to absorb a reduced paycheck for taking unpaid leave to be vaccinated or potentially missing a significantly larger period of time from work (and a larger financial hit) because of the potential side effects of the vaccination.⁴¹

Further, there is a need to continue building vaccine confidence in some parts of the population, making the COVID-19 ETS even more important to assure safe working conditions during the period before these workers are vaccinated. As discussed in more depth in “Grave Danger” (Section V.A. of this briefing package), even though vaccines are now more readily available, they do not protect all workers.

Some workers are unable to be vaccinated for medical or other reasons, even if they are willing to be. And in immunocompromised workers, vaccines can be considerably less effective than in immunocompetent individuals.

And while some employees may simply elect not to be vaccinated for personal reasons, federal OSHA has a statutory duty to ensure that employers protect those employees from the grave danger of COVID-19 regardless of their basis for refusing vaccination. These factors, along with the uneven vaccination rates among some subpopulations, such as the Latinx and Black populations, who have been disproportionately harmed by the virus but also have the lowest vaccination rates, make the need for this COVID-19 ETS especially acute.⁴²

³⁹ King, WC et al. (2021, April 24). COVID-19 vaccine hesitancy January-March 2021 among 18-64 year old US adults by employment and occupation. medRxiv;

<https://www.medrxiv.org/content/10.1101/2021.04.20.21255821v3>. (King et al., April 24, 2021).

⁴⁰Centers for Disease Control and Prevention (CDC). (2021a, May 24). Demographic Trends of People Receiving COVID-19 Vaccinations in the United States. <https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends>. (CDC, May 24, 2021a).

⁴¹ SEIU Healthcare. (2021, February 8). Research shows 81% of healthcare workers willing to take COVID-19 vaccines but personal financial pressures remain a significant barrier for uptake. <https://www.newswire.ca/news-releases/research-shows-81-of-healthcareworkers-willing-to-take-covid-19-vaccines-but-personal-financial-pressures-remain-asignificant-barrier-for-uptake-888810789.html>. (SEIU Healthcare, February 8, 2021).

⁴² Ndugga, N et al. (2021, February 18). Latest Data on COVID-19 Vaccinations Race/Ethnicity. Kaiser Family Foundation. <https://www.kff.org/coronavirus-covid19/issue-brief/latest-data-on-covid-19-vaccinations-race-ethnicity/>. (Ndugga et al., February 18, 2021).

This COVID-19 ETS can help facilitate vaccination among those groups, protect those who cannot or will not be vaccinated, and thereby mitigate the disproportionate impacts of the virus for workers in these groups. Even when the COVID-19 ETS helps currently unvaccinated workers overcome the obstacles to becoming vaccinated, they must still be protected by the other measures of this standard until they are fully protected by the vaccine. With the two-dose vaccines in particular, the time from a first shot to fully effective vaccination is 5 to 6 weeks.

Furthermore, also increasing are new virus variants, the most prevalent of which, the B.1.1.7 variant first identified in the U.K., now appears responsible for almost 66% of the cases in the U.S.⁴³ While the currently authorized vaccines appear effective against all of the variants now circulating, promoting vaccination as quickly as possible becomes even more critical because the variant is not only more transmissible, it also appears to cause more severe disease.

CNN.com, June 15, 2021, "CDC now calls coronavirus **Delta variant** a 'variant of concern'"⁴⁴

"The US Centers for Disease Control and Prevention now calls the Delta variant of the novel coronavirus, also known as B.1.617.2, a "variant of concern."

The variant of concern designation is given to strains of the virus that scientists believe are more transmissible or can cause more severe disease. Vaccines, treatments and tests that detect the virus may also be less effective against a variant of concern. Previously, the CDC had considered the Delta variant to be a variant of interest.

The CDC said the Delta variant, which was first identified in India, shows increased transmissibility, potential reduction in neutralization by some monoclonal antibody treatments under emergency authorization and potential reduction in neutralization from sera after vaccination in lab tests.

....

Covid-19 cases have been declining over the past few months in the United States, but there's concern that could change as the pace of vaccinations slows and the Delta variant spreads. The CDC estimates it accounted for 9.9% of cases in the US as of June 5.

⁴³ Centers for Disease Control and Prevention (CDC). (2021b, May 24). Variant Proportions. <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>. (CDC, May 24, 2021b).

⁴⁴ <https://www.cnn.com/2021/06/15/health/delta-variant-of-concern-cdc-coronavirus/index.html>

[As of June 22, 2021, the Delta variant now makes up about 20% of cases in the U.S.⁴⁵]

At a White House Covid-19 briefing last week, National Institute of Allergy and Infectious Diseases Director Dr. Anthony Fauci encouraged everyone to get vaccinated against Covid-19, noting that the Delta variant is was in circulation in the United States at a rate similar to the tipping point seen in the UK, where the variant is now dominant.

....

The variant is believed to be responsible for the most recent rise in cases in the UK and a study of cases in Scotland published on Monday found that it was associated with about double the risk of hospitalization compared with the Alpha variant, B.1.1.7, that was first identified in the UK.

The UK announced Monday that the easing of coronavirus restrictions would be delayed another four weeks, until July 19, following a rise in cases and, in particular, the growing spread of the Delta variant.”

....

As of Sunday, the Delta variant was responsible for about 10.3% of US Covid-19 cases, according to Dr. Eric Topol, the founder and director of the Scripps Research Translational Institute, whose outbreak.info has been tracking variants throughout the pandemic.

The may not seem like a lot, but the speed with which it's spreading is a concern. "It doubles every seven to 10 days, which means when it gets to three weeks from now, this variant will be dominant," Topol said. "That means we have two to three weeks to just go flat out with vaccination to stop this trend."

[As of June 22, 2021, the Delta variant now makes up about 20% of cases in the U.S.⁴⁶]

....

"This is the most troubling variant by far, because it's another 60% more contagious than the Alpha, so it's a super spreader strain," Topol said. But the vaccination rate is stalling.

⁴⁵ <https://www.cnn.com/2021/06/22/fauci-declares-delta-variant-greatest-threat-to-the-nations-efforts-to-eliminate-covid.html>

⁴⁶ <https://www.cnn.com/2021/06/22/fauci-declares-delta-variant-greatest-threat-to-the-nations-efforts-to-eliminate-covid.html>

While 43.9% in the US is fully vaccinated, according to the CDC, the rate at which people are getting vaccinated has been slowing down.

In Mississippi, nearly 29% of population is fully vaccinated. In Alabama it's less than 31%. In Arkansas, less than 33%. In Louisiana, Georgia, and Wyoming it's less than 34%, according to CDC data.

....

The good news is that people who are fully vaccinated seem to have solid protection against the Delta variant. A study published in the Lancet found a single dose of Covid-19 vaccine wasn't enough, but after the second dose, the Pfizer-BioNTech provided 79% protection from the Delta variant. That compares with 92% protection against the Alpha variant. Another analysis from England's public health agency found two doses of the Pfizer vaccine seemed 96% effective against hospitalization.”

Finally, while the science continues to develop, the full extent and duration of the immune response remains unknown. Additional evidence is also needed to determine the extent to which people who are vaccinated could still be infected and transmit the disease to others, even if they themselves are protected from the worst health effects. Although such cases do not appear to be common, the COVID-19 ETS would help protect these employees and their co-workers in mixed groups of vaccinated and unvaccinated people.

These issues, as already discussed in the section on grave danger (Section V.A. of this briefing package) demonstrate that the various protections required in the COVID-19 ETS are still necessary, even for workplaces in which many but not all members of the workforce have been vaccinated.

Due to the inadequacies of current standards, the general duty clause, federal OSHA guidance and other entity guidance, as well as the need for more vaccination to occur as described above, federal OSHA finds the COVID-19 ETS necessary to protect healthcare workers with the highest risk of contracting COVID-19 at work.

VI. Brief Overview of Provisions of the COVID-19 ETS

The full text of the COVID-19 ETS is attached to this briefing package. For an in depth discussion on how Federal OSHA determined what was required to be in the COVID-19 ETS, see pages 631-972 of the preamble to the COVID-19 ETS.⁴⁷ This section provides a brief overview of each section in the COVID-19 ETS:

§1910.502 Healthcare

⁴⁷ <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-preamble.pdf>

- §1910.502(a) *Scope and Application*— COVID-19 ETS applies to all settings where any employee provides healthcare services or healthcare support services. This section exempts several employers that would be considered a healthcare setting but for Federal OSHA excluding them from the COVID-19 ETS. Exemptions include:
 - Dispensing of prescriptions by pharmacists in retail setting
 - Non-hospital ambulatory care where non-employees are screened prior to entry
 - Ambulatory care settings where employees are fully vaccinated and all non-employees are screened prior to entry
 - Home healthcare settings where all employees are fully vaccinated and all non-employees are screened prior to entry
 - Healthcare support services not performed in a healthcare setting (e.g. offsite laundry, billing, etc.)
 - Telehealth services performed outside of a setting where direct patient care occurs
- §1910.502(b) *Definitions*—contains a list of definitions that apply to the COVID-19 ETS
- §1910.502(c) *COVID-19 plan*—Each employer must create and implement a COVID-19 plan for each workplace. Requirements of the plan include:
 - Must be in writing if employer has more than 10 employees
 - Workplace must designate at least one “COVID-19 safety coordinator” to implement and monitor COVID-19 plan
 - Employer must conduct hazard assessment of workplace
 - To qualify for exemption in (a)(4) based on employees’ fully vaccinated status, plan must include policies to determine employees’ vaccination status
 - Employer must seek employee input in coming up with plan
 - Employer must monitor workplace to ensure effectiveness of plan
 - Plan must address hazards identified by assessment required and include policies to minimize risk of transmission of COVID-19. Plan must also include policies for employers sharing its COVID-19 plan with other employers who share the same physical location
 - Plan must also include policies for protecting employees when in course of their employment enter into private residences
- §1910.502(d) *Patient Screening and Management*—Where direct patient care is provided employer must limit and monitor points of entry, screen and triage all clients, patients residents and other visitors entering the setting.

- §1910.502(e) *Standard and Transmission-Based Precautions*-- Employers must develop and implement policies and procedures to adhere to Standard and Transmission-Based Precautions in accordance with CDC’s “Guidelines for Isolation Precautions” (incorporated by reference, § 1910.509).
- §1910.502(f) *Personal Protective Equipment*—Covers requirements for facemasks, faceshields, respirators, gloves, isolation gowns and limited exceptions to the facemask requirement (employee alone in a room, while employee is eating and drinking while physical distancing, when required to wear other respiratory protection under § 1910.134, ADA disability, religious beliefs) Also covers when an employee is required to be provided and wear a respirator after a confirmed exposure to a confirmed or suspected case of COVID-19.
- §1910.502(g) *Aerosol-generating procedures*—contains requirements for employees performing aerosol-generating procedures on patients with suspected or confirmed COVID-19.
- §1910.502(h) *Physical distancing*—contains situation in which employees must physically distance from one another.
- §1910.502(i) *Physical barriers*—includes requirement to install cleanable or disposable solid barriers at each fixed work location where employee is not separated from all other people by at least 6 feet.
- §1910.502(j) *Cleaning and Disinfection*—Employers must follow standard practices for cleaning and disinfection of surfaces and equipment in accordance with CDC’s “COVID-19 Infection Prevention and Control Recommendation” and CDC’s “Guidelines for Environmental Infection Control” at pages 86-103, 147-149.
- §1910.502(k) *Ventilation*—Contains requirements for HVAC system(s) within structures in which the employer has control or owns. This section also contains requirements for AIIRs. This section does not require installation of new HVAC system and AIIRS.
- §1910.502(l) *Health screening and medical management*—this section contains screening requirements for all employees before each work day and shift. Provisions include:
 - Requirement for employer to provide COVID-19 test to employee if required for screening purposes
 - Requirement that employees notify employer of any COVID-19 positive test, suspected COVID-19 diagnosis by healthcare provider, loss of taste and/or smell, fever and shortness of breath

- Requirement to notify each employee who was not wearing a respirator and any other required PPE and has been in close contact with a person with a confirmed case of COVID-19 in the workplace. The notification must contain the date the contact occurred.
 - Requirement to notify other employees who were not wearing a respirator and any other required PPE and worked in a well-defined portion of a workplace (e.g., a particular floor) during the same time in which a person with a confirmed case of COVID-19 was present during the potential transmission period
 - Requirement to notify employers whose employees were not wearing respirators and any other required PPE and have been in close contact with that person, or worked in a well-defined portion of a workplace in which that person was present, during the potential transmission period.
 - Notifications required by this section cannot contain person's name, contact information or occupation
 - The section also discusses when medical removal of an employee from the workplace is required
- §1910.502(m) *Vaccination*—Employer must support COVID-19 vaccination for each employee by providing reasonable time and paid leave (e.g., paid sick leave, administrative leave) to each employee for vaccination and any side effects experienced following vaccination.
 - §1910.502(n) *Training*—section includes training employee must receive including training on how COVID-19 is transmitted, procedures for wearing PPE, policies on cleaning and disinfection, policies on screening and health management, available sick leave policies, any COVID-19-related benefits to which the employee may be entitled under applicable federal, state, or local laws, and identity of safety coordinator.
 - §1910.502(o) *Anti-retaliation*—employer must inform employee that employer cannot discriminate or discharge employee for exercising right to protections required by standard
 - §1910.502(p) *Requirements implemented at no cost to employees*—implementation of standard must come at no cost to employee
 - §1910.502(q) *Recordkeeping*—Applies to employers with 10 or more employees. Employers must keep all versions of the COVID-19 plan, establish and maintain COVID-19 log to record each instance identified by the employer in which an employee is COVID-19 positive, regardless of whether the instance is connected to exposure to COVID-19 at work. The COVID-19 log must contain, for each instance,

the employee's name, one form of contact information, occupation, location where the employee worked, the date of the employee's last day at the workplace, the date of the positive test for, or diagnosis of, COVID-19, and the date the employee first had one or more COVID-19 symptoms, if any were experienced and must be recorded within 24 hours of employer learning of employee is COVID-19 positive.

- §1910.502(r) *Reporting COVID-19 fatalities and hospitalizations to OSHA*—must report within 8 hours of learning of COVID-19 fatality, within 24 hours of COVID-19 hospitalization. When reporting COVID-19 fatalities and in-patient hospitalizations to OSHA in accordance with paragraph (r)(1) of this section, the employer must follow the requirements in 29 CFR part 1904.39, except for 29 CFR part 1904.39(a)(1) and (2) and (b)(6).
- §1910.502(s) *Dates*—The COVID-19 ETS is effective June 21, 2021, Employers must comply with all requirements of the ETS except paragraphs (i), (k) and (n) by July 6, 2021. Employers must comply with paragraphs (i), (k), and (n) by July 21, 2021.

If the Board adopts the federal COVID-19 ETS, it will be effective on August 2, 2021. Virginia employers must comply with all the requirements of the COVID-19 ETS except paragraphs (i), (k) and (n) by August 17, 2021. Employers must comply with paragraphs (i), (k), and (n) by September 1, 2021.

§1910.504 Mini Respiratory Program

- §1910.504(a) *Scope and application*—section only applies to respirator use in accordance with §1910.502(f)(4)
- §1910.504(b) *Definitions*—contains definitions applying to §1910.504
- §1910.504(c) *Respirators provided by employees*—contains requirement that employer provide employee copy of notice detailing how:
 - the user should follow all instructions provided by manufacturer on use, maintenance and cleaning
 - employee should keep track of their own respirator and not use someone else's mistakenly, and
 - not to use your own respirator where other workplace hazards require use of a respirator—the employer must provide this respirator.
- §1910.504(d) *Respirators provided by employers*—Employers must train employees on how to properly wear, inspect, put on, and remove respirators.

Employer must also train on the limitations and capabilities of respirator, procedures for storing and maintaining respirator, and how to perform a seal check. This section also contains provisions on how to reuse respirators.

- §1910.504(e) *Effective date*—This section is effective as of June 21, 2021.
- §1910.505 *Severability*—Each section of this subpart U, and each provision within those sections, is separate and severable from the other sections and provisions. If any provision of this subpart is held to be invalid or unenforceable on its face, or as applied to any person, entity, or circumstance, or is stayed or enjoined, that provision shall be construed so as to continue to give the maximum effect to the provision permitted by law, unless such holding shall be one of utter invalidity or unenforceability, in which event the provision shall be severable from this subpart and shall not affect the remainder of the subpart.

§1910.509 Incorporation by Reference.

- §1910.509(a)-(d) incorporates some CDC documents, List N—Disinfectants for COVID-19 from the EPA and several ANSI standards.

VII. State Plan requirements and Federal OSHA’s plan to Adjust the COVID-19 ETS as Necessary

A. State Plan Requirements

When federal OSHA promulgates an emergency temporary standard, States and U.S. Territories with their own OSHA-approved occupational safety and health plans (“State Plans”) must either amend their standards to be identical or “at least as effective as” the new standard, or show that an existing State Plan standard covering this area is “at least as effective” as the new Federal standard. 29 CFR 1953.5(b).

Adoption of the COVID-19 ETS by State Plans must be completed within 30 days of the promulgation date of the final Federal rule, and State Plans must notify Federal OSHA of the action they will take within 15 days. The State Plan standard must remain in effect for the duration of the Federal COVID-19 ETS.

B. Federal OSHA Plans to Adjust the COVID-19 ETS as Necessary.

Federal OSHA finds it necessary to adopt the COVID-19 ETS, but plans to adjust as conditions change. As more of the workforce becomes vaccinated and the post-vaccination evidence base continues to grow, and the CDC updates its guidance,

federal OSHA will withdraw or modify the COVID-19 ETS to the extent the workplace hazard is substantially diminished in the settings covered by this COVID-19 ETS. Federal OSHA expects to revisit the COVID-19 ETS every 30 days.

VIII. Impact

A. Impact on Employers

Federal OSHA projects the net total effect of the Occupational Exposure to COVID-19; Emergency Temporary Standard will result in additional costs for employers, but also a net benefit. The costs to employers include: developing a COVID-19 plan, patient screening and management, respiratory protection, training, ventilation, health screening and medical management costs, physical barriers and plexiglass, physical distancing, cleaning and disinfecting, hand hygiene, recordkeeping, reporting, and MRP costs. The benefits stem mainly from infections prevented and deaths prevented.

B. Impact on Employees

The COVID-19 ETS will provide greater protections for healthcare workers from occupational exposure to COVID-19 in settings where people with COVID-19 are reasonably expected to be present. In turn an uninfected health care worker cannot infect others in the community, resulting in better control of the pandemic overall.

In addition, by providing paid leave to get a vaccine and time for potential side effects from the vaccine, the COVID-19 ETS will offer greater access to the vaccine, thereby increasing the total number of healthcare workers vaccinated overall.

C. Impact on the Department of Labor and Industry

It is anticipated that any impact on DOLI resulting from adoption of this emergency standard will be negligible. DOLI developed and adopted its own Emergency Temporary Standard (VOSH ETS) on July 15, 2020 and then the [Final Permanent Standard \(FPS\), Infectious Disease Prevention: SARS-CoV-2 Virus That Causes COVID-19 on January 13th, 2021](#).

In a side-by-side comparison of the COVID-19 ETS and the FPS, there were many similar requirements. The Department does not anticipate any substantial additional costs to VOSH. Any costs would be related to training VOSH compliance staff on the differences in the OSHA standard and the VOSH standard.

D. Feasibility

1. Technological Feasibility⁴⁸

Federal OSHA has reviewed the requirements imposed by the COVID-19 ETS and has determined that achieving compliance with the rule is technologically feasible for typical operations in the settings that are covered by the COVID-19 ETS. In reaching this determination, OSHA reviewed evidence that shows that healthcare-specific good infection control practices are routinely implemented by employers who have employees in covered settings.

This evidence includes: readily available CDC infection control guidance documents, many of which are COVID-19 specific; regulations issued by the Centers for Medicare & Medicaid Services (CMS), compliance with which is typically required for accreditation of these settings by The Joint Commission; and the application of similar requirements in OSHA's Bloodborne Pathogens Standard, 29 CFR 1910.1030.

Federal OSHA's assessment also analyzed the technological feasibility of complying with the requirements of the COVID-19 ETS for developing a COVID-19 Plan: maintaining physical distancing; installing physical barriers; and ensuring existing ventilation systems are operating as designed.

As noted, the COVID-19 ETS requires employers to develop and implement a COVID-19 plan through a multilayered approach to addressing the spread of COVID-19 by taking feasible measures to reduce or eliminate the transmission of COVID-19. This includes requirements for employers to implement procedures to ensure employees maintain at least 6 feet of physical distancing from others to the extent feasible and, when distancing is not feasible, to install physical barriers, again to the extent feasible. It also allows flexibility in the material of barriers.

The regulatory text allows for alternatives in some situations, and federal OSHA has identified a variety of alternatives that it believes would be technologically feasible in those situations most of the time. There are no technological feasibility barriers related to compliance with requirements in the COVID-19 ETS for facemasks and respirators, cleaning and disinfection, health screening and medical management, or employee notification. Based on the combination of federal OSHA's evaluation of technological feasibility of controls in the various scenarios examined, federal OSHA finds that the COVID-19 ETS is technologically feasible.

⁴⁸ See pgs. 342-413 of the preamble to the COVID-19 ETS for an in depth analysis of the technological feasibility of the COVID-19 ETS.

2. Economic Feasibility⁴⁹

Federal OSHA estimates the costs, benefits, and other impacts anticipated to result from the COVID-19 ETS based on employers achieving full compliance with the requirements of the standard. They do not include prior costs associated with firms whose current practices are already in compliance with the COVID-19 ETS requirements.

To determine whether compliance with the COVID-19 ETS is economically feasible for all affected industries, federal OSHA conducted two screening tests to determine whether the costs of the rule are beneath the threshold level at which the economic viability of an affected industry might be threatened. The two screening tests are the one-percent-of-revenue test and the ten-percent-of-profit test. For those industries with costs beneath both of these threshold levels, the rule was presumed to be economically feasible. Industries that have costs beneath both thresholds for all establishments constitute the majority of industries covered by the COVID-19 ETS.

For industries with costs above one percent of revenues or ten percent of profits, federal OSHA performed additional analysis regarding whether firms would be eligible for scope exemptions to avoid the cost of compliance with the COVID-19 ETS or whether they could generally pass on the compliance costs of the rule in the form of higher prices or if, instead, firms would have to absorb the costs of the rule in the form of lost profits.

Given the fact that all competitors in the industries that had costs above the revenue or profit threshold have to comply with the COVID-19 ETS, OSHA does not expect foreign competition or other factors to restrict the ability of affected firms to pass the costs of the COVID-19 ETS on to consumers through price increases. Federal OSHA concluded that the revenue test is the most appropriate metric to use for determining the economic feasibility of the COVID-19 ETS.

Looking at COVID-19 ETS costs to revenues, OSHA has concluded that complying with the COVID-19 ETS is economically feasible for all covered industries in their entirety. Furthermore, none of the economic impacts on small or very small entities are such as to threaten the structure of any of the covered healthcare industries. In addition, it is important to note that the costs of compliance with the COVID-19 ETS will only affect revenues and profits for the period during which the COVID-19 ETS is in effect, which is expected to be

⁴⁹ See pgs. 414-614 of the preamble to the COVID-19 ETS for an in depth analysis of the economic feasibility of the ETS.

at most 6 months, so it will be easier for employers to withstand the impact of any additional costs for this time period as opposed to absorbing ongoing costs typically required by rulemakings.

Finally, OSHA notes that most of the NAICS that failed one or both of the screens would not have done so if federal OSHA followed its normal analysis of comparing costs to annual profit and revenue, as opposed to only 6 months of profits and revenue. Under a one-year timeframe of revenues and costs, the economic impacts of the COVID-19 ETS would have been cut in half.

The table below provides a summary of Federal OSHA’s best estimate of the costs and benefits of the rule using a discount rate of 3 percent.

Costs		
COVID-19 Plan		\$1,198,482,522
Patient Screening and Management		\$1,245,401,751
Respiratory Protection		\$732,594,291
Training		\$396,046,226
Ventilation		\$30,554,935
Health Screening and Medical Management Costs		\$83,121,853
Physical Barriers and Plexiglass		\$57,407,631
Physical Distancing		\$11,270,696
Cleaning and Disinfecting		\$5,902,432
Hand Hygiene		\$5,800,000
Recordkeeping		\$13,207,068
Reporting		\$129,467
MRP Costs		\$189,726,559
Total Costs		\$3,969,645,432
Benefits	Cases	
Infections Prevented	295,284	19,300,929,013
Deaths Prevented	776	7,550,800,224
		\$26,851,729,237
Net Benefits		\$22,882,083,805

Note: In a true benefit-cost analysis, the costs to all parties (e.g., employers, employees, governments) are included. Throughout OSHA’s economic feasibility analysis in this rule, there are places where OSHA estimates there are no costs borne by employers. This does not necessarily mean that there are no costs or burdens imposed on others

as might be considered in a true benefit-cost analysis, but these potential other costs do not need to be considered as part of OSHA's analysis of the economic feasibility to employers.

Using federal OSHA's estimate of the costs and benefits as a basis, Table I.-2 provides an estimate of Virginia's costs and benefits of the rule using a discount rate of 3 percent.

Virginia's Costs		
COVID-19 Plan		\$32,179,256
Patient Screening and Management		\$33,439,037
Respiratory Protection		\$19,670,157
Training		\$10,633,841
Ventilation		\$820,400
Health Screening and Medical Management Costs		\$223,182
Physical Barriers and Plexiglass		\$1,541,395
Physical Distancing		\$302,618
Cleaning and Disinfecting		\$158,480
Hand Hygiene		\$155,730
Recordkeeping		\$354,610
Reporting		\$3,476
MRP Costs		\$5,094,159
Total Costs for Virginia		\$106,584,980
Virginia Benefits		
	Cases	
Infections Prevented	7,928	518,229,944
Deaths Prevented	21	202,738,986
		\$720,968,930
Virginia Net Benefits		\$614,383,950

To calculate Virginia's cost, Virginia uses the formula (federal costs provided) x .02685 = Virginia's costs.

DOLI developed and adopted its own Emergency Temporary Standard (VOSH ETS) on July 15, 2020 and then the [Final Permanent Standard \(FPS\), Infectious Disease Prevention: SARS-CoV-2 Virus That Causes COVID-19 on January 13th, 2021](#), both of which were applicable to employees and employers in healthcare services and healthcare support services.

In a side-by-side comparison of the COVID-19 ETS and the FPS (See Attachment A), there were many similar requirements. It is anticipated that the compliance costs associated with the

COVID-19 ETS for covered Virginia employers who are already in compliance with the FPS will be lessened based on the mitigation strategies already implemented.

Based upon the analysis above, Federal OSHA finds the COVID-19 ETS to be both technologically and economically feasible.

Contact Person:

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board adopt the federal COVID-19 Emergency Temporary Standard, 1910.502, *et seq.*, applicable to all settings where any employee provides healthcare services or healthcare support services, with an effective date of August 2, 2021 and which shall expire within six months or when repealed by the Board, whichever occurs first.

The Department also recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, *et seq.*, applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

The Department further recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, *et seq.*, applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

The Department further recommends that the Board state in any motion it may make to adopt this standard that should the federal COVID-19 Emergency Temporary Standard, 1910.502, *et seq.*, applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

The Department also recommends that the Board state in any motion it may make to adopt this standard that it will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation.

Occupational Exposure to COVID-19

Emergency Temporary Standard

As Adopted by the

Safety and Health Codes Board

Date: _____



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: _____

16VAC25-90-1910.502; 16 VAC25-90-1910.504; 16 VAC25-90-1910.505; 16 VAC25-90-1910.509

When the regulations as set forth in federal OSHA’s Emergency Temporary Standard for Occupational Exposure to COVID-19, part 1910 is applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

June 21, 2021

August 2, 2021

877-889-5627). Due to copyright issues, OSHA cannot post consensus standards on the OSHA website or through www.regulations.gov.

List of Subjects in 29 CFR Part 1910

COVID-19, Disease, Health facilities, Health, Healthcare, Incorporation by reference, Occupational health and safety, Public health, Quarantine, Reporting and recordkeeping requirements, Respirators, SARS-CoV-2, Telework, Vaccines, Viruses.

Authority and Signature

James S. Frederick, Acting Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue NW, Washington, DC 20210, authorized the preparation of this document pursuant to the following authorities: Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order 8-2020 (85 FR 58393 (Sept. 18, 2020)); 29 CFR part 1911; and 5 U.S.C. 553.

James S. Frederick,

Acting Assistant Secretary of Labor for Occupational Safety and Health.

For the reasons set forth in the preamble, chapter XVII of title 29 of the Code of Federal Regulations is amended as follows:

PART 1910—OCCUPATIONAL SAFETY AND HEALTH STANDARDS

■ 1. Add subpart U to read as follows:

Subpart U—COVID-19 Emergency Temporary Standard

Sec.

1910.502 Healthcare.

1910.504 Mini Respiratory Protection Program.

1910.505 Severability.

1910.509 Incorporation by Reference.

Authority: 29 U.S.C. 653, 655, and 657; Secretary of Labor's Order No. 8-2020 (85 FR 58393); 29 CFR part 1911; and 5 U.S.C. 553.

§ 1910.502 Healthcare.

(a) *Scope and application.* (1) Except as otherwise provided in this paragraph, this section applies to all settings where any employee provides healthcare services or healthcare support services.

(2) This section does not apply to the following:

(i) The provision of first aid by an employee who is not a licensed healthcare provider;

(ii) The dispensing of prescriptions by pharmacists in retail settings;

(iii) Non-hospital ambulatory care settings where all non-employees are screened prior to entry and people with

suspected or confirmed COVID-19 are not permitted to enter those settings;

(iv) Well-defined hospital ambulatory care settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;

(v) Home healthcare settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not present;

(vi) Healthcare support services not performed in a healthcare setting (e.g., off-site laundry, off-site medical billing); or

(vii) Telehealth services performed outside of a setting where direct patient care occurs.

Note to paragraph (a)(2). OSHA does not intend to preclude the employers of employees who are unable to be vaccinated from the scope exemption in paragraphs (a)(2)(iv) and (v) of this section. Under various anti-discrimination laws, workers who cannot be vaccinated because of medical conditions, such as allergies to vaccine ingredients, or certain religious beliefs may ask for a reasonable accommodation from their employer. Accordingly, where an employer reasonably accommodates an employee who is unable to be vaccinated in a manner that does not expose the employee to COVID-19 hazards (e.g., telework, working in isolation), that employer may be within the scope exemption in paragraphs (a)(2)(iv) and (v) of this section.

(3)(i) Where a healthcare setting is embedded within a non-healthcare setting (e.g., medical clinic in a manufacturing facility, walk-in clinic in a retail setting), this section applies only to the embedded healthcare setting and not to the remainder of the physical location.

(ii) Where emergency responders or other licensed healthcare providers enter a non-healthcare setting to provide healthcare services, this section applies only to the provision of the healthcare services by that employee.

(4) In well-defined areas where there is no reasonable expectation that any person with suspected or confirmed COVID-19 will be present, paragraphs (f), (h), and (i) of this section do not apply to employees who are fully vaccinated.

Note 1 to paragraph (a). Nothing in this section is intended to limit state or local government mandates or guidance (e.g., executive order, health department order) that go beyond the requirements of and are not inconsistent with this section.

Note 2 to paragraph (a): Employers are encouraged to follow public health guidance from the Centers for Disease Control and Prevention (CDC) even when not required by this section.

(b) *Definitions.* The following definitions apply to this section:

Aerosol-generating procedure means a medical procedure that generates aerosols that can be infectious and are of respirable size. For the purposes of this section, only the following medical procedures are considered aerosol-generating procedures: Open suctioning of airways; sputum induction; cardiopulmonary resuscitation; endotracheal intubation and extubation; non-invasive ventilation (e.g., BiPAP, CPAP); bronchoscopy; manual ventilation; medical/surgical/postmortem procedures using oscillating bone saws; and dental procedures involving: Ultrasonic scalars; high-speed dental handpieces; air/water syringes; air polishing; and air abrasion.

Airborne infection isolation room (AIIR) means a dedicated negative pressure patient-care room, with special air handling capability, which is used to isolate persons with a suspected or confirmed airborne-transmissible infectious disease. AIIRs include both permanent rooms and temporary structures (e.g., a booth, tent or other enclosure designed to operate under negative pressure).

Ambulatory care means healthcare services performed on an outpatient basis, without admission to a hospital or other facility. It is provided in settings such as: Offices of physicians and other health care professionals; hospital outpatient departments; ambulatory surgical centers; specialty clinics or centers (e.g., dialysis, infusion, medical imaging); and urgent care clinics. Ambulatory care does not include home healthcare settings for the purposes of this section.

Assistant Secretary means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

Clean/cleaning means the removal of dirt and impurities, including germs, from surfaces using soap and water or other cleaning agents. Cleaning alone reduces germs on surfaces by removing contaminants and may also weaken or damage some of the virus particles, which decreases risk of infection from surfaces.

Close contact means being within 6 feet of any other person for a cumulative total of 15 minutes or more over a 24-hour period during that person's potential period of transmission. The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated.

Common areas means indoor or outdoor locations under the control of the employer that more than one person may use or where people congregate (e.g., building lobbies, reception areas, waiting rooms, restrooms, break rooms, eating areas, conference rooms).

COVID-19 (Coronavirus Disease 2019) means the respiratory disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). For clarity and ease of reference, this section refers to "COVID-19" when describing exposures or potential exposures to SARS-CoV-2.

COVID-19 positive and confirmed COVID-19 refer to a person who has a confirmed positive test for, or who has been diagnosed by a licensed healthcare provider with, COVID-19.

COVID-19 symptoms mean the following: Fever or chills; cough; shortness of breath or difficulty breathing; fatigue; muscle or body aches; headache; new loss of taste or smell; sore throat; congestion or runny nose; nausea or vomiting; diarrhea.

COVID-19 test means a test for SARS-CoV-2 that is:

(i) Cleared or approved by the U.S. Food and Drug Administration (FDA) or is authorized by an Emergency Use Authorization (EUA) from the FDA to diagnose current infection with the SARS-CoV-2 virus; and

(ii) Administered in accordance with the FDA clearance or approval or the FDA EUA as applicable.

Direct patient care means hands-on, face-to-face contact with patients for the purpose of diagnosis, treatment, and monitoring.

Disinfect/disinfection means using an EPA-registered, hospital-grade disinfectant on EPA's "List N" (incorporated by reference, § 1910.509), in accordance with manufacturers' instructions to kill germs on surfaces.

Elastomeric respirator means a tight-fitting respirator with a facepiece that is made of synthetic or rubber material that permits it to be disinfected, cleaned, and reused according to manufacturer's instructions. It is equipped with a replaceable cartridge(s), canister(s), or filter(s).

Facemask means a surgical, medical procedure, dental, or isolation mask that is FDA-cleared, authorized by an FDA EUA, or offered or distributed as described in an FDA enforcement policy. Facemasks may also be referred to as "medical procedure masks."

Face shield means a device, typically made of clear plastic, that:

(i) Is certified to ANSI/ISEA Z87.1 (incorporated by reference, § 1910.509); or

(ii) Covers the wearer's eyes, nose, and mouth to protect from splashes, sprays, and spatter of body fluids, wraps around the sides of the wearer's face (i.e., temple-to-temple), and extends below the wearer's chin.

Filtering facepiece respirator means a negative pressure particulate respirator with a non-replaceable filter as an integral part of the facepiece or with the entire facepiece composed of the non-replaceable filtering medium.

Fully vaccinated means 2 weeks or more following the final dose of a COVID-19 vaccine.

Hand hygiene means the cleaning and/or disinfecting of one's hands by using standard handwashing methods with soap and running water or an alcohol-based hand rub that is at least 60% alcohol.

Healthcare services mean services that are provided to individuals by professional healthcare practitioners (e.g., doctors, nurses, emergency medical personnel, oral health professionals) for the purpose of promoting, maintaining, monitoring, or restoring health. Healthcare services are delivered through various means including: Hospitalization, long-term care, ambulatory care, home health and hospice care, emergency medical response, and patient transport. For the purposes of this section, healthcare services include autopsies.

Healthcare support services mean services that facilitate the provision of healthcare services. Healthcare support services include patient intake/admission, patient food services, equipment and facility maintenance, housekeeping services, healthcare laundry services, medical waste handling services, and medical equipment cleaning/reprocessing services.

High-touch surfaces and equipment means any surface or piece of equipment that is repeatedly touched by more than one person (e.g., doorknobs, light switches, countertops, handles, desks, tables, phones, keyboards, tools, toilets, faucets, sinks, credit card terminals, touchscreen-enabled devices).

Physical location means a site (including outdoor and indoor areas, a structure, or a group of structures) or an area within a site where work or any work-related activity (e.g., taking breaks, going to the restroom, eating, entering, or exiting work) occurs. A physical location includes the entirety of any space associated with the site (e.g., workstations, hallways, stairwells, breakrooms, bathrooms, elevators) and any other space that an employee might occupy in arriving, working, or leaving.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Respirator means a type of personal protective equipment (PPE) that is certified by NIOSH under 42 CFR part 84 or is authorized under an EUA by the FDA. Respirators protect against airborne hazards by removing specific air contaminants from the ambient (surrounding) air or by supplying breathable air from a safe source. Common types of respirators include filtering facepiece respirators, elastomeric respirators, and PAPRs. Face coverings, facemasks, and face shields are not respirators.

Screen means asking questions to determine whether a person is COVID-19 positive or has symptoms of COVID-19.

Surgical mask means a mask that covers the user's nose and mouth and provides a physical barrier to fluids and particulate materials. The mask meets certain fluid barrier protection standards and Class I or Class II flammability tests. Surgical masks are generally regulated by FDA as Class II devices under 21 CFR 878.4040—Surgical apparel.

Vaccine means a biological product authorized or licensed by the FDA to prevent or provide protection against COVID-19, whether the substance is administered through a single dose or a series of doses.

Workplace means a physical location (e.g., fixed, mobile) where the employer's work or operations are performed.

(c) **COVID-19 plan.** (1) The employer must develop and implement a COVID-19 plan for each workplace. If the employer has multiple workplaces that are substantially similar, its COVID-19 plan may be developed by workplace type rather than by individual workplace so long as all required site-specific information is included in the plan.

Note to paragraph (c)(1). For those employers who do not already have a COVID-19 plan in place, OSHA's website contains significant compliance assistance materials, including a model plan.

(2) If the employer has more than 10 employees, the COVID-19 plan must be written.

(3) The employer must designate one or more workplace COVID-19 safety coordinators to implement and monitor the COVID-19 plan developed under this section. The COVID-19 safety coordinator(s) must be knowledgeable in infection control principles and

practices as they apply to the workplace and employee job operations. The identity of the safety coordinator(s) must be documented in any written COVID-19 plan. The safety coordinator(s) must have the authority to ensure compliance with all aspects of the COVID-19 plan.

(4)(i) The employer must conduct a workplace-specific hazard assessment to identify potential workplace hazards related to COVID-19.

(ii) In order for an employer to be exempt from providing controls in a well-defined area under paragraph (a)(4) of this section based on employees' fully vaccinated status, the COVID-19 plan must include policies and procedures to determine employees' vaccination status.

(5) The employer must seek the input and involvement of non-managerial employees and their representatives, if any, in the hazard assessment and the development and implementation of the COVID-19 plan.

(6) The employer must monitor each workplace to ensure the ongoing effectiveness of the COVID-19 plan and update it as needed.

(7) The COVID-19 plan must address the hazards identified by the assessment required by paragraph (c)(4) of this section, and include policies and procedures to:

(i) Minimize the risk of transmission of COVID-19 for each employee, as required by paragraphs (d) through (n) of this section;

Note to paragraph (c)(7)(i). Although the employer's COVID-19 plan must account for the potential COVID-19 exposures to each employee, the plan can do so generally and need not address each employee individually.

(ii) Effectively communicate and coordinate with other employers:

(A) When employees of different employers share the same physical location, each employer must effectively communicate its COVID-19 plan to all other employers, coordinate to ensure that each of its employees is protected as required by this section, and adjust its COVID-19 plan to address any particular COVID-19 hazards presented by the other employees. This requirement does not apply to delivery people, messengers, and other employees who only enter a workplace briefly to drop off or pick up items.

(B) An employer with one or more employees working in a physical location controlled by another employer must notify the controlling employer when those employees are exposed to conditions at that location that do not meet the requirements of this section; and

(iii) Protect employees who in the course of their employment enter into private residences or other physical locations controlled by a person not covered by the OSH Act (e.g., homeowners, sole proprietors). This must include procedures for employee withdrawal from that location if those protections are inadequate.

Note to paragraph (c). The employer may include other policies, procedures, or information necessary to comply with any applicable federal, state, or local public health laws, standards, and guidelines in their COVID-19 plan.

(d) *Patient screening and management.* In settings where direct patient care is provided, the employer must:

(1) Limit and monitor points of entry to the setting. This provision does not apply where emergency responders or other licensed healthcare providers enter a non-healthcare setting to provide healthcare services.

(2) Screen and triage all clients, patients, residents, delivery people and other visitors, and other non-employees entering the setting.

(3) Implement other applicable patient management strategies in accordance with CDC's "COVID-19 Infection Prevention and Control Recommendations" (incorporated by reference, § 1910.509).

Note to paragraph (d). The employer is encouraged to use telehealth services where available and appropriate in order to limit the number of people entering the workplace.

(e) *Standard and Transmission-Based Precautions.* Employers must develop and implement policies and procedures to adhere to Standard and Transmission-Based Precautions in accordance with CDC's "Guidelines for Isolation Precautions" (incorporated by reference, § 1910.509).

(f) *Personal protective equipment (PPE)—(1) Facemasks.* (i) Employers must provide, and ensure that employees wear, facemasks that meet the definition in paragraph (b) of this section; and

(ii) The employer must ensure a facemask is worn by each employee over the nose and mouth when indoors and when occupying a vehicle with other people for work purposes. The employer must provide a sufficient number of facemasks to each employee to comply with this paragraph and must ensure that each employee changes them at least once per day, whenever they are soiled or damaged, and more frequently as necessary (e.g., patient care reasons).

(iii) The following are exceptions to the requirements for facemasks in paragraph (f)(1)(ii) of this section:

(A) When an employee is alone in a room.

(B) While an employee is eating and drinking at the workplace, provided each employee is at least 6 feet away from any other person, or separated from other people by a physical barrier.

(C) When employees are wearing respiratory protection in accordance with § 1910.134 or paragraph (f) of this section.

(D) When it is important to see a person's mouth (e.g., communicating with an individual who is deaf or hard of hearing) and the conditions do not permit a facemask that is constructed of clear plastic (or includes a clear plastic window). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it.

(E) When employees cannot wear facemasks due to a medical necessity, medical condition, or disability as defined in the Americans with Disabilities Act (42 U.S.C. 12101 *et seq.*), or due to a religious belief. Exceptions must be provided for a narrow subset of persons with a disability who cannot wear a facemask or cannot safely wear a facemask, because of the disability, as defined in the Americans with Disabilities Act (42 U.S.C. 12101 *et seq.*), including a person who cannot independently remove the facemask. The remaining portion of the subset who cannot wear a facemask may be exempted on a case-by-case basis as required by the Americans with Disabilities Act and other applicable laws. In all such situations, the employer must ensure that any such employee wears a face shield for the protection of the employee, if their condition or disability permits it. Accommodations may also need to be made for religious beliefs consistent with Title VII of the Civil Rights Act.

(F) When the employer can demonstrate that the use of a facemask presents a hazard to an employee of serious injury or death (e.g., arc flash, heat stress, interfering with the safe operation of equipment). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it. Any employee not wearing a facemask must remain at least 6 feet away from all other people unless the employer can demonstrate it is not feasible. The employee must resume wearing a facemask when not engaged in the

activity where the facemask presents a hazard.

Note to paragraph (f)(1)(iii)(F). With respect to paragraphs (f)(1)(iii)(D) through (F) of this section, the employer may determine that the use of face shields, without facemasks, in certain settings is not appropriate due to other infection control concerns.

(iv) Where a face shield is required to comply with this paragraph or is otherwise required by the employer, the employer must ensure that face shields are cleaned at least daily and are not damaged. When an employee provides a face shield that meets the definition in paragraph (b) of this section, the employer may allow the employee to use it and is not required to reimburse the employee for that face shield.

(2) Respirators and other PPE for exposure to people with suspected or confirmed COVID-19. When employees have exposure to a person with suspected or confirmed COVID-19, the employer must provide:

(i) A respirator to each employee and ensure that it is provided and used in accordance with § 1910.134 and

(ii) Gloves, an isolation gown or protective clothing, and eye protection to each employee and ensure that the PPE is used in accordance with subpart I of this part.

Note to paragraph (f)(2). When there is a limited supply of filtering facepiece respirators, employers may follow the CDC's "Strategies for Optimizing the Supply of N95 Respirators" (available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>). Where possible, employers are encouraged to select elastomeric respirators or PAPRs instead of filtering facepiece respirators to prevent shortages and supply chain disruption.

(3) Respirators and other PPE during aerosol-generating procedures. For aerosol-generating procedures performed on a person with suspected or confirmed COVID-19, the employer must provide:

(i) A respirator to each employee and ensure that it is provided and used in accordance with § 1910.134; and

(ii) Gloves, an isolation gown or protective clothing, and eye protection to each employee and ensure that the PPE is used in accordance with subpart I of this part.

Note 1 to paragraph (f)(3). For aerosol-generating procedures on a person suspected or confirmed with COVID-19, employers are encouraged to select elastomeric respirators or PAPRs instead of filtering facepiece respirators.

Note 2 to paragraph (f)(3). Additional requirements specific to aerosol-generating procedures on people with suspected or

confirmed COVID-19 are contained in paragraph (g) of this section.

(4) Use of respirators when not required. (i) The employer may provide a respirator to the employee instead of a facemask as required by paragraph (f)(1) of this section. In such circumstances, the employer must comply with § 1910.504.

(ii) Where the employer provides the employee with a facemask as required by paragraph (f)(1) of this section, the employer must permit the employee to wear their own respirator instead of a facemask. In such circumstances, the employer must also comply with § 1910.504.

(5) Respirators and other PPE based on Standard and Transmission-Based Precautions. The employer must provide protective clothing and equipment (e.g., respirators, gloves, gowns, goggles, face shields) to each employee in accordance with Standard and Transmission-Based Precautions in healthcare settings in accordance with CDC's "Guidelines for Isolation Precautions" (incorporated by reference, § 1910.509) and ensure that the protective clothing and equipment is used in accordance with subpart I of this part.

(g) *Aerosol-generating procedures on a person with suspected or confirmed COVID-19.* When an aerosol-generating procedure is performed on a person with suspected or confirmed COVID-19:

(1) The employer must limit the number of employees present during the procedure to only those essential for patient care and procedure support.

(2) The employer must ensure that the procedure is performed in an existing AIIR, if available.

(3) After the procedure is completed, the employer must clean and disinfect the surfaces and equipment in the room or area where the procedure was performed.

Note to paragraph (g). Respirators and other PPE requirements during aerosol-generating procedures are contained in paragraph (f)(3) of this section.

(h) *Physical distancing.* (1) The employer must ensure that each employee is separated from all other people by at least 6 feet when indoors unless the employer can demonstrate that such physical distancing is not feasible for a specific activity (e.g., hands-on medical care). This provision does not apply to momentary exposure while people are in movement (e.g., passing in hallways or aisles).

(2) When the employer establishes it is not feasible for an employee to maintain a distance of at least 6 feet from all other people, the employer

must ensure that the employee is as far apart from all other people as feasible.

Note to paragraph (h). Physical distancing can include methods such as: Telehealth; telework or other remote work arrangements; reducing the number of people, including non-employees, in an area at one time; visual cues such as signs and floor markings to indicate where employees and others should be located or their direction and path of travel; staggered arrival, departure, work, and break times; and adjusted work processes or procedures to allow greater distance between employees.

(i) *Physical barriers.* At each fixed work location outside of direct patient care areas (e.g., entryway/lobby, check-in desks, triage, hospital pharmacy windows, bill payment) where each employee is not separated from all other people by at least 6 feet of distance, the employer must install cleanable or disposable solid barriers, except where the employer can demonstrate it is not feasible. The barrier must be sized (e.g., height and width) and located to block face-to-face pathways between individuals based on where each person would normally stand or sit. The barrier may have a pass-through space at the bottom for objects and merchandise.

Note to paragraph (i). Physical barriers are not required in direct patient care areas or resident rooms.

(j) *Cleaning and disinfection.* (1) In patient care areas, resident rooms, and for medical devices and equipment, the employer must follow standard practices for cleaning and disinfection of surfaces and equipment in accordance with CDC's "COVID-19 Infection Prevention and Control Recommendations" and CDC's "Guidelines for Environmental Infection Control," pp. 86-103, 147-149 (both incorporated by reference, § 1910.509).

(2) In all other areas, the employer must:

(i) Clean high-touch surfaces and equipment at least once a day, following manufacturers' instructions for application of cleaners; and

(ii) When the employer is aware that a person who is COVID-19 positive has been in the workplace within the last 24 hours, clean and disinfect, in accordance with CDC's "Cleaning and Disinfecting Guidance" (incorporated by reference, § 1910.509), any areas, materials, and equipment under the employer's control that have likely been contaminated by the person who is COVID-19 positive (e.g., rooms they occupied, items they touched).

(3) The employer must provide alcohol-based hand rub that is at least 60% alcohol or provide readily accessible hand washing facilities.

(k) *Ventilation.* (1) Employers who own or control buildings or structures with an existing heating, ventilation, and air conditioning (HVAC) system(s) must ensure that:

- (i) The HVAC system(s) is used in accordance with the HVAC manufacturer's instructions and the design specifications of the HVAC system(s);
- (ii) The amount of outside air circulated through its HVAC system(s) and the number of air changes per hour are maximized to the extent appropriate;
- (iii) All air filters are rated Minimum Efficiency Reporting Value (MERV) 13 or higher, if compatible with the HVAC system(s). If MERV-13 or higher filters are not compatible with the HVAC system(s), employers must use filters with the highest compatible filtering efficiency for the HVAC system(s);
- (iv) All air filters are maintained and replaced as necessary to ensure the proper function and performance of the HVAC system(s); and
- (v) All intake ports that provide outside air to the HVAC system(s) are cleaned, maintained, and cleared of any debris that may affect the function and performance of the HVAC system(s).

(2) Where the employer has an existing AHIR, the employer must maintain and operate it in accordance with its design and construction criteria.

Note 1 to paragraph (k). This section does not require installation of new HVAC systems or AHIRs to replace or augment functioning systems.

Note 2 to paragraph (k). In addition to the requirements for existing HVAC systems and AHIRs, all employers should also consider other measures to improve ventilation in accordance with "CDC's Ventilation Guidance," (available at www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html) (e.g., opening windows and doors). This could include maximizing ventilation in buildings without HVAC systems or in vehicles.

(l) *Health screening and medical management—(1) Screening.* (i) The employer must screen each employee before each work day and each shift. Screening may be conducted by asking employees to self-monitor before reporting to work or may be conducted in-person by the employer.

(ii) If a COVID-19 test is required by the employer for screening purposes, the employer must provide the test to each employee at no cost to the employee.

(2) *Employee notification to employer of COVID-19 illness or symptoms.* The employer must require each employee to promptly notify the employer when the employee:

- (i) Is COVID-19 positive (*i.e.*, confirmed positive test for, or has been diagnosed by a licensed healthcare provider with, COVID-19); or
- (ii) Has been told by a licensed healthcare provider that they are suspected to have COVID-19; or
- (iii) Is experiencing recent loss of taste and/or smell with no other explanation; or
- (iv) Is experiencing both fever (≥ 100.4 °F) and new unexplained cough associated with shortness of breath.

(3) *Employer notification to employees of COVID-19 exposure in the workplace.*

(i) Except as provided for in paragraph (l)(3)(iii) of this section, when the employer is notified that a person who has been in the workplace(s) (including employees, clients, patients, residents, vendors, contractors, customers, delivery people and other visitors, or other non-employees) is COVID-19 positive, the employer must, within 24 hours:

(A) Notify each employee who was not wearing a respirator and any other required PPE and has been in close contact with that person in the workplace. The notification must state the fact that the employee was in close contact with someone with COVID-19 along with the date(s) that contact occurred.

(B) Notify all other employees who were not wearing a respirator and any other required PPE and worked in a well-defined portion of a workplace (e.g., a particular floor) in which that person was present during the potential transmission period. The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated. The notification must specify the date(s) the person with COVID-19 was in the workplace during the potential transmission period.

(C) Notify other employers whose employees were not wearing respirators and any other required PPE and have been in close contact with that person, or worked in a well-defined portion of a workplace (e.g., a particular floor) in which that person was present, during the potential transmission period. The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated. The notification must specify the date(s) the person with COVID-19 was in the workplace during the potential transmission period and the location(s) where the person with COVID-19 was in the workplace.

(ii) The notifications required by paragraph (l)(3)(i) of this section must not include any employee's name, contact information (e.g., phone number, email address), or occupation.

(iii) The notification provisions are not triggered by the presence of a patient with confirmed COVID-19 in a workplace where services are normally provided to suspected or confirmed COVID-19 patients (e.g., emergency rooms, urgent care facilities, COVID-19 testing sites, COVID-19 wards in hospitals).

(4) *Medical removal from the workplace.* (i) If the employer knows an employee meets the criteria listed in paragraph (l)(2)(i) of this section, then the employer must immediately remove that employee and keep the employee removed until they meet the return to work criteria in paragraph (l)(6) of this section.

(ii) If the employer knows an employee meets the criteria listed in paragraphs (l)(2)(ii) through (iv) of this section, then the employer must immediately remove that employee and either:

(A) Keep the employee removed until they meet the return to work criteria in paragraph (l)(6) of this section; or

(B) Keep the employee removed and provide a COVID-19 polymerase chain reaction (PCR) test at no cost to the employee.

(1) If the test results are negative, the employee may return to work immediately.

(2) If the test results are positive, the employer must comply with paragraph (l)(4)(i) of this section.

(3) If the employee refuses to take the test, the employer must continue to keep the employee removed from the workplace consistent with paragraph (l)(4)(ii)(A) of this section, but the employer is not obligated to provide medical removal protection benefits in accordance with paragraph (l)(5)(iii) of this section. Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons.

Note to paragraph (l)(4)(ii). This partial symptom list in paragraphs (l)(2)(iii) and (l)(2)(iv) of this section informs the employer of the minimum requirements for compliance. The full list of COVID-19 symptoms provided by CDC includes additional symptoms not listed in paragraphs (l)(2)(iii) through (iv) of this section. Employers may choose to remove or test employees with additional symptoms from the CDC list, or refer the employees to a healthcare provider.

(iii)(A) If the employer is required to notify the employee of close contact in

the workplace to a person who is COVID-19 positive in accordance with paragraph (l)(3)(i)(A) of this section, then the employer must immediately remove that employee and either:

(1) Keep the employee removed for 14 days; or

(2) Keep the employee removed and provide a COVID-19 test at least five days after the exposure at no cost to the employee.

(i) If the test results are negative, the employee may return to work after seven days following exposure.

(ii) If the test results are positive, the employer must comply with paragraph (l)(4)(i) of this section.

(iii) If the employee refuses to take the test, the employer must continue to keep the employee removed from the workplace consistent with paragraph (l)(4)(iii)(A)(1) of this section, but the employer is not obligated to provide medical removal protection benefits in accordance with paragraph (l)(5)(iii) of this section. Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons, consistent with applicable non-discrimination laws.

(B) Employers are not required to remove any employee who would otherwise be required to be removed under paragraph (i)(4)(iii)(A) of this section if the employee does not experience the symptoms in paragraph (l)(2)(iii) or (iv) of this section and has:

(1) Been fully vaccinated against COVID-19 (*i.e.*, 2 weeks or more following the final dose); or

(2) Had COVID-19 and recovered within the past 3 months.

(iv) Any time an employee is required to be removed from the workplace for any reason under paragraph (l)(4) of this section, the employer may require the employee to work remotely or in isolation if suitable work is available.

(5) *Medical removal protection benefits.* (i) Employers with 10 or fewer employees on the effective date of this section are not required to comply with paragraphs (l)(5)(iii) through (iv) of this section.

(ii) When an employer allows an employee to work remotely or in isolation in accordance with paragraph (l)(4)(iv) of this section, the employer must continue to pay the employee the same regular pay and benefits the employee would have received had the employee not been absent from work, until the employee meets the return to work criteria specified in paragraph (l)(4)(iii) or (l)(6) of this section.

(iii) When an employer removes an employee in accordance with paragraph (l)(4) of this section:

(A) The employer must continue to provide the benefits to which the employee is normally entitled and must also pay the employee the same regular pay the employee would have received had the employee not been absent from work, up to \$1,400 per week, until the employee meets the return to work criteria specified in paragraph (l)(4)(iii) or (l)(6) of this section.

(B) For employers with fewer than 500 employees, the employer must pay the employee up to the \$1,400 per week cap but, beginning in the third week of an employee's removal, the amount is reduced to only two-thirds of the same regular pay the employee would have received had the employee not been absent from work, up to \$200 per day (\$1,000 per week in most cases).

(iv) The employer's payment obligation under paragraph (l)(5)(iii) of this section is reduced by the amount of compensation that the employee receives from any other source, such as a publicly or employer-funded compensation program (*e.g.*, paid sick leave, administrative leave), for earnings lost during the period of removal or any additional source of income the employee receives that is made possible by virtue of the employee's removal.

(v) Whenever an employee returns to the workplace after a COVID-19-related workplace removal, that employee must not suffer any adverse action as a result of that removal from the workplace and must maintain all employee rights and benefits, including the employee's right to their former job status, as if the employee had not been removed.

(6) *Return to work.* The employer must make decisions regarding an employee's return to work after a COVID-19-related workplace removal in accordance with guidance from a licensed healthcare provider or CDC's "Isolation Guidance" (incorporated by reference, § 1910.509); and CDC's "Return to Work Healthcare Guidance" (incorporated by reference, § 1910.509).

Note to paragraph (l). OSHA recognizes that CDC's "Strategies to Mitigate Healthcare Personnel Staffing Shortages" (available at www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html) allows elimination of quarantine for certain healthcare workers, but only as a last resort, if the workers' absence would mean there are no longer enough staff to provide safe patient care, specific other amelioration strategies have already been tried, patients have been notified, and workers are utilizing additional PPE at all times.

(m) *Vaccination.* The employer must support COVID-19 vaccination for each

employee by providing reasonable time and paid leave (*e.g.*, paid sick leave, administrative leave) to each employee for vaccination and any side effects experienced following vaccination.

(n) *Training.* (1) The employer must ensure that each employee receives training, in a language and at a literacy level the employee understands, and so that the employee comprehends at least the following:

(i) COVID-19, including how the disease is transmitted (including pre-symptomatic and asymptomatic transmission), the importance of hand hygiene to reduce the risk of spreading COVID-19 infections, ways to reduce the risk of spreading COVID-19 through the proper covering of the nose and mouth, the signs and symptoms of the disease, risk factors for severe illness, and when to seek medical attention;

(ii) Employer-specific policies and procedures on patient screening and management;

(iii) Tasks and situations in the workplace that could result in COVID-19 infection;

(iv) Workplace-specific policies and procedures to prevent the spread of COVID-19 that are applicable to the employee's duties (*e.g.*, policies on Standard and Transmission-Based Precautions, physical distancing, physical barriers, ventilation, aerosol-generating procedures);

(v) Employer-specific multi-employer workplace agreements related to infection control policies and procedures, the use of common areas, and the use of shared equipment that affect employees at the workplace;

(vi) Employer-specific policies and procedures for PPE worn to comply with this section, including:

(A) When PPE is required for protection against COVID-19;

(B) Limitations of PPE for protection against COVID-19;

(C) How to properly put on, wear, and take off PPE;

(D) How to properly care for, store, clean, maintain, and dispose of PPE; and

(E) Any modifications to donning, doffing, cleaning, storage, maintenance, and disposal procedures needed to address COVID-19 when PPE is worn to address workplace hazards other than COVID-19;

(vii) Workplace-specific policies and procedures for cleaning and disinfection;

(viii) Employer-specific policies and procedures on health screening and medical management;

(ix) Available sick leave policies, any COVID-19-related benefits to which the employee may be entitled under

applicable federal, state, or local laws, and other supportive policies and practices (e.g., telework, flexible hours);

(x) The identity of the safety coordinator(s) specified in the COVID-19 plan;

(xi) The requirements of this section; and

(xii) How the employee can obtain copies of this section and any employer-specific policies and procedures developed under this section, including the employer's written COVID-19 plan, if required.

Note to paragraph (n)(1). Employers may rely on training completed prior to the effective date of this section to the extent that it meets the relevant training requirements under this paragraph.

(2) The employer must ensure that each employee receives additional training whenever:

(i) Changes occur that affect the employee's risk of contracting COVID-19 at work (e.g., new job tasks);

(ii) Policies or procedures are changed; or

(iii) There is an indication that the employee has not retained the necessary understanding or skill.

(3) The employer must ensure that the training is overseen or conducted by a person knowledgeable in the covered subject matter as it relates to the employee's job duties.

(4) The employer must ensure that the training provides an opportunity for interactive questions and answers with a person knowledgeable in the covered subject matter as it relates to the employee's job duties.

(o) **Anti-Retaliation.** (1) The employer must inform each employee that:

(i) Employees have a right to the protections required by this section; and

(ii) Employers are prohibited from discharging or in any manner discriminating against any employee for exercising their right to the protections required by this section, or for engaging in actions that are required by this section.

(2) The employer must not discharge or in any manner discriminate against any employee for exercising their right to the protections required by this section, or for engaging in actions that are required by this section.

Note to paragraph (o). In addition, section 11(c) of the OSH Act also prohibits the employer from discriminating against an employee for exercising rights under, or as a result of actions that are required by, this section. That provision of the Act also protects the employee who files a safety and health complaint, or otherwise exercises any rights afforded by the OSH Act.

(p) **Requirements implemented at no cost to employees.** The implementation

of all requirements of this section, with the exception of any employee self-monitoring conducted under paragraph (l)(1)(i) of this section, must be at no cost to employees.

(q) **Recordkeeping.** (1) **Small employer exclusion.** Employers with 10 or fewer employees on the effective date of this section are not required to comply with paragraph (q)(2) or (q)(3) of this section.

(2) **Required records.** Employers with more than 10 employees on the effective date of this section must:

(i) Retain all versions of the COVID-19 plan implemented to comply with this section while this section remains in effect.

(ii) Establish and maintain a COVID-19 log to record each instance identified by the employer in which an employee is COVID-19 positive, regardless of whether the instance is connected to exposure to COVID-19 at work.

(A) The COVID-19 log must contain, for each instance, the employee's name, one form of contact information, occupation, location where the employee worked, the date of the employee's last day at the workplace, the date of the positive test for, or diagnosis of, COVID-19, and the date the employee first had one or more COVID-19 symptoms, if any were experienced.

(B) The information in the COVID-19 log must be recorded within 24 hours of the employer learning that the employee is COVID-19 positive and must be maintained as though it is a confidential medical record and must not be disclosed except as required by this ETS or other federal law.

(C) The COVID-19 log must be maintained and preserved while this section remains in effect.

Note to paragraph (q)(2)(ii): The COVID-19 log is intended to assist employers with tracking and evaluating instances of employees who are COVID-19 positive without regard to whether those employees were infected at work. The tracking will help evaluate potential workplace exposure to other employees.

(3) **Availability of records.** By the end of the next business day after a request, the employer must provide, for examination and copying:

(i) All versions of the written COVID-19 plan to all of the following: Any employees, their personal representatives, and their authorized representatives.

(ii) The individual COVID-19 log entry for a particular employee to that employee and to anyone having written authorized consent of that employee.

(iii) A version of the COVID-19 log that removes the names of employees, contact information, and occupation,

and only includes, for each employee in the COVID-19 log, the location where the employee worked, the last day that the employee was at the workplace before removal, the date of that employee's positive test for, or diagnosis of, COVID-19, and the date the employee first had one or more COVID-19 symptoms, if any were experienced, to all of the following: Any employees, their personal representatives, and their authorized representatives.

(iv) All records required to be maintained by this section to the Assistant Secretary.

Note to paragraph (q). Employers must continue to record all work-related confirmed cases of COVID-19 on their OSHA Forms 300, 300A, and 301, or the equivalent forms, if required to do so under 29 CFR part 1904.

(r) **Reporting COVID-19 fatalities and hospitalizations to OSHA.** (1) The employer must report to OSHA:

(i) Each work-related COVID-19 fatality within 8 hours of the employer learning about the fatality.

(ii) Each work-related COVID-19 inpatient hospitalization within 24 hours of the employer learning about the inpatient hospitalization.

(2) When reporting COVID-19 fatalities and inpatient hospitalizations to OSHA in accordance with paragraph (r)(1) of this section, the employer must follow the requirements in 29 CFR 1904.39, except for 29 CFR 1904.39(a)(1) and (2) and (b)(6).

(s) **Dates.** (1) **Effective date.** This section is effective as of June 21, 2021.

(2) **Compliance dates.** (i) Employers must comply with all requirements of this section, except for requirements in paragraphs (i), (k), and (n) of this section by July 6, 2021.

(ii) Employers must comply with the requirements of this section in paragraphs (i), (k), and (n) of this section by July 21, 2021.

§ 1910.504 Mini Respiratory Protection Program.

(a) **Scope and application.** This section applies only to respirator use in accordance with § 1910.502(f)(4).

(b) **Definitions.** The following definitions apply to this section:

COVID-19 (Coronavirus Disease 2019) means the respiratory disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). For clarity and ease of reference, this section refers to "COVID-19" when describing exposures or potential exposures to SARS-CoV-2.

Elastomeric respirator means a tight-fitting respirator with a facepiece that is made of synthetic or rubber material that permits it to be disinfected, cleaned, and reused according to

manufacturer's instructions. It is equipped with a replaceable cartridge(s), canister(s), or filter(s).

Filtering facepiece respirator means a negative-pressure particulate respirator with a non-replaceable filter as an integral part of the facepiece or with the entire facepiece composed of the non-replaceable filtering medium.

Hand hygiene means the cleaning and/or disinfecting of one's hands by using standard handwashing methods with soap and running water or an alcohol-based hand rub that is at least 60% alcohol.

Respirator means a type of personal protective equipment (PPE) that is certified by the National Institute for Occupational Safety and Health (NIOSH) under 42 CFR part 84 or is authorized under an Emergency Use Authorization (EUA) by the US Food and Drug Administration. Respirators protect against airborne hazards by removing specific air contaminants from the ambient (surrounding) air or by supplying breathable air from a safe source. Common types of respirators include filtering facepiece respirators, elastomeric respirators, and PAPRs. Face coverings, facemasks, and face shields are not respirators.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Tight-fitting respirator means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator (e.g., filtering facepiece).

User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

(c) **Respirators provided by employees.** Where employees provide and use their own respirators, the employer must provide each employee with the following notice: Respirators can be an effective method of protection against COVID-19 hazards when properly selected and worn. Respirator use is encouraged to provide an additional level of comfort and protection for workers even in circumstances that do not require a respirator to be used. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. If your employer allows you to provide and use your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following:

(1) Read and follow all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.

(2) Keep track of your respirator so that you do not mistakenly use someone else's respirator.

(3) Do not wear your respirator where other workplace hazards (e.g., chemical exposures) require use of a respirator. In such cases, your employer must provide you with a respirator that is used in accordance with OSHA's respiratory protection standard (29 CFR 1910.134). For more information about using a respirator, see OSHA's respiratory protection safety and health topics page (<https://www.osha.gov/respiratory-protection>).

(d) **Respirators provided by employers.** Where employers provide respirators to their employees, the employer must comply with the following requirements:

(1) **Training.** The employer must ensure that each employee wearing a respirator receives training prior to first use and if they change the type of respirator, in a language and at a literacy level the employee understands, and comprehends at least the following:

(i) How to inspect, put on and remove, and use a respirator;

(ii) The limitations and capabilities of the respirator, particularly when the respirator has not been fit tested;

(iii) Procedures and schedules for storing, maintaining, and inspecting respirators;

(iv) How to perform a user seal check as described in paragraph (d)(2) of this section; and

(v) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators and what to do if the employee experiences signs and symptoms.

(2) **User seal check.** (i) The employer must ensure that each employee who uses a tight-fitting respirator performs a user seal check to ensure that the respirator is properly seated to the face each time the respirator is put on. Acceptable methods of user seal checks include:

(A) Positive pressure user seal check (i.e., blow air out). Once you have conducted proper hand hygiene and properly donned the respirator, place your hands over the facepiece, covering as much surface area as possible. Exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure is being built up inside the facepiece without any evidence of outward leakage of air at the seal. Examples of evidence that it is leaking could be the feeling of air

movement on your face along the seal of the facepiece, fogging of your glasses, or a lack of pressure being built up inside the facepiece. If the particulate respirator has an exhalation valve, then performing a positive pressure check may not be possible unless the user can cover the exhalation valve. In such cases, a negative pressure check must be performed.

(B) Negative pressure user seal check (i.e., suck air in). Once you have conducted proper hand hygiene and properly donned the respirator, cover the filter surface with your hands as much as possible and then inhale. The facepiece should collapse on your face and you should not feel air passing between your face and the facepiece.

(ii) The employer must ensure that each employee corrects any problems discovered during the user seal check. In the case of either type of user seal check (positive or negative), if air leaks around the nose, use both hands to readjust how the respirator sits on your face or adjust the nosepiece, if applicable. Readjust the straps along the sides of your head until a proper seal is achieved.

Note to paragraph (d)(2). When employees are required to wear a respirator and a problem with the seal check arises due to interference with the seal by an employee's facial hair, employers may provide a different type of respirator to accommodate employees who cannot trim or cut facial hair due to religious belief.

(3) **Reuse of respirators.** (i) The employer must ensure that a filtering facepiece respirator used by a particular employee is only reused by that employee, and only when:

(A) The respirator is not visibly soiled or damaged;

(B) The respirator has been stored in a breathable storage container (e.g., paper bag) for at least five calendar days between use and has been kept away from water or moisture;

(C) The employee does a visual check in adequate lighting for damage to the respirator's fabric or seal;

(D) The employee successfully completes a user seal check as described in paragraph (d)(2) of this section;

(E) The employee uses proper hand hygiene before putting the respirator on and conducting the user seal check; and

(F) The respirator has not been worn more than five days total.

Note to paragraph (d)(3)(i). The reuse of single-use respirators (e.g., filtering facepiece respirators) is discouraged.

(ii) The employer must ensure that an elastomeric respirator or PAPR is only reused when:

(A) The respirator is not damaged;

(B) The respirator is cleaned and disinfected as often as necessary to be maintained in a sanitary condition in accordance with § 1910.134, Appendix B-2; and

(C) A change schedule is implemented for cartridges, canisters, or filters.

(4) *Discontinuing use of respirators.* Employers must require employees to discontinue use of a respirator when either the employee or a supervisor reports medical signs or symptoms (e.g., shortness of breath, coughing, wheezing, chest pain, any other symptoms related to lung problems, cardiovascular symptoms) that are related to ability to use a respirator. Any employee who previously had a medical evaluation and was determined to not be medically fit to wear a respirator must not be provided with a respirator under this standard unless they are re-evaluated and medically cleared to use a respirator.

(e) *Effective date.* This section is effective as of June 21, 2021.

§ 1910.505 Severability.

Each section of this subpart U, and each provision within those sections, is separate and severable from the other sections and provisions. If any provision of this subpart is held to be invalid or unenforceable on its face, or as applied to any person, entity, or circumstance, or is stayed or enjoined, that provision shall be construed so as to continue to give the maximum effect to the provision permitted by law, unless such holding shall be one of utter invalidity or unenforceability, in which event the provision shall be severable from this subpart and shall not affect the remainder of the subpart.

§ 1910.509 Incorporation by Reference.

(a)(1) The material listed in this section is incorporated by reference into this subpart with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, OSHA must publish a document in the **Federal Register** and the material must

be available to the public. All approved material is available for inspection at any Regional Office of the Occupational Safety and Health Administration (OSHA), or at the OSHA Docket Office, U.S. Department of Labor, 200 Constitution Avenue NW, Room N-3508, Washington, DC 20210; telephone: 202-693-2350 (TTY number: 877-889-5627). It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of these standards at NARA, email fedreg.legal@nara.gov, or go to www.archives.gov/federal-register/cfr/ibr-locations.html.

(2) The material is available from the sources listed in this section and as follows:

(i) The material listed in paragraphs (b) and (c) of this section (CDC and EPA) is available at this permanent weblink hosted by OSHA: www.osha.gov/coronavirus/ets/ibr.

(ii) The material listed in paragraph (d) of this section (ISEA) is available from the American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036; telephone: 212-642-4900; fax: 212-398-0023; website: <http://www.ansi.org>.

(b) Centers for Disease Control and Prevention (CDC): 1600 Clifton Road, Atlanta, GA 30329; websites: <https://www.cdc.gov/>, <https://www.cdc.gov/coronavirus/2019-ncov/communication/guidance.html>, and <https://www.cdc.gov/infectioncontrol/guidelines/>.

(1) *Cleaning and Disinfecting Guidance.* COVID-19: Cleaning and Disinfecting Your Facility; Every Day and When Someone is Sick, updated April 5, 2021, IBR approved for § 1910.502(j).

(2) *COVID-19 Infection Prevention and Control Recommendations.* COVID-19: Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic, updated February 23, 2021, IBR approved for §§ 1910.502(d) and (j).

(3) *Guidelines for Isolation Precautions.* 2007 Guideline for

Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, updated July 2019, IBR approved for §§ 1910.502(e) and (f).

(4) *Guidelines for Environmental Infection Control.* Guidelines for Environmental Infection Control in Health-Care Facilities, updated July 2019, IBR approved for § 1910.502(j).

(5) *Isolation Guidance.* COVID-19: Isolation If You Are Sick; Separate yourself from others if you have COVID-19, updated February 18, 2021, IBR approved for § 1910.502(l).

(6) *Return to Work Healthcare Guidance.* COVID-19: Return to Work Criteria for Healthcare Personnel with SARS-CoV-2 Infection (Interim Guidance), updated February 16, 2021, IBR approved for § 1910.502(l).

(c) U.S. Environmental Protection Agency (EPA): 1200 Pennsylvania Avenue NW, Washington, DC 20460; website: <https://www.epa.gov/>.

(1) List N. Pesticide Registration List N: Disinfectants for Coronavirus (COVID-19), updated April 9, 2021, IBR approved for § 1910.502(b).

(2) [Reserved]

(d) International Safety Equipment Association (ISEA): 1901 North Moore Street, Suite 808, Arlington, VA 22209; website: www.safetyequipment.org

(1) ANSI/ISEA Z87.1-2010, American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI-approved April 13, 2010, IBR approved for § 1910.502(b).

(2) ANSI/ISEA Z87.1-2015, American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI-approved May 28, 2015, IBR approved for § 1910.502(b).

(3) ANSI/ISEA Z87.1-2020, American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI-approved March 11, 2020, IBR approved for § 1910.502(b).

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DRAFT: JUNE 21, 2021

**VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY (DOLI)
VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) PROGRAM**

SUBJECT: SIDE BY SIDE COMPARISON OF OSHA COVID-19 EMERGENCY TEMPORARY STANDARD (OSHA COVID-19 ETS), 1910.502, et seq, AND THE FINAL PERMANENT STANDARD (FPS) FOR INFECTIOUS DISEASE PREVENTION OF THE SARS-COV-2 VIRUS THAT CAUSES COVID-19, 16VAC25-220

The OSHA COVID-19 ETS and Preamble can be found at: <https://www.govinfo.gov/content/pkg/FR-2021-06-21/pdf/2021-12428.pdf>

NOTE: “ALAEA” means “at least as effective as,” OSH Act of 1970, 29 USC 667(c)(2), 655(c), Occupational Safety and Health Standards; 29 CFR 1953.5(b), Emergency temporary standards.

REFERENCES:

29 USC 667(c)(2) State Jurisdiction and State Plans

....

(c) The Secretary shall approve the plan submitted by a State under subsection (b), or any modification thereof, if such plan in his judgement --

(1) designates a State agency or agencies as the agency or agencies responsible for administering the plan throughout the State,

(2) provides for the development and enforcement of safety and health standards relating to one or more safety or health issues, **which standards (and the enforcement of which standards) are or will be at least as effective in providing safe and healthful employment and places of employment as the standards promulgated under section 6 which relate to the same issues**, and which standards, when applicable to products which are distributed or used in interstate commerce, are required by compelling local conditions and do not unduly burden interstate commerce....(Emphasis added).

29 USC 655(c) Occupational Safety and Health Standards.

....

(c) (1) The Secretary shall provide, without regard to the requirements of chapter 5, title 5, Unites States Code, for an emergency temporary standard to take immediate effect upon publication in the Federal Register if he determines --

(A) that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and

(B) that such emergency standard is necessary to protect employees from such danger.

(2) Such standard shall be effective until superseded by a standard promulgated in accordance with the procedures prescribed in paragraph (3) of this subsection.

(3) Upon publication of such standard in the Federal Register the Secretary shall commence a proceeding in accordance with section 6 (b) of this Act, and the standard as published shall also serve as a proposed rule for the proceeding. The Secretary shall promulgate a standard under this paragraph no later than six months after publication of the emergency standard as provided in paragraph (2) of this subsection.

(Emphasis added).

1953.5(b) Emergency temporary standards.

1953.5(b)(1) Immediately upon publication of an emergency temporary standard in the Federal Register, OSHA shall advise the States of the standard and that a Federal program change supplement shall be required. **This notification must also provide that the State has 30 days after the date of promulgation of the Federal standard to adopt a State emergency temporary standard if the State plan covers that issue. The State may demonstrate that promulgation of an emergency temporary standard is not necessary because the State standard is already the same as or at least as effective as the Federal standard change. The State standard must remain in effect for the duration of the Federal emergency temporary standard which may not exceed six (6) months.**

1953.5(b)(2) Within 15 days after receipt of the notice of a Federal emergency temporary standard, the State shall advise OSHA of the action it will take. State standards shall be submitted in accordance with the applicable procedures in § 1953.4(b) -- Federal Program Changes, except that the required documentation or plan supplement must be submitted within 5 days of State promulgation. (Emphasis added).

ETS Section	ETS Text	FPS Section	FPS Text	ALAEA Discussion Where Applicable	Comments
§1910.502(a) Scope and Application	<p>(a) Scope and application.</p> <p>(1) Except as otherwise provided in this paragraph, this section applies to all settings where any employee provides healthcare services or healthcare support services.</p> <p>(2) This section does not apply to the following:</p> <p>(i) the provision of first aid by an employee who is not a licensed healthcare provider;</p> <p>(ii) the dispensing of prescriptions by pharmacists in retail settings;</p> <p>(iii) non-hospital ambulatory care settings where all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;</p> <p>(iv) well-defined hospital ambulatory care settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;</p> <p>(v) home healthcare settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not present;</p> <p>(vi) healthcare support services not performed in a healthcare setting (e.g., off-site laundry, off-site medical billing); or</p> <p>(vii) telehealth services performed outside of a setting where direct patient care occurs.</p> <p>Note to paragraphs (a)(2)(iv) and (a)(2)(v): OSHA does not intend to preclude the employers of employees who are unable to be vaccinated from the scope exemption in paragraphs (a)(2)(iv) and (a)(2)(v). Under various anti-discrimination laws, workers who cannot be vaccinated because of medical conditions, such as allergies to vaccine ingredients, or certain religious beliefs may ask for a reasonable accommodation from their employer. Accordingly, where an employer reasonably accommodates an employee who is unable to be vaccinated in a manner that does not expose the employee to COVID-19 hazards (e.g., telework, working</p>	16VAC25-220-10. Purpose, scope, and applicability.	<p>Purpose, scope, and applicability.</p> <p>A. This standard is designed to establish requirements for employers to control, prevent, and mitigate the spread of SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19) to and among employees and employers.</p> <p>B. This standard is adopted in accordance with subdivision 6 a of § 40.1-22 of the Code of Virginia and shall apply to every employer, employee, and place of employment in the Commonwealth of Virginia within the jurisdiction of the VOSH program as described in 16VAC25- 60-20 and 16VAC25-60-30.</p> <p>C. This standard is designed to supplement and enhance existing VOSH laws, rules, regulations, and standards applicable directly or indirectly to SARS-CoV-2 virus or COVID-19 disease-related hazards such as, but not limited to, those dealing with personal protective equipment, respiratory protective equipment, sanitation, access to employee exposure and medical records, occupational exposure to hazardous chemicals in laboratories, hazard communication, § 40.1-51.1 A of the Code of Virginia, etc. Should this standard conflict with an existing VOSH rule, regulation, or standard, the more stringent requirement from an occupational safety and health hazard prevention standpoint shall apply. Notwithstanding anything to the contrary in this standard, no enforcement action shall be brought against an employer or institution for failure to provide PPE required by this standard if such PPE is not readily available on commercially reasonable terms and the employer or institution makes a good faith effort to acquire or provide such PPE as is readily available on commercially reasonable terms. The Department of Labor and Industry shall consult with the Virginia Department of Health as to the ready availability of PPE on commercially reasonable terms and, in the event there are limited supplies of PPE, whether such supplies are being allocated to high risk or very high risk workplaces.</p> <p>D. Application of this standard to a place of employment will be based on the exposure risk level presented by SARS-CoV-2 virus-related and COVID-19 disease-related hazards present or job tasks undertaken by employees at the place of employment as defined in this standard (i.e., very high, high, medium, and lower risk levels).</p> <p>1. It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower exposure risk for purposes of application of the requirements of</p>		<p>The OSHA ETS applies only to health care workers and even excludes some healthcare settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings.</p> <p>The FPS applies to “to every employer, employee, and place of employment in the Commonwealth of Virginia within the jurisdiction of the VOSH program as described in 16VAC25- 60-20 and 16VAC25-60-30.”</p>

<p>in isolation), that employer may be within the scope exemption in paragraphs (a)(2)(iv) and (a)(2)(v). (3) (i) Where a healthcare setting is embedded within a non-healthcare setting (e.g., medical clinic in a manufacturing facility, walk-in clinic in a retail setting), this section applies only to the embedded healthcare setting and not to the remainder of the physical location. (ii) Where emergency responders or other licensed healthcare providers enter a non-healthcare setting to provide healthcare services, this section applies only to the provision of the healthcare services by that employee. (4) In well-defined areas where there is no reasonable expectation that any person with suspected or confirmed COVID-19 will be present, paragraphs (f), (h), and (i) of this section do not apply to employees who are fully vaccinated. Note 1 to paragraph (a): Nothing in this section is intended to limit state or local government mandates or guidance (e.g., executive order, health department order) that go beyond the requirements of and are not inconsistent with this section.</p> <p>Note 2 to paragraph (a): Employers are encouraged to follow public health guidance from the Centers for Disease Control and Prevention (CDC) even when not required by this section.</p>		<p>this standard. It is further recognized that various required job tasks prohibit an employee from being able to observe physical distancing from other persons. 2. Factors that shall be considered in determining exposure risk level include, but are not limited to: a. The job tasks being undertaken, the work environment (e.g., indoors or outdoors), the known or suspected presence of the SARS-CoV-2 virus, the presence of a person known or suspected to be infected with the SARS-CoV-2 virus, the number of employees and other persons in relation to the size of the work area, the working distance between employees and other employees or persons, and the duration and frequency of employee exposure through contact inside of six feet with other employees or persons (e.g., including shift work exceeding eight hours per day); and b. The type of hazards encountered, including exposure to respiratory droplets and potential exposure to the airborne transmission of SARS-CoV-2 virus; contact with contaminated surfaces or objects, such as tools, workstations, or break room tables, and shared spaces such as shared workstations, break rooms, locker rooms, and entrances and exits to the facility; shared work vehicles; and industries or places of employment where employer sponsored shared transportation is a common practice, such as ride-share vans or shuttle vehicles, car-pools, and public transportation, etc.</p> <p>E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID19 disease related hazards or job tasks addressed by this standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard, the employer's actions shall be considered in compliance with this standard. An employer's actual compliance with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines. F. A public or private institution of higher education that has received certification from the State Council of Higher Education for Virginia that the institution's reopening plans are in compliance with guidance documents, whether mandatory or non-mandatory, developed by the Governor's Office in conjunction with the Virginia Department of</p>		<p>[Yellow highlighted]</p> <p>Language is comparable.</p> <p>Some people contacting DOLI seem to be under a misunderstanding about the ability of the FPS to respond to changes in CDC guidance. 16VAC25-220-10.E directs the Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.</p>
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			<p>Health shall be considered in compliance with this standard, provided the institution operates in compliance with its certified reopening plans and the certified reopening plans provide equivalent or greater levels of employee protection than this standard.</p> <p>G. A public school division or private school that submits its plans to the Virginia Department of Education to move to Phase II and Phase III that are aligned with CDC guidance for reopening of schools that provide equivalent or greater levels of employee protection than a provision of this standard and that operate in compliance with the public school division's or private school's submitted plans shall be considered in compliance with this standard. An institution's actual compliance with recommendations contained in CDC guidelines or the Virginia Department of Education guidance, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.</p> <p>H. Nothing in the standard shall be construed to require employers to conduct contact tracing of the SARS-CoV-2 virus or COVID-19 disease.</p>		<p>The Department has issued FAQs addressing the CDC's updates concerning persons who are fully vaccinated (see §10, FAQs 19-22, and §40, FAQs 46-54).</p> <p>https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/</p>
1910.502(b) Definitions	Aerosol-generating procedure means a medical procedure that generates aerosols that can be infectious and are of respirable size. For the purposes of this section, only the following medical procedures are considered aerosol-generating procedures: open suctioning of airways; sputum induction; cardiopulmonary resuscitation; endotracheal intubation and extubation; non-invasive ventilation (e.g., BiPAP, CPAP); bronchoscopy; manual ventilation; medical/surgical/postmortem procedures using oscillating bone saws; and dental procedures involving: ultrasonic scalers; high-speed dental handpieces; air/water syringes; air polishing; and air abrasion	16VAC25-220-30 Definitions	<p>[The following language is contained in the definition for "Exposure risk level," "very high"]</p> <p>1. Aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on a patient or person known or suspected to be infected with the SARS-CoV-2 virus;</p>	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of "aerosol generating procedure")	The OSHA ETS definition is more detailed than the FPS in that it lists all the procedures that would be included. Some of which are not listed in the FPS.
	Airborne infection isolation room (AIIR) means a dedicated negative pressure patient-care room, with special air handling capability, which is used to isolate persons with a suspected or confirmed airborne-transmissible infectious disease. AIIRs include both permanent rooms and temporary structures (e.g., a booth,	16VAC25-220-30 Definitions	"Airborne infection isolation room" or "AIIR," formerly a negative pressure isolation room, means a single-occupancy patient-care room used to isolate persons with a suspected or confirmed airborne infectious disease. Environmental factors are controlled in AIIRs to minimize the transmission of infectious agents that are usually transmitted from person to person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. AIIRs provide		Definitions are comparable

	tent or other enclosure designed to operate under negative pressure).		(i) negative pressure in the room so that air flows under the door gap into the room, (ii) an air flow rate of six to 12 air changes per hour (ACH) (six ACH for existing structures, 12 ACH for new construction or renovation), and (iii) direct exhaust of air from the room to the outside of the building or recirculation of air through a high efficiency particulate air (HEPA) filter before returning to circulation.		
	Ambulatory care means healthcare services performed on an outpatient basis, without admission to a hospital or other facility. It is provided in settings such as: offices of physicians and other health care professionals; hospital outpatient departments; ambulatory surgical centers; specialty clinics or centers (e.g., dialysis, infusion, medical imaging); and urgent care clinics. Ambulatory care does not include home healthcare settings for the purposes of this section.	16VAC25-220-30 Definitions	<p>"Exposure risk level" means the level of possibility that an employee could be exposed to the hazards associated with SARS-CoV-2 virus and the COVID-19 disease. The exposure risk level assessment should address all risks and all modes of transmission, including airborne transmission, as well as transmission by asymptomatic and presymptomatic individuals. Risk levels should be based on the risk factors present that increase risk exposure to COVID-19 and are present during the course of employment regardless of location. Hazards and job tasks have been divided into four risk exposure levels: very high, high, medium, and lower:</p> <p>"Very high" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure to known or suspected sources of the SARS-CoV-2 virus (e.g., laboratory samples) or persons known or suspected to be infected with the SARS-CoV-2 virus, including, but not limited to, during specific medical, postmortem, or laboratory procedures:</p> <ol style="list-style-type: none"> 1. Aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on a patient or person known or suspected to be infected with the SARS-CoV-2 virus; 2. Collecting or handling specimens from a patient or person known or suspected to be infected with the SARS-CoV-2 virus (e.g., manipulating cultures from patients known or suspected to be infected with the SARS-CoV-2 virus); and 3. Performing an autopsy that involves aerosol-generating procedures on the body of a person known or suspected to be infected with the SARS-CoV-2 virus at the time of their death. <p>"High" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARSCoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk, including, but not limited to:</p>		There is no definition for "ambulatory care" in FPS. While the FPS does not use the same definition, it describes situations similar to the ambulatory care setting in the description for high exposure risk and medium exposure risk. However the OSHA ETS excludes home health care settings while the FPS includes it.

		<p>1. Health care (physical and mental health) delivery and support services provided to a patient known or suspected to be infected with the SARS-CoV-2 virus, including field hospitals (e.g., doctors, nurses, cleaners, and other hospital staff who must enter patient rooms or areas);</p> <p>2. Health care (physical and mental) delivery, care, and support services, wellness services, non-medical support services, physical assistance, etc., provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus involving skilled nursing services, outpatient medical services, clinical services, drug treatment programs, medical outreach services, mental health services, home health care, nursing home care, assisted living care, memory care support and services, hospice care, rehabilitation services, primary and specialty medical care, dental care, COVID-19 testing services, blood donation services, and chiropractic services;</p> <p>3. First responder services provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus;</p> <p>4. Medical transport services (loading, transporting, unloading, etc.) provided to patients known or suspected to be infected with the SARS-CoV-2 virus (e.g., ground or air emergency transport, staff, operators, drivers, pilots, etc.);</p> <p>5. Mortuary services involved in preparing (e.g., for burial or cremation) the bodies of persons who are known or suspected to be infected with the SARS-CoV-2 virus at the time of their death...</p> <p>"Medium" exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus. Medium exposure risk hazards or job tasks may include, but are not limited to, operations and services in:</p> <p>....</p> <p>2. Situations not involving exposure to known or suspected sources of SARS-CoV-2:</p> <p>hospitals, other health care (physical and mental) delivery and support services in a nonhospital setting, wellness services, physical assistance, etc.; skilled nursing facilities; outpatient medical facilities; clinics, drug treatment programs, and medical outreach services; non-medical support services; mental health facilities; home health care, nursing homes, assisted living facilities, memory care facilities, and</p>		
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			hospice care; rehabilitation centers, doctors' offices, dentists' offices, and chiropractors' offices; first responders services provided by police, fire, paramedic and emergency medical services providers, medical transport; contact tracers; correctional facilities, jails, detentions centers, and juvenile detention centers, etc.		
	Assistant Secretary means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.		No comparable definition in the FPS.		Not applicable
	Clean/cleaning means the removal of dirt and impurities, including germs, from surfaces using soap and water or other cleaning agents. Cleaning alone reduces germs on surfaces by removing contaminants and may also weaken or damage some of the virus particles, which decreases risk of infection from surfaces.	16VAC25-220-30. Definitions.	"Cleaning" means the removal of dirt and impurities, including germs, from surfaces. Cleaning alone does not kill germs. But by removing the germs, cleaning decreases their number and therefore the risk of spreading infection.		Definitions are comparable See DOLI §40, FAQs 41, 42, 43 and 44 on CDC updates concerning cleaning and disinfecting. https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/
	Close contact means being within 6 feet of any other person for a cumulative total of 15 minutes or more over a 24-hour period during that person's potential period of transmission. The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated.	16VAC25-220-30. Definitions.	No comparable definition in the FPS. The FPS contains a number of definitions where maintaining 6 feet of physical distancing is addressed: "Minimal occupational contact" means no or very limited, brief, and infrequent contact with employees or other persons at the place of employment. Examples include, but are not limited to, remote work (i.e., those working from home); employees with no more than brief contact with others inside six feet (e.g., passing another person in a hallway that does not allow physical distancing of six feet); health care employees providing only telemedicine services; a long distance truck driver. "Duration and frequency of employee exposure" means how long ("duration")....An example of a chronic situation could involve a job task that requires an employee to interact either for an extended period of time inside six feet with a smaller static group of other employees or persons or for an extended period of time inside six feet with a larger group of other employees or persons in succession but for periods of shorter duration.	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of "close contact")	The term "close contact" is intentionally not used in the FPS because it is used by the CDC for determining when contact tracing should be conducted and is defined as "any individual within 6 feet of an infected person for at least 15 minutes." It was the intention of DOLI and the Board to not place the burden of conducting contact tracing on employers. VDH conducts contact tracing. 16VAC25-220-10.H specifically provides that:

			<p>"High" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARSCoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk...</p> <p>"Medium" exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus</p> <p>"Lower" exposure risk hazards or job tasks are those not otherwise classified as very high, high, or medium exposure risk that do not require contact inside six feet with persons known to be, or suspected of being, or who may be infected with SARS-CoV-2</p> <p>"Physical distancing" also called "social distancing" means a person keeping space between himself and other persons while conducting work-related activities inside and outside of the physical establishment by staying at least six feet from other persons.</p>		1. Nothing in the standard shall be construed to require employers to conduct contact tracing of the SARS-CoV-2 virus or COVID-19 disease.
	Common areas means indoor or outdoor locations under the control of the employer that more than one person may use or where people congregate (e.g., building lobbies, reception areas, waiting rooms, restrooms, break rooms, eating areas, conference rooms).	16VAC25-220-40(E) Mandatory requirements for all employers.	<p>No comparable definition in the FPS; however, see 16VAC25-220-40(E):</p> <p>E. Access to common areas, breakrooms, or lunchrooms shall be closed or controlled. If the nature of an employer's work or the work area does not allow employees to consume meals in the employee's workspace while observing physical distancing, an employer may designate, reconfigure, and alternate usage of spaces where employees congregate, including lunch and break rooms, locker rooms, time clocks, etc., with controlled access, provided the following conditions are met:</p>	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of "common areas")	
	COVID-19 (Coronavirus Disease 2019) means the respiratory disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). For clarity and ease of reference, this section refers to "COVID-19" when describing exposures or potential exposures to SARS-CoV-2	16VAC25-220-30. Definitions.	"COVID-19" means Coronavirus Disease 2019, which is primarily a respiratory disease, caused by the SARS-CoV-2 virus.		Definitions are comparable
	COVID-19 positive and confirmed COVID-19 refer to a person who has a confirmed positive test for, or who has	16VAC25-220-30. Definitions	"Known to be infected with the SARS-CoV-2 virus" means a person, whether symptomatic or asymptomatic, who has tested positive for SARS-CoV-2, and the employer knew or with reasonable diligence		Definitions are comparable

	been diagnosed by a licensed healthcare provider with, COVID-19.		<p>should have known that the person has tested positive for SARS-CoV-2.</p> <p>"Symptomatic" means a person is experiencing signs or symptoms attributed to COVID-19. A person may become symptomatic two to 14 days after exposure to the SARS-CoV-2 virus.</p>		
	COVID-19 symptoms mean the following: fever or chills; cough; shortness of breath or difficulty breathing; fatigue; muscle or body aches; headache; new loss of taste or smell; sore throat; congestion or runny nose; nausea or vomiting; diarrhea	16VAC25-220-30. Definitions	<p>"Signs of COVID-19" are medical conditions that can be objectively observed and may include fever, trouble breathing or shortness of breath, cough, vomiting, new confusion, bluish lips or face, etc.</p> <p>"Symptoms of COVID-19" are medical conditions that are subjective to the person and not observable to others and may include chills, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, nausea, congestion or runny nose, or diarrhea, etc.</p> <p>"Symptomatic" means a person is experiencing signs or symptoms attributed to COVID-19. A person may become symptomatic two to 14 days after exposure to the SARS-CoV-2 virus.</p>		Definitions are comparable
	COVID-19 test means a test for SARS-CoV-2 that is: (i) Cleared or approved by the U.S. Food and Drug Administration (FDA) or is authorized by an Emergency Use Authorization (EUA) from the FDA to diagnose current infection with the SARS-CoV-2 virus; and (ii) Administered in accordance with the FDA clearance or approval or the FDA EUA as applicable	16VAC25-220-40.B.3. Mandatory requirements for all employers.	<p>No comparable definition in FPS.</p> <p>The FPS does address the issue of serological testing:</p> <p>16VAC25-220-40.B.3 Serological testing, also known as antibody testing, is a test to determine if persons have been infected with SARS-CoV-2 virus. It has not been determined that persons who test positive for the presence of antibodies by serological testing are immune from infection.</p>	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of COVID-19 test)	
	Direct patient care means hands-on, face-to-face contact with patients for the purpose of diagnosis, treatment, and monitoring.		<p>No comparable definition in FPS.</p> <p>However, the FPS addresses the issue of patient care in several definitions:</p> <p>"High" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARSCoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk, including, but not limited to:</p> <p>1. Health care (physical and mental health) delivery and support services provided to a patient known or suspected to be infected</p>		Language is comparable

			<p>with the SARS-CoV-2 virus, including field hospitals (e.g., doctors, nurses, cleaners, and other hospital staff who must enter patient rooms or areas)....</p> <p>"Medium" exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus. Medium exposure risk hazards or job tasks may include, but are not limited to, operations and services in:</p> <p>....</p> <p>2. Situations not involving exposure to known or suspected sources of SARS-CoV-2: hospitals, other health care (physical and mental) delivery and support services in a nonhospital setting, wellness services, physical assistance, etc.; skilled nursing facilities; outpatient medical facilities; clinics, drug treatment programs, and medical outreach services; non-medical support services; mental health facilities; home health care, nursing homes, assisted living facilities, memory care facilities, and hospice care; rehabilitation centers, doctors' offices, dentists' offices, and chiropractors' offices; first responders services provided by police, fire, paramedic and emergency medical services providers, medical transport; contact tracers; correctional facilities, jails, detentions centers, and juvenile detention centers, etc.</p>		
	<p>Disinfect/disinfection means using an EPA-registered, hospital-grade disinfectant on EPA's "List N" (incorporated by reference, § 1910.509), in accordance with manufacturers' instructions to kill germs on surfaces.</p>	<p>16VAC25-220-30. Definitions</p> <p>16VAC25-220-40.L.7. Mandatory requirements for all employers.</p>	<p>"Disinfecting" means using chemicals approved for use against SARS-CoV-2 virus, for example EPA-registered disinfectants, or non-EPA-registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2 virus, to kill germs on surfaces. The process of disinfecting does not necessarily clean dirty surfaces or remove germs, but killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.</p> <p>L. Sanitation and disinfecting.</p> <p>....</p> <p>7. Employers shall ensure that cleaning and disinfecting products are readily available to employees to accomplish the required cleaning and disinfecting. In addition, employers shall ensure use of only disinfecting chemicals and products indicated in the Environmental Protection Agency (EPA) List N for use against SARS-CoV-2, or non-EPA registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2</p>		<p>Definitions are comparable</p>

	<p>Elastomeric respirator means a tight-fitting respirator with a facepiece that is made of synthetic or rubber material that permits it to be disinfected, cleaned, and reused according to manufacturer's instructions. It is equipped with a replaceable cartridge(s), canister(s), or filter(s).</p>		<p>No comparable definition in FPS.</p> <p>However:</p> <p>"Respirator" means a protective device that covers the nose and mouth or the entire face or head to guard the wearer against hazardous atmospheres. Respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH). Respirators may be (i) tightfitting, which means either a half mask that covers the mouth and nose or a full face piece that covers the face from the hairline to below the chin or (ii) loose-fitting, such as hoods or helmets that cover the head completely. There are two major classes of respirators: 1. Air-purifying, which remove contaminants from the air; and 2. Atmosphere-supplying, which provide clean, breathable air from an uncontaminated source. As a general rule, atmosphere-supplying respirators are used for more hazardous exposures.</p>	<p>Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of "elastomeric respirator")</p>	
	<p>Facemask means a surgical, medical procedure, dental, or isolation mask that is FDA-cleared, authorized by an FDA EUA, or offered or distributed as described in an FDA enforcement policy. Facemasks may also be referred to as "medical procedure masks."</p>		<p>"Surgical/medical procedure mask" means a mask to be worn over the wearer's nose and mouth that is fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids, and prevents the wearer from exposing others in the same fashion. A surgical/medical procedure mask protects others from the wearer's respiratory emissions. A surgical/medical procedure mask has a looser fitting face seal than a tight-fitting respirator. A surgical/medical procedure mask does not provide the wearer with a reliable level of protection from inhaling smaller airborne particles. A surgical/medical procedure mask is considered a form of personal protective equipment, but is not considered respiratory protection equipment under VOSH laws, rules, regulations, and standards. Testing and approval is cleared by the U.S. Food and Drug Administration (FDA).</p>		<p>Definitions are comparable</p>
	<p>Face shield means a device, typically made of clear plastic, that: (i) is certified to ANSI/ISEA Z87.1 (incorporated by reference, § 1910.509); or (ii) covers the wearer's eyes, nose, and mouth to protect from splashes, sprays, and spatter of body fluids, wraps around the sides of the wearer's face (i.e., temple-to-temple), and extends below the wearer's chin</p>		<p>"Face shield" means a form of personal protective equipment made of transparent, impermeable materials primarily used for eye protection from droplets or splashes for the person wearing it. A face shield is not a substitute for a face covering, surgical/medical procedure mask, or respirator.</p>		<p>Definitions are comparable</p>
	<p>Filtering facepiece respirator means a negative pressure particulate respirator with a non-replaceable filter as an integral part of the facepiece or with the entire facepiece composed of the non-replaceable filtering medium.</p>		<p>"Filtering facepiece respirator" means a negative pressure air purifying particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering</p>		<p>Definitions are comparable</p>

			medium. Filtering facepiece respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH).		
	Fully vaccinated means 2 weeks or more following the final dose of a COVID-19 vaccine.		No comparable definition in FPS.		<p>FPS does not mention Fully vaccinated, Vaccination, or vaccine.</p> <p>However, the Department has issued FAQs under 16VAC25-220-10.E addressing the CDC's updates concerning persons who are fully vaccinated (see §10, FAQs 19-22, and §40, FAQs 46-54).</p> <p>The FAQs can be found at: https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/</p>
	Hand hygiene means the cleaning and/or disinfecting of one's hands by using standard handwashing methods with soap and running water or an alcohol-based hand rub that is at least 60% alcohol.	<p>16VAC25-220-30. Definitions</p> <p>16VAC25-220-40.E.4. Mandatory requirements for all employers.</p> <p>16VAC25-220-40.L.9. Mandatory requirements for all employers.</p>	<p>No comparable definition in FPS.</p> <p>"Hand sanitizer" means an alcohol-based hand rub containing at least 60% alcohol, unless otherwise provided for in this standard.</p> <p>Hand sanitizer and handwashing facilities are addressed in a number of sections in the FPS:</p> <p>4. Handwashing facilities, and hand sanitizer where feasible, are available to employees. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable and use and storage in hot environments can result in a hazard.</p> <p>9. Employees shall have easy, frequent access and permission to use soap and water, and hand sanitizer where feasible, for the duration of work. Employees assigned to a work station where job tasks require frequent interaction inside six feet with other persons shall be provided with hand sanitizer where feasible at the employees work station. 10. Mobile crews shall be provided with hand sanitizer where</p>		Language is comparable.

		<p>16VAC25-220-70.C.5(a). Infectious disease preparedness and response plan.</p>	<p>feasible for the duration of work at a work site or client or customer location and shall have transportation immediately available to nearby toilet facilities and handwashing facilities that meet the requirements of VOSH laws, standards, and regulations dealing with sanitation. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable, and use and storage in hot environments can result in a hazard.</p> <p>5(a) Promote frequent and thorough hand washing, including by providing employees, customers, visitors, the general public, and other persons to the place of employment with a place to wash their hands. If soap and running water are not immediately available, provide hand sanitizers.</p>		
	<p>Healthcare services mean services that are provided to individuals by professional healthcare practitioners (e.g., doctors, nurses, emergency medical personnel, oral health professionals) for the purpose of promoting, maintaining, monitoring, or restoring health. Healthcare services are delivered through various means including: hospitalization, longterm care, ambulatory care, home health and hospice care, emergency medical response, and patient transport. For the purposes of this section, healthcare services include autopsies.</p>		<p>No comparable definition in FPS.</p> <p>However, the issue of healthcare services is addressed in the following definitions:</p> <p>"Very high" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure to known or suspected sources of the SARS-CoV-2 virus (e.g., laboratory samples) or persons known or suspected to be infected with the SARS-CoV-2 virus, including, but not limited to, during specific medical, postmortem, or laboratory procedures:</p> <ol style="list-style-type: none"> 1. Aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on a patient or person known or suspected to be infected with the SARS-CoV-2 virus; 2. Collecting or handling specimens from a patient or person known or suspected to be infected with the SARS-CoV-2 virus (e.g., manipulating cultures from patients known or suspected to be infected with the SARS-CoV-2 virus); and 3. Performing an autopsy that involves aerosol-generating procedures on the body of a person known or suspected to be infected with the SARS-CoV-2 virus at the time of their death. <p>"High" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARSCoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk, including, but not limited to:</p>	<p>Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of "healthcare services")</p>	

		<p>1. Health care (physical and mental health) delivery and support services provided to a patient known or suspected to be infected with the SARS-CoV-2 virus, including field hospitals (e.g., doctors, nurses, cleaners, and other hospital staff who must enter patient rooms or areas);</p> <p>2. Health care (physical and mental) delivery, care, and support services, wellness services, non-medical support services, physical assistance, etc., provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus involving skilled nursing services, outpatient medical services, clinical services, drug treatment programs, medical outreach services, mental health services, home health care, nursing home care, assisted living care, memory care support and services, hospice care, rehabilitation services, primary and specialty medical care, dental care, COVID-19 testing services, blood donation services, and chiropractic services;</p> <p>3. First responder services provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus;</p> <p>4. Medical transport services (loading, transporting, unloading, etc.) provided to patients known or suspected to be infected with the SARS-CoV-2 virus (e.g., ground or air emergency transport, staff, operators, drivers, pilots, etc.);</p> <p>5. Mortuary services involved in preparing (e.g., for burial or cremation) the bodies of persons who are known or suspected to be infected with the SARS-CoV-2 virus at the time of their death; and</p> <p>"Medium" exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus. Medium exposure risk hazards or job tasks may include, but are not limited to, operations and services in:</p> <p>....</p> <p>2. Situations not involving exposure to known or suspected sources of SARS-CoV-2:</p> <p>hospitals, other health care (physical and mental) delivery and support services in a nonhospital setting, wellness services, physical assistance, etc.; skilled nursing facilities; outpatient medical facilities; clinics, drug treatment programs, and medical</p>		
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			outreach services; non-medical support services; mental health facilities; home health care, nursing homes, assisted living facilities, memory care facilities, and hospice care; rehabilitation centers, doctors' offices, dentists' offices, and chiropractors' offices; first responders services provided by police, fire, paramedic and emergency medical services providers, medical transport; contact tracers; correctional facilities, jails, detentions centers, and juvenile detention centers, etc.		
	Healthcare support services mean services that facilitate the provision of healthcare services. Healthcare support services include patient intake/admission, patient food services, equipment and facility maintenance, housekeeping services, healthcare laundry services, medical waste handling services, and medical equipment cleaning/reprocessing services.		No comparable definition in FPS. See response to OSHA ETS definition of “healthcare services” above.	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of “healthcare support services”)	
	High-touch surfaces and equipment means any surface or piece of equipment that is repeatedly touched by more than one person (e.g., doorknobs, light switches, countertops, handles, desks, tables, phones, keyboards, tools, toilets, faucets, sinks, credit card terminals, touchscreen-enabled devices).	16VAC25-220-40.L.4, 5, 6 Mandatory requirements for all employers.	No comparable definition in FPS. However, the FPS addresses the issue of cleaning/disinfecting certain types of surfaces: 4. Areas in the place of employment where employees or other persons known or suspected to be infected with the SARS-CoV-2 virus accessed or worked shall be cleaned and disinfected prior to allowing other employees access to the areas. Where feasible, a period of 24 hours will be observed prior to cleaning and disinfecting. This requirement shall not apply if the areas in question have been unoccupied for seven or more days. 5. All common spaces, including bathrooms (including port-a-johns, privies, etc.), frequently touched surfaces, and doors, shall at a minimum be cleaned and disinfected at least once during or at the end of the shift. Where multiple shifts are employed, such spaces shall be cleaned and disinfected no less than once every 12 hours. 6. All shared tools, equipment, workspaces, and vehicles shall be cleaned and disinfected prior to transfer from one employee to another.	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (definition of “high-touch surfaces and equipment”)	See DOLI §40, FAQs 41, 42, 43 and 44 on CDC updates concerning cleaning and disinfecting. https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/
	Physical location means a site (including outdoor and indoor areas, a structure, or a group of structures) or an area within a site where work or any work-related activity		No comparable definition in FPS.	Possible ALAEA issue when comparing requirements in the OSHA	

	(e.g., taking breaks, going to the restroom, eating, entering, or exiting work) occurs. A physical location includes the entirety of any space associated with the site (e.g., workstations, hallways, stairwells, breakrooms, bathrooms, elevators) and any other space that an employee might occupy in arriving, working, or leaving		The FPS uses the terms “place of employment” and “workplace” but does not define them in detail	ETS to requirements in the FPS applicable to the healthcare industry (definition of “physical location”)	
	Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering		No comparable definition in the FPS. However, the term is defined in 1910.134, Respiratory Protection Standard, which applies in Virginia: “Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.” https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134		The term is defined in 1910.134, Respiratory Protection Standard, which applies in Virginia.
	Respirator means a type of personal protective equipment (PPE) that is certified by NIOSH under 42 CFR part 84 or is authorized under an EUA by the FDA. Respirators protect against airborne hazards by removing specific air contaminants from the ambient (surrounding) air or by supplying breathable air from a safe source. Common types of respirators include filtering facepiece respirators, elastomeric respirators, and PAPRs. Face coverings, facemasks, and face shields are not respirators.		"Respirator" means a protective device that covers the nose and mouth or the entire face or head to guard the wearer against hazardous atmospheres. Respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH). Respirators may be (i) tightfitting, which means either a half mask that covers the mouth and nose or a full face piece that covers the face from the hairline to below the chin or (ii) loose-fitting, such as hoods or helmets that cover the head completely. There are two major classes of respirators: 1. Air-purifying, which remove contaminants from the air; and 2. Atmosphere-supplying, which provide clean, breathable air from an uncontaminated source. As a general rule, atmosphere-supplying respirators are used for more hazardous exposures.		Definitions are comparable
	Screen means asking questions to determine whether a person is COVID-19 positive or has symptoms of COVID-19.	16VAC25-220-50.C.1 Requirements for hazards or job tasks classified as very high or high exposure risk.	No comparable definition in FPS. However, the FPS addresses the issue of screening: 50.C.1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.		Language is comparable

		16VAC25-220-60.C1 Requirements for hazards or job tasks classified at medium exposure risk.	60.C.1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.		
	Surgical mask means a mask that covers the user's nose and mouth and provides a physical barrier to fluids and particulate materials. The mask meets certain fluid barrier protection standards and Class I or Class II flammability tests. Surgical masks are generally regulated by FDA as Class II devices under 21 CFR 878.4040 – Surgical apparel.		"Surgical/medical procedure mask" means a mask to be worn over the wearer's nose and mouth that is fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids, and prevents the wearer from exposing others in the same fashion. A surgical/medical procedure mask protects others from the wearer's respiratory emissions. A surgical/medical procedure mask has a looser fitting face seal than a tight-fitting respirator. A surgical/medical procedure mask does not provide the wearer with a reliable level of protection from inhaling smaller airborne particles. A surgical/medical procedure mask is considered a form of personal protective equipment, but is not considered respiratory protection equipment under VOSH laws, rules, regulations, and standards. Testing and approval is cleared by the U.S. Food and Drug Administration (FDA).		Definitions are comparable
	Vaccine means a biological product authorized or licensed by the FDA to prevent or provide protection against COVID-19, whether the substance is administered through a single dose or a series of doses.		No comparable definition in FPS.		FPS does not mention Fully vaccinated, Vaccination, or vaccine. However, the Department has issued FAQs under 16VAC25-220-10.E addressing the CDC's updates concerning persons who are fully vaccinated (see §10, FAQs 19-22, and §40, FAQs 46-54). The FAQs can be found at: https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/
	Workplace means a physical location (e.g., fixed, mobile) where the employer's work or operations are performed.		No comparable definition in FPS.		The term is addressed in Occupational Safety and

			The FPS uses the terms “place of employment” and “workplace” but does not define them in detail		Health Review Commission court decisions in sufficient detail.
§1910.502(c) COVID-19 Plan	<p>(c) COVID-19 plan.</p> <p>(1) The employer must develop and implement a COVID-19 plan for each workplace. If the employer has multiple workplaces that are substantially similar, its COVID-19 plan may be developed by workplace type rather than by individual workplace so long as all required site-specific information is included in the plan.</p> <p>(2) If the employer has more than 10 employees, the COVID-19 plan must be written.</p> <p>(3) The employer must designate one or more workplace COVID-19 safety coordinators to implement and monitor the COVID-19 plan developed under this section. The COVID-19 safety coordinator(s) must be knowledgeable in infection control principles and practices as they apply to the workplace and employee job operations. The identity of the safety coordinator(s) must be documented in any written COVID-19 plan. The safety coordinator(s) must have the authority to ensure compliance with all aspects of the COVID-19 plan.</p> <p>(4) (i) The employer must conduct a workplace-specific hazard assessment to identify potential workplace hazards related to COVID-19. (ii) In order for an employer to be exempt from providing controls in a well-defined area under paragraph (a)(4) of this section based on employees’ fully vaccinated status, the COVID-19 plan must include policies and procedures to determine employees’ vaccination status.</p> <p>(5) The employer must seek the input and involvement of non-managerial employees and their representatives, if any, in the hazard assessment and the development and implementation of the COVID-19 plan.</p> <p>(6) The employer must monitor each workplace to ensure the ongoing effectiveness of the COVID-19 plan and update it as needed.</p> <p>(7) The COVID-19 plan must address the hazards identified by the assessment required by paragraph (c)(4) of this section, and include policies and procedures to: (i) Minimize the risk of transmission of COVID-19 for each employee, as required by paragraphs (d) through (n) of this section; Note to paragraph (c)(7)(i): Although the</p>	16VAC25-220-70 Infectious disease preparedness and response plan.	<p>A. Employers with hazards or job tasks classified as:</p> <ol style="list-style-type: none"> 1. Very high and high shall develop and implement a written Infectious Disease Preparedness and Response Plan; 2. Medium with 11 or more employees shall develop and implement a written Infectious Disease Preparedness and Response Plan. <p>B. The plan and training requirements tied to the plan shall only apply to those employees classified as very high, high, and medium covered by this section.</p> <p>C. Employers shall designate a person to be responsible for implementing their plan. The plan shall:</p> <ol style="list-style-type: none"> 1. Identify the name or title of the person responsible for administering the plan. This person shall be knowledgeable in infection control principles and practices as the principles and practices apply to the facility, service, or operation. 2. Provide for employee involvement in development and implementation of the plan. 3. Consider and address the level of SARS-CoV-2 virus and COVID-19 disease risk associated with various places of employment, the hazards employees are exposed to at those sites, and job tasks employees perform at those sites. Such considerations shall include: <ol style="list-style-type: none"> a. Where, how, and to what sources of the SARS-CoV-2 virus or COVID-19 disease might employees be exposed at work, including: <ol style="list-style-type: none"> (1) The general public, customers, other employees, patients, and other persons; (2) Persons known or suspected to be infected with the SARS-CoV-2 virus or those at particularly high risk of COVID-19 infection (e.g., local, state, national, and international travelers who have visited locations with ongoing COVID-19 community transmission and health care employees who have had unprotected exposures to persons known or suspected to be infected with SARS-CoV-2 virus); (3) Situations where employees work more than one job with different employers and encounter hazards or engage in job tasks that present a very high, high, or medium level of exposure risk; and (4) Situations where employees work during higher risk activities involving potentially large numbers of people or enclosed work areas such as at large social gatherings, weddings, funerals, parties, restaurants, bars, hotels, sporting events, concerts, parades, movie 		Requirements are comparable.

	<p>employer's COVID-19 plan must account for the potential COVID-19 exposures to each employee, the plan can do so generally and need not address each employee individually. (ii) Effectively communicate and coordinate with other employers: (A) When employees of different employers share the same physical location, each employer must effectively communicate its COVID-19 plan to all other employers, coordinate to ensure that each of its employees is protected as required by this section, and adjust its COVID-19 plan to address any particular COVID-19 hazards presented by the other employees. This requirement does not apply to delivery people, messengers, and other employees who only enter a workplace briefly to drop off or pick up items. (B) An employer with one or more employees working in a physical location controlled by another employer must notify the controlling employer when those employees are exposed to conditions at that location that do not meet the requirements of this section; and (iii) Protect employees who in the course of their employment enter into private residences or other physical locations controlled by a person not covered by the OSH Act (e.g., homeowners, sole proprietors). This must include procedures for employee withdrawal from that location if those protections are inadequate. Note to paragraph (c): The employer may include other policies, procedures, or information necessary to comply with any applicable federal, state, or local public health laws, standards, and guidelines in their COVID-19 plan.</p>		<p>theaters, rest stops, airports, bus stations, train stations, cruise ships, river boats, airplanes, etc.</p> <p>b. To the extent permitted by law, including HIPAA, employees' individual risk factors for severe disease. For example, people of any age with one or more of the following conditions are at increased risk of severe illness from COVID-19: chronic kidney disease; COPD (chronic obstructive pulmonary disease); immunocompromised state (weakened immune system) from solid organ transplant; obesity (body mass index or BMI of 30 or higher); serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies; sickle cell disease; or type 2 diabetes mellitus. Also, for example, people with one or more of the following conditions might be at an increased risk for severe illness from COVID-19: asthma (moderate-to-severe); cerebrovascular disease (affects blood vessels and blood supply to the brain); cystic fibrosis; hypertension or high blood pressure; immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines; neurologic conditions, such as dementia; liver disease; pregnancy; pulmonary fibrosis (having damaged or scarred lung tissues); smoking; thalassemia (a type of blood disorder); type 1 diabetes mellitus; etc. The risk for severe illness from COVID-19 also increases with age.</p> <p>c. Engineering, administrative, work practice, and personal protective equipment controls necessary to address those risks.</p> <p>4. Consider and address contingency plans for situations that may arise as a result of outbreaks that impact employee safety and health, such as:</p> <p>a. Increased rates of employee absenteeism (an understaffed business can be at greater risk for accidents);</p> <p>b. The need for physical distancing, staggered work shifts, downsizing operations, delivering services remotely, and other exposure-reducing workplace control measures such as elimination and substitution, engineering controls, administrative and work practice controls, and personal protective equipment (e.g., respirators, surgical/medical procedure masks, etc.);</p> <p>c. Options for conducting essential operations in a safe and healthy manner with a reduced workforce; and</p> <p>d. Interrupted supply chains or delayed deliveries of safety and health related products and services essential to business operations.</p> <p>5. Identify infection prevention measures to be implemented:</p> <p>a. Promote frequent and thorough hand washing, including by providing employees, customers, visitors, the general public, and other persons to the place of employment with a place to wash their</p>		
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			<p>hands. If soap and running water are not immediately available, provide hand sanitizers.</p> <p>b. Maintain regular housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment. c. Establish policies and procedures for managing and educating visitors about the procedures at the place of employment.</p> <p>6. Provide for the prompt identification and isolation of employees known or suspected to be infected with the SARS-CoV-2 virus away from work, including procedures for employees to report when they are experiencing signs or symptoms of COVID-19.</p> <p>7. Address infectious disease preparedness and response with outside businesses, including, but not limited to, subcontractors who enter the place of employment, businesses that provide contract or temporary employees to the employer, and other persons accessing the place of employment to comply with the requirements of this standard and the employer's plan.</p> <p>8. Identify the mandatory and non-mandatory recommendations in any CDC guidelines or Commonwealth of Virginia guidance documents the employer is complying with, if any, in lieu of a provision of this standard, as provided for in 16VAC25-220-10 E, F, and G.</p>		
§1910.502(d)	<p>Patient screening and management.</p> <p>In settings where direct patient care is provided, the employer must:</p> <p>(1) Limit and monitor points of entry to the setting. This provision does not apply where emergency responders or other licensed healthcare providers enter a non-healthcare setting to provide healthcare services.</p> <p>(2) Screen and triage all clients, patients, residents, delivery people and other visitors, and other non-employees entering the setting.</p> <p>(3) Implement other applicable patient management strategies in accordance with CDC's "COVID-19 Infection Prevention and Control Recommendations" (incorporated by reference, § 1910.509).</p> <p>Note to paragraph (d): The employer is encouraged to use telehealth services where available and appropriate in order to limit the number of people entering the workplace.</p>	<p>16VAC25-220-50.C.1 Requirements for hazards or job tasks classified as very high or high exposure risk.</p> <p>16VAC25-220-60.C1 Requirements for hazards or job tasks classified at medium exposure risk.</p>	<p>No comparable requirement in FPS for "patient" screening.</p> <p>However, the FPS addresses the issue of employee screening:</p> <p>50.C.1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.</p> <p>60.C.1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.</p>	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (patient screening and management requirements)	
§1910.502(e) Standard and Transmission-	(e) Standard and Transmission-Based Precautions. Employers must develop and implement policies and procedures to adhere to Standard and Transmission-	16VAC25-220-10.E	E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID19		Provisions are comparable.

Based Precautions.	Based Precautions in accordance with CDC’s “Guidelines for Isolation Precautions” (incorporated by reference, § 1910.509).	Purpose, scope, and applicability.	<p>disease related hazards or job tasks addressed by this standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard, the employer's actions shall be considered in compliance with this standard. An employer's actual compliance with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.</p> <p>16VAC25-220-40. Mandatory requirements for all employers.</p> <p>A. Employers shall ensure compliance with the requirements in this section to protect employees in all exposure risk levels from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease.</p> <p>B. Exposure assessment and determination, notification requirements, and employee access to exposure and medical records.</p> <p>16VAC25-220-70. Infectious disease preparedness and response plan</p> <p>A. Employers with hazards or job tasks classified as:</p> <ol style="list-style-type: none"> 1. Very high and high shall develop and implement a written Infectious Disease Preparedness and Response Plan; 2. Medium with 11 or more employees shall develop and implement a written Infectious Disease Preparedness and Response Plan.... 		16VAC25-220-10.E of the FPS provides employers the flexibility to comply with CDC guidelines “whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID19 disease related hazards or job tasks addressed by this standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard”
§1910.502(f) Personal Protective Equipment	(f) Personal protective equipment (PPE). (1) Facemasks. (i) Employers must provide, and ensure that employees wear, facemasks that meet the definition in paragraph (b) of this section; and (ii) The employer must ensure a facemask is worn by each employee over the nose and mouth when indoors and when occupying a vehicle with other people for work purposes. The employer must provide a sufficient number of facemasks to each employee to comply with this paragraph and must ensure that each employee changes them at least once per day, whenever they are soiled or damaged, and more frequently as necessary (e.g., patient care reasons).	16 VAC25-220-50.D. Requirements for hazards or jobs classified as very high or high exposure risk	D. Personal protective equipment (PPE). Employers covered by this section and not otherwise covered by the VOSH Standards for General Industry (16VAC25-90-1910.132), shall comply with the following requirements for a SARS-CoV-2 virus and COVID-19 disease-related hazard assessment and personal protective equipment selection: 1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall:	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (e.g., see possible examples highlighted in yellow)	The OSHA ETS only covers health care workers and requires “facemasks” when providing healthcare services. Since the FPS covers all workers, the approach to PPE and face coverings is different in that the level of protection required will depend on the level of exposure to the hazard (very high, high, medium)

<p>(iii) The following are exceptions to the requirements for facemasks in paragraph (f)(1)(ii) of this section: (A) When an employee is alone in a room. (B) While an employee is eating and drinking at the workplace, provided each employee is at least 6 feet away from any other person, or separated from other people by a physical barrier. (C) When employees are wearing respiratory protection in accordance with § 1910.134 or paragraph (f) of this section. (D) When it is important to see a person’s mouth (e.g., communicating with an individual who is deaf or hard of hearing) and the conditions do not permit a facemask that is constructed of clear plastic (or includes a clear plastic window). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it.</p>		<p>On shared work vehicles: 16VAC25-220-40.F. Mandatory requirements for all employers.</p>	<p>a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment; b. Communicate selection decisions to each affected employee; and c. Select PPE that properly fits each affected employee. 2. Employers shall verify that the required SARS-CoV-2 virus and COVID-19 disease workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated, the person certifying that the evaluation has been performed, the date of the hazard assessment, and the document as a certification of hazard assessment. 3. Unless specifically addressed by an industry specific standard applicable to the employer and providing for PPE protections to employees from the SARS-COV-2 virus or COVID-19 disease (e.g., 16VAC25-175-1926, 16VAC25-190-1928, 16VAC25-100-1915, 16VAC25-120-1917, or 16VAC25-130-1918), the requirements of 16VAC25-90-1910.132 (General requirements) and 16VAC25-90-1910.134 (Respiratory protection) shall apply to all employers for that purpose. 4. Unless contraindicated by a hazard assessment and equipment selection requirements in subdivision 1 of this subsection, employees classified as very high or high exposure risk shall be provided with and wear gloves, a gown, a face shield or goggles, and a respirator when in contact with or inside six feet of patients or other persons known to be or suspected of being infected with SARS-CoV-2. Gowns shall be the correct size to assure protection.</p> <p>F. When multiple employees are occupying a vehicle for work purposes, employers shall use the hierarchy of hazard controls to mitigate the hazards associated with SARS-CoV-2 and COVID19 to prevent employee exposures in the following order: 1. Eliminate the need for employees to share work vehicles and arrange for alternative means for additional employees to travel to work sites. 2. Provide access to fresh air ventilation (e.g., windows). Do not recirculate cabin air. 3. When physical distancing cannot be maintained, establish procedures to maximize separation between employees during travel (e.g., setting occupancy limits, sitting in alternate seats, etc.). 4. When employees must share work vehicles because no other alternatives are available, employees shall be provided with respiratory protection, such as an N95 filtering face piece respirator. The employer shall ensure compliance with respiratory protection and</p>	<p>and lower exposure risk), with the determination being made by the employer.</p> <p>In some industries where the risk is determined to be medium or lower, a “facemask” as defined by the OSHA ETS would not be required unless the employer determined so during their PPE hazard assessment.</p> <p>In evaluating those health care workers that the OSHA ETS does not exempt from the ETS under the FPS, those health care workers would likely fall into the “high risk” category and would need to comply with section 16VAC25-220-50.D of the FPS, requiring the employer to evaluate the level of PPE required.</p> <p>Section 50.D.4 requires employees must be provided and wear a respirator unless contraindicated by a hazard assessment when inside of 6 feet of patients or persons known to be or suspected to be infected with SARS-Co-V-2. The OSHA ETS requires the same in a note to section f.</p> <p>By performing the PPE assessment required by the</p>
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	<p>(E) When employees cannot wear facemasks due to a medical necessity, medical condition, or disability as defined in the Americans with Disabilities Act (42 USC 12101 et seq.), or due to a religious belief. Exceptions must be provided for a narrow subset of persons with a disability who cannot wear a facemask or cannot safely wear a facemask, because of the disability, as defined in the Americans with Disabilities Act (42 USC 12101 et seq.), including a person who cannot independently remove the facemask. The remaining portion of the subset who cannot wear a facemask may be exempted on a case-by-case basis as required by the Americans with Disabilities Act and other applicable laws. In all such situations, the employer must ensure that any such employee wears a face shield for the protection of the employee, if their condition or disability permits it. Accommodations may also need to be made for religious beliefs consistent with Title VII of the Civil Rights Act. (F) When the employer can demonstrate that the use of a facemask presents a hazard to an employee of serious injury or death (e.g., arc flash, heat stress, interfering with the safe operation of equipment). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it. Any employee not wearing a facemask must remain at least 6 feet away from all other people unless the</p>	<p>On exemptions from facemask (or in some cases “face coverings” under the FPS) for medical or religious reasons and use of face shield: 16VAC25-220.40.J. Mandatory requirements for all employers.</p>	<p>personal protective equipment standards applicable to the employer's industry.</p> <p>5. Until adequate supplies of respiratory protection and/or personal protective equipment become readily available for non-medical and non-first responder employers and employees, employers shall provide and employees shall wear face coverings while occupying a work vehicle with other employees or persons. Notwithstanding anything to the contrary in this standard, the Secretary of Commerce and Trade may exercise discretion in the enforcement of an employer's failure to provide PPE required by this standard, if the employer demonstrates that the employer:</p> <p>a. Is exercising due diligence to come into compliance with such requirement; and b. Is implementing alternative methods and measures to protect employees that are satisfactory to the Secretary of Commerce and Trade after consultation with the Commissioner and the Secretary of Health and Human Services.</p> <p>J. Nothing in this standard shall require the use of a respirator, surgical/medical procedure mask, or face covering by any employee for whom doing so would be contrary to the employee's health or safety because of a medical condition; however, nothing in this standard shall negate an employer's obligations to comply with personal protective equipment and respiratory protection standards applicable to its industry.</p> <p>1. Although face shields are not considered a substitute for face coverings as a method of source control and not used as a replacement for face coverings among people without medical contraindications, face shields may provide some level of protection against contact with respiratory droplets. In situations where a face covering cannot be worn due to medical contraindications, employers shall provide and employees shall wear either:</p> <p>a. A face shield that wraps around the sides of the wearer's face and extends below the chin; or</p> <p>b. A hooded face shield.</p> <p>2. To the extent feasible, employees wearing face shields in accordance with this subsection shall observe physical distancing requirements in this standard.</p> <p>3. Face shield wearers shall wash their hands before and after removing the face shield and avoid touching their eyes, nose, and mouth when removing it.</p> <p>4. Disposable face shields shall only be worn for a single use and disposed of according to manufacturer instructions.</p> <p>5. Reusable face shields shall be cleaned and disinfected after each use according to manufacturer instructions.</p>		<p>FPS, the healthcare workers covered by the OSHA ETS could be required to either wear a surgical/medical procedure mask (a “facemask” under the ETS) or in some cases a respirator—the FPS is as effective as the OSHA ETS in this regard.</p> <p>The OSHA ETS requires the use of a facemask while occupying a work vehicle with other people for work purposes. The FPS has a similar provision which uses the hierarchy of controls for multiple employees occupying a work vehicle for work purposes. If there are no alternatives to occupying a vehicle with multiple employees, the employees must wear a respirator which affords more protection than a facemask. The FPS is as effective as the ETS in this regard.</p>
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<p>employer can demonstrate it is not feasible. The employee must resume wearing a facemask when not engaged in the activity where the facemask presents a hazard.</p> <p>Note to paragraph (f)(1)(iii)(F): With respect to paragraphs (f)(1)(iii)(D) through (F) of this section, the employer may determine that the use of face shields, without facemasks, in certain settings is not appropriate due to other infection control concerns.</p> <p>(iv) Where a face shield is required to comply with this paragraph or is otherwise required by the employer, the employer must ensure that face shields are cleaned at least daily and are not damaged. When an employee provides a face shield that meets the definition in paragraph (b) of this section, the employer may allow the employee to use it and is not required to reimburse the employee for that face shield.</p> <p>(2) Respirators and other PPE for exposure to people with suspected or confirmed COVID-19. When employees have exposure to a person with suspected or confirmed COVID-19, the employer must provide:</p> <p>(i) a respirator to each employee and ensure that it is provided and used in accordance with § 1910.134 and</p> <p>(ii) gloves, an isolation gown or protective clothing, and eye protection to each employee and ensure that the PPE is used in accordance with subpart I of this part.</p> <p>Note to paragraph (f)(2): When there is a limited supply of filtering facepiece respirators, employers may follow the CDC’s “Strategies for Optimizing the Supply of N95 Respirators” (available at: https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html). Where possible, employers are encouraged to select elastomeric respirators or PAPRs instead of filtering facepiece respirators to prevent shortages and supply chain disruption.</p> <p>(3) Respirators and other PPE during aerosol-generating procedures. For aerosol-generating procedures performed on a person with suspected or confirmed COVID-19, the employer must provide:</p>		<p>4. Unless contraindicated by a hazard assessment and equipment selection requirements in subdivision 1 of this subsection, employees classified as very high or high exposure risk shall be provided with and wear gloves, a gown, a face shield or goggles, and a</p>		
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<p>(i) a respirator to each employee and ensure that it is provided and used in accordance with § 1910.134; and (ii) gloves, an isolation gown or protective clothing, and eye protection to each employee and ensure that the PPE is used in accordance with subpart I of this part.</p> <p>Note 1 to paragraph (f)(3): For aerosol-generating procedures on a person suspected or confirmed with COVID-19, employers are encouraged to select elastomeric respirators or PAPRs instead of filtering facepiece respirators.</p> <p>Note 2 to paragraph (f)(3): Additional requirements specific to aerosol-generating procedures on people with suspected or confirmed COVID-19 are contained in paragraph (g) of this section.</p> <p>(4) Use of respirators when not required. (i) The employer may provide a respirator to the employee instead of a facemask as required by paragraph (f)(1) of this section. In such circumstances, the employer must comply with § 1910.504. (ii) Where the employer provides the employee with a facemask as required by paragraph (f)(1) of this section, the employer must permit the employee to wear their own respirator instead of a facemask. In such circumstances, the employer must also comply with § 1910.504.</p> <p>(5) Respirators and other PPE based on Standard and Transmission-Based Precautions. The employer must provide protective clothing and equipment (e.g., respirators, gloves, gowns, goggles, face shields) to each employee in accordance with Standard and Transmission-Based Precautions in healthcare settings in accordance with CDC’s “Guidelines for Isolation Precautions” (incorporated by reference, § 1910.509) and ensure that the protective clothing and equipment is used in accordance with subpart I of this part.</p>	<p>16VAC25-220-50.D.4. Requirements for hazards or job tasks classified as very high or high exposure risk.</p> <p>16VAC25-220-90.B Discrimination against an employee for exercising rights under this standard is prohibited.</p> <p>16VAC25-220-10.E Purpose, scope, and applicability.</p>	<p>respirator when in contact with or inside six feet of patients or other persons known to be or suspected of being infected with SARS-CoV-2. Gowns shall be the correct size to assure protection.</p> <p>B. No person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own personal protective equipment, including, but not limited to, a respirator, face shield, gown, or gloves, provided that the PPE does not create a greater hazard to the employee or create a serious hazard for other employees. In situations where face coverings are not provided by the employer, no person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own face covering that meets the requirements of this standard, provided that the face covering does not create a greater hazard to the employee or create a serious hazard for other employees. Nothing in this subsection shall be construed to prohibit an employer from establishing and enforcing legally permissible dress code or similar requirements addressing the exterior appearance of personal protective equipment or face coverings.</p> <p>E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID19 disease related hazards or job tasks addressed by this standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard, the employer's actions shall be considered in compliance with this standard. An employer's actual compliance with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks</p>			<p>16VAC25-220-10.E of the FPS provides employers the flexibility to comply with CDC guidelines “whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID19 disease related hazards or job tasks addressed by this</p>
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			addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.		standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard”
§1910.502(g) Aerosol-generating procedures on a person with suspected or confirmed COVID-19	When an aerosol-generating procedure is performed on a person with suspected or confirmed COVID-19: (1) The employer must limit the number of employees present during the procedure to only those essential for patient care and procedure support. (2) The employer must ensure that the procedure is performed in an existing AIIR, if available. (3) After the procedure is completed, the employer must clean and disinfect the surfaces and equipment in the room or area where the procedure was performed. Note to paragraph (g): Respirators and other PPE requirements during aerosol-generating procedures are contained in paragraph (f)(3) of this section.	16VAC25-220-50.B.3, 4 and 5 Requirements for hazards or job task classified as very high or high exposure risk: Engineering controls 16VAC25-220-40.L.4 Mandatory requirements for all employers	B.3. Hospitalized patients known or suspected to be infected with the SARS-CoV-2 virus, where feasible and available, shall be placed in airborne infection isolation room (AIIRs). B.4. Employers shall use AIIRs when available for performing aerosol-generating procedures on patients with known or suspected to be infected with the SARS-CoV-2 virus. B.5. For postmortem activities, employers shall use autopsy suites or other similar isolation facilities when performing aerosol-generating procedures on the bodies of persons known or suspected to be infected with the SARS-CoV-2 virus at the time of their death. L.4. Areas in the place of employment where employees or other persons known or suspected to be infected with the SARS-CoV-2 virus accessed or worked shall be cleaned and disinfected prior to allowing other employees access to the areas.	[Language highlighted in yellow] Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (The employer must limit the number of employees present during the procedure to only those essential for patient care and procedure support.)	Provisions are comparable with the exception of the OSHA ETS requirement that “The employer must limit the number of employees present during the procedure to only those essential for patient care and procedure support.”
§1910.502(h) Physical distancing.	(1) The employer must ensure that each employee is separated from all other people by at least 6 feet when indoors unless the employer can demonstrate that such physical distancing is not feasible for a specific activity (e.g., hands-on medical care). This provision does not apply to momentary exposure while people are in movement (e.g., passing in hallways or aisles). (2) When the employer establishes it is not feasible for an employee to maintain a distance of at least 6 feet from all other people, the employer must ensure that the employee is as far apart from all other people as feasible. Note to paragraph (h): Physical distancing can include methods such as: telehealth; telework or other remote work arrangements; reducing the number of people, including non-employees, in an area at one time; visual cues such as signs and floor markings to indicate where employees and others should be located or their direction and path of travel; staggered arrival, departure, work, and break	16VAC25-220-30. Definitions 16 VAC25-220-40.D. Mandatory requirements for all employers	"Physical distancing" also called "social distancing" means a person keeping space between himself and other persons while conducting work-related activities inside and outside of the physical establishment by staying at least six feet from other persons. Physical separation of an employee from other employees or persons by a permanent, solid floor to ceiling wall (e.g., an office setting) constitutes one form of physical distancing from an employee or other person stationed on the other side of the wall, provided that six feet of travel distance is maintained from others around the edges or sides of the wall as well. D. Unless otherwise provided in this standard, employers shall establish and implement policies and procedures that ensure employees observe physical distancing while on the job and during paid breaks on the employer's property, including policies and procedures that: 1. Use verbal announcements, signage, or visual cues to promote physical distancing.		The provisions are comparable.

	<p>times; and adjusted work processes or procedures to allow greater distance between employees.</p>	<p>16VAC25-220-40.G Mandatory requirements for all employers</p> <p>16VAC25-220-40.H Mandatory requirements for all employers</p> <p>16VAC25-220-50.C.9 Requirements for hazards or job tasks classified as very high or high exposure risk.</p> <p>16VAC25-220-60.C Requirements for hazards or job tasks classified as medium exposure risk.</p>	<p>2. Decrease worksite density by limiting non-employee access to the place of employment or restrict access to only certain workplace areas to reduce the risk of exposure. An employer's compliance with occupancy limits contained in any applicable Virginia executive order or order of public health emergency will constitute compliance with the requirements in this subsection.</p> <p>G. Where the nature of an employee's work or the work area does not allow the employee to observe physical distancing requirements, employers shall ensure compliance with respiratory protection and personal protective equipment standards applicable to its industry.</p> <p>H. When it is necessary for employees solely exposed to lower risk hazards or job tasks to have brief contact with others inside six feet (e.g., passing another person in a hallway that does not allow physical distancing of six feet), a face covering is required.</p> <p>9. Where feasible, employers shall:</p> <ol style="list-style-type: none"> a. Implement flexible work site (e.g., telework). b. Implement flexible work hours (e.g., staggered shifts). c. Increase physical distancing between employees at the work site to six feet. d. Increase physical distancing between employees and other persons to six feet. e. Implement flexible meeting and travel options (e.g., use telephone or video conferencing instead of in person meetings; postpone non-essential travel or events; etc.). f. Deliver services remotely (e.g. phone, video, internet, etc.). g. Deliver products through curbside pick-up. <p>C. Administrative and work practice controls. To the extent feasible, employers shall implement the following administrative and work practice controls:</p> <ol style="list-style-type: none"> 1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19. 2. Provide face coverings to non-employees suspected to be infected with SARS-COV-2 to contain respiratory secretions until the non- 		
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			<p>employees are able to leave the site (i.e., for medical evaluation and care or to return home).</p> <ol style="list-style-type: none"> 3. Implement flexible work site (e.g., telework). 4. Implement flexible work hours (e.g., staggered shifts). 5. Increase physical distancing between employees at the work site to six feet. 6. Increase physical distancing between employees and other persons, including customers, to six feet (e.g., drive-through physical barriers) where such barriers will aid in mitigating the spread of SARS-CoV-2 virus transmission, etc. 7. Implement flexible meeting and travel options (e.g., using telephone or video conferencing instead of in person meetings; postponing non-essential travel or events; etc.). 8. Deliver services remotely (e.g. phone, video, internet, etc.). 9. Deliver products through curbside pick-up or delivery. 10. Employers shall provide and require employees to wear face coverings who, because of job tasks, cannot feasibly practice physical distancing from another employee or other person if the hazard assessment has determined that personal protective equipment, such as respirators or surgical/medical procedure masks, was not required for the job task. 11. Employers shall provide and require employees in customer or other person facing jobs to wear face coverings. 		
§1910.502(i) Physical barriers.	At each fixed work location outside of direct patient care areas (e.g., entryway/lobby, check-in desks, triage, hospital pharmacy windows, bill payment) where each employee is not separated from all other people by at least 6 feet of distance, the employer must install cleanable or disposable solid barriers, except where the employer can demonstrate it is not feasible. The barrier must be sized (e.g., height and width) and located to block face-to-face pathways between individuals based on where each person would normally stand or sit. The barrier may have a pass-through space at the bottom for objects and merchandise. Note to paragraph (i): Physical barriers are not required in direct patient care areas or resident rooms.	16VAC25-220-50.B.7 Requirements for hazards or job tasks classified as very high or high exposure risk: Engineering Controls	<ol style="list-style-type: none"> 7. To the extent feasible, employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission. <p>(This is also a requirement found in 16VAC25-220-60.B.2.- Requirements for hazards or job tasks classified at medium exposure risk:</p> <ol style="list-style-type: none"> 2. Where feasible, employers shall Install physical barriers (e.g., such as clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 virus transmission. 	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (the employer must install cleanable or disposable solid barriers, except where the employer can demonstrate it is not feasible).	The FPS is arguably not as effective as the OSHA ETS. The OSHA ETS requires that each fixed location outside of direct patient care areas where each employee is not separated from other people by at least 6 feet, the employer must install barriers except where the employer can demonstrate it is not feasible.
§1910.502(j) Cleaning and disinfection.	(1) In patient care areas, resident rooms, and for medical devices and equipment, the employer must follow standard practices for cleaning and disinfection of surfaces and equipment in accordance with CDC’s “COVID-19 Infection Prevention and Control	16VAC25-220-40.L Mandatory requirements for all employers:	<p>L. Sanitation and disinfecting.</p> <ol style="list-style-type: none"> 1. In addition to the requirements contained in this standard, employers shall comply with the VOSH sanitation standard applicable to its industry. 		The provisions are comparable.

	<p>Recommendations” and CDC’s “Guidelines for Environmental Infection Control,” pp. 86–103, 147-149 (both incorporated by reference, § 1910.509). (2) In all other areas, the employer must: (i) clean high-touch surfaces and equipment at least once a day, following manufacturers’ instructions for application of cleaners; and (ii) When the employer is aware that a person who is COVID-19 positive has been in the workplace within the last 24 hours, clean and disinfect, in accordance with CDC’s “Cleaning and Disinfecting Guidance” (incorporated by reference, § 1910.509), any areas, materials, and equipment under the employer’s control that have likely been contaminated by the person who is COVID-19 positive (e.g., rooms they occupied, items they touched). (3) The employer must provide alcohol-based hand rub that is at least 60% alcohol or provide readily accessible hand washing facilities.</p>	<p>Sanitation and Disinfecting</p>	<p>2. Employees that interact with customers, the general public, contractors, and other persons shall be provided with and immediately use supplies to clean and disinfectant surfaces contacted during the interaction where there is the potential for exposure to the SARS-CoV-2 virus by themselves or other employees.</p> <p>3. In addition to the requirements contained in this standard, employers shall comply with the VOSH hazard communication standard applicable to the employers' industry for cleaning and disinfecting materials and hand sanitizers.</p> <p>4. Areas in the place of employment where employees or other persons known or suspected to be infected with the SARS-CoV-2 virus accessed or worked shall be cleaned and disinfected prior to allowing other employees access to the areas. Where feasible, a period of 24 hours will be observed prior to cleaning and disinfecting. This requirement shall not apply if the areas in question have been unoccupied for seven or more days.</p> <p>5. All common spaces, including bathrooms (including port-a-johns, privies, etc.), frequently touched surfaces, and doors, shall at a minimum be cleaned and disinfected at least once during or at the end of the shift. Where multiple shifts are employed, such spaces shall be cleaned and disinfected no less than once every 12 hours.</p> <p>6. All shared tools, equipment, workspaces, and vehicles shall be cleaned and disinfected prior to transfer from one employee to another.</p> <p>7. Employers shall ensure that cleaning and disinfecting products are readily available to employees to accomplish the required cleaning and disinfecting. In addition, employers shall ensure use of only disinfecting chemicals and products indicated in the Environmental Protection Agency (EPA) List N for use against SARS-CoV-2, or non-EPA registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2.</p> <p>8. Employers shall ensure that the manufacturer's instructions for use of all disinfecting chemicals and products are complied with (e.g., concentration, application method, contact time, PPE, etc.).</p> <p>9. Employees shall have easy, frequent access and permission to use soap and water, and hand sanitizer where feasible, for the duration of work. Employees assigned to a work station where job tasks require frequent interaction inside six feet with other persons shall be provided with hand sanitizer where feasible at the employees work station.</p> <p>10. Mobile crews shall be provided with hand sanitizer where feasible for the duration of work at a work site or client or customer location and shall have transportation immediately available to nearby toilet facilities and handwashing facilities that meet the requirements of</p>		
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			<p>VOSH laws, standards, and regulations dealing with sanitation. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable, and use and storage in hot environments can result in a hazard.</p> <p>11. It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower as presenting potential exposure risk for purposes of application of the requirements of this standard. In situations other than emergencies, employers shall ensure that protective measures are put in place to prevent cross-contamination between tasks, areas, and personnel.</p>		
§1910.502(k) Ventilation.	<p>(1) Employers who own or control buildings or structures with an existing heating, ventilation, and air conditioning (HVAC) system(s) must ensure that: (i) The HVAC system(s) is used in accordance with the HVAC manufacturer's instructions and the design specifications of the HVAC system(s); (ii) The amount of outside air circulated through its HVAC system(s) and the number of air changes per hour are maximized to the extent appropriate; (iii) All air filters are rated Minimum Efficiency Reporting Value (MERV) 13 or higher, if compatible with the HVAC system(s). If MERV-13 or higher filters are not compatible with the HVAC system(s), employers must use filters with the highest compatible filtering efficiency for the HVAC system(s); (iv) All air filters are maintained and replaced as necessary to ensure the proper function and performance of the HVAC system(s); and (v) All intake ports that provide outside air to the HVAC system(s) are cleaned, maintained, and cleared of any debris that may affect the function and performance of the HVAC system(s). (2) Where the employer has an existing AIIR, the employer must maintain and operate it in accordance with its design and construction criteria. Note 1 to paragraph (k): This section does not require installation of new HVAC systems or AIIRs to replace or augment functioning systems. Note 2 to paragraph (k): In addition to the requirements for existing HVAC systems and AIIRs, all employers should also consider other measures to improve ventilation in accordance with "CDC's Ventilation Guidance," (available at www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html) (e.g., opening windows and doors). This could include maximizing</p>	<p>16VAC25-220-50.B Requirements for hazards or job tasks classified as very high or high exposure risk: Engineering Controls</p>	<p>B. Engineering controls. 1. Employers shall ensure that appropriate air-handling systems under their control:</p> <p>a. Are installed and maintained in accordance with the USBC and manufacturer's instructions in healthcare facilities and other places of employment treating, caring for, or housing persons known or suspected to be infected with the SARS-CoV-2 virus; and</p> <p>b. Where feasible and within the design parameters of the system, are utilized as follows:</p> <p>(1) Increase total airflow supply to occupied spaces provided that a greater hazard is not created (e.g., airflow that is increased too much may make doors harder to open or may blow doors open);</p> <p>(2) In ground transportation settings, use natural ventilation to increase outdoor air dilution of inside air in a manner that will aid in mitigating the spread of SARS-CoV2 virus and COVID-19 disease transmission to employees, and when environmental conditions and transportation safety and health requirements allow;</p> <p>(3) Inspect filter housing and racks to ensure appropriate filter fit and check for ways to minimize filter bypass;</p> <p>(4) Increase air filtration to as high as possible in a manner that will still enable the system to provide airflow rates as the system design requires. Ensure compliance with higher filtration values is allowed by the air handler manufacturer's installation instructions and listing;</p> <p>(5) Generate clean-to-less-clean air movements by re-evaluating the positioning of supply and exhaust air diffusers and/or dampers and adjusting zone supply and exhaust flow rates to establish measurable pressure differentials;</p> <p>(6) Have staff work in "clean" ventilation zones that do not include higher-risk areas such as visitor reception or exercise facilities (if open);</p> <p>(7) Ensure exhaust fans in restroom facilities are functional and operating continuously when the building is occupied;</p> <p>(8) If the system's design can accommodate such an adjustment and is allowed by the air handler manufacturer's installation instructions and</p>	<p>[Language highlighted in yellow] Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (where MERV-13 or higher filters are not compatible with the HVAC system(s))</p>	<p>The provisions are comparable with the exception of the OSHA ETS language requiring employer to use filters with highest compatible filtering efficiency if MERV-13 cannot be used</p>

	ventilation in buildings without HVAC systems or in vehicles.		listing, improve central air filtration to MERV-13 and seal edges of the filter to limit bypass; and (9) Check filters to ensure they are within service life and appropriately installed. c. Comply with USBC and applicable referenced American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards. NOTE: These ventilation requirements are also found in 16VAC25-220-60.B, Requirements for hazards for job tasks classified at medium exposure risk.		
§1910.502(l) Health screening and medical management.	(1) Screening. (i) The employer must screen each employee before each work day and each shift. Screening may be conducted by asking employees to self-monitor before reporting to work or may be conducted in-person by the employer. (ii) If a COVID-19 test is required by the employer for screening purposes, the employer must provide the test to each employee at no cost to the employee.	16VAC25-220-50.C.1 Requirements for hazards or job tasks classified as very high or high exposure risk. 16VAC25-220-60.C.1 Requirements for hazards or job tasks classified at medium exposure risk 16VAC25-220-40.C.3 Mandatory requirements for all employers.	50.C.1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19. 60.C.1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19. 40.C.3. For purposes of this section, COVID-19 testing is considered a "medical examination" under § 40.1-28 of the Code of Virginia. Employers shall not require employees to pay for the cost of COVID-19 testing for return to work determinations. If an employer's health insurance covers the entire cost of COVID-19 testing, use of the insurance coverage would not be considered a violation of this subdivision C 3.		The provisions are comparable.
§1910.502(l) Health screening and	(2) Employee notification to employer of COVID-19 illness or symptoms. The employer must require each employee to promptly notify the employer when the employee:	16VAC25-220-40.B.4	4. Employers shall develop and implement policies and procedures for employees to report when they are experiencing signs or symptoms consistent with COVID-19, and no alternative diagnosis has been made (e.g., tested positive for influenza). Such employees		The provisions are comparable.

<p>medical management.</p>	<p>(i) is COVID-19 positive (i.e., confirmed positive test for, or has been diagnosed by a licensed healthcare provider with, COVID-19); or (ii) has been told by a licensed healthcare provider that they are suspected to have COVID-19; or (iii) is experiencing recent loss of taste and/or smell with no other explanation; or (iv) is experiencing both fever ($\geq 100.4^{\circ}$ F) and new unexplained cough associated with shortness of breath.</p> <p>(3) Employer notification to employees of COVID-19 exposure in the workplace. (i) Except as provided for in paragraph (1)(3)(iii) of this section, when the employer is notified that a person who has been in the workplace(s) (including employees, clients, patients, residents, vendors, contractors, customers, delivery people and other visitors, or other non-employees) is COVID-19 positive, the employer must, within 24 hours: (A) Notify each employee who was not wearing a respirator and any other required PPE and has been in close contact with that person in the workplace. The notification must state the fact that the employee was in close contact with someone with COVID-19 along with the date(s) that contact occurred.</p> <p>(B) Notify all other employees who were not wearing a respirator and any other required PPE and worked in a well-defined portion of a workplace (e.g., a particular floor) in which that person was present during the potential transmission period. The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated. The notification must specify the date(s) the person with COVID-19 was in the workplace during the potential transmission period.</p> <p>(C) Notify other employers whose employees were not wearing respirators and any other required PPE and have been in close contact with that person, or worked in a well-defined portion of a workplace (e.g., a particular floor) in which that person was present, during the potential transmission period.</p> <p>The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated. The notification must specify the date(s) the</p>	<p>Mandatory requirements for all employers.</p> <p>16VAC25-220-40.B.7 Mandatory requirements for all employers.</p>	<p>shall be designated by the employer as "suspected to be infected with SARS-CoV-2 virus."</p> <p>To the extent permitted by law, including HIPAA, employers shall establish a system to receive reports of positive SARS-CoV-2 tests by employees, subcontractors, contract employees, and temporary employees (excluding patients hospitalized on the basis of being known or suspected to be infected with SARS-CoV-2 virus) present at the place of employment within two days prior to symptom onset (or positive test if the employee is asymptomatic) until 10 days after onset (or positive test).</p> <p>Employers shall notify:</p> <p>a. The employer's own employees who may have been exposed, within 24 hours of discovery of the employees' possible exposure, while keeping confidential the identity of the person known to be infected with SARS-CoV-2 virus in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;</p> <p>b. In the same manner as subdivision 7 a of this subsection, other employers whose employees were present at the work site during the same time period;</p> <p>c. In the same manner as subdivision 7 a of this subsection, the building or facility owner. The building or facility owner will require all employer tenants to notify the owner of the occurrence of a SARS-CoV-2-positive test for any employees or residents in the building. This notification will allow the owner to take the necessary steps to sanitize the common areas of the building.</p> <p>In addition, the building or facility owner will notify all employer tenants in the building that one or more cases have been discovered and the floor or work area where the case was located. The identity of the individual will be kept confidential in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;</p> <p>d. The Virginia Department of Health during a declaration of an emergency by the Governor pursuant to § 44-146.17 of the Code of Virginia. Every employer as defined by § 40.1-2 of the Code of Virginia shall report to the Virginia Department of Health (VDH) when the work site has had two or more confirmed cases of COVID-</p>		<p>The provisions are comparable.</p>
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<p>person with COVID-19 was in the workplace during the potential transmission period and the location(s) where the person with COVID-19 was in the workplace.</p> <p>(ii) The notifications required by paragraph (1)(3)(i) of this section must not include any employee’s name, contact information (e.g., phone number, email address), or occupation.</p> <p>(iii) The notification provisions are not triggered by the presence of a patient with confirmed COVID-19 in a workplace where services are normally provided to suspected or confirmed COVID-19 patients (e.g., emergency rooms, urgent care facilities, COVID-19 testing sites, COVID-19 wards in hospitals).</p> <p>(4) Medical removal from the workplace.</p> <p>(i) If the employer knows an employee meets the criteria listed in paragraph (1)(2)(i) of this section, then the employer must immediately remove that employee and keep the employee removed until they meet the return to work criteria in paragraph (1)(6) of this section.</p> <p>(ii) If the employer knows an employee meets the criteria listed in paragraphs (1)(2)(ii) through (1)(2)(iv) of this section, then the employer must immediately remove that employee and either:</p> <p>(A) Keep the employee removed until they meet the return to work criteria in paragraph (1)(6) of this section; or</p> <p>(B) Keep the employee removed and provide a COVID-19 polymerase chain reaction (PCR) test at no cost to the employee.</p> <p>(1) If the test results are negative, the employee may return to work immediately.</p> <p>(2) If the test results are positive, the employer must comply with paragraph (1)(4)(i) of this section. (3) If the employee refuses to take the test, the employer must</p>	<p>16VAC25-220-40.C. Mandatory requirements for all employers.</p>	<p>19 of its own employees present at the place of employment within a 14-day period testing positive for SARS-CoV-2 virus during that 14-day time period. Employers shall make such a report in a manner specified by VDH, including name, date of birth, and contact information of each case, within 24 hours of becoming aware of such cases. Employers shall continue to report all cases until the local health department has closed the outbreak. After the outbreak is closed, subsequent identification of two or more confirmed cases of COVID-19 during a declared emergency shall be reported, as required by this subdivision B 7 d. The following employers are exempt from this provision because of separate outbreak reporting requirements contained in 12VAC5-90-90: any residential or day program, service, or facility licensed or operated by any agency of the Commonwealth, school, child care center, or summer camp; and</p> <p>e. The Virginia Department of Labor and Industry within 24 hours of the discovery of three or more of its own employees present at the place of employment within a 14- day period testing positive for SARS-CoV-2 virus during that 14-day time period. A reported positive SARS-CoV-2 test does not need to be reported more than once and will not be used for the purpose of identifying more than one grouping of three or more cases, or more than one 14-day period.</p> <p>C. Return to work. Employers shall develop and implement policies and procedures for employees known or suspected to be infected with the SARS-CoV-2 virus to return to work.</p> <p>1. Symptomatic employees known or suspected to be infected with the SARS-CoV-2 virus are excluded from returning to work until all three of the following conditions have been met:</p> <p>a. The employee is fever-free (below 100.0° F) for at least 24 hours, without the use of fever-reducing medications;</p> <p>b. Respiratory symptoms, such as cough and shortness of breath have improved; and</p> <p>c. At least 10 days have passed since symptoms first appeared. However, a limited number of employees with severe illness may produce replication competent virus beyond 10 days that may warrant extending duration of isolation for up to 20 days after symptom onset. Employees who are severely immunocompromised may require testing to determine when they can return to work, and the employer shall consider consultation with infection control experts. VOSH will consult with VDH when identifying severe employee illnesses that may warrant extended duration of isolation or severely immunocompromised employees required to undergo testing.</p>		<p>The provisions are comparable.</p> <p>See DOLI §40, FAQs 24, 25, 26, 27, 28, 29 on isolation, quarantine and return to work issues consistent with CDC updates.</p> <p>https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/</p>
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<p>continue to keep the employee removed from the workplace consistent with paragraph (1)(4)(ii)(A) of this section, but the employer is not obligated to provide medical removal protection benefits in accordance with paragraph (1)(5)(iii) of this section.</p> <p>Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons.</p> <p>Note to paragraph (1)(4)(ii): This partial symptom list in paragraphs (1)(2)(iii) and (1)(2)(iv) of this section informs the employer of the minimum requirements for compliance. The full list of COVID-19 symptoms provided by CDC includes additional symptoms not listed in paragraphs (1)(2)(iii) through (1)(2)(iv) of this section. Employers may choose to remove or test employees with additional symptoms from the CDC list, or refer the employees to a healthcare provider.</p> <p>(iii) (A) If the employer is required to notify the employee of close contact in the workplace to a person who is COVID-19 positive in accordance with paragraph (1)(3)(i)(A) of this section, then the employer must immediately remove that employee and either: (1) Keep the employee removed for 14 days; or (2) Keep the employee removed and provide a COVID-19 test at least five days after the exposure at no cost to the employee.</p> <p>(i) If the test results are negative, the employee may return to work after seven days following exposure.</p> <p>(ii) If the test results are positive, the employer must comply with paragraph (1)(4)(i) of this section.</p> <p>(iii) If the employee refuses to take the test, the employer must continue to keep the employee removed from the workplace consistent with paragraph (1)(4)(iii)(A)(1) of this section, but the employer is not obligated to provide medical removal protection benefits in accordance with paragraph (1)(5)(iii) of this section.</p> <p>Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons, consistent with applicable non-discrimination laws.</p> <p>(B) Employers are not required to remove any employee who would otherwise be required to be removed under paragraph (i)(4)(iii)(A) of this section if the employee</p>	<p>16VAC25-220-40.C.3. Mandatory requirements for all employers.</p> <p>16VAC25-220-40.B.5. Mandatory requirements for all employers.</p>	<p>2. Employees known to be infected with SARS-CoV-2 who never develop signs or symptoms are excluded from returning to work until 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.</p> <p>C.3. For purposes of this section, COVID-19 testing is considered a "medical examination" under § 40.1-28 of the Code of Virginia. Employers shall not require employees to pay for the cost of COVID-19 testing for return to work determinations. If an employer's health insurance covers the entire cost of COVID-19 testing, use of the insurance coverage would not be considered a violation of this subdivision C 3.</p> <p>B.5. Employers shall not permit employees or other persons known or suspected to be infected with SARS-CoV-2 virus to report to or remain at the work site or engage in work at a customer or client location until cleared for return to work (see subsection C of this section). Nothing in this standard shall prohibit an employer from permitting an employee known or suspected to be infected with SARS-CoV-2 virus from engaging in teleworking or other form of work isolation that would not result in potentially exposing other employees to the SARS-CoV-2 virus.</p>		<p>The provisions are comparable.</p> <p>The provisions are comparable.</p>
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<p>does not experience the symptoms in paragraph (1)(2)(iii) or (1)(2)(iv) of this section and has:</p> <p>(1) been fully vaccinated against COVID-19 (i.e., 2 weeks or more following the final dose); or</p> <p>(2) had COVID-19 and recovered within the past 3 months.</p> <p>(iv) Any time an employee is required to be removed from the workplace for any reason under paragraph (1)(4) of this section, the employer may require the employee to work remotely or in isolation if suitable work is available.</p> <p>(5) Medical removal protection benefits.</p> <p>(i) Employers with 10 or fewer employees on the effective date of this section are not required to comply with paragraphs (1)(5)(iii) through (1)(5)(iv) of this section. (ii) When an employer allows an employee to work remotely or in isolation in accordance with paragraph (1)(4)(iv) of this section, the employer must continue to pay the employee the same regular pay and benefits the employee would have received had the employee not been absent from work, until the employee meets the return to work criteria specified in paragraph (1)(4)(iii) or (1)(6) of this section.</p> <p>(iii) When an employer removes an employee in accordance with paragraph (1)(4) of this section: (A) the employer must continue to provide the benefits to which the employee is normally entitled and must also pay the employee the same regular pay the employee would have received had the employee not been absent from work, up to \$1,400 per week, until the employee meets the return to work criteria specified in paragraph (1)(4)(iii) or (1)(6) of this section.</p> <p>(B) For employers with fewer than 500 employees, the employer must pay the employee up to the \$1,400 per week cap but, beginning in the third week of an employee's removal, the amount is reduced to only two-thirds of the same regular pay the employee would have received had the employee not been absent from work, up to \$200 per day (\$1,000 per week in most cases).</p> <p>(iv) The employer's payment obligation under paragraph (1)(5)(iii) of this section is reduced by the amount of compensation that the employee receives from any other source, such as a publicly or employer-funded</p>		<p>No comparable provision in the FPS.</p>	<p>Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (medical removal benefits)</p>	
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<p>compensation program (e.g., paid sick leave, administrative leave), for earnings lost during the period of removal or any additional source of income the employee receives that is made possible by virtue of the employee's removal. (v) Whenever an employee returns to the workplace after a COVID-19-related workplace removal, that employee must not suffer any adverse action as a result of that removal from the workplace and must maintain all employee rights and benefits, including the employee's right to their former job status, as if the employee had not been removed.</p> <p>(6) Return to work. The employer must make decisions regarding an employee's return to work after a COVID-19-related workplace removal in accordance with guidance from a licensed healthcare provider or CDC's "Isolation Guidance" (incorporated by reference, § 1910.509); and CDC's "Return to Work Healthcare Guidance" (incorporated by reference, § 1910.509). Note to paragraph (l): OSHA recognizes that CDC's "Strategies to Mitigate Healthcare Personnel Staffing Shortages" (available at www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html) allows elimination of quarantine for certain healthcare workers, but only as a last resort, if the workers' absence would mean there are no longer enough staff to provide safe patient care, specific other amelioration strategies have already been tried, patients have been notified, and workers are utilizing additional PPE at all times</p>	<p>16VAC25-220-40.B.5. Mandatory requirements for all employers.</p> <p>16VAC25-220-40.C. Mandatory requirements for all employers.</p>	<p>5. Employers shall not permit employees or other persons known or suspected to be infected with SARS-CoV-2 virus to report to or remain at the work site or engage in work at a customer or client location until cleared for return to work (see subsection C of this section). Nothing in this standard shall prohibit an employer from permitting an employee known or suspected to be infected with SARS-CoV-2 virus from engaging in teleworking or other form of work isolation that would not result in potentially exposing other employees to the SARS-CoV-2 virus.</p> <p>C. Return to work. Employers shall develop and implement policies and procedures for employees known or suspected to be infected with the SARS-CoV-2 virus to return to work.</p> <p>1. Symptomatic employees known or suspected to be infected with the SARS-CoV-2 virus are excluded from returning to work until all three of the following conditions have been met:</p> <ul style="list-style-type: none"> a. The employee is fever-free (below 100.0° F) for at least 24 hours, without the use of fever-reducing medications; b. Respiratory symptoms, such as cough and shortness of breath have improved; and c. At least 10 days have passed since symptoms first appeared. <p>However, a limited number of employees with severe illness may produce replication-competent virus beyond 10 days that may warrant extending duration of isolation for up to 20 days after symptom onset. Employees who are severely immunocompromised may require testing to determine when they can return to work, and the employer shall consider consultation with infection control experts. VOSH will consult with VDH when identifying severe employee illnesses that may warrant extended duration of isolation or severely immunocompromised employees required to undergo testing.</p> <p>2. Employees known to be infected with SARS-CoV-2 who never develop signs or symptoms are excluded from returning to work until</p>	<p>The provisions are comparable.</p> <p>The Department has issued FAQs addressing the CDC's updates concerning persons who are fully vaccinated (see §10, FAQs 19-22, and §40, FAQs 46-54).</p> <p>https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/</p>	
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			10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.		
§1910.502(m) Vaccination.	The employer must support COVID-19 vaccination for each employee by providing reasonable time and paid leave (e.g., paid sick leave, administrative leave) to each employee for vaccination and any side effects experienced following vaccination.		No comparable provision in the FPS.	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (paid leave for vaccinations)	
§1910.502(n) Training.	(1) The employer must ensure that each employee receives training, in a language and at a literacy level the employee understands , and so that the employee comprehends at least the following: (i) COVID-19, including how the disease is transmitted (including presymptomatic and asymptomatic transmission), the importance of hand hygiene to reduce the risk of spreading COVID-19 infections, ways to reduce the risk of spreading COVID-19 through the proper covering of the nose and mouth, the signs and symptoms of the disease, risk factors for severe illness, and when to seek medical attention; (ii) employer-specific policies and procedures on patient screening and management; (iii) tasks and situations in the workplace that could result in COVID-19 infection; (iv) workplace-specific policies and procedures to prevent the spread of COVID19 that are applicable to the employee’s duties (e.g., policies on Standard and Transmission-Based Precautions, physical distancing, physical barriers, ventilation, aerosol-generating procedures); (v) employer-specific multi-employer workplace agreements related to infection control policies and procedures, the use of common areas, and the use of shared equipment that affect employees at the workplace; (vi) employer-specific policies and procedures for PPE worn to comply with this section, including: (A) when PPE is required for protection against COVID-19; (B) limitations of PPE for protection against COVID-19; (C) how to properly put on, wear, and take off PPE; (D) how to properly care for, store, clean, maintain, and dispose of PPE; and	16VAC25-220-80 Training	A. Employers with hazards or job tasks classified as very high, high, or medium exposure risk at a place of employment shall provide training on the hazards and characteristics of the SARSCoV-2 virus and COVID-19 disease to all employees working at the place of employment regardless of employee risk classification. The training program shall enable each employee to recognize the hazards of the SARS-CoV-2 virus and signs and symptoms of COVID-19 disease and shall train each employee in the procedures to be followed in order to minimize these hazards. B. The training required under subsection A of this section shall include: 1. The requirements of this standard; 2. The mandatory and non-mandatory provisions in any applicable CDC guidelines or Commonwealth of Virginia guidance documents the employer is complying with, if any, in lieu of a provision of this standard as provided for in 16VAC25-220-10 E, F, and G; 3. The characteristics and methods of transmission of the SARS-CoV-2 virus; 4. The signs and symptoms of COVID-19 disease; 5. Risk factors for severe COVID-19 illness including underlying health conditions and advancing age; 6. Awareness of the ability of persons pre-symptomatically and asymptotically infected with SARS-CoV-2 to transmit the SARS-CoV-2 virus; 7. Safe and healthy work practices, including, but not limited to, physical distancing, the wearing of face coverings, disinfection procedures, disinfecting frequency, ventilation, noncontact methods of greeting, etc.; 8. Personal protective equipment (PPE): a. When PPE is required; b. What PPE is required;		See DOLI §80, FAQ 1 on employer requirement “to present information in a manner that their employees can understand.” https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/

			<p>1. Changes in the workplace, SARS-CoV-2 virus or COVID-19 disease hazards exposed to, or job tasks performed render previous training obsolete;</p> <p>2. Changes are made to the employer's Infectious Disease Preparedness and Response Plan; or</p> <p>3. Inadequacies in an affected employee's knowledge or use of workplace control measures indicate that the employee has not retained the requisite understanding or skill.</p> <p>E. Employers with hazards or job tasks classified at lower risk shall provide written or oral information to employees exposed to such hazards or engaged in such job tasks on the hazards and characteristics of SARS-COV-2 and the symptoms of COVID-19 and measures to minimize exposure. The Department of Labor and Industry shall develop an information sheet containing information on the items listed in subsection F of this section, which an employer may utilize to comply with this subsection.</p> <p>F. The information required under subsection E of this section shall include at a minimum:</p> <ol style="list-style-type: none"> 1. The requirements of this standard; 2. The characteristics and methods of transmission of the SARS-CoV-2 virus; 3. The signs and symptoms of COVID-19 disease; 4. The ability of persons pre-symptomatically and asymptotically infected with SARSCoV-2 to transmit the SARS-CoV-2 virus; 5. Safe and healthy work practices and control measures, including, but not limited to, physical distancing, the benefits of wearing face coverings, sanitation and disinfection practices; and 6. The anti-discrimination provisions of this standard in 16VAC25-220-90. 	knowledgeable in the covered subject matter)	provides an opportunity for interactive questions and answers with a person knowledgeable in the covered subject matter as it relates to the employee's job duties.
§1910.502(o) Retaliation	(o) Anti-Retaliation. (1) The employer must inform each employee that: (i) employees have a right to the protections required by this section; and (ii) employers are prohibited from discharging or in any manner discriminating against any employee for exercising their right to the protections required by this section, or for engaging in actions that are required by this section. (2) The employer must not discharge or in any manner discriminate against any employee for exercising their right to the protections required by this section, or for engaging in actions that are required by this section.	16VAC25-220-90. Discrimination against an employee for exercising rights under this standard is prohibited.	<p>A. No person shall discharge or in any way discriminate against an employee because the employee has exercised rights under the safety and health provisions of this standard, Title 40.1 of the Code of Virginia, and implementing regulations under 16VAC25-60-110 for themselves or others.</p> <p>B. No person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own personal protective equipment, including, but not limited to, a respirator, face shield, gown, or gloves, provided that the PPE does not create a greater hazard to the employee or create a serious hazard for other employees. In situations where face coverings are not provided by the employer, no person shall discharge or in any way</p>		The provisions are similar but not identical.

	Note to paragraph (o): In addition, section 11(c) of the OSH Act also prohibits the employer from discriminating against an employee for exercising rights under, or as a result of actions that are required by, this section. That provision of the Act also protects the employee who files a safety and health complaint, or otherwise exercises any rights afforded by the OSH Act.		<p>discriminate against an employee who voluntarily provides and wears the employee's own face covering that meets the requirements of this standard, provided that the face covering does not create a greater hazard to the employee or create a serious hazard for other employees. Nothing in this subsection shall be construed to prohibit an employer from establishing and enforcing legally permissible dress code or similar requirements addressing the exterior appearance of personal protective equipment or face coverings.</p> <p>C. No person shall discharge or in any way discriminate against an employee who raises a reasonable concern about infection control related to the SARS-CoV-2 virus and COVID-19 disease to the employer, the employer's agent, other employees, a government agency, or to the public such as through print, online, social, or any other media.</p> <p>D. Nothing in this standard shall limit an employee from refusing to do work or enter a location because of a reasonable fear of illness or death. The requirements of 16VAC25-60-110 contain the applicable requirements concerning discharge or discipline of an employee who has refused to complete an assigned task because of a reasonable fear of illness or death.</p> <p>16VAC25-220-80. Training. B. The training required under subsection A of this section shall include: 9. The anti-discrimination provisions in 16VAC25-220-90;</p>		
§1910.502(p) Requirements implemented at no cost to employees.	(p) Requirements implemented at no cost to employees. The implementation of all requirements of this section, with the exception of any employee self-monitoring conducted under paragraph (l)(1)(i) of this section, must be at no cost to employees.		No comparable section in FPS.	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (Requirements implemented at no cost to employees)	
§1910.502(q) Recordkeeping	(q) Recordkeeping. (1) Small employer exclusion. Employers with 10 or fewer employees on the effective date of this section are not required to comply with paragraph (q)(2) or (q)(3) of this section.	16VAC25-220-40. Mandatory requirements for all employers	16VAC25-220-40.B.7.a-c 7. To the extent permitted by law, including HIPAA, employers shall establish a system to receive reports of positive SARS-CoV-2 tests by employees, subcontractors, contract employees, and temporary employees (excluding patients hospitalized on the basis of being known or suspected to be infected with SARS-CoV-2 virus) present at the place of employment within two days prior to symptom onset (or	Possible ALAEA issue when comparing recordkeeping requirements in the OSHA ETS to any recordkeeping requirements in the FPS applicable to the	The ETS requires a specific COVID-19 log to be created and maintained by ER The FPS does require ER to establish a system to

<p>(2) Required records. Employers with more than 10 employees on the effective date of this section must: (i) retain all versions of the COVID-19 plan implemented to comply with this section while this section remains in effect.</p> <p>(ii) establish and maintain a COVID-19 log to record each instance identified by the employer in which an employee is COVID-19 positive, regardless of whether the instance is connected to exposure to COVID-19 at work. (A) The COVID-19 log must contain, for each instance, the employee’s name, one form of contact information, occupation, location where the employee worked, the date of the employee’s last day at the workplace, the date of the positive test for, or diagnosis of, COVID-19, and the date the employee first had one or more COVID-19 symptoms, if any were experienced. (B) The information in the COVID-19 log must be recorded within 24 hours of the employer learning that the employee is COVID-19 positive and must be maintained as though it is a confidential medical record and must not be disclosed except as required by this ETS or other federal law. (C) The COVID-19 log must be maintained and preserved while this section remains in effect. Note to paragraph (q)(2)(ii): The COVID-19 log is intended to assist employers with tracking and evaluating instances of employees who are COVID-19 positive without regard to whether those employees were infected at work. The tracking will help evaluate potential workplace exposure to other employees.</p> <p>(3) Availability of records. By the end of the next business day after a request, the employer must provide, for examination and copying:</p> <p>(i) All versions of the written COVID-19 plan to all of the following: any employees, their personal representatives, and their authorized representatives.</p> <p>(ii) The individual COVID-19 log entry for a particular employee to that employee and to anyone having written authorized consent of that employee. (iii) A version of the COVID-19 log that removes the names of employees, contact information, and occupation, and only includes, for each employee in the COVID-19 log, the location where the employee worked, the last day that the employee was at the workplace before removal, the date</p>		<p>positive test if the employee is asymptomatic) until 10 days after onset (or positive test). Employers shall notify:</p> <p>a. The employer's own employees who may have been exposed, within 24 hours of discovery of the employees' possible exposure, while keeping confidential the identity of the person known to be infected with SARS-CoV-2 virus in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;</p> <p>b. In the same manner as subdivision 7 a of this subsection, other employers whose employees were present at the work site during the same time period;</p> <p>c. In the same manner as subdivision 7 a of this subsection, the building or facility owner. The building or facility owner will require all employer tenants to notify the owner of the occurrence of a SARS-CoV-2-positive test for any employees or residents in the building. This notification will allow the owner to take the necessary steps to sanitize the common areas of the building. In addition, the building or facility owner will notify all employer tenants in the building that one or more cases have been discovered and the floor or work area where the case was located. The identity of the individual will be kept confidential in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;</p>	<p>healthcare industry (COVID-19 log)</p>	<p>receive reports of positive COVID tests by EEs and notification requirements for ER to notify all EEs potentially exposed in the workplace; however, there is no specific COVID log requirement.</p>
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	<p>of that employee's positive test for, or diagnosis of, COVID-19, and the date the employee first had one or more COVID-19 symptoms, if any were experienced, to all of the following: any employees, their personal representatives, and their authorized representatives.</p> <p>(iv) All records required to be maintained by this section to the Assistant Secretary. Note to paragraph (q): Employers must continue to record all work-related confirmed cases of COVID-19 on their OSHA Forms 300, 300A, and 301, or the equivalent forms, if required to do so under 29 CFR part 1904.</p>				
<p>§1910.502(r) Reporting COVID-19 fatalities and hospitalizations to OSHA.</p>	<p>(r) Reporting COVID-19 fatalities and hospitalizations to OSHA.</p> <p>(1) The employer must report to OSHA: (i) Each work-related COVID-19 fatality within 8 hours of the employer learning about the fatality. (ii) Each work-related COVID-19 in-patient hospitalization within 24 hours of the employer learning about the in-patient hospitalization.</p> <p>(2) When reporting COVID-19 fatalities and in-patient hospitalizations to OSHA in accordance with paragraph (r)(1) of this section, the employer must follow the requirements in 29 CFR part 1904.39, except for 29 CFR part 1904.39(a)(1) and (2) and (b)(6).</p>	<p>Va. Code §40.1-51.1(D)</p> <p>16VAC25-220-40.B.7.d and 7.e Mandatory requirements for all employers.</p>	<p>Va. Code §40.1-51.1(D). § 40.1-51.1. Duties of employers.</p> <p>....</p> <p>D. Every employer shall report to the Virginia Department of Labor and Industry within eight hours any work-related incident resulting in a fatality or within 24 hours any work-related incident resulting in (i) the inpatient hospitalization of one or more persons, (ii) an amputation, or (iii) the loss of an eye, as prescribed in the rules and regulations of the Safety and Health Codes Board.</p> <p>7. To the extent permitted by law, including HIPAA, employers shall establish a system to receive reports of positive SARS-CoV-2 tests by employees, subcontractors, contract employees, and temporary employees (excluding patients hospitalized on the basis of being known or suspected to be infected with SARS-CoV-2 virus) present at the place of employment within two days prior to symptom onset (or positive test if the employee is asymptomatic) until 10 days after onset (or positive test). Employers shall notify:</p> <p>...</p> <p>d. The Virginia Department of Health during a declaration of an emergency by the Governor pursuant to § 44-146.17 of the Code of Virginia. Every employer as defined by § 40.1-2 of the Code of Virginia shall report to the Virginia Department of Health (VDH) when the work site has had two or more confirmed cases of COVID-19 of its own employees present at the place of employment within a 14-day period testing positive for SARS-CoV-2 virus during that 14-day time period. Employers shall make such a report in a manner specified by VDH, including name, date of birth, and contact information of each case, within 24 hours of becoming aware of such</p>		

			<p>cases. Employers shall continue to report all cases until the local health department has closed the outbreak. After the outbreak is closed, subsequent identification of two or more confirmed cases of COVID-19 during a declared emergency shall be reported, as required by this subdivision B 7 d. The following employers are exempt from this provision because of separate outbreak reporting requirements contained in 12VAC5- 90-90: any residential or day program, service, or facility licensed or operated by any agency of the Commonwealth, school, child care center, or summer camp; and</p> <p>e. The Virginia Department of Labor and Industry within 24 hours of the discovery of three or more of its own employees present at the place of employment within a 14- day period testing positive for SARS-CoV-2 virus during that 14-day time period. A reported positive SARS-CoV-2 test does not need to be reported more than once and will not be used for the purpose of identifying more than one grouping of three or more cases, or more than one 14-day period.</p>		
§1910.502(s) Dates	<p>(s) Dates.</p> <p>(1) Effective date. This section is effective as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].</p> <p>(2) Compliance dates. (i) Employers must comply with all requirements of this section, except for requirements in paragraph (i), paragraph (k), and paragraph (n) of this section by [INSERT DATE 14 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. (ii) Employers must comply with the requirements of this section in paragraph (i), paragraph (k), and paragraph (n) of this section by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</p>	16VAC25-220-20. Effective dates.	<p>A.5. Effective date is January 27, 2021.</p> <p>B. The requirements for 16VAC25-220-70 shall take effect on March 26, 2021. The training requirements in 16VAC25-220-80 shall take effect on March 26, 2021.</p>		
§1910.504(a) Mini Respiratory Protection Program.	<p>§ 1910.504 Mini Respiratory Protection Program.</p> <p>(a) Scope and application. This section applies only to respirator use in accordance with § 1910.502 (f)(4). (see below)</p> <p>ETS § 1910.502 (f)(4). Use of respirators when not required.</p> <p>(i) The employer <i>may</i> provide a respirator to the employee instead of a facemask as required by paragraph (f)(1) of this section. In such circumstances, the employer</p>	16VAC25-220-50.D. Requirements for hazards or job tasks classified as very high or high exposure risk.	<p>50.D. Personal protective equipment (PPE). Employers covered by this section and not otherwise covered by the VOSH Standards for General Industry (16VAC25-90-1910.132), shall comply with the following requirements for a SARS-CoV-2 virus and COVID-19 disease-related hazard assessment and personal protective equipment selection:</p> <p>1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective</p>	Possible ALAEA issue when comparing requirements in the OSHA ETS to requirements in the FPS applicable to the healthcare industry (mini respiratory protection program)	OSHA refers to this section as the “mini” respiratory protection program” because it is a less detailed hybrid of the respiratory protection program normally required under 19.132.

	<p>must comply with § 1910.504. (ii) Where the employer provides the employee with a facemask as required by paragraph (f)(1) of this section, the employer must permit the employee to wear their own respirator instead of a facemask. In such circumstances, the employer must also comply with § 1910.504</p>		<p>equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall: a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment; b. Communicate selection decisions to each affected employee; and c. Select PPE that properly fits each affected employee</p> <p>3. Unless specifically addressed by an industry specific standard applicable to the employer and providing for PPE protections to employees from the SARS-COV-2 virus or COVID-19 disease (e.g., 16VAC25-175-1926, 16VAC25-190-1928, 16VAC25-100-1915, 16VAC25-120-1917, or 16VAC25-130-1918), the requirements of 16VAC25-90-1910.132 (General requirements) and 16VAC25-90-1910.134 (Respiratory protection) shall apply to all employers for that purpose.</p> <p>4. Unless contraindicated by a hazard assessment and equipment selection requirements in subdivision 1 of this subsection, employees classified as very high or high exposure risk shall be provided with and wear gloves, a gown, a face shield or goggles, and a respirator when in contact with or inside six feet of patients or other persons known to be or suspected of being infected with SARS-CoV-2. Gowns shall be the correct size to assure protection.</p>		<p>FPS requires employers to assess hazard and select and provide PPE as appropriate.</p> <p>FPS references industry standards or respiratory requirements of 16VAC25-90-1910.132 (General requirements) and 16VAC25-90-1910.134 (Respiratory protection) shall apply to all employers for that purpose.</p>
<p>§1910.504(b) Definitions</p>	<p>(b) Definitions. The following definitions apply to this section:</p> <p>COVID-19 (Coronavirus Disease 2019) means the respiratory disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). For clarity and ease of reference, this section refers to “COVID-19” when describing exposures or potential exposures to SARS-CoV-2.</p> <p>Elastomeric respirator means a tight-fitting respirator with a facepiece that is made of synthetic or rubber material that permits it to be disinfected, cleaned, and reused according to manufacturer’s instructions. It is equipped with a replaceable cartridge(s), canister(s), or filter(s).</p>	<p>16VAC25-220-30. Definitions.</p>	<p>See below FPS definitions that correspond to ETS definitions in this section.</p> <p>See response above to definition of "COVID-19"</p> <p>See response above to definition of “Elastomeric respirator”</p>		

<p>Filtering facepiece respirator means a negative-pressure particulate respirator with a non-replaceable filter as an integral part of the facepiece or with the entire facepiece composed of the non-replaceable filtering medium.</p> <p>Hand hygiene means the cleaning and/or disinfecting of one's hands by using standard handwashing methods with soap and running water or an alcohol-based hand rub that is at least 60% alcohol.</p> <p>Respirator means a type of personal protective equipment (PPE) that is certified by the National Institute for Occupational Safety and Health (NIOSH) under 42 CFR part 84 or is authorized under an Emergency Use Authorization (EUA) by the US Food and Drug Administration. Respirators protect against airborne hazards by removing specific air contaminants from the ambient (surrounding) air or by supplying breathable air from a safe source. Common types of respirators include filtering facepiece respirators, elastomeric respirators, and PAPRs. Face coverings, facemasks, and face shields are not respirators.</p> <p>Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.</p> <p>Tight-fitting respirator means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator (e.g., filtering facepiece).</p> <p>User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.</p>			<p>See response above to definition of "Filtering facepiece respirator"</p> <p>See response above to definition of "Hand hygiene"</p> <p>See response above to definition of "Respirator"</p> <p>See response above to definition of "Powered air-purifying respirator"</p> <p>See response above to definition of "Respirator" which contains a definition of "tight-fitting" respirator</p> <p>No comparable definition in FPS</p> <p>However, the term is defined in 1910.134, Respiratory Protection Standard, which applies in Virginia:</p> <p>"User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face."</p> <p>https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134</p>		<p>The term is defined in 1910.134, Respiratory Protection Standard, which applies in Virginia</p>
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<p>§1910.504(c) Respirators provided by employees.</p>	<p>(c) Respirators provided by employees. Where employees provide and use their own respirators, the employer must provide each employee with the following notice: Respirators can be an effective method of protection against COVID-19 hazards when properly selected and worn. Respirator use is encouraged to provide an additional level of comfort and protection for workers even in circumstances that do not require a respirator to be used. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. If your employer allows you to provide and use your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following: (1) Read and follow all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations. (2) Keep track of your respirator so that you do not mistakenly use someone else's respirator; (3) Do not wear your respirator where other workplace hazards (e.g., chemical exposures) require use of a respirator. In such cases, your employer must provide you with a respirator that is used in accordance with OSHA's respiratory protection standard (29 CFR part 1910.134). For more information about using a respirator, see OSHA's respiratory protection safety and health topics page (https://www.osha.gov/respiratory-protection).</p>	<p>16VAC25-220-90.B. Discrimination against an employee for exercising rights under this standard is prohibited.</p>	<p>16VAC25-220-90.B No person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own personal protective equipment, including, but not limited to, a respirator, face shield, gown, or gloves, provided that the PPE does not create a greater hazard to the employee or create a serious hazard for other employees. In situations where face coverings are not provided by the employer, no person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own face covering that meets the requirements of this standard, provided that the face covering does not create a greater hazard to the employee or create a serious hazard for other employees. Nothing in this subsection shall be construed to prohibit an employer from establishing and enforcing legally permissible dress code or similar requirement addressing the exterior appearance of personal protective equipment or face coverings. (Emphasis added).</p>		<p>See DOLI §90, FAQ 3 https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/</p>
<p>§1910.504(d) Respirators provided by employers.</p>	<p>(d) Respirators provided by employers. Where employers provide respirators to their employees, the employer must comply with the following requirements: (1) Training. The employer must ensure that each employee wearing a respirator receives training prior to first use and if they change the type of respirator, in a language and at a literacy level the employee understands, and comprehends at least the following: (i) How to inspect, put on and remove, and use a respirator; (ii) The limitations and capabilities of the respirator, particularly when the respirator has not been fit tested; (iii) Procedures and schedules for storing, maintaining, and inspecting respirators; (iv) How to perform a user seal check as described in paragraph (d)(2) of this section; and (v) How to recognize medical signs and symptoms that may limit or prevent the effective use of</p>	<p>16VAC25-220-50.D. 1 & 4. Requirements for hazards or job tasks classified as very high or high exposure risk.</p>	<p>16VAC25-220-50.D. D. Personal protective equipment (PPE). Employers covered by this section and not otherwise covered by the VOSH Standards for General Industry (16VAC25-90-1910.132), shall comply with 40 the following requirements for a SARS-CoV-2 virus and COVID-19 disease-related hazard assessment and personal protective equipment selection: 1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall: a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will</p>		<p>OSHA refers to this section as the "mini" respiratory protection program" because it is a less detailed hybrid of the respiratory protection program normally required under 19.132. The OSHA ETS outlines specific but lessened requirements when respirators are provided by the employers, such as training, seal checks, reuse of respirators and</p>

<p>respirators and what to do if the employee experiences signs and symptoms. (2) User seal check. (i) The employer must ensure that each employee who uses a tight-fitting respirator performs a user seal check to ensure that the respirator is properly seated to the face each time the respirator is put on. Acceptable methods of user seal checks include: (A) Positive pressure user seal check (i.e., blow air out). Once you have conducted proper hand hygiene and properly donned the respirator, place your hands over the facepiece, covering as much surface area as possible. Exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure is being built up inside the facepiece without any evidence of outward leakage of air at the seal. Examples of evidence that it is leaking could be the feeling of air movement on your face along the seal of the facepiece, fogging of your glasses, or a lack of pressure being built up inside the facepiece. If the particulate respirator has an exhalation valve, then performing a positive pressure check may not be possible unless the user can cover the exhalation valve. In such cases, a negative pressure check must be performed. (B) Negative pressure user seal check (i.e., suck air in). Once you have conducted proper hand hygiene and properly donned the respirator, cover the filter surface with your hands as much as possible and then inhale. The facepiece should collapse on your face and you should not feel air passing between your face and the facepiece. (ii) The employer must ensure that each employee corrects any problems discovered during the user seal check. In the case of either type of user seal check (positive or negative), if air leaks around the nose, use both hands to readjust how the respirator sits on your face or adjust the nosepiece, if applicable. Readjust the straps along the sides of your head until a proper seal is achieved. Note to paragraph (d)(2)(i) and (ii): When employees are required to wear a respirator and a problem with the seal check arises due to interference with the seal by an employee’s facial hair, employers may provide a different type of respirator to accommodate employees who cannot trim or cut facial hair due to religious belief. (3) Reuse of respirators. (i) The employer must ensure that a filtering facepiece respirator used by a particular employee is only reused by that employee, and only when: (A) the respirator is not</p>		<p>protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment; b. Communicate selection decisions to each affected employee; and c. Select PPE that properly fits each affected employee. 4. Unless contraindicated by a hazard assessment and equipment selection requirements in subdivision 1 of this subsection, employees classified as very high or high exposure risk shall be provided with and wear gloves, a gown, a face shield or goggles, and a respirator when in contact with or inside six feet of patients or other persons known to be or suspected of being infected with SARS-CoV-2. Gowns shall be the correct size to assure protection.</p>		<p>guidance for discontinuing use of a respirator.</p> <p>The FPS covers assessment of PPE and the requirement to employers to determine and select appropriate PPE and provide respirators to employees in the high exposure risk categories. FPS incorporates by reference 16VAC25-90-1910.134 (Respiratory protection). There is no COVID-19 specific respiratory requirements such as the one outlined in the ETS.</p>
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	<p>visibly soiled or damaged; (B) the respirator has been stored in a breathable storage container (e.g., paper bag) for at least five calendar days between use and has been kept away from water or moisture; (C) the employee does a visual check in adequate lighting for damage to the respirator's fabric or seal; (D) the employee successfully completes a user seal check as described in paragraph (d)(2) of this section; (E) the employee uses proper hand hygiene before putting the respirator on and conducting the user seal check; and (F) the respirator has not been worn more than five days total. Note to paragraph (d)(3)(i): The reuse of single-use respirators (e.g., filtering facepiece respirators) is discouraged. (ii) The employer must ensure that an elastomeric respirator or PAPR is only reused when: (A) the respirator is not damaged; (B) the respirator is cleaned and disinfected as often as necessary to be maintained in a sanitary condition in accordance with § 1910.134, Appendix B-2; and (C) a change schedule is implemented for cartridges, canisters, or filters.</p> <p>(4) Discontinuing use of respirators. Employers must require employees to discontinue use of a respirator when either the employee or a supervisor reports medical signs or symptoms (e.g., shortness of breath, coughing, wheezing, chest pain, any other symptoms related to lung problems, cardiovascular symptoms) that are related to ability to use a respirator. Any employee who previously had a medical evaluation and was determined to not be medically fit to wear a respirator must not be provided with a respirator under this standard unless they are reevaluated and medically cleared to use a respirator.</p>				
§1910.504(e) Effective date	(e) Effective date. This section is effective as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].	16VAC25-220-20. Effective dates.	<p>A.5. The Governor reviewed the standard under subdivision A 1 of this section and the effective date is January 27, 2021.</p> <p>B. The requirements for 16VAC25-220-70 shall take effect on March 26, 2021. The training requirements in 16VAC25-220-80 shall take effect on March 26, 2021.</p>		
§1910.505 Severability.	§ 1910.505 Severability. Each section of this subpart U, and each provision within those sections, is separate and severable from the other sections and provisions. If any provision of this subpart is held to be invalid or unenforceable on its face, or as applied to any person, entity, or circumstance, or is stayed or enjoined, that		No comparable provision in FPS.		Not applicable

	provision shall be construed so as to continue to give the maximum effect to the provision permitted by law, unless such holding shall be one of utter invalidity or unenforceability, in which event the provision shall be severable from this subpart and shall not affect the remainder of the subpart				
§1910.509(a) Incorporation by Reference.	§ 1910.509 Incorporation by Reference. (a)(1) The material listed in this section is incorporated by reference into this subpart with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, OSHA must publish a document in the Federal Register and the material must be available to the public. All approved material is available for inspection at any Regional Office of the Occupational Safety and Health Administration (OSHA), or at the OSHA Docket Office, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-3508, Washington, DC 20210; telephone: 202-693-2350 (TTY number: 877-889-5627). It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of these standards at NARA, email fedreg.legal@nara.gov , or go to www.archives.gov/federal-register/cfr/ibr-locations.html . (2) The material is available from the sources listed in this section and as follows: (i) The material listed in paragraphs (b) and (c) of this section (CDC and EPA) is available at this permanent weblink hosted by OSHA: www.osha.gov/coronavirus/ets/ibr . (ii) The material listed in paragraph (d) of this section (ISEA) is available from the American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036; telephone: 212-642-4900; fax: 212-398-0023; website: http://www.ansi.org .		Not applicable		
§1910.509(b) Centers for Disease Control and Prevention (CDC).	(b) Centers for Disease Control and Prevention (CDC). 1600 Clifton Road, Atlanta, GA 30329; websites: https://www.cdc.gov/ , https://www.cdc.gov/coronavirus/2019-ncov/communication/guidance.html , and https://www.cdc.gov/infectioncontrol/guidelines/ . (1) Cleaning and Disinfecting Guidance. COVID-19: Cleaning and Disinfecting Your Facility; Every Day and	16VAC25-220-10.E. Purpose, scope, and applicability.	E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID19 disease related hazards or job tasks addressed by this standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard, the employer's actions shall be considered in compliance with this standard. An employer's actual compliance with a recommendation		See DOLI §40, FAQs 41, 42, 43 and 44 on CDC updates concerning cleaning and disinfecting. https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/

	<p>When Someone is Sick, updated April 5, 2021, incorporation by reference (IBR) approved for § 1910.502(j). (2) COVID-19 Infection Prevention and Control Recommendations. COVID-19: Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic, updated February 23, 2021, IBR approved for §§ 1910.502(d) and (j). (3) Guidelines for Isolation Precautions. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, updated July 2019, IBR approved for §§ 1910.502(e) and (f). (4) Guidelines for Environmental Infection Control. Guidelines for Environmental Infection Control in Health-Care Facilities, updated July 2019, IBR approved for § 1910.502(j). (5) Isolation Guidance. COVID-19: Isolation If You Are Sick; Separate yourself from others if you have COVID-19, updated February 18, 2021, IBR approved for § 1910.502(l). (6) Return to Work Healthcare Guidance. COVID-19: Return to Work Criteria for Healthcare Personnel with SARS-CoV-2 Infection (Interim Guidance), updated February 16, 2021, IBR approved for § 1910.502(l).</p>		<p>contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.</p>		
<p>§1910.509(c) U.S. Environmental Protection Agency (EPA):</p>	<p>(c) U.S. Environmental Protection Agency (EPA): 1200 Pennsylvania Avenue, NW, Washington, DC 20460; website: https://www.epa.gov/. (1) List N. Pesticide Registration List N: Disinfectants for Coronavirus (COVID19), updated April 9, 2021, IBR approved for § 1910.502(b). (2) [Reserved]</p>	<p>16VAC25-220-40.L.7. Mandatory requirements for all employers.</p>	<p>See: L. Sanitation and disinfecting. 7. Employers shall ensure that cleaning and disinfecting products are readily available to employees to accomplish the required cleaning and disinfecting. In addition, employers shall ensure use of only disinfecting chemicals and products indicated in the Environmental Protection Agency (EPA) List N for use against SARS-CoV-2, or non-EPA registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2.</p>		
<p>§1910.509(d) International Safety Equipment Association (ISEA):</p>	<p>(d) International Safety Equipment Association (ISEA): 1901 North Moore Street, Suite 808, Arlington, VA 22209; website: www.safetysafetyequipment.org (1) ANSI/ISEA Z87.1-2010, American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI-approved April 13, 2010, IBR approved for § 1910.502(b). (2) ANSI/ISEA Z87.1-2015, American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, ANSI-approved May 28, 2015, IBR approved for § 1910.502(b). (3) ANSI/ISEA Z87.1-2020, American National Standard for Occupational and Educational</p>		<p>Not applicable</p>		

	Personal Eye and Face Protection Devices, ANSI-approved March 11, 2020, IBR approved for § 1910.502(b).				
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COMMONWEALTH of VIRGINIA

DEPARTMENT OF LABOR AND INDUSTRY

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DRAFT: JUNE 25, 2021

NEW INFORMATION HIGHLIGHTED IN YELLOW **VIRGINIA SAFETY AND HEALTH CODES BOARD**

BRIEFING PACKAGE FOR

for June 29, 2021

Proposed Amendments to the Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 That Causes COVID-19, §16 VAC 25-220

I. Action Requested.

The VOSH Program requests the Safety and Health Codes Board adopt proposed amendments to the Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 That Causes COVID-19, §16 VAC 25-220. Va. Code §40.1-22(6a).

Any proposed changes to or proposed revocation of the Final Permanent Standard (FPS), for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, §16 VAC 25-220 voted upon by the Safety and Health Codes Board at its upcoming meeting will go through a similar notice and comment process to that used for adoption of the FPS. This includes a written comment period for the public and stakeholders to provide written feedback to the Board about the proposed changes or proposed revocation, at least one public hearing, and development of an Economic Impact Analysis (EIA). The Board will then hold a second meeting and vote to accept or reject the proposed changes or proposed revocation as final. During both the proposed and final change stages, the Governor will have the opportunity to review the changes per 16VAC25-220-20.A.

Should the Board adopt proposed amendments to the FPS, the Administration has requested that the Board proceed as expeditiously as possible with promulgation process, including the holding of a 30 day written comment period, a public hearing, and publication of an Economic Impact Analysis so that a final vote on the proposed amendments could occur as soon as possible.

A. Attachments.

ATTACHMENT A:

INDUSTRY SPECIFIC INFORMATION ASSOCIATED WITH ADOPTION OF THE EMERGENCY TEMPORARY STANDARD AND ORIGINAL FINAL PERMANENT STANDARD

ATTACHMENT B:

CURRENT LAWS AND REGULATIONS
RECOGNIZED MITIGATION STRATEGIES FOR COVID-19 NOT COVERED BY VOSH REGULATIONS OR STANDARDS
VA. CODE §40.1-51(A), THE “GENERAL DUTY CLAUSE”

ATTACHMENT C:

OTHER STATE COVID-19 LAWS, STANDARDS AND REGULATIONS

ATTACHMENT D:

FINDING OF “GRAVE DANGER” TO SUPPORT THE ADOPTION OF THE EMERGENCY TEMPORARY STANDARD (ETS) AND FINAL PERMANENT STANDARD (FPS) FOR INFECTIOUS DISEASE PREVENTION OF THE SARS-COV-2 VIRUS THAT CAUSES COVID-19, 16VAC25-220, EFFECTIVE JULY 27, 2020 AND JANUARY 27, 2021, RESPECTIVELY

ATTACHMENT E:

OSHA RECORDKEEPING GUIDELINES FOR RECORDING COVID-19 OCCUPATIONALLY RELATED CASES.

ATTACHMENT F:

VOSH INVESTIGATION AND INSPECTION PROCEDURES

ATTACHMENT G:

DETERMINING CAUSE OF DEATH (CDC)

ATTACHMENT H:

VOSH Violations Issued in COVID-19 Cases Opened From February 1, 2020 to June 16, 2021

ATTACHMENT I:

January 11, 2021, Economic Impact Proposed Standard For Infectious Disease Prevention Of The Sars-Cov-2 Virus That Causes Covid-19, Prepared by Chmura Economics and Analytics

ATTACHMENT J:

January 11, 2021, DOLI ADDENDUM to January 11, 2021, Economic Impact Proposed Standard for Infectious Disease Prevention Of The Sars-Cov-2 Virus That Causes Covid-19, Prepared by Chmura Economics and Analytics

B. Situation Summary.¹

- On February 7, 2020, the Commissioner of the Virginia Department of Health (VDH) issued a Declaration of Public Emergency.²
- On March 7, 2020 the first case of COVID-19 in Virginia was confirmed.³
- On March 11, 2020 the World Health Organization characterized COVID-19 as a pandemic.⁴
- On March 12, 2020 Governor Ralph S. Northam issued Executive Order 51, Declaration of a State of Emergency Due To Novel Coronavirus (Covid-19) in the Commonwealth of Virginia.⁵
- On March 13, 2020, President Donald J. Trump declared a national emergency in response to the COVID-19 pandemic.⁶
- On March 17, 2020 Governor Northam and State Health Commissioner M. Norman Oliver, MD, MA issued a Declaration of Public Health Emergency.⁷
- On March 23, 2020 Governor Northam issued Executive Order 53⁸ that orders the closure of certain non-essential businesses, bans all gatherings of more than 10 people, and closes all K-12 schools for the remainder of the academic year. Governor Northam also urged all Virginians to avoid non-essential travel outside the home, if and when possible. Food establishments are mandated to offer curbside takeout and delivery service only, or close to the public.
- On March 25, 2020 Governor Northam and State Health Commissioner M. Norman Oliver, MD, MA directed all hospitals to stop performing elective surgeries or procedures to help conserve supplies of personal protective equipment (PPE). Order of Public Health Emergency Two.⁹

¹ <https://www.vdh.virginia.gov/coronavirus/> - Situation Summary Taken in Part from the Virginia Department of Health Website

² <https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/Order-of-the-Governor-and-State-Health-Commissioner-Declaration-of-Public-Health-Emergency.pdf>

³ <https://www.vdh.virginia.gov/news/2020-news-releases/first-virginia-case-of-covid-19-confirmed-at-fort-belvoir/>

⁴ <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

⁵ [https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/eo/EO-51-Declaration-of-a-State-of-Emergency-Due-to-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/eo/EO-51-Declaration-of-a-State-of-Emergency-Due-to-Novel-Coronavirus-(COVID-19).pdf)

⁶ <https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>

⁷ <https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/Order-of-the-Governor-and-State-Health-Commissioner-Declaration-of-Public-Health-Emergency.pdf>

⁸ [https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-53-Temporary-Restrictions-Due-To-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-53-Temporary-Restrictions-Due-To-Novel-Coronavirus-(COVID-19).pdf)

⁹ <https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/Order-of-Public-Health-Emergency-Two---Order-of-The-Governor-and-State-Health-Commissioner.pdf>

- On March 30, 2020 Governor Northam issued Executive Order 55¹⁰, a statewide Temporary Stay at Home order. The executive order took effect immediately and will remain in place until June 10, 2020. The order directed all Virginians to stay home except in extremely limited circumstances. Individuals may leave their residence for allowable travel, including to seek medical attention, work, care for family or household members, obtain goods and services like groceries, prescriptions, and others as outlined in Executive Order Fifty-Three, and engage in outdoor activity with strict social distancing requirements.
- On May 8, 2020 Governor Northam issued Executive Order 61 and Order of Public Health Emergency Three, Phase One Easing of Certain Temporary Restrictions Due to Novel Coronavirus (COVID-19).¹¹
- On May 12, 2020 Governor Northam issued Executive Order 62 and Order of Public Health Emergency Four, Jurisdictions Temporarily Delayed from Entering Phase One in Executive Order 61 and Permitted to Remain in Phase Zero Northern Virginia Region.¹²
- On May 14, 2020 Governor Northam issued Amended Executive Order 62 and Amended Order of Public Health Emergency Four, Jurisdictions Temporarily Delayed from Entering Phase One in Executive Order 61 and Permitted to Remain in Phase Zero, Phase Zero Jurisdictions.¹³
- On May 26, 2020 Governor Northam issued a revised Executive Order 63¹⁴ (EO 63), “Order of Public Health Emergency Five, Requirement to Wear Face Covering While Inside Buildings.” EO 63 also directed the Commissioner of the Virginia Department of Labor and Industry [and Virginia Safety and Health Codes Board] to promulgate emergency regulations and standards to control, prevent, and mitigate the spread of COVID-19 in the workplace.
- On December 10, 2020 Governor Northam issued Executive Order 72¹⁵ (EO 72) "Order of Public Health Emergency Nine, Common Sense Surge Restrictions, Certain Temporary Restrictions Due to Novel Coronavirus (COVID-19)."

¹⁰ [https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-55-Temporary-Stay-at-Home-Order-Due-to-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-55-Temporary-Stay-at-Home-Order-Due-to-Novel-Coronavirus-(COVID-19).pdf)

¹¹ [https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-61-and-Order-of-Public-Health-Emergency-Three---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-61-and-Order-of-Public-Health-Emergency-Three---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-(COVID-19).pdf)

¹² <https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-62-and-Order-of-Public-Health-Emergency-Four---Jurisdictions-Temporarily-Delayed-From-Entering-Phase-One-in-Executive-Order-61-and-Permitted-to-Remain-in-Phase-Zero-Northern-Virginia-Region.pdf>

¹³ <https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-62-and-Order-of-Public-Health-Emergency-Four-AMENDED.pdf>

¹⁴ <https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-63-and-Order-Of-Public-Health-Emergency-Five---Requirement-To-Wear-Face-Covering-While-Inside-Buildings.pdf>

¹⁵ [https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-72-and-Order-of-Public-Health-Emergency-Nine-Common-Sense-Surge-Restrictions-Certain-Temporary-Restrictions-Due-to-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-72-and-Order-of-Public-Health-Emergency-Nine-Common-Sense-Surge-Restrictions-Certain-Temporary-Restrictions-Due-to-Novel-Coronavirus-(COVID-19).pdf)

- On May 14, 2021, Governor Northam issued Executive Order 79 (EO79) "Order of Public Health Emergency Ten, Ending of Common Sense Public Health Restrictions Due to Novel Coronavirus (COVID-19)."
- On May 28, 2021, the CDC issued "Interim Public Health Recommendations for Fully Vaccinated People"¹⁶ which cleared fully vaccinated people to safely resume most normal activities. The CDC continues to recommend preventative measures for unvaccinated people (unvaccinated people refers to individuals of all ages, including children, that have not completed a vaccination series or received a single-dose vaccine) including wearing a face covering and staying six feet apart from people who don't live with you.¹⁷

Face coverings continue to be required on planes, buses, trains, and other forms of public transportation traveling into, within, or out of the United States and in U.S. transportation hubs such as airports and stations.

- On June 10, 2021, federal OSHA issues an updated version of "Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace."¹⁸ The guidance focuses on safety and health protections and mitigation efforts to protect unvaccinated, not fully vaccinated and otherwise at-risk workers:

1. Grant paid time off for employees to get vaccinated.
2. Instruct any workers who are infected, unvaccinated workers who have had close contact with someone who tested positive for SARS-CoV-2, and all workers with COVID-19 symptoms to stay home from work
3. Implement physical distancing for unvaccinated and otherwise at-risk workers in all communal work areas
4. Provide unvaccinated and otherwise at-risk workers with face coverings or surgical masks, unless their work task requires a respirator or other PPE
5. Educate and train workers on your COVID-19 policies and procedures using accessible formats and in language they understand
6. Suggest that unvaccinated customers, visitors, or guests wear face coverings
7. Maintain Ventilation Systems
8. Perform routine cleaning and disinfection
9. Record and report COVID-19 infections and deaths: Under mandatory OSHA rules in 29 CFR 1904
10. Implement protections from retaliation and set up an anonymous process for workers to voice concerns about COVID-19-related hazards
11. Follow other applicable mandatory OSHA standards

- On June 21, 2021, federal OSHA issued an Emergency Temporary Standard for Occupational Exposure to COVID-19 (COVID-19 ETS) applicable to employees engaged in healthcare services and healthcare support services.¹⁹ At its June 29, 2021

¹⁶ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>

¹⁷ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

¹⁸ <https://www.osha.gov/coronavirus/safework>

¹⁹ <https://www.govinfo.gov/content/pkg/FR-2021-06-21/pdf/2021-12428.pdf>

meeting, the Board is considering adoption of the COVID-19 ETS in Virginia that would apply to healthcare services and healthcare support services which would expire within six months or when repealed by the Board, whichever occurs first. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS was no longer in effect.

II. Summary of Rulemaking Process.

A. Petition Concerning Poultry and Meat Processing.

On April 23, 2020, the Commissioner of Labor and Industry received a petition from the Virginia Legal Aid Justice Center (LAJC), Community Organizing, and Community Solidarity with the Poultry Workers organizations to enact an emergency regulation to address COVID-19 related workplace hazards in the poultry processing and meatpacking industries. On April 29, 2020, Commissioner C. Ray Davenport provided an initial response to the April 23rd petition letter.

On May 6, 2020, the Commissioner received a follow-up letter from the same petitioners. On May 14, 2020, Commissioner C. Ray Davenport provided a follow-up response to the April 23rd and May 6th petition letters indicating that the petition would be submitted to the Virginia Safety and Health Codes Board for consideration.

B. Virginia Executive Order 63, issued May 26, 2020.

On May 26, 2020, Governor Northam issued a revised Executive Order 63²⁰ (EO 63), “Order of Public Health Emergency Five, Requirement to Wear Face Covering While Inside Buildings” that provides in part:

“E. Department of Labor and Industry

Except for paragraph B above, this Order does not apply to employees, employers, subcontractors, or other independent contractors in the workplace. The Commissioner of the Virginia Department of Labor and Industry shall promulgate emergency regulations and standards to control, prevent, and mitigate the spread of COVID-19 in the workplace. The regulations and standards adopted in accordance with §§ 40.1-22(6a) or 2.2-4011 of the Code of Virginia shall apply to every employer, employee, and place of employment within the jurisdiction of the Virginia Occupational Safety and Health program as described in 16 Va. Admin. Code § 25-60-20 and Va. Admin. Code § 25-60-30. These regulations and standards must address personal protective equipment, respiratory protective equipment, and sanitation, access to employee exposure and medical records and hazard communication. Further, these regulations and standards may not conflict with requirements and guidelines applicable to businesses set out and incorporated into Amended

²⁰ *Id.*

Executive Order 61 and Amended Order of Public Health Emergency Three.²¹ (Emphasis added).

Although EO 63 does not mention the Safety and Health Codes Board, Governor Northam issued a news release which says in part:

“The Governor is also directing the Commissioner of the Department of Labor and Industry to develop emergency temporary standards for occupational safety that will protect employees from the spread of COVID-19 in their workplaces. These occupational safety standards will require the approval by vote of the Virginia Safety and Health Codes Board and must address personal protective equipment, sanitation, record-keeping of incidents, and hazard communication. Upon approval, the Department of Labor and Industry will be able to enforce the standards through civil penalties and business closures.”²² (Emphasis added).

C. Emergency Meetings of Safety and Health Codes Board.

1. Emergency Temporary Standard.

On June 12, 2020 the Department posted a Notice of Meeting for a June 24, 2020 emergency meeting²³ of the Safety and Health Codes Board to consider for adoption an Emergency Temporary Standard/Emergency Regulation (“ETS/ER”), Infectious Disease Prevention: SARS-CoV-2 Virus That Causes COVID-19, applicable to every employer, employee, and place of employment in the Commonwealth of Virginia within the jurisdiction of the VOSH program as described in §§16VAC 25-60-20 and 16 VAC 25-60-30.

On June 12, 2020 the Department also opened a 10 day Comment Forum²⁴ to provide the public the opportunity to submit written comments on the Department’s request to consider for adoption an ETS/ER Infectious Disease Prevention, SARS-CoV-2 Virus that Causes COVID-19. The comment period closed on June 22, 2020, and the comments were reviewed with the Board at its meeting on June 24, 2020.

On June 24, 2020, the Board decided to proceed with the adoption of an ETS under Va. Code §40.1-22(6a) and further provided that once the ETS was adopted, the Board would proceed with the consideration of adopting a permanent replacement standard for the ETS.

The Board continued its meeting of June 24th on June 29, 2020,²⁵ July 7, 2020²⁶ and July 15, 2020.²⁷ On July 15, 2020, the Virginia Safety and Health Codes Board

²¹ [https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-61-and-Order-Of-Public-Health-Emergency-Three-AMENDED---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-61-and-Order-Of-Public-Health-Emergency-Three-AMENDED---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-(COVID-19).pdf)

²² <https://www.governor.virginia.gov/newsroom/all-releases/2020/may/headline-857020-en.html>

²³ <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31004>

²⁴ <https://townhall.virginia.gov/L/comments.cfm?GeneralNoticeid=1118>

²⁵ <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31037>

²⁶ <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31057>

²⁷ <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31089>

adopted §16 VAC 25-220, Emergency Temporary Standard, Infectious Disease Prevention: SARS-CoV-2 Virus That Causes COVID-19.

The ETS was published in the Richmond Times Dispatch on July 27, 2020 and took immediate effect.²⁸ The ETS expired on January 26, 2021.

D. Final Permanent Standard.

1. Proposed Permanent Standard.

Pursuant to Va. Code §40.1-22(6a), publication of the COVID-19 ETS in the Richmond Times Dispatch constituted notice that the Board intends to adopt a permanent standard within a period of six months.

Although not required to under Va. Code §40.1-22(6a), the Board opted to engage in the following notice and comment process that would mirror, to the extent possible within the compressed six month timeline for adoption, Virginia Administrative Process Act (APA) procedures:

- The Board held a 60 day written comment period for the proposed permanent standard running from August 27, 2020 to September 25, 2020.²⁹
- The Board held a public hearing on the proposed permanent standard on September 30, 2020.³⁰

The Department received 993 written comments through the Virginia Regulatory Townhall for the 60 day written comment period from August 27, 2020 to September 25, 2020. There were 33 written comments sent directly to the Department during the 60 day written comment period, although a number of those were also posted by the Commenters on the Virginia Regulatory Townhall. There were 29 oral comments received during the public hearing on September 30, 2020.

The Board was briefed on the Department's response to the public comments at its regular meeting on November 12, 2020.

- In response to the public comments received, the Department developed recommended revisions to the proposed permanent standard and published them on December 10, 2020 with a 30 day written comment period ending January 9, 2021.³¹
- A public hearing was held on January 5, 2021.³²

²⁸ http://register.dls.virginia.gov/emergency_regs.shtml

²⁹ <https://townhall.virginia.gov/L/ViewNotice.cfm?gnid=1137>

³⁰ <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31418>

³¹ <https://townhall.virginia.gov/L/ViewNotice.cfm?gnid=1177>

³² <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31985>

- An economic impact analysis (EIA)³³ based on the requirements of Va. Code §2.2-4007.04³⁴ was issued on January 11, 2021. The EIA was prepared by Chmura Economics & Analytics, a nationally recognized economic consulting firm.³⁵ The Department issued an Addendum to the EIA³⁶ on January 11, 2021.
2. Review of Comments Submitted: Initial 60 day Written Comment Period from August 27, 2020 to September 25, 2020; and Public Hearing of September 30, 2020.

The Department received 993 written comments through the Virginia Regulatory Townhall for the 60 day written comment period from August 27, 2020 to September 25, 2020.³⁷

There were 33 written comments sent directly to the Department during the 60 day written comment period, although a number of those were also posted by the Commenter on the Virginia Regulatory Townhall.³⁸

There were 29 oral comments received during the public hearing on September 30, 2020.³⁹

3. Review of Comments Submitted: Follow-up 30 day Written Comment Period from December 10, 2020 to January 9, 2021; and Public Hearing of January 5, 2021.

The Department received 238 written comments through the Virginia Regulatory Townhall for the 30 day written comment period from December 10, 2020 to January 9, 2021.⁴⁰

There were 21 written comments sent directly to the Department during the 30 day written comment period, although a number of those were also posted by the Commenter on the Virginia Regulatory Townhall.

There were 24 oral comments received during the public hearing on January 5, 2020.

4. Adoption of Final Permanent Standard.

A meeting of the Board to consider adoption of a final standard was held January

³³ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/VDOLI-COVID-Regulation-Economic-Impact-Analysis-EIA-20210111.pdf>

³⁴ <https://law.lis.virginia.gov/vacode/title2.2/chapter40/section2.2-4007.04/>

³⁵ <http://www.chmuraecon.com/>

³⁶ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/DOLI-ADDENDUM-TO-EIA-Final-1.11.2021.pdf>

³⁷ https://townhall.virginia.gov/L/GetFile.cfm?File=meeting\92\31594\Agenda_DOLI_31594_v6.pdf

³⁸ *Id.*

³⁹ <https://townhall.virginia.gov/L/ViewNotice.cfm?gnid=1162>

⁴⁰ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/Combined-Townhall-Direct-to-DOLI-and-Oral-Comments-with-Dept-Response-1.10.2021-FOR-PUBLICATION.pdf>

12, 2021⁴¹ and a continuation of the meeting was held on January 13, 2021,⁴² at which time the Board adopted the Final Permanent Standard, 16VAC25-220 with an effective date of January 27, 2021.⁴³

16VAC25-220-20.C provides that within fourteen (14) days of the expiration of the Governor's COVID-19 State of Emergency and Commissioner of Health's COVID-19 Declaration of Public Emergency, the Virginia Safety and Health Codes Board shall notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for the standard.⁴⁴

The state of emergency that Governor Northam declared on March 12, 2020 in response to COVID-19 is set to expire on June 30.⁴⁵

E. Proposed Changes to or Revocation of Final Permanent Standard.

Any proposed changes to or proposed revocation of the Final Permanent Standard (FPS), for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19 16VAC25-220 voted upon by the Safety and Health Codes Board at its upcoming meeting will go through a similar notice and comment process to that used for adoption of the FPS. This includes a written comment period for the public and stakeholders to provide written feedback to the Board about the proposed changes or proposed revocation, at least one public hearing, and development of an Economic Impact Analysis (EIA). The Board will then hold a second meeting and vote to accept or reject the proposed changes or proposed revocation as final. During both the proposed and final change stages, the Governor will have the opportunity to review the changes per 16VAC25-220-20.A.

Should the Board adopt proposed amendments to the FPS, the Administration has requested that the Board proceed as expeditiously as possible with promulgation process, including the holding of a 30 day written comment period, a public hearing, and publication of an Economic Impact Analysis so that a final vote on the proposed amendments could occur as soon as possible.

- The Safety and Health Codes Board is also considering for adoption federal OSHA's Occupational Exposure to COVID-19, Emergency Temporary Standard, 1910.502, et

⁴¹ <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31986>

⁴² <https://townhall.virginia.gov/L/ViewMeeting.cfm?MeetingID=31987>

⁴³ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/Final-Standard-for-Infectious-Disease-Prevention-of-the-Virus-That-Causes-COVID-19-16-VAC25-220-1.27.2021.pdf>

⁴⁴ NOTE 1: The intent of the language is to give the Board the maximum amount of flexibility to "notice" the Board meeting within 14 days even if the Board may not actually meet within 14 days.

NOTE 2: The new language in 16VAC25-220.C requires the Board to make a "determination" of whether there is continued need for the standard. The Department has identified three "determination" options:

- That there is no continued need for the standard;
- That there is a continued need for the standard with no changes; and
- That there is a continued need for a revised standard.

Regardless of the determination, the Department and Board will provide notice and comment opportunities on any changes to or revocation of the standard.

⁴⁵ <https://www.governor.virginia.gov/newsroom/all-releases/2021/june/headline-897920-en.html>

seq. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS is no longer in effect.

III. Proposed Amendments to the Final Permanent Standard.

10 Purpose, scope, and applicability.

The purpose of the proposed amendments is to change the focus of the FPS from the very high/high/medium/lower risk exposure level approach to one that focuses on mitigation strategies directed at protecting employees who are unvaccinated, not fully vaccinated or are otherwise at risk from the grave danger presented by the SARS-C-oV-2 virus (and its variants) and the COVID-19 disease. In doing so the Department and the Virginia Department of Health (VDH) reviewed and identified requirements from:

- OSHA's "Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace," and
- OSHA's COVID-19 ETS (requirements of general application, not dependent on or specific to the healthcare industry).
- 16VAC25-220-10.B is amended as follows:

1. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

2. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30

days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

- 16VAC25-220-10.E is amended as follows:

E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID-19 disease related hazards or job tasks addressed by this standard, ~~and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard,~~ the employer's actions shall be considered in compliance with the related provisions of this standard....

NOTE 1: VOSH is required by the OSH Act of 1970⁴⁶ and OSHA regulations⁴⁷ to be "at least as effective as" federal OSHA; and standards and regulations adopted by VOSH must be "as stringent as" those adopted by federal OSHA in accordance with Va. Code §40.1-22(5). VOSH generally follows OSHA interpretations of federal identical standards and regulations.

20 Dates.

- Provides a process for gubernatorial review of proposed and final changes to the final standard prior to the standard becoming effective.
- Requirements for training would take effect 30 days after the effective date of the FPS, and the requirement to develop an infectious disease prevention and response plans would take effect 60 days after the effective date of the FPS.

30 Definitions.

- New or revised definitions are provided for the following terms: "Aerosol-generating procedure," "Airborne infection isolation room" or "AIIR," "Ambulatory care," "ASTM," "Cleaning," "Community Transmission," "Confirmed COVID-19" [formerly "know to be infected with the SARS-CoV-2 virus"], "COVID-19 positive and confirmed COVID-19," "COVID-19 test," "Elastomeric respirator," "Face covering," "Face mask," "Face shield," "Fully vaccinated," "Healthcare services," "Healthcare support services," "Otherwise at risk," "Personal Protective Equipment," "Powered air-purifying respirator (PAPR)," "Respirator," "Signs of COVID-19," "Surgical mask," "Suspected COVID-19" [formerly "Suspected to be infected with SARS-CoV-2 virus"], and "Symptoms of COVID-19," and "Vaccine."

⁴⁶ https://www.osha.gov/laws-regs/oshact/section_18

⁴⁷ <https://www.osha.gov/laws-regs/regulations/standardnumber/1902/1902.4>

- Definitions are deleted for the following terms: "Exposure risk level [including "Very high," "High," "Medium," and "Lower"], "May be infected with SARS-CoV-2 virus," "Minimal occupational contact," "Surgical/medical procedure mask."

40 Mandatory requirements for employers in all exposure risk levels.

- Changes are made throughout 16VAC25-220-40 to reflect revised requirements for employees who are fully vaccinated and for those employees who are not fully vaccinated or otherwise at risk.

- Changes are made throughout 16VAC25-220-40 to reflect revised CDC procedures for cleaning and/or disinfecting surfaces.

- 16VAC25-220-40.A is amended as follows:

A. Employers shall have a policy in place to ensure compliance with the requirements in this section to protect employees from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease. Such policy shall have a method to receive anonymous complaints of violations. An employer that enforces its policy in good faith and resolves filed complaints shall be considered in compliance with this subsection

- References to exposure risk hazards of very high, high, medium and lower are removed and the focus of requirements is shifted to addressing hazards faced by employees who are not fully vaccinated or are otherwise at risk.

- Employers may rely on an employee's representation of being fully vaccinated, as defined herein, without requiring proof of vaccination; however, nothing in this standard shall be construed to preclude an employer from requiring proof that an employee is fully vaccinated.

- The requirement for employers to notify DOLI of three or more cases within a 14 day period is changed to two or more cases to be consistent with a similar requirement to report such cases to the Virginia Department of Health. Such reports can be filed online at:

<https://www.doli.virginia.gov/report-a-workplace-fatality-or-severe-injury-or-covid-19-case/>

- 16VAC25-220-40.C is amended to reflect the return to work requirements from the OSHA COVID-19 ETS:

C. Return to work. Employers shall develop and implement policies and procedures for suspected or confirmed COVID-19 employees to return to work.

1. If the employer knows an employee is COVID-19 positive, then the employer must immediately remove that employee from the worksite and keep the employee removed until they meet the return to work criteria in 16VAC25-220-40 C 3.

2. If the employer knows an employee is suspected COVID-19, then the employer must immediately remove that employee from the worksite and either:

a. Keep the employee removed until they meet the return to work criteria in 16VAC25-220-40 C 3; or

b. Keep the employee removed and provide a COVID-19 polymerase chain reaction (PCR) test at no cost to the employee.

(1) If the test results are negative, the employee may return to work immediately.

(2) If the test results are positive, the employer must comply with 16VAC25-220-40 C 1.

(3) If the employee refuses to take the test, the employer must continue to keep the employee removed from the workplace consistent with 16VAC25-220-40 C 1. Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons.

3. The employer must make decisions regarding an employee's return to work after a COVID-19-related workplace removal in accordance with guidance from a licensed healthcare provider, a VDH public health professional, or CDC's "Isolation Guidance"⁴⁸ (hereby incorporated by reference); and CDC's "Return to Work Healthcare Guidance"⁴⁹ (hereby incorporated by reference).

- 16VAC25-220-40.G is amended as follows:

Employers shall provide and require employees that are not fully vaccinated, and otherwise at-risk employees (because of a prior transplant or other medical condition), to wear face coverings or surgical masks while indoors, unless their work task requires a respirator or other PPE.

Exceptions to the requirements for face coverings or surgical masks for employees that are not fully vaccinated are noted (e.g., when an employee is alone in a room; While an employee is eating and drinking at the workplace, provided each employee is at least 6 feet away from any other person, or separated from other people by a physical barrier, etc.).

Requirements related to the wearing of face shields in certain circumstances are provided.

⁴⁸ <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/isolation.html>

⁴⁹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>

Certain requirements related to cleaning and/or disinfecting are revised to reflect DOLI Frequently Asked Questions and updated in CDC guidance.

NOTE: HIPAA does not apply to apply to VOSH or OSHA.⁵⁰

50 Requirements for healthcare services and healthcare support services.

- A Scope and Application section is added which provides:

1. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

2. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

- Coverage of correctional facilities, jails, detention centers, and juvenile detention centers was moved from 16VAC25-220-50 to 16VAC25-220-60, because 16VAC25-220-50 is now limited to coverage of healthcare services and healthcare support services.
- A list of activities that the section does not apply to is included (e.g., the provision of first aid by an employee who is not a licensed healthcare provider; the dispensing of prescriptions by pharmacists in retail setting; etc.)

⁵⁰ <https://www.osha.gov/Publications/OSHA-factsheet-HIPPA-whistle.pdf>

60 Requirements for higher-risk workplaces with mixed-vaccination status employees.

- 16VAC25-220-60 is amended to mitigate the spread of COVID-19 for employees who are not fully vaccinated, and otherwise at-risk employees in workplaces (which include, but are not limited to, manufacturing, meat and poultry processing, high-volume retail and grocery, transit, seafood processing, correctional facilities, jails, detention centers, and juvenile detention centers) where there is heightened risk due to the following types of factors:

1. Where employees who are not fully vaccinated or otherwise at-risk employees are working close to one another, for example, on production or assembly lines. Such workers may also be near one another at other times, such as when clocking in or out, during breaks, or in locker/changing rooms.

2. Where employees who are not fully vaccinated or otherwise at-risk workers often have prolonged closeness to coworkers (e.g., for 8–12 hours per shift).

3. Employees who are not fully vaccinated or otherwise at-risk employees who may be exposed to the infectious virus through respiratory droplets or aerosols in the air—for example, when employees who are not fully vaccinated or otherwise at-risk employees in a manufacturing or factory setting who have the virus cough or sneeze. It is also possible that exposure could occur from contact with contaminated surfaces or objects, such as tools, workstations, or break room tables. Shared spaces such as break rooms, locker rooms, and entrances/exits to the facility may contribute to their risk.

4. Other distinctive factors that may increase risk among these employees who are not fully vaccinated or otherwise at-risk employees include:

- a. A common practice at some workplaces of sharing employer-provided transportation such as ride-share vans or shuttle vehicles; and
- b. Communal housing, or living quarters onboard vessels with other unvaccinated or otherwise at-risk individuals.

70 Infectious disease preparedness and response plan.

- 16VAC25-220-70 is amended to apply to employers covered by 16VAC25-220-50 and 16VAC25-220-60.
- For employers covered by 16VAC25-220-60, the plan requirements do not apply to employees who are fully vaccinated.

80 Training.

- 16VAC25-220-80 is amended to apply to employers covered by 16VAC25-220-50 and 16VAC25-220-60.

- For employer covered by 16VAC25-220-60 employers may provide fully vaccinated employees with written information meeting the requirements of subsection 16VAC25-220-80 F in lieu of training.

NOTE: Construction employers, regardless of risk category, will be required to provide SARS-COV-2 and COVID-19 related training, and training on the FPS in accordance with the federal identical OSHA/VOSH regulation at 1926.21(b)(2), which provides:

“The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.” (Emphasis added).

90 Discrimination against an employee for exercising rights under this emergency temporary standard/emergency regulation is prohibited.

No amendments proposed.

IV. **Basis, Purpose and Impact of the Final Standard.**

A. Basis.

1. Applicable Statutes.

The Safety and Health Codes Board is authorized by Title 40.1-22(5)⁵¹ to:

“... adopt, alter, amend, or repeal rules and regulations to further, protect and promote the safety and health of employees in places of employment over which it has jurisdiction and to effect compliance with the federal OSH Act of 1970...as may be necessary to carry out its functions established under this title....All such rules and regulations shall be designed to protect and promote the safety and health of such employees. In making such rules and regulations to protect the occupational safety and health of employees, the Board shall adopt the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity. However, such standards shall be at least as stringent as the standards promulgated by the Federal Occupational Safety and Health Act of 1970 (P.L. 91-596). In addition to the attainment of the highest degree of health and safety protection for the employee, other considerations shall be the latest available scientific data in the field, the feasibility of the standards, and experience gained under this and other health and safety laws. Whenever practicable, the standard promulgated shall be expressed in terms of objective criteria and of the performance desired. Such standards when applicable to products which are distributed in interstate commerce shall be the same as federal standards unless deviations are required

⁵¹ <https://law.lis.virginia.gov/vacode/40.1-22/>

by compelling local conditions and do not unduly burden interstate commerce.”

Va. Code §40.1-22(6a)⁵² provides that:

....

(6a) The Board shall provide, without regard to the requirements of Chapter 40 (§ 2.2-4000 et seq.) of Title 2.2, for an emergency temporary standard to take immediate effect upon publication in a newspaper of general circulation, published in the City of Richmond, Virginia, if it determines that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and that such emergency standard is necessary to protect employees from such danger. The publication mentioned herein shall constitute notice that the Board intends to adopt such standard within a period of six months. The Board by similar publication shall prior to the expiration of six months give notice of the time and date of, and conduct a hearing on, the adoption of a permanent standard. The emergency temporary standard shall expire within six months or when superseded by a permanent standard, whichever occurs first, or when repealed by the Board.

(Emphasis added).

The Department consulted with the OAG concerning the meaning and proper application of Va. Code §40.1-22(6a), and DOLI concludes:

Virginia Code § 40.1-22(6a) states that the Board shall provide — without regard to the requirements of the APA — for an emergency temporary or permanent standard if the Board determines that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards and that such standard is necessary to protect employees from such danger. Section 40.1-22(6a) creates a path to a temporary and/or permanent standard outside of the APA. This creates a separate procedure for emergency temporary and/or permanent standards – without regard to the regular processes of the APA. It is incumbent on the Board to make findings and a record sufficient to support those findings of a grave danger and the necessity of the standard to protect employees from that grave danger. (Emphasis added).

The purpose of the proposed amendments is to change the focus of the FPS from the very high/high/medium/lower risk exposure level approach to one that focuses on mitigation strategies directed at protecting employees who are unvaccinated, not fully vaccinated or are otherwise at risk from the grave danger presented by the SARS-CoV-2 virus (and its variants) and the COVID-19 disease. In doing so the Department and the Virginia Department of Health (VDH) reviewed and pulled requirements from:

- OSHA’s “Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace,” and

⁵² *Id.*

- OSHA's COVID-19 ETS of general application.

2. Requirements More Restrictive than Federal.⁵³

On June 21, 2021, federal OSHA adopted a COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to the healthcare industry⁵⁴ (COVID-19 ETS) (employees engaged in healthcare services and healthcare support services), but does not have a specific regulation or standard that addresses the SARS-CoV-2 virus that causes COVID-19 for employers in non-healthcare settings.⁵⁵

At its June 29, 2021 meeting, the Board is considering adoption of the COVID-19 ETS in Virginia that would apply to healthcare services and healthcare support services which would expire within six months or when repealed by the Board, whichever occurs first. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS was no longer in effect.

3. Agencies, Localities, and Other Entities Particularly Affected.⁵⁶

The Department is not aware of any agency, locality or entity that is likely to bear a disproportionate material impact which would not be experienced by other agencies, localities, or entities.

4. Alternatives to Standard.⁵⁷

See ATTACHMENT B, CURRENT LAWS AND REGULATIONS
RECOGNIZED MITIGATION STRATEGIES FOR COVID-19 NOT COVERED
BY VOSH REGULATIONS OR STANDARDS.

As previously referenced, on June 21, 2021, federal OSHA adopted a COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to the healthcare

⁵³ Identify and describe any requirement of the regulatory change which is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect. Based on Townhall Agency Background Document, From TH-02.

⁵⁴ <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

<https://www.govinfo.gov/content/pkg/FR-2021-06-21/pdf/2021-12428.pdf>

⁵⁵ <https://www.osha.gov/coronavirus/ets>

⁵⁶ Identify any other state agencies, localities, or other entities particularly affected by the regulatory change. “Particularly affected” are those that are likely to bear any identified disproportionate material impact which would not be experienced by other agencies, localities, or entities. “Locality” can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect. Based on Townhall Agency Background Document, From TH-02.

⁵⁷ Describe any viable alternatives to the regulatory change that were considered, and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the regulatory change. Also, include discussion of less intrusive or less costly alternatives for small businesses of achieving the purpose of the regulatory change. Based on Townhall Agency Background Document, From TH-02.

industry (COVID-19 ETS) but does not have a specific regulation or standard that addresses the SARS-CoV-2 virus that causes COVID-19 for employers in non-healthcare settings.

At its June 29, 2021 meeting, the Board is considering adoption of the COVID-19 ETS in Virginia that would apply to healthcare services and healthcare support services which would expire within six months or when repealed by the Board, whichever occurs first. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS was no longer in effect.

Certain VOSH regulations (identical to OSHA counterparts unless otherwise noted) can be used to address some SARS-CoV-2 or COVID-19 hazards (see ATTACHMENT B), but other hazards and mitigation efforts cannot be so addressed (see list below).

There are no VOSH or OSHA regulations (with the exception of the COVID-19 ETS referenced above) or standards that would require:

Physical distancing of **unvaccinated or not fully vaccinated employees** at least six feet where feasible (also known as Social Distancing)

Require unvaccinated, not fully vaccinated or otherwise at risk employees to wear face coverings

Disinfection of work areas where confirmed or suspected COVID-19 employees or other persons accessed or worked

Employers to develop policies and procedures for employees to report when they are confirmed COVID-19 or experiencing symptoms consistent with COVID-19

Employers to, prior to the commencement of each work shift, prescreen of employees and other persons to verify each employee or person is not COVID-19 symptomatic

Employers to prohibit known and suspected COVID-19 employees and other persons from reporting to or being allowed to remain at work or on a job site until cleared for return

Employers to develop and implement policies and procedures for known COVID-19 or suspected COVID-19 employees to return to work using either a symptom-based or test-based strategy depending on local healthcare and testing circumstances

Employers to prohibit COVID-19 positive employees from reporting to or being allowed to remain at work or on a job site until cleared for return to work

Employers to provide employees assigned to work stations and in frequent

contact with other persons inside six feet with alcohol based hand sanitizers at their workstations

Employers **in certain high risk industries** to develop a written Infectious Disease Preparedness and Response Plan

Employee training on SARS-CoV-2 and COVID-19 hazards, with the exception of 1926.21(b)(2) referenced above for the Construction Industry

Va. Code §40.1-51(a), otherwise known as the “general duty clause” (the Virginia equivalent to §5(a)(1)⁵⁸ of the OSH Act of 1970), can be used to address some SARS-CoV-2 or COVID-19 hazards, but other hazards and mitigation efforts cannot be so addressed (see below). Va. Code §40.1-51(a) provides that:

“It shall be the duty of every employer to furnish to each of his employees safe employment and a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees....”

While Congress intended that the primary method of compliance and enforcement under the OSH Act of 1970 would be through the adoption of occupational safety and health standards⁵⁹, it also provided the general duty clause as an enforcement tool that could be used in the absence of an OSHA (or VOSH) regulation.

As is evident from the wording of the general duty statute, it does not directly address the issue of SARS-CoV-2 or COVID-19 related hazards. While preferable to no enforcement tool at all, the general duty clause does not provide either the regulated community, employees, or the VOSH Program with substantive and consistent requirements on how to reduce or eliminate SARS-CoV-2 or COVID-19 related hazards.

Federal case law has established that the general duty clause can only be used to address “serious” recognized hazards to which employees of the cited employer are exposed through reference to such things as national consensus standards, manufacturer’s requirements, requirements of the Centers for Disease Control (CDC), or an employer’s safety and health rules. Other than serious hazards cannot be addressed by the general duty clause.

One limitation on the use of the general duty clause can result in unfortunate outcomes worksites with multiple employers. For instance, a general duty clause violation can only be issued to an employer whose own employees were exposed to the alleged hazard.⁶⁰ In the context of a COVID-19 situation, consider a subcontractor (“subcontractor one”) who sends one employee to a multi-employer worksite who is COVID-19 positive and knowingly allows that employee to work around disease free

⁵⁸ https://www.osha.gov/laws-regs/oshact/section_5, 29 U.S.C. § 654(a)(1).

⁵⁹ *The Law of Occupational Safety and Health*, Nothstein, 1981, page 259.

⁶⁰

https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\181\GDoc_DOLI_5354_v6.pdf, VOSH Field Operations Manual (FOM), Chapter 10, page 18)

employees of another subcontractor (“subcontractor two”), which results in the transmission of the disease to one or more of the second contractors’ employees.

In such a situation, because no uninfected employees of subcontractor one were exposed to the disease at the worksite, the contractor who created the hazard could not be issued a general duty violation or accompanying monetary penalty.

Finally, in the context of the COVID-19 pandemic, the primary problem with the use of the general duty clause is the inability to use it to enforce any national consensus standard, manufacturer’s requirements, CDC recommendations, or employer safety and health rules which use “should,” “may,” “it is recommended,” and similar non-mandatory language.⁶¹

5. Regulatory Flexibility Analysis.⁶²

The standard contains alternative regulatory methods in the form of options for employers to reduce the burden of compliance:

- At its core the Standard is a risk management system to prevent or limit the spread in the workplace of the SARS-CoV-2 virus that causes COVID-19. It is designed to provide basic protections for all employees and employers within the jurisdiction of the VOSH program.
- It provides certain mandatory requirements for all employers and specific additional requirements in 16VAC25-220-50 for healthcare services or healthcare support services, and 16VAC25-220-60 for higher-risk workplaces with mixed-vaccination status employees centered around mitigation of hazards.
- Proposed amendments are recommended to reduce the compliance burden for employers whose employees are fully vaccinated.
- On June 21, 2021, OSHA issued its COVID-19 Emergency Temporary Standard, 1910.502, et. seq., applicable to healthcare services and healthcare support services. At its June 29, 2021 meeting, the Board is considering adoption of the COVID-19 ETS in Virginia which would expire within six

⁶¹“ Courts and the [Occupational Safety and Health Review] Commission have held that OSHA must define an alleged hazard in such a way as to give the employer fair notice of its obligations under the OSH Act. In *Ruhlin Co.* [*Ruhlin Co.*, 21 OSH Cases 1779], the Commission held that the employer ‘lacked fair notice that it could have an obligation under section 5(a)(1) to require its employees to wear high visibility vests.’ The Commission found that a May 2004 interpretive letter by OSHA refers to a provision of the Federal Highway Administration manual which contained optional, not mandatory language.”

⁶² Describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change. Based on Townhall Agency Background Document, From TH-02.

months or when repealed by the Board, whichever occurs first. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS was no longer in effect.

- 16VAC25-220-60 is amended to apply to higher-risk workplaces (which include manufacturing, meat and poultry processing, high-volume retail and grocery, seafood processing, transit, correctional facilities, jails, detention centers, and juvenile detention centers) with mixed-vaccination status employees (employees who are not fully vaccinated and other at risk employees).
- Employers covered by 16VAC25-220-50 or -60 would be provided 30 days to train employees and 60 days to develop and implement an Infectious disease preparedness and response plan. All other employers are exempted from training and plan requirements, with the exception that employees must be provided information about COVID-19 hazards (an information document satisfying this requirement is provided free of charge by the Department). Small employers covered by 16VAC25-220-50 or -60 with 10 or fewer employees would be exempted from the Infectious disease preparedness and response plan requirements.
- The standard provides flexibility to businesses through 16VAC25-220-10.E which provides that: “To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID-19 disease related hazards or job tasks addressed by a provision of this standard, the employer’s actions shall be considered in compliance with this standard. An employer’s actual compliance with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-COV-2 and COVID19 related hazards or job tasks addressed by this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard.”

B. Purpose.

The purpose of the proposed amendments is to take into account the latest recommendations of the CDC to mitigate the spread of the SARS-CoV-2 virus for unvaccinated, not fully vaccinated and otherwise at risk employees, and reduce the compliance burden for employers whose employees are fully vaccinated. The recommended changes support the overall purpose of the standard to reduce/eliminate employee injuries, illnesses, and fatalities from SARS-CoV-2 and COVID-19 related hazards and job tasks in all industries under the jurisdiction of the Virginia State Plan.

NOTE:

On June 21, 2021, OSHA issued its COVID-19 Emergency Temporary Standard, 1910.502, et. seq., applicable to healthcare services and healthcare support services. At its June 29, 2021 meeting, the Board is considering adoption of the COVID-19 ETS in Virginia which would expire within six months or when repealed by the Board, whichever

occurs first. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS was no longer in effect.

C. Background.

1. SARS-CoV-2 Virus That Causes the COVID-19 Disease.

SARS-CoV-2 is a betacoronavirus, like MERS-CoV (Middle East Respiratory Syndrome Coronavirus) and SARS-CoV (Severe Acute Respiratory Syndrome Coronavirus). Coronaviruses are named for crown-like spikes on their surface. SARS-CoV-2 causes the Coronavirus Disease 2019 (COVID-19).

SARS-CoV-2 is easily transmitted through the air from person-to-person through respiratory droplets, aerosols, and other forms of airborne transmission, and the virus can settle and deposit on environmental surfaces where it can remain viable for days.

"Signs of COVID-19" are abnormalities that can be objectively observed, and may include fever, trouble breathing or shortness of breath, cough, vomiting, new confusion, bluish lips or face, etc.

"Symptoms of COVID-19" are abnormalities that are subjective to the person and not observable to others, and may include chills, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, nausea, congestion or runny nose, diarrhea, etc.

COVID-19 Medical Complications.

"Although most people with COVID-19 have mild to moderate symptoms, the disease can cause severe medical complications and lead to death in some people. Older adults or people with existing chronic medical conditions are at greater risk of becoming seriously ill with COVID-19."⁶³:

In one study, younger adults 20–44 account for 20% of hospitalizations, 12% of ICU admissions."⁶⁴

"Complications can include:

- Pneumonia and trouble breathing
- Organ failure in several organs
- Heart problems
- A severe lung condition that causes a low amount of oxygen to go through your bloodstream to your organs (acute respiratory distress syndrome)
- Blood clots
- Acute kidney injury

⁶³ <https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-20479963>

⁶⁴ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e2.htm>

- Additional viral and bacterial infections”⁶⁵

“Illness Severity [CDC]

The largest cohort of >44,000 persons with COVID-19 from China showed that illness severity can range from mild to critical:

- Mild to moderate (mild symptoms up to mild pneumonia): 81%
- Severe (dyspnea, hypoxia, or >50% lung involvement on imaging): 14%
- Critical (respiratory failure, shock, or multi-organ system dysfunction): 5%

In this study, all deaths occurred among patients with critical illness and the overall case fatality rate was 2.3%. The case fatality rate among patients with critical disease was 49%. Among children in China, illness severity was lower with 94% having asymptomatic, mild or moderate disease, 5% having severe disease, and <1% having critical disease.

In a study of U.S. COVID-19 cases with known disposition, the proportion of persons who were hospitalized was 14%. The proportion of persons with COVID-19 admitted to the intensive care unit (ICU) was 2%, and overall 5% of patients died.⁶⁶

Long-term Effects of COVID-19

“People with moderate-to-severe or uncontrolled asthma are more likely to be hospitalized from COVID-19.”⁶⁷

‘Patients with acute respiratory distress syndrome (ARDS), seen often in severe COVID-19 illness, sometimes develop permanent lung damage or fibrosis as well.’ Dr. Andrew Martin, chair, pulmonary medicine at Deborah Heart and Lung Center in Browns Mills, New Jersey, told Healthline.

....

‘Viral respiratory infections can lead to anything from a simple cough that lasts for a few weeks or months to full-blown chronic wheezing or asthma,’ Martin said. He added that when a respiratory infection is severe, recovery can be prolonged with a general increase in shortness of breath — even after lung function returns to normal.

Also, patients with COVID-19 who developed ARDS, a potentially life threatening lung injury that could require treatment in an intensive care unit (ICU), have a greater risk of long-term health issues.

....

Those most at risk are ‘people 65 years and older, people who live in a nursing home or long-term care facility, people with chronic lung, heart, kidney and liver disease.’ said Dr. Gary Weinstein, pulmonologist/critical care medicine specialist at Texas

⁶⁵

https://www.hopkinsguides.com/hopkins/view/Johns_Hopkins_ABX_Guide/540747/all/Coronavirus_COVID_19_SA_RS_CoV_2

⁶⁶ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

⁶⁷ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/asthma.html>

Health Presbyterian Hospital Dallas (Texas Health Dallas). Additionally, he said others who could be at risk are those with compromised immune systems and people with morbid obesity or diabetes.

Weinstein added that there are particular health issues that patients with severe COVID-19 illness may face. He said some patients will need to recover from pneumonia or acute ARDS and that many may require oxygen. Additionally, depending on the duration of the illness, many will be severely debilitated, deconditioned, weak, and could require aggressive rehabilitation.

‘Finally, when patients have lung failure, they frequently have failure or dysfunction of their other organs, such as the kidney, heart, and brain,’ emphasized Weinstein. However, ‘Patients with mild symptoms will recover faster and be less likely to need oxygen but will likely have weakness and fatigue.’⁶⁸ (Emphasis added).

A CDC report on “Characteristics and Clinical Outcomes of Adult Patients Hospitalized with COVID-19 — Georgia, March 2020”:⁶⁹

“In a cohort of 305 hospitalized adults with COVID-19 in Georgia (primarily metropolitan Atlanta)...One in four hospitalized patients had no recognized risk factors for severe COVID-19.

....

Although a larger proportion of older patients had worse outcomes (IMV [invasive mechanical ventilation] or death), a considerable proportion of patients aged 18–64 years who lacked high-risk conditions received ICU-level care and died (23% and 5%, respectively). Estimated case fatality among patients who received ICU care was high (37%–49%) but comparable with that observed in a smaller case series of COVID-19 patients in the state of Washington. Among hospitalized patients, 26% lacked high-risk factors for severe COVID-19, and few patients (7%) lived in institutional settings before admission, suggesting that SARS-CoV-2 infection can cause significant morbidity in relatively young persons without severe underlying medical conditions. Community mitigation recommendations (e.g., social distancing) should be widely instituted, not only to protect older adults and those with underlying medical conditions, but also to prevent the spread of SARS-CoV-2 among persons in the general population who might not consider themselves to be at risk for severe illness.

Report on “What factors did people who died with COVID-19 have in common?”⁷⁰

“A team of investigators hailing from eight institutions in China and the United States — including the Chinese People’s Liberation Army General Hospital in Beijing, and the University of California – Davis — recently looked at the data

⁶⁸ <https://www.healthline.com/health-news/what-we-know-about-the-long-term-effects-of-covid-19#COVID-19-might-affect-the-brain-stem>

⁶⁹ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e1.htm>

⁷⁰ <https://www.medicalnewstoday.com/articles/what-factors-did-people-who-died-with-covid-19-have-in-common#The-majority-were-older-males>

of 85 patients who died of multiple organ failure after having received care for severe COVID-19.

....

‘The greatest number of deaths in our cohort were in males over 50 with noncommunicable chronic diseases,’ the investigators note.

‘We hope that this study conveys the seriousness of COVID-19 and emphasizes the risk groups of males over 50 with chronic comorbid conditions, including hypertension (high blood pressure), coronary heart disease, and diabetes,’ they have commented.

The team also notes that, among the 85 patients whose records they analyzed, the most common COVID-19 symptoms were fever, shortness of breath, and fatigue.

....

Among the complications that the patients experienced while hospitalized with COVID-19, some of the most common were respiratory failure, shock, acute respiratory distress syndrome, and cardiac arrhythmia, or irregular heartbeat.

....

‘Perhaps our most significant observation is that while respiratory symptoms may not develop until a week after presentation, once they do there can be a rapid decline, as indicated by the short duration between time of admission and death (6.35 days on average) in our study,’ they write.”

Report on “Irish Study: Blood Clotting a Significant Cause of Death in Patients With COVID-19.”

“A study led by clinician scientists at RCSI University of Medicine and Health Sciences has found that Irish patients admitted to hospital with severe COVID-19 infection are experiencing abnormal blood clotting that contributes to death in some patients.

The study, carried out by the Irish Centre for Vascular Biology, RCSI and St James' Hospital, Dublin, is published in current edition of the British Journal of Hematology.

The authors found that abnormal blood clotting occurs in Irish patients with severe COVID-19 infection, causing micro-clots within the lungs. They also found that Irish patients with higher levels of blood clotting activity had a significantly worse prognosis and were more likely to require ICU admission.

‘Our novel findings demonstrate that COVID-19 is associated with a unique type of blood clotting disorder that is primarily focused within the lungs and which undoubtedly contributes to the high levels of mortality being seen in patients with COVID-19,’ said Professor James O'Donnell, Director of the Irish Centre for Vascular Biology, RCSI and Consultant Hematologist in the National Coagulation Centre in St James's Hospital, Dublin.

‘In addition to pneumonia affecting the small air sacs within the lungs, we are

also finding hundreds of small blood clots throughout the lungs. This scenario is not seen with other types of lung infection, and explains why blood oxygen levels fall dramatically in severe COVID-19 infection.”⁷¹

2. National and State COVID-19 Case, Death and Hospitalization Statistics.

Centers for Disease Control (CDC): U.S. and Virginia Statistics

As of June 21, 2020, in the U. S. there were 1,248,029 total cases (32,411 new cases compared to June 20, 2020) of COVID-19 and 119,615 deaths (560 new deaths compared to June 20, 2020).⁷² Confirmed COVID-19 cases in Virginia totaled 57,994 with 1,611 deaths.

As of December 26, 2020, in the U. S. there were 18,730,806 total cases (146,512 new cases compared to December 25, 2020) and 329,592 deaths (1,692 new deaths compared to December 25, 2020). Confirmed COVID-19 cases in Virginia totaled 333,576 with 4,854 deaths.⁷³

As of June 11, 2021, in the U. S. there were 33,246,578 total cases (current 7-day average of 13,997 cases), 2,243,371 hospitalizations (current 7-day average of 2,239), and 596,059 total deaths (current 7-day moving average of 347 deaths).⁷⁴

As of June 14, 2021, confirmed cases in Virginia totaled 677,812⁷⁵ (7-day average 140 cases), 30,182 hospitalizations (7-day average of 10 hospitalizations),⁷⁶ with 11,318 deaths (7-day average of 3 deaths).⁷⁷

⁷¹ <https://www.invasivecardiology.com/news/irish-study-blood-clotting-significant-cause-death-patients-covid-19>

⁷² <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

⁷³ *Id.*

⁷⁴ <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

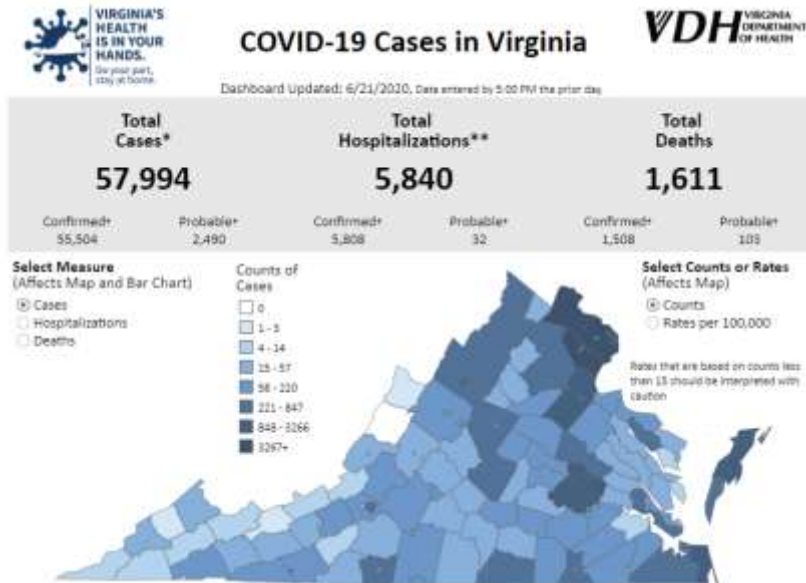
⁷⁵ <https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia/>

⁷⁶ <https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia-cases/>

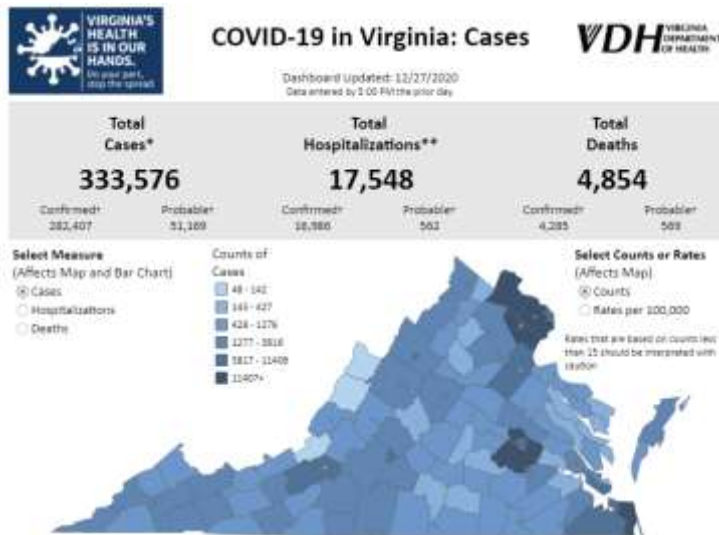
⁷⁷ <https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia-cases/>

National and Virginia Charts

Virginia Cases by County as of June 21, 2020.⁷⁸



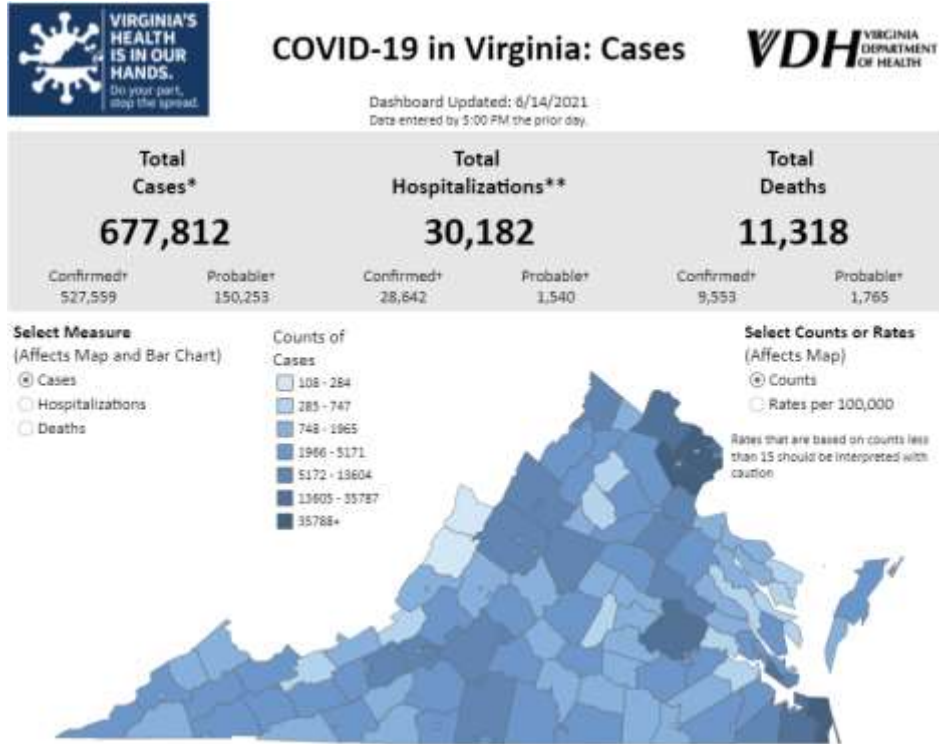
Virginia Cases by County as of December 26, 2020.⁷⁹



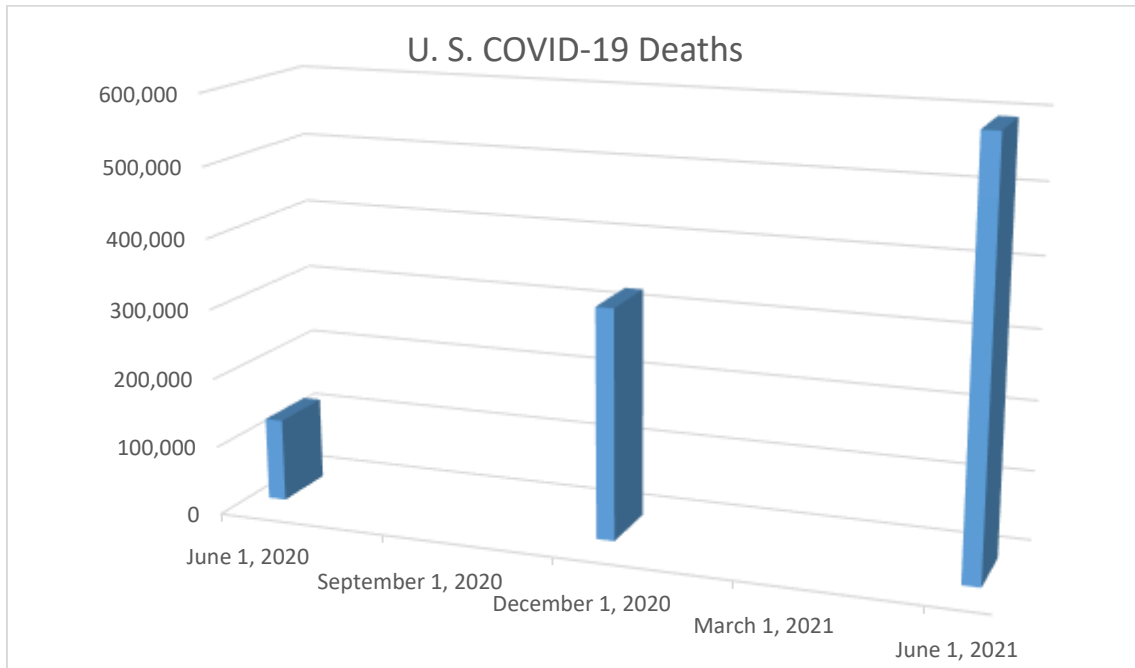
⁷⁸ <https://www.vdh.virginia.gov/coronavirus/>

⁷⁹ *Id.*

Virginia Cases by County as of June 14, 2021.⁸⁰

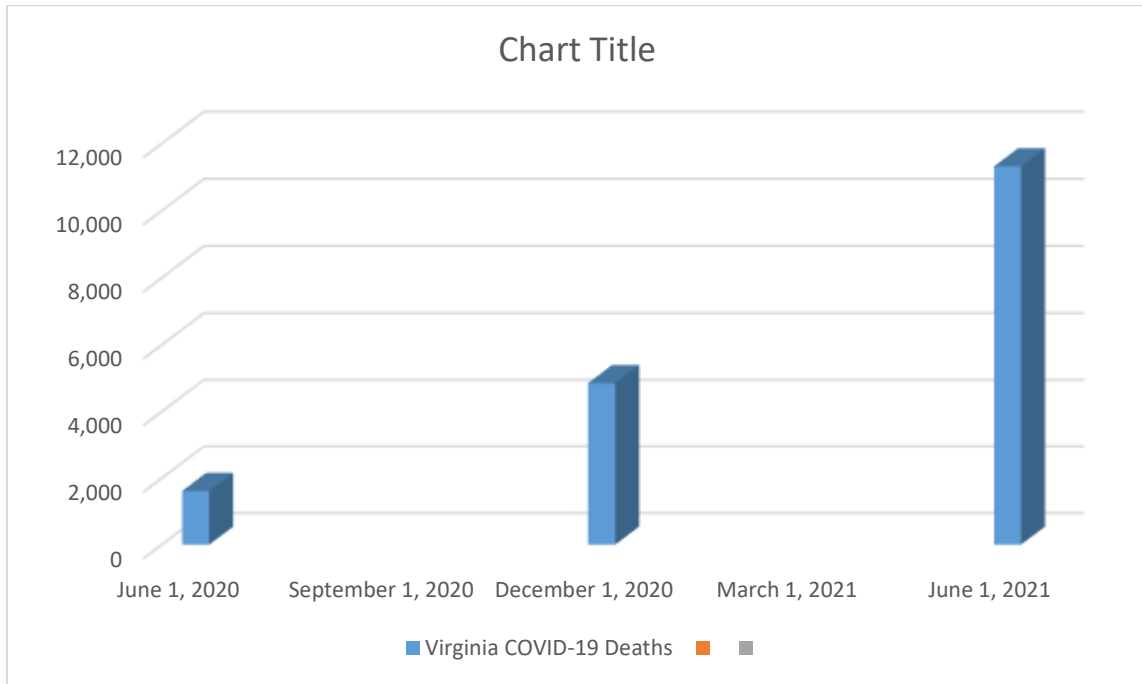


Comparison of U. S. Deaths as of June 21, 2020, December 26, 2020, and June 11, 2021



⁸⁰ <https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia-cases/>

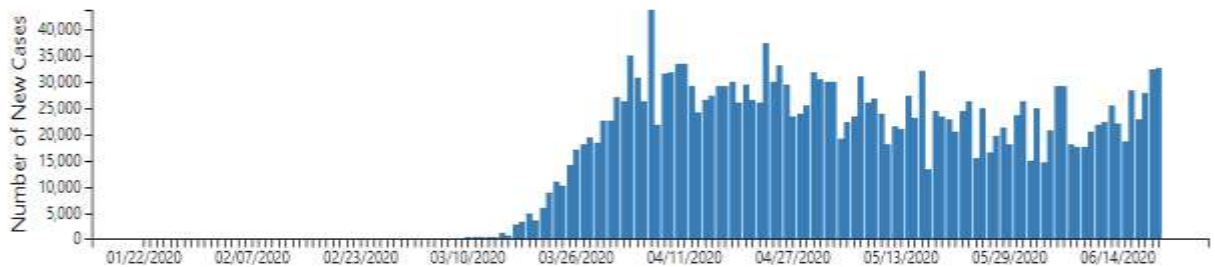
Comparison of Virginia Deaths as of June 21, 2020, December 26, 2020, and June 14, 2021



National COVID-19 Cases as of June 21, 2020⁸¹

New Cases by Day

The following chart shows the number of new COVID-19 cases reported each day in the U.S. since the beginning of the outbreak. Hover over the bars to see the number of new cases by day.

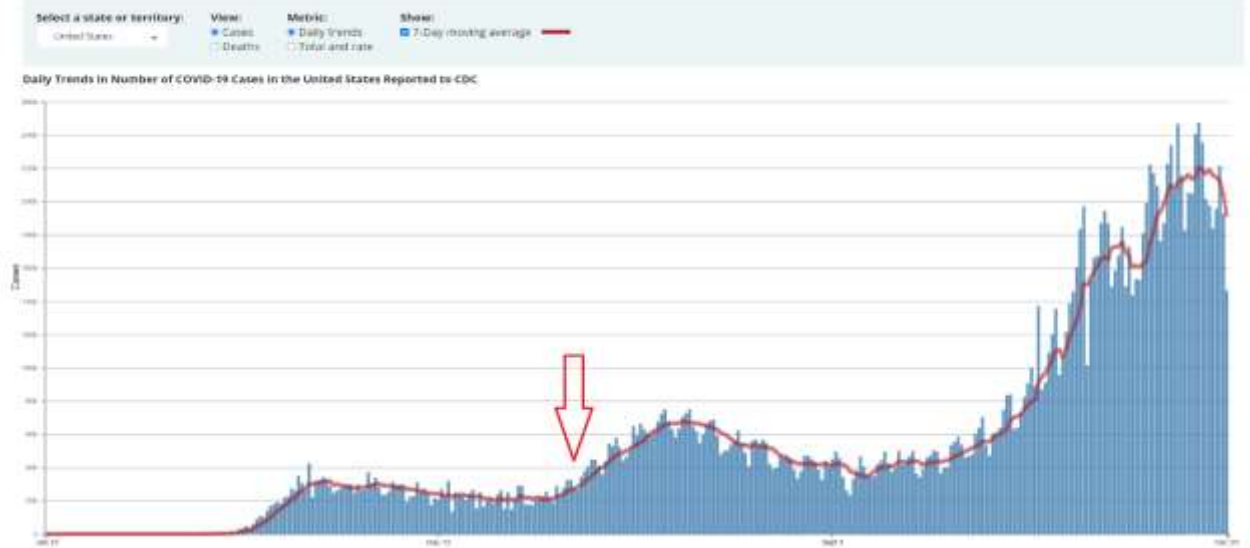


⁸¹ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

National COVID-19 Cases as of December 26, 2020.⁸²

Trends in Number of COVID-19 Cases and Deaths in the US Reported to CDC, by State/Territory

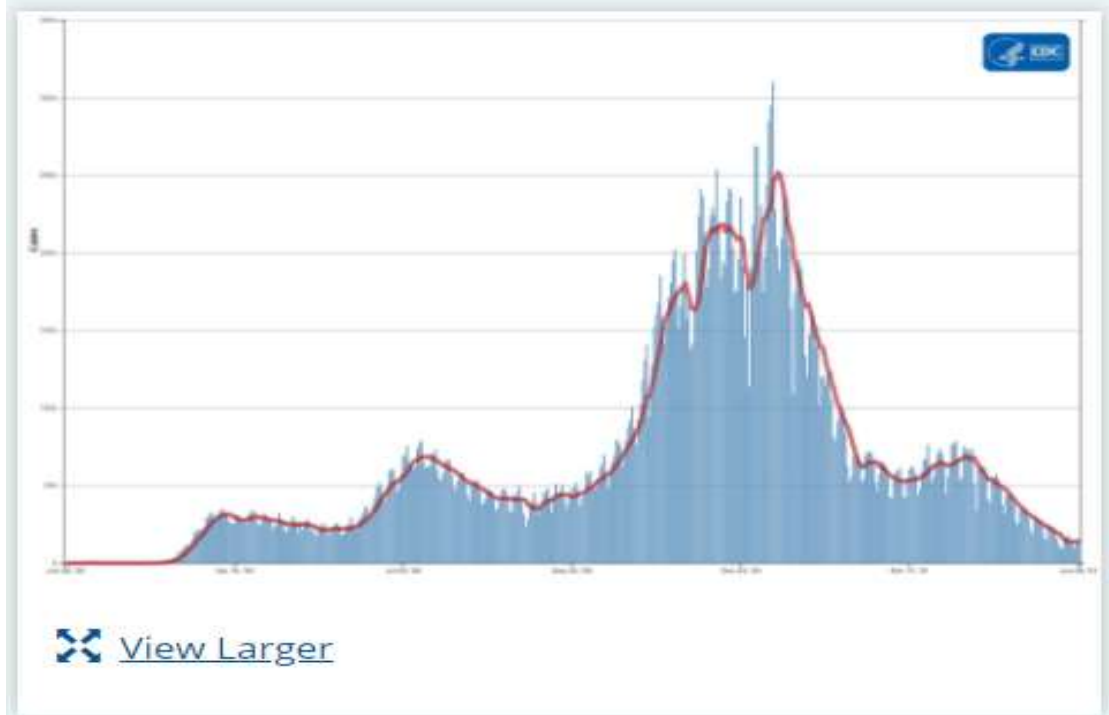
Reported to the CDC by State or Territory



National COVID-19 Cases as of June 11, 2021

Daily Trends in COVID-19 Cases in the United States Reported to CDC

7-Day moving average

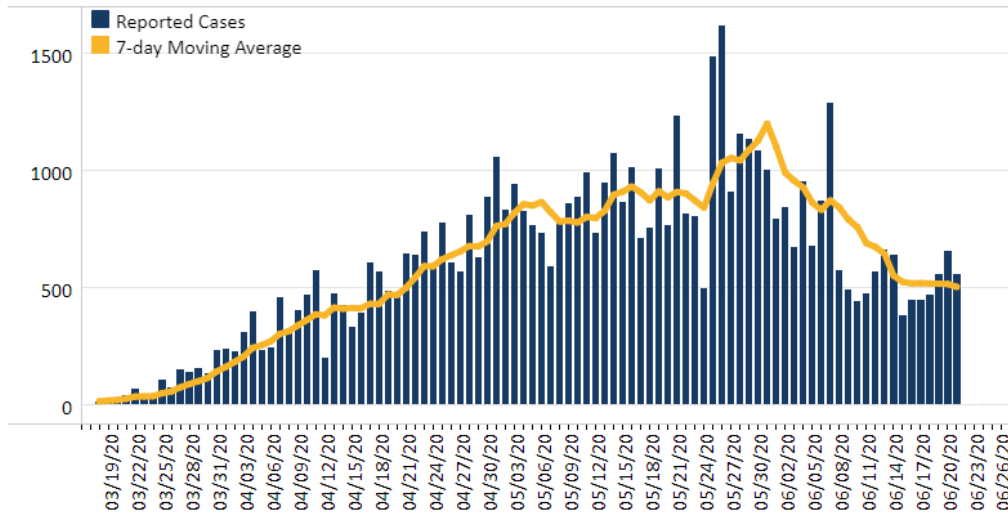


⁸² *Id.*

Virginia Cases as of June 21, 2020.⁸³

Total Cases by Date Reported

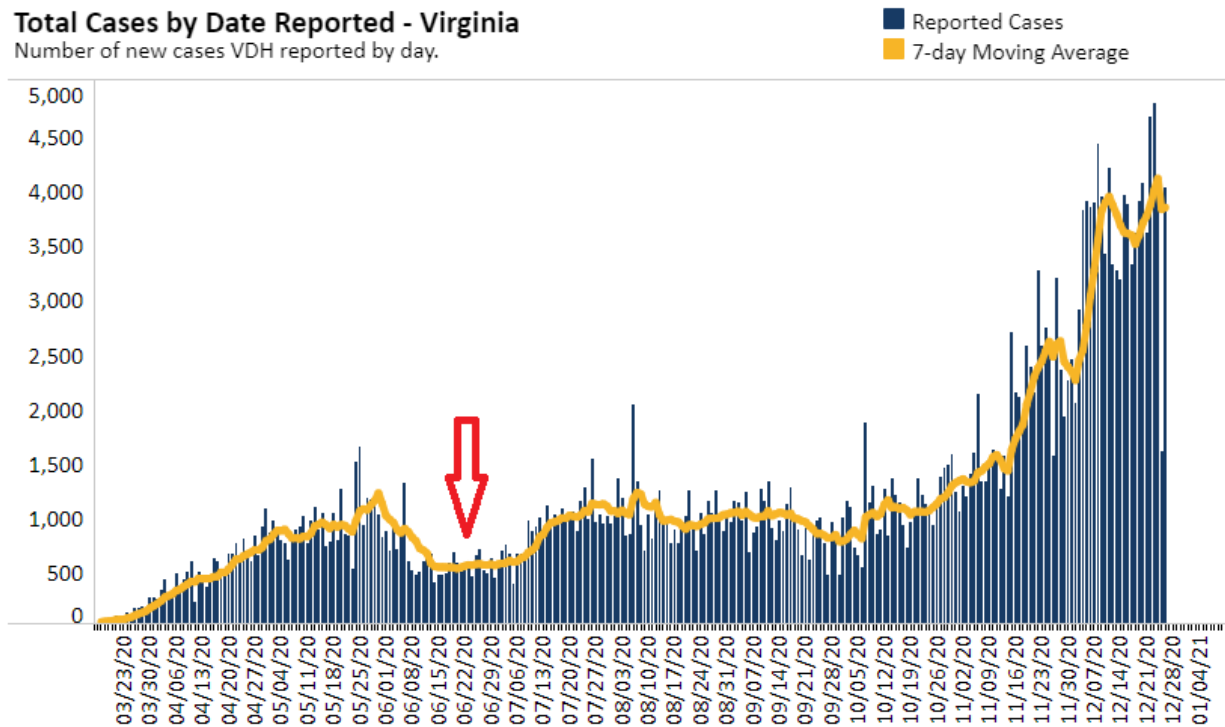
Number of new cases VDH reported by day.



Virginia Cases as of December 26, 2020.⁸⁴

Total Cases by Date Reported - Virginia

Number of new cases VDH reported by day.



⁸³ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

⁸⁴ *Id.*

Virginia Cases as of June 14, 2021.⁸⁵

Number of Cases by Date of Symptom Onset

Number of cases by the day closest to when symptoms began.

Select Region

(Affects Bar Chart)

(All)

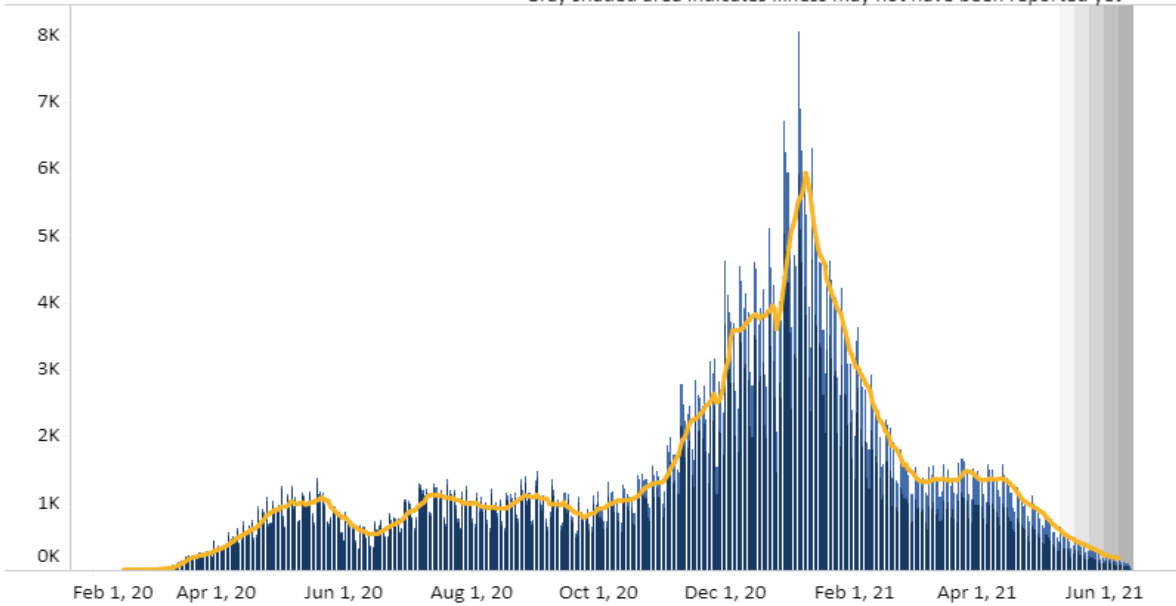
Select Date Range

(Affects Bar Chart)

All Reporting

- Confirmed Cases
- Probable Cases
- 7-day moving average

Gray shaded area indicates illness may not have been reported yet

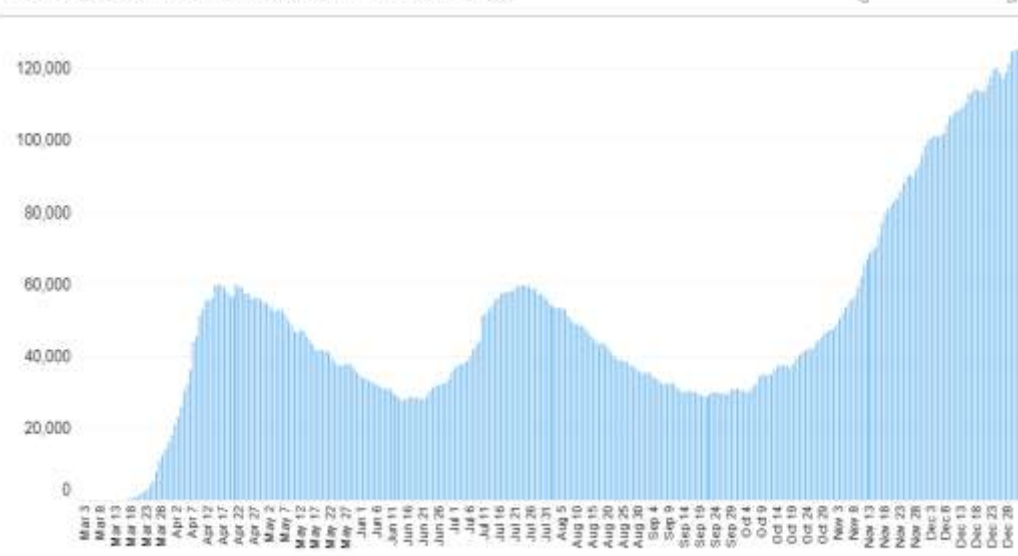


Current hospitalizations remain the most reliable statistic. Hospitalizations are a much better reflection of reality than the other metrics through the holiday reporting bumpiness.⁸⁶

U. S. Hospitalizations through January 2, 2021.

US CURRENTLY HOSPITALIZED WITH COVID-19

Mar 1 Jan 2



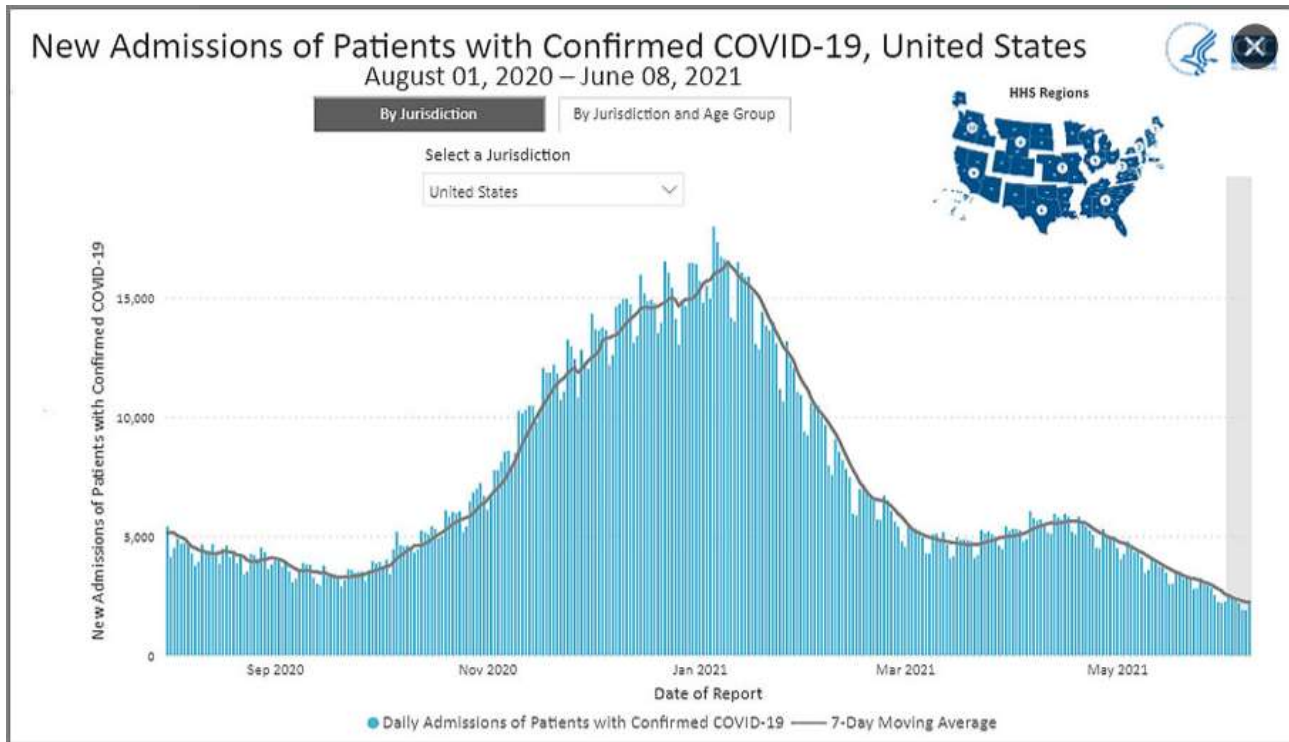
The COVID Tracking Project

Note: Florida began reporting this figure on July 10.

⁸⁵ <https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia-cases/>

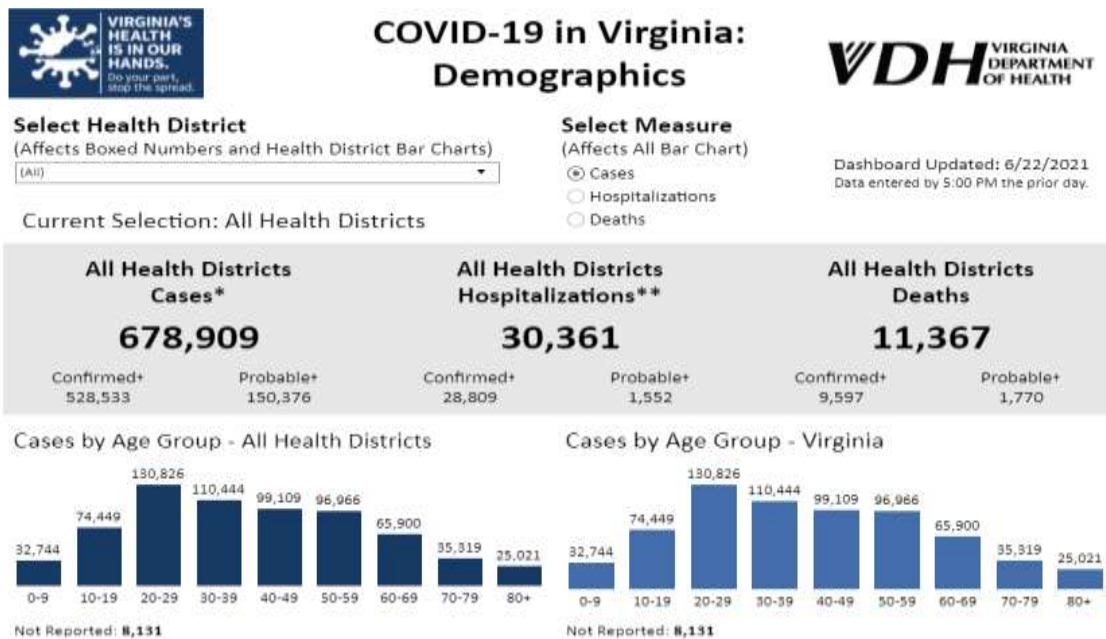
⁸⁶ <https://covidtracking.com/data/charts/us-currently-hospitalized>

U. S. Hospitalizations through June 8, 2021.⁸⁷



COVID-19 in Virginia Demographics⁸⁸

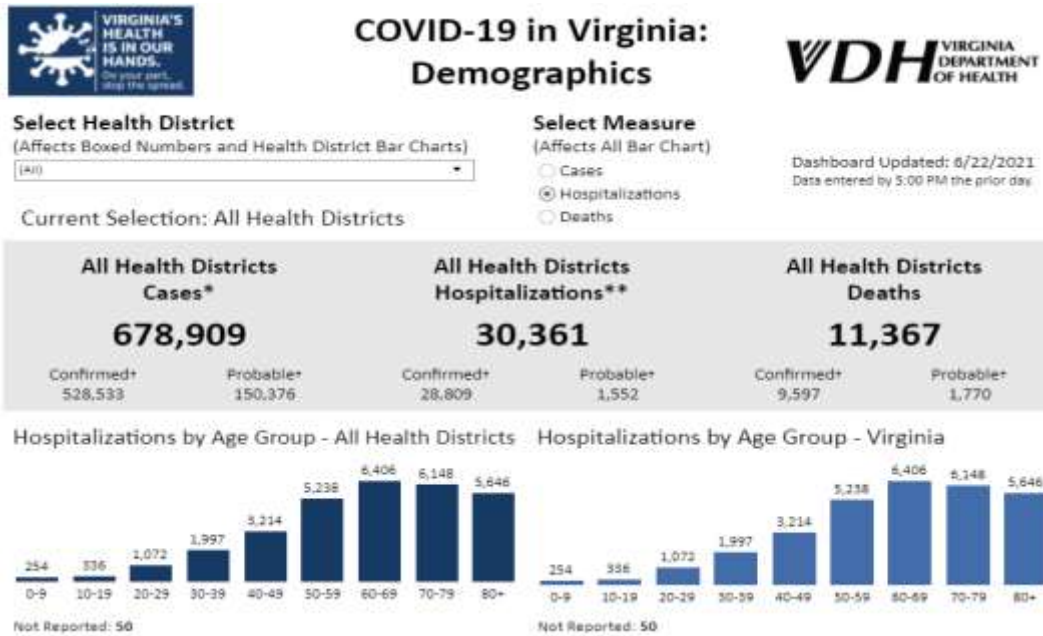
Approximately **74.1%** of COVID-19 cases occurred in the working age population of 20-69.



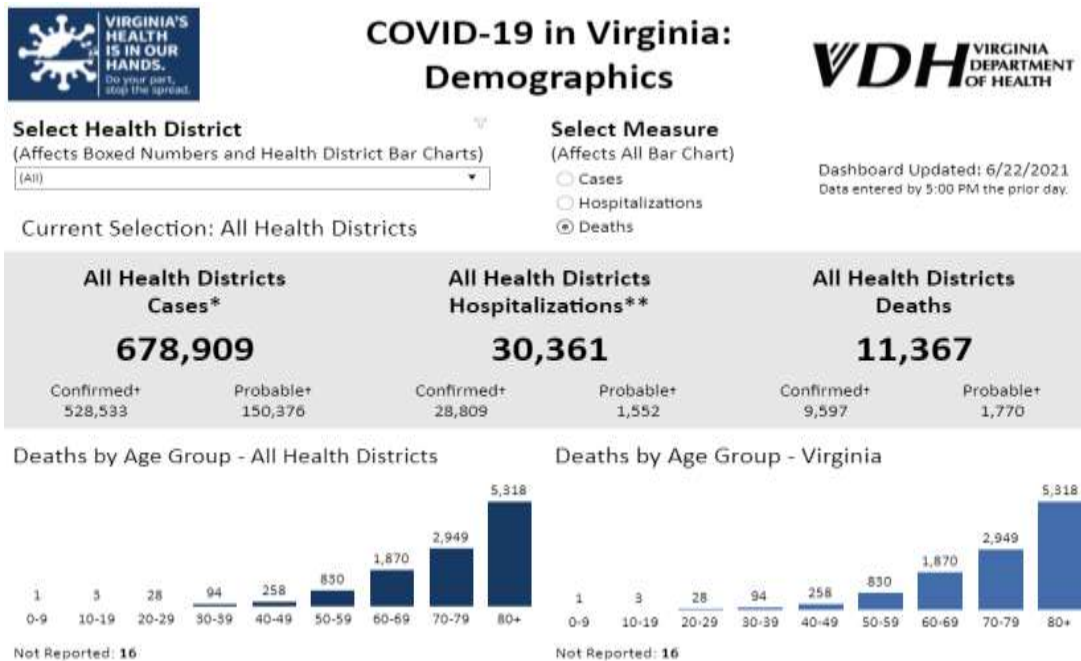
⁸⁷ <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

⁸⁸ <https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia-demographics/>

Approximately **59.0%** of COVID-19 hospitalizations occurred in the working age population of 20-69.



Approximately **27.1%** of COVID-19 deaths occurred in the working age population of 20-69.



COVID-19 State Rankings: Total Cases per 100K as of December 22, 2020 ⁸⁹

- 7 - Tennessee
- 29 - Kentucky
- 39 - North Carolina
- 42 - Maryland
- 43 - West Virginia
- 45 - Virginia



⁸⁹ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

COVID-19 State Rankings: Total Cases per 100K as of June 11, 2021 ⁹⁰

- 5 - Tennessee
- 28 - Kentucky
- 38 - North Carolina
- 42 - West Virginia
- 43 - Virginia**
- 44 - Maryland

Rate of coronavirus (COVID-19) cases in the United States as of June 11, 2021, by state
(per 100,000 people)



⁹⁰ <https://www.statista.com/statistics/1109004/coronavirus-covid19-cases-rate-us-americans-by-state/>

COVID-19 State Rankings: Average Daily Cases per 100K in Last 7 Days as of December 26, 2020. ⁹¹

- 1 - Tennessee
- 6 - West Virginia
- 19 - North Carolina
- 25 - Kentucky
- 30 - Virginia
- 39 - Maryland

Data Table for Average Daily Cases per 100k in Last 7 Days

CDC | Updated Dec 27 2020 2:05PM

State/Territory #	Average Daily Cases per 100k in Last 7 Days #
Tennessee	119.7
California	95.7
Arizona	88
Oklahoma	83.2
Indiana	72.5
West Virginia	71.4
Alabama	68.8
Utah	67.3
Arkansas	65.6
Nevada	64
Delaware	63.6
New York*	63.6
Pennsylvania	63.2
Georgia	62.8
Ohio	61.4
Massachusetts	59.7
Mississippi	57.9
Rhode Island	57.4
North Carolina	56.8
New Mexico	56.5
Idaho	53.7
South Carolina	50.9
New Jersey	50.6
New York City*	50.5
Kentucky	48
Florida	46.4
Kansas	45.4
New Hampshire	45.4
Illinois	44.8
Virginia	44.7
Nebraska	43.7
Louisiana	43.2
Texas	42.7
South Dakota	42.4
Colorado	42.2
Wyoming	40.9
Missouri	40.8
Connecticut	39.9
Maryland	38.7
Wisconsin	37.7
Montana	37.6
Iowa	37
Alaska	34.3
Maine	31.2
Minnesota	30.2
Michigan	29
District of Columbia	27.7
North Dakota	26.7
Washington	26.5
Oregon	22.1
Puerto Rico	21.4
Vermont	14.3
Virgin Islands	9.1
Hawaii	8.5
Guam	6.3
Northern Mariana Islands	1.8
American Samoa	0
Federated States of Micronesia	0
Palau	0
Republic of Marshall Islands	0

⁹¹ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

COVID-19 State Rankings: Average Daily Cases per 100K in Last 7 Days as of June 14, 2021.⁹²

- 11 - Kentucky
- 21 - West Virginia
- 39 - Tennessee
- 42 - North Carolina
- 47 - Virginia**
- 49 - Maryland

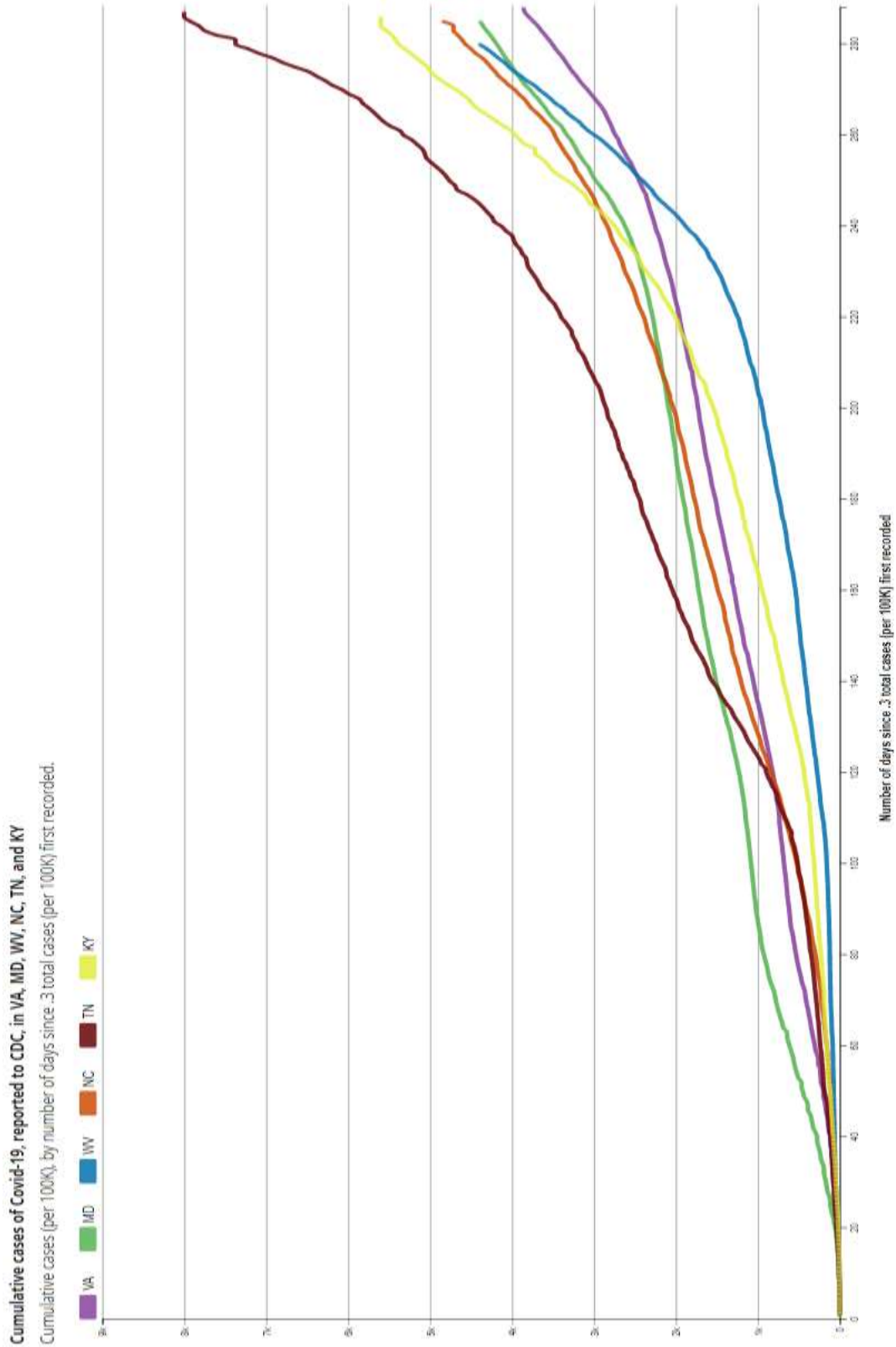
State Table for Cumulative Cases per 100K in Last 7 Days

CDC | Data as of June 14, 2021 1:12 PM ET. Paced: June 14, 2021 2:03 PM ET. [Download Data](#)

State/Territory #	7-Day Case Rate per 100,000 #
Virgin Islands	89.8
Colorado	79.2
Wyoming	67.7
Missouri	64.2
Utah	59.8
Washington	51.8
Arkansas	50.7
Florida	50.6
Nevada	43.2
Oregon	42.1
Kentucky	40.7
Arizona	40.3
Montana	39.6
Indiana	33.9
Idaho	32.1
Alabama	31.1
Louisiana	29.7
North Dakota	29.5
Texas	29
Mississippi	26.9
West Virginia	28.1
Kansas	26.6
Hawaii	25.6
Maine	25.4
Oklahoma	25.1
South Carolina	24.3
Georgia	24.1
Delaware	23.8
Pennsylvania	22
New Mexico	20.5
Ohio	20.5
Alaska	19.6
American Samoa	N/A
Guam	20.5
New York City*	20.2
Minnesota	19
New Jersey	18.7
Illinois	18.6
Tennessee	18.3
Michigan	18.2
Iowa	17.4
North Carolina	16.5
New York*	15.7
Rhode Island	14
Wisconsin	12.5
Massachusetts	11.5
Virginia	11.5
Puerto Rico	11.1
Maryland	11
New Hampshire	11
Nebraska	10.6
South Dakota	10.1
California	9.7
Vermont	9.3
Connecticut	9.2
District of Columbia	8.8
Federated States of Micronesia	N/A
Northern Mariana Islands	0
Palau	0
Republic of Marshall Islands	0

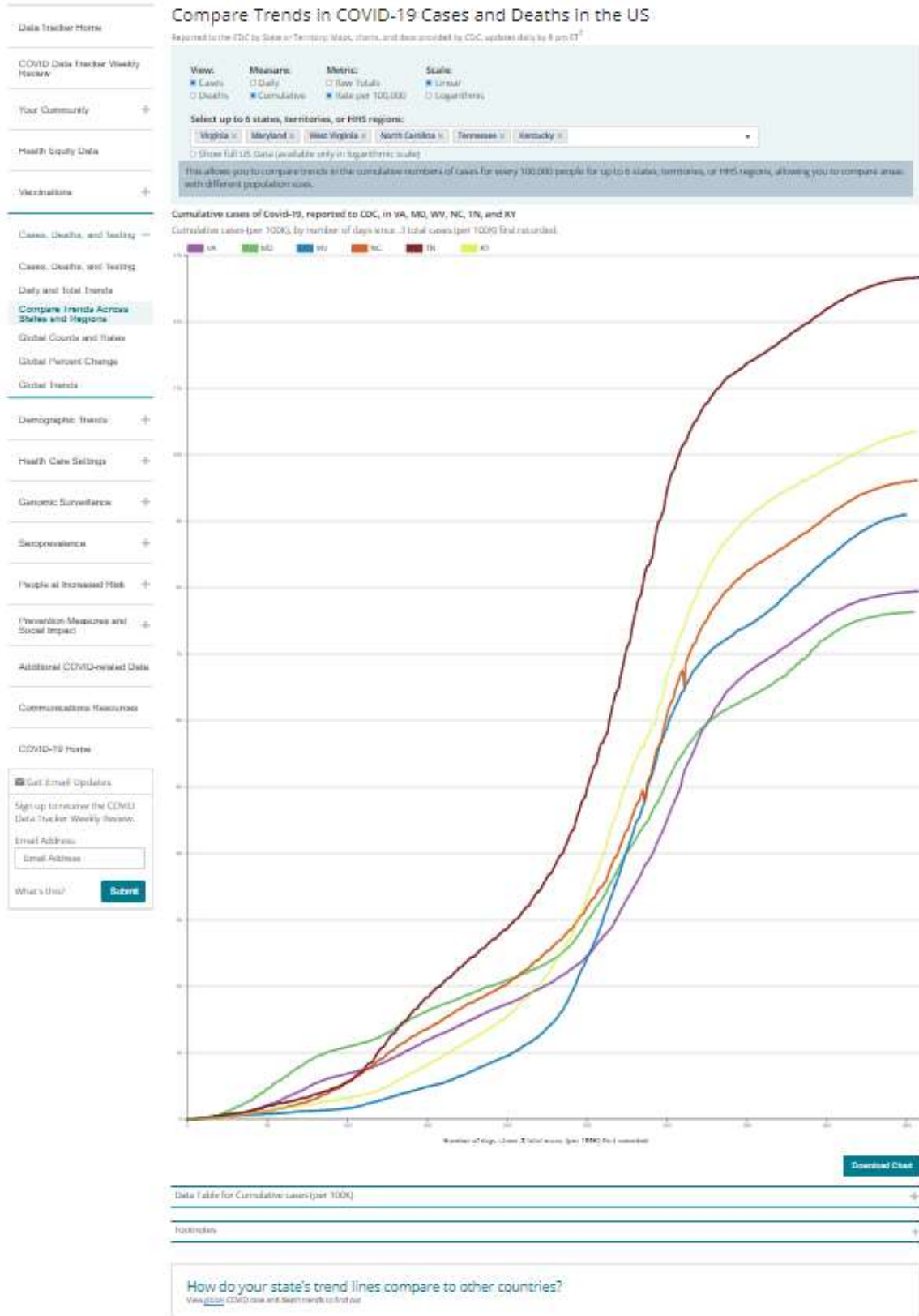
⁹² https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days

Comparison of trends (Totals) in COVID-19 cases by state December 26, 2020:⁹³



⁹³ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

Comparison of trends (Totals) in COVID-19 cases by state June 14, 2021:⁹⁴



⁹⁴ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

D. SARS-CoV-2 and COVID-19, General Information, Studies, and Statistics.

1. General Information on Pandemics.⁹⁵

“Viruses are constantly mutating. Those that trigger pandemics have enough novelty that the human immune system does not quickly recognize them as dangerous invaders. They force the body to create a brand-new defense, involving new antibodies and other immune system components that can react to and attack the foe. Large numbers of people get sick in the short term, and social factors such as crowding and the unavailability of medicine can drive those numbers even higher. Ultimately, in most cases, antibodies developed by the immune system to fight off the invader linger in enough of the affected population to confer longer-term immunity and limit person-to-person viral transmission. But that can take several years, and before it happens, havoc reigns.

....

Containment. The severe acute respiratory syndrome (SARS) epidemic of 2003 was caused not by an influenza virus but by a coronavirus, SARS-CoV, that is closely related to the cause of the current affliction, SARS-CoV-2. Of the seven known human coronaviruses, four circulate widely, causing up to a third of common colds. The one that caused the SARS outbreak was far more virulent. Thanks to aggressive epidemiological tactics such as isolating the sick, quarantining their contacts and implementing social controls, bad outbreaks were limited to a few locations such as Hong Kong and Toronto.

This containment was possible because sickness followed infection very quickly and obviously: almost all people with the virus had serious symptoms such as fever and trouble breathing. And they transmitted the virus after getting quite sick, not before. “Most patients with SARS were not that contagious until maybe a week after symptoms appeared.” says epidemiologist Benjamin Cowling of the University of Hong Kong. “If they could be identified within that week and put into isolation with good infection control, there wouldn’t be onward spread.” Containment worked so well there were only 8,098 SARS cases globally and 774 deaths. The world has not seen a case since 2004.

Vaccine power. When a new H1N1 influenza virus, known as swine flu, caused a pandemic in 2009, “there was an alarm bell because this was a brand-new H1N1,” Cowling says, and it was very similar to the 1918 killer. Swine flu proved less severe than feared. In part, Krammer says, “we were lucky because the pathogenicity of the virus wasn’t very high.” But another important reason was that six months after the virus appeared, scientists developed a vaccine for it.

Unlike measles or smallpox vaccines, which can confer long-term immunity, **flu vaccines offer only a few years of protection. Influenza viruses are slippery, mutating rapidly to escape immunity. As a result, the vaccines must be updated every year and given regularly.** But during a pandemic, even a short-term vaccine is a boon. The 2009 vaccine helped to temper a second wave of cases in

⁹⁵ <https://www.scientificamerican.com/article/how-the-covid-19-pandemic-could-end1/>

the winter. As a result, the virus much more rapidly went the way of the 1918 virus, becoming a widely circulating seasonal flu, from which many people are now protected either by flu shots or by antibodies from a previous infection.

Projections about how COVID-19 will play out are speculative, but the end game will most likely involve a mix of everything that checked past pandemics: Continued social-control measures to buy time, new antiviral medications to ease symptoms, and a vaccine. The exact formula—how long control measures such as social distancing must stay in place, for instance—depends in large part on how strictly people obey restrictions and how effectively governments respond. For example, containment measures that worked for COVID-19 in places such as Hong Kong and South Korea came far too late in Europe and the U.S. “The question of how the pandemic plays out is at least 50 percent social and political,” Cobey says.

....

It will take a vaccine to stop transmission. That will take time—probably a year from now. Still, there is reason to think a vaccine could work effectively. Compared with flu viruses, coronaviruses don’t have as many ways to interact with host cells.

“If that interaction goes away, [the virus] can’t replicate anymore,” Krammer says. “That’s the advantage we have here.” It is not clear whether a vaccine will confer long-term immunity as with measles or short-term immunity as with flu shots. But “any vaccine at all would be helpful at this point,” says epidemiologist Aubree Gordon of the University of Michigan.

Unless a vaccine is administered to all of the world’s eight billion inhabitants who are not currently sick or recovered, COVID-19 is likely to become endemic. It will circulate and make people sick seasonally—sometimes very sick. But if the virus stays in the human population long enough, it will start to infect children when they are young.” (Emphasis added).

2. Transmission.

Modes of Transmission

“The principal mode by which people are infected with SARS-CoV-2 (the virus that causes COVID-19) is through exposure to respiratory fluids carrying infectious virus. Exposure occurs in three principal ways:

- (1) inhalation of very fine respiratory droplets and aerosol particles,
- (2) deposition of respiratory droplets and particles on exposed mucous membranes in the mouth, nose, or eye by direct splashes and sprays, and
- (3) touching mucous membranes with hands that have been soiled either directly by virus-containing respiratory fluids or indirectly by touching surfaces with virus on them.

People release respiratory fluids during exhalation (e.g., quiet breathing, speaking, singing, exercise, coughing, sneezing) in the form of droplets across a spectrum of sizes.¹⁻⁹ These droplets carry virus and transmit infection.

- The largest droplets settle out of the air rapidly, within seconds to minutes.
- The smallest very fine droplets, and aerosol particles formed when these fine droplets rapidly dry, are small enough that they can remain suspended in the air for minutes to hours.

Infectious exposures to respiratory fluids carrying SARS-CoV-2 occur in three principal ways (not mutually exclusive):

1. Inhalation of air carrying very small fine droplets and aerosol particles that contain infectious virus. Risk of transmission is greatest within three to six feet of an infectious source where the concentration of these very fine droplets and particles is greatest.

2. Deposition of virus carried in exhaled droplets and particles onto exposed mucous membranes (i.e., “splashes and sprays”, such as being coughed on). Risk of transmission is likewise greatest close to an infectious source where the concentration of these exhaled droplets and particles is greatest.

3. Touching mucous membranes with hands soiled by exhaled respiratory fluids containing virus or from touching inanimate surfaces contaminated with virus.”⁹⁶

Asymptomatic and Pre-symptomatic Transmission

“Increasing numbers of epidemiologic studies have documented SARS-CoV-2 transmission during the pre-symptomatic incubation period. Studies using RT-PCR detection have reported low cycle thresholds, indicating larger quantities of viral RNA, among people with asymptomatic and pre-symptomatic SARS-CoV-2 infection. Likewise in viral culture, viral growth has been observed in specimens obtained from patients with asymptomatic and pre-symptomatic infection. The proportion of SARS-CoV-2 transmission due to asymptomatic or pre-symptomatic infection compared with symptomatic infection is not entirely clear; however, recent studies do suggest that people who are not showing symptoms may transmit the virus.”⁹⁷

A meta-analysis estimated that the initial median R_0 [the basic reproduction number for the virus] for COVID-19 is 2.79 (meaning that one infected person will on average infect 2.79 others), although current estimates might be biased because of insufficient data.⁹⁸ The current best estimate of the CDC based on data through August 1, 2020 is an R_0 value of 2.5.⁹⁹

⁹⁶ https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/sars-cov-2-transmission.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fscience%2Fscience-briefs%2Fscientific-brief-sars-cov-2.html

⁹⁷ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

⁹⁸ https://wwwnc.cdc.gov/eid/article/26/6/20-0495_article

⁹⁹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>

Around one in five people are traditionally thought to be super-spreaders. These are people who seem to transmit a given infectious disease significantly more widely than most.¹⁰⁰

“The incubation period for COVID-19 is thought to extend to 14 days, with a median time of 4-5 days from exposure to symptoms onset. One study reported that 97.5% of people with COVID-19 who have symptoms will do so within 11.5 days of SARS-CoV-2 infection.”¹⁰¹

“Available data indicate that persons with mild to moderate COVID-19 remain infectious no longer than 10 days after symptom onset. Most adults with more severe to critical illness or severe immunocompromise likely remain infectious no longer than 20 days after symptom onset; however, there have been several reports of people shedding replication-competent virus beyond 20 days due to severe immunocompromise. Recovered adults can continue to shed detectable but non-infectious SARS-CoV-2 RNA in upper respiratory specimens for up to 3 months after illness onset, albeit at concentrations considerably lower than during illness, in concentration ranges where replication-competent virus has not been reliably recovered and infectiousness is unlikely. The circumstances that result in persistently detectable SARS-CoV-2 RNA have yet to be determined. Studies have not found evidence that clinically recovered adults with persistence of viral RNA have transmitted SARS-CoV-2 to others. **These findings strengthen the justification for relying on a symptom-based rather than test-based strategy for ending isolation of most patients, so that adults who are no longer infectious are not kept unnecessarily isolated and excluded from work or other responsibilities.**”¹⁰²
(Emphasis added).

The CDC’s current best estimate of the percentage of persons with positive COVID-19 infections that are asymptomatic is 30%.¹⁰³

The CDC’s current best estimate of the percentage of COVID-19 disease transmission occurring prior to symptom onset is 50%.¹⁰⁴

Viral Shedding

“Viral shedding by asymptomatic people may represent 40–50% of total infections though some uncertainty remains regarding how much they contribute to totals. Viral shedding may antedate symptoms by up to 3+ days.”¹⁰⁵

¹⁰⁰ <https://newatlas.com/health-wellbeing/covid19-case-studies-coronavirus-superspreader-clusters-cdc-report/>

¹⁰¹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

¹⁰² <https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html>

¹⁰³ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>

¹⁰⁴ *Id.*

¹⁰⁵

https://www.hopkinsguides.com/hopkins/view/Johns_Hopkins_ABX_Guide/540747/all/Coronavirus_COVID_19_SA_RS_CoV_2

“Viral shedding¹⁰⁶...occurs when a virus is released from an infected host. Studying viral shedding is helpful in understanding how infectious diseases like COVID-19 spread.

Researchers often define the term across a spectrum, using modifiers like “low” and “high” to describe levels of viral shedding. Assessing levels of viral shedding helps researchers determine at what point individuals are most infectious.

For example, a recently published study¹⁰⁷ of 94 patients with COVID-19 suggests that those infected with the new strain of coronavirus have the highest levels of viral shedding right before showing symptoms. Other studies have shown that some individuals may continue shedding the virus even after their symptoms resolve, or subside; one study¹⁰⁸ found that individuals with mild cases of the virus may continue viral shedding up to eight days after symptom resolution.

From a public health perspective, understanding viral shedding of COVID-19 is necessary to determine appropriate actions for virus mitigation. If viral shedding is indeed highest right before a person starts showing symptoms, robust contact tracing efforts to identify potential exposures is necessary to slow the further spread of COVID-19 in communities. Information about viral spread after symptom resolution also allows public health officials to determine appropriate measures for those who have recovered from COVID-19, including guidance on extended quarantine.” (Emphasis added).

Infectious Dose and Viral Load

“Infectious respiratory diseases spread when a healthy person comes in contact with virus particles expelled by someone who is sick — usually through a cough or sneeze. The amount of particles a person is exposed to can affect how likely they are to become infected and, once infected, how severe the symptoms become.

The amount of virus necessary to make a person sick is called the infectious dose. Viruses with low infectious doses are especially contagious in populations without significant immunity. The minimum infectious dose of SARS-CoV-2, the virus that causes COVID-19, is unknown so far, but researchers suspect it is low. “The virus is spread through very, very casual interpersonal contact,” W. David Hardy, a professor of infectious disease at Johns Hopkins University School of Medicine, told STAT.¹⁰⁹

A high infectious dose may lead to a higher viral load, which can impact the severity of COVID-19 symptoms. Viral load is a measure of virus particles. It is the amount of virus present once a person has been infected and the virus has had time to replicate in their cells. With most viruses, higher viral loads are associated with worse outcomes.

¹⁰⁶ <https://achi.net/newsroom/defining-covid-19-terms-viral-shedding/>

¹⁰⁷ <https://www.nature.com/articles/s41591-020-0869-5>

¹⁰⁸ <https://www.healio.com/pulmonology/practice-management/news/online/%7B071c6a27-2c50-458f-9558-19b9f501df05%7D/patients-with-covid-19-may-shed-virus-after-symptom-resolution>

¹⁰⁹ <https://www.statnews.com/2020/04/14/how-much-of-the-coronavirus-does-it-take-to-make-you-sick/>

One study¹¹⁰ of COVID-19 patients in China found that those with more severe symptoms tended to have higher viral loads. ‘It’s not proven, but it would make sense that higher inoculating doses will lead to higher viral loads, and higher viral loads would translate into more pathogenic clinical courses,’ said Dan Barouch, director of the Center for Virology and Vaccine Research at Beth Israel Deaconess Medical Center.”¹¹¹ (Emphasis added).

3. Cross Border Transmission.

According to the Director-General of the World Health Organization, “This [SARS-CoV-2] virus does not respect borders.”¹¹² While “stay at home” orders were still in place in 17 states and the District of Columbia as of May 25, 2020, states began reopening over the summer, only to reinstate restrictions as case rates increased dramatically in the fall and early winter.¹¹³

Particularly in the construction industry, but in other mobile work crew industries as well, contractors from the states of Maryland, North Carolina, West Virginia, Tennessee, the District of Columbia, Georgia, Pennsylvania, and other states regularly work in Virginia, increasing the chance of virus spread across borders.¹¹⁴ For instance, during calendar year 2019, contractors from the following states were inspected by VOSH:

Alabama (5)	Missouri (5)
California (2)	Nebraska (3)
Delaware (3)	New Hampshire (1)
<u>District of Columbia (11)</u>	New Jersey (1)
Florida (9)	New York (1)
<u>Georgia (13)</u>	<u>North Carolina (96)</u>
Illinois (4)	Ohio (5)
Indiana (4)	Oklahoma (1)
Iowa (1)	<u>Pennsylvania (11)</u>
Kentucky (2)	South Carolina (5)
<u>Maryland (66)</u>	<u>Tennessee (22)</u>
Michigan (2)	Texas (6)
Minnesota (3)	<u>West Virginia (11)</u>
Mississippi (1)	Wisconsin (2).

WLS.com, Roanoke, VA, May 5, 2020, “25 COVID-19 cases connected to Cave Spring High School construction work”

“ROANOKE, Va. – More than two dozen coronavirus cases are connected to construction work at a local high school, according to Roanoke County Public Schools officials.

¹¹⁰ [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30196-1/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30196-1/fulltext)

¹¹¹ <https://www.statnews.com/2020/04/14/how-much-of-the-coronavirus-does-it-take-to-make-you-sick/>

¹¹² <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--27-february-2020>

¹¹³ <https://www.aarp.org/politics-society/government-elections/info-2020/coronavirus-state-restrictions.html>

¹¹⁴ <https://www.kayak.com/travel-restrictions/united-states/>

The president of Avis Construction, Troy Smith, spoke to the Roanoke County school board on Tuesday and reported as many as 25 cases of COVID-19 that are related to construction work at Cave Spring High School.

Smith told school board members that not all 25 cases are construction workers, but rather, some are family members of workers.

School officials told 10 News that most cases are in workers from different out-of-state subcontractors.

All work was halted at the Cave Spring High School construction site on Monday, per recommendation from the health department.”¹¹⁵ (Emphasis added).

CNBC.com, June 14, 2021, “Boris Johnson extends current lockdown rules in England due to concerns over delta Covid variant”

“LONDON — Prime Minister Boris Johnson on Monday announced a delay of four weeks to the next phase of England’s lockdown reopening, amid a surge in the delta variant of Covid-19 first discovered in India.

Rules on the use of face masks, limiting the number of people who can meet indoors and out, and shutting nightclubs and similar venues were due to be lifted June 21, but that has now been pushed back to July 19. At the moment, gatherings are limited to six people indoors and 30 outdoors.

....

New figures from Public Health England indicate that 42,323 cases of the delta variant of the coronavirus have now been confirmed across the U.K., an increase of 240% from last week, while the country’s transmission rate is at its highest since January.

More than 70 million vaccine doses have been administered across the U.K., with around 80% of the country having now received at least one dose. **But a Public Health England paper in late May showed that the Pfizer and AstraZeneca vaccines were only 33% effective against the delta variant after a single shot.**

New data on Monday showed much better effectiveness against the delta variant after two doses. Public Health England said the Pfizer-BioNTech vaccine is 96% effective against hospitalization after two doses and the Oxford-AstraZeneca shot is 92% effective.”¹¹⁶ (Emphasis added).

4. Infection Fatality Rate.

Though there are limitations on the availability and accuracy of COVID-19 data around the country, researchers are conducting studies to determine a likely range of

¹¹⁵ <https://www.wsls.com/news/local/2020/05/06/25-covid-19-cases-connected-to-cave-spring-high-school-construction-work/>

¹¹⁶ <https://www.cnbc.com/2021/06/14/uks-boris-johnson-to-extend-covid-19-restrictions-in-england-reports.html>

the “infection mortality rate” (IFR) of COVID-19. The infection fatality rate is the ratio of deaths divided by the number of actual infections with SARS-CoV-2.

A study by the University of Washington using data through April 20, 2020 calculated the U.S. “infection mortality rate” among symptomatic cases (IFR-S) to be 1.3%.¹¹⁷ Another study calculated a global IFR of 1.04%.¹¹⁸

A study by the London School of Hygiene and Tropical Medicine estimated the infection fatality rate on the Diamond Princess Cruise Ship to be 1.2%.¹¹⁹ Nearly the entire cruise ships 3,711 passengers and crew were tested.

A study¹²⁰ published in the International Journal of Infectious Diseases in December 2020, concluded: “Based on a systematic review and meta-analysis of published evidence on COVID-19 until July 2020, the IFR of the disease across populations is 0.68% (0.53%–0.82%). However, due to very high heterogeneity in the meta-analysis, it is difficult to know if this represents a completely unbiased point estimate. It is likely that, due to age and perhaps underlying comorbidities in the population, different places will experience different IFRs due to the disease. Given issues with mortality recording, it is also likely that this represents an underestimate of the true IFR figure. More research looking at age-stratified IFR is urgently needed to inform policymaking on this front.”

As of March 19, 2021, the CDC’s best estimate of the infection fatality rate for COVID-19 is 2.5.¹²¹

¹¹⁷ <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2020.00455>; Study assumptions: We make three assumptions for our analysis: (1) Errors in the numerator and the denominator lead to underreporting of true COVID-19 deaths and cases, respectively; error is smaller for deaths than for cases. (2) Both the errors are declining over time. (3) The errors in the denominator are declining at a faster rate than the error in the numerator.

Assumption #1 is self-evident; both the deaths and the actual cases are undercounted during the initial phase of the epidemic. Because deaths are much more visible events than infections, which, in the case of COVID-19, can go asymptomatic during the first few days of infection, we posit that, at any point in time, the errors in the denominator are larger than the errors in the numerator. Hence, this assumption leads to CFR estimates being larger than the IFR-S, which is typically believed to be true based on observed data.

Assumption #2 is our central assumption, which states that under some stationary processes of care delivery, health care supply, and reporting, which are all believed to be improving over time, the errors in both the numerator and the denominator are declining. It implies that we are improving in the measurement of both the numerator and denominator over time, albeit at different rates in different jurisdictions.

Assumption #3 posits that the error in the denominator is declining faster than the error in the numerator. This assumption indicates that the CFR rates, based on the number of cumulative COVID-19 deaths and the cumulative reported COVID-19 cases, are declining over time and are confirmed based on our observed data (described in detail below).

¹¹⁸ <https://www.medrxiv.org/content/10.1101/2020.05.11.20098780v1>

¹¹⁹ <https://www.medrxiv.org/content/10.1101/2020.03.05.20031773v2>

¹²⁰ *A systematic review and meta-analysis of published research data on COVID-19 infection fatality rates*, <https://www.sciencedirect.com/science/article/pii/S1201971220321809?via%3Dihub>

¹²¹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>

The generally accepted approximate IFR-S of seasonal influenza is 0.1%.¹²²

5. COVID-19 Comparisons to Seasonal Influenza.

Seasonal Influenza

“While seasonal influenza (flu) viruses are detected year-round in the United States, flu viruses are most common during the fall and winter. The exact timing and duration of flu seasons can vary, but influenza activity often begins to increase in October. Most of the time flu activity peaks between December and February, although activity can last as late as May.”¹²³

“Influenza activity in the United States during the 2018–2019 season began to increase in November and remained at high levels for several weeks during January–February. Influenza A viruses were the predominant circulating viruses last year. While influenza A (H1N1pdm09) viruses predominated from October 2018 – mid February 2019, influenza A (H3N2) viruses were more commonly reported starting in late February 2019. Influenza B viruses were not commonly reported among circulating viruses during the 2018–2019 season. The season had moderate severity based on levels of outpatient influenza-like illness, hospitalizations rates, and proportions of pneumonia and influenza-associated deaths.

CDC estimates that the burden of illness during the 2018–2019 season included an estimated 35.5 million people getting sick with influenza, 16.5 million people going to a health care provider for their illness, 490,600 hospitalizations, and 34,200 deaths from influenza (Table 1). The number of influenza-associated illnesses that occurred last season was similar to the estimated number of influenza-associated illnesses during the 2012–2013 influenza season when an estimated 34 million people had symptomatic influenza illness.”¹²⁴ (Emphasis added).

The effectiveness of the 2018-2019 influenza vaccine for all vaccine types against influenza A or B viruses was estimated by the CDC to be 29%.¹²⁵

The mortality rate or death rate of the seasonal influenza in 2018 was approximately 0.1%.¹²⁶

“According to the CDC, counted deaths during the peak week of the influenza seasons from 2013-2014 to 2019-2020 ranged from 351 (2015-2016, week 11 of 2016) to 1,626 (2017-2018, week 3 of 2018).”¹²⁷

COVID-19

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https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00455?utm_campaign=covid19fasttrack&utm_medium=press&utm_content=basu&utm_source=mediaadvisory&

123 <https://www.cdc.gov/flu/about/season/flu-season.htm>

124 <https://www.cdc.gov/flu/about/burden/2018-2019.html>

125 <https://www.cdc.gov/flu/vaccines-work/2018-2019.html>

126

https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00455?utm_campaign=covid19fasttrack&utm_medium=press&utm_content=basu&utm_source=mediaadvisory& citing <https://www.cdc.gov/flu/about/burden/2018-2019.html>

127 <https://www.thedenverchannel.com/news/coronavirus/study-covid-19-10-to-40-times-deadlier-than-seasonal-flu>

“The Centers for Disease Control and Prevention (CDC) today confirmed the first case of 2019 Novel Coronavirus (2019-nCoV) in the United States in the state of Washington. The patient recently returned from Wuhan, China, where an outbreak of pneumonia caused by this novel coronavirus has been ongoing since December 2019.... The patient from Washington with confirmed 2019-nCoV infection returned to the United States from Wuhan on January 15, 2020.”¹²⁸ (Emphasis added).

“Officials in Santa Clara County, California, announced last night that at least two deaths in early February can now be attributed to COVID-19. Until now, the first US fatality from the pandemic coronavirus was assumed to be in the Seattle area on Feb 28, but postmortem testing on deaths from Feb 6 [2020] and Feb 17 now confirm that COVID-19 was spreading in the San Francisco Bay area weeks earlier than previously thought.”¹²⁹

“[As of May 20, 2020] The CDC's current "best guess" is that — in a scenario without any further social distancing or other efforts to control the spread of the virus — roughly 4 million patients would be hospitalized in the U.S. with COVID-19 and **500,000 would die over the course of the pandemic.** That's according to the agency's new parameters that the Center for Public Integrity plugged into a simple epidemiological model.

....

The CDC document outlines five possible scenarios¹³⁰ for the future of the pandemic, one "best guess" and two better-case and two worse-case versions. All of them are "unmitigated," meaning they do not account for future social distancing, widespread mask usage or other efforts to contain the coronavirus.

State and local officials can use the scenarios as a baseline model against which to weigh different responses.”¹³¹ (Emphasis added).

As of June 11, 2021, in the U. S. there were 33,246,578 total cases (current 7-day average of 13,997 cases), 2,243,371 hospitalizations (current 7-day average of 2,239), and **596,059 total deaths** (current 7-day moving average of 347 deaths).¹³²

“During the week ending April 21, 2020, 15,455 coronavirus-related deaths [occurred], which made the coronavirus' peak death rate 10 to 40 times higher than the one-week peak of the flu.”¹³³ (Emphasis added).

6. Superspreader Cases.

“**Superspreader Event**”: **High SARS-CoV-2 Attack Rate Following Exposure at**

¹²⁸ <https://www.cdc.gov/media/releases/2020/p0121-novel-coronavirus-travel-case.html>

¹²⁹ <https://www.cidrap.umn.edu/news-perspective/2020/04/coroner-first-us-covid-19-death-occurred-early-february>

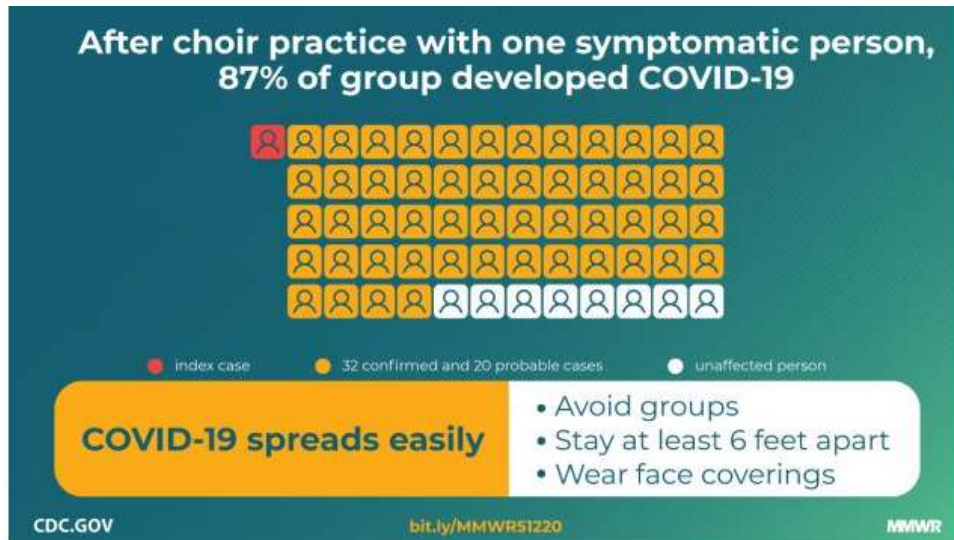
¹³⁰ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

¹³¹ <https://www.npr.org/sections/health-shots/2020/05/22/860981956/scientists-say-new-lower-cdc-estimates-for-severity-of-covid-19-are-optimistic>

¹³² <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

¹³³ <https://www.thedenverchannel.com/news/coronavirus/study-covid-19-10-to-40-times-deadlier-than-seasonal-flu>

a Choir Practice — Skagit County, Washington, March, 2020¹³⁴



“Following a 2.5-hour choir practice on March 10, 2020 attended by 61 persons, including a symptomatic index patient, 32 confirmed and 20 probable secondary COVID-19 cases occurred (an attack virus rate of from 53.3% to 86.7%)¹³⁵; three patients were hospitalized, and two died. Transmission was likely facilitated by close proximity (within 6 feet) during practice and augmented by the act of singing.

....

No choir member reported having had symptoms at the March 3 practice. One person at the March 10 practice had cold-like symptoms beginning March 7. This person, who had also attended the March 3 practice, had a positive laboratory result for SARS-CoV-2 by reverse transcription–polymerase chain reaction (RT-PCR) testing.

....

Aerosol emission during speech has been correlated with loudness of vocalization, and certain persons, who release an order of magnitude more particles than their peers, have been referred to as superemitters and have been hypothesized to contribute to superspreading events.¹³⁶

....

The 2.5-hour singing practice provided several opportunities for droplet and fomite transmission, including members sitting close to one another, sharing snacks, and stacking chairs at the end of the practice. The act of singing, itself, might have contributed to transmission through emission of aerosols, which is affected by loudness of vocalization.

....

Certain persons, known as superemitters, who release more aerosol particles during

¹³⁴ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6919e6.htm>

¹³⁵ “The findings in this report are subject to at least two limitations. First, the seating chart was not reported because of concerns about patient privacy. However, with attack rates of 53.3% and 86.7% among confirmed and all cases, respectively, and one hour of the practice occurring outside of the seating arrangement, the seating chart does not add substantive additional information. Second, the 19 choir members classified as having probable cases did not seek testing to confirm their illness. One person classified as having probable COVID-19 did seek testing 10 days after symptom onset and received a negative test result. It is possible that persons designated as having probable cases had another illness.” *Id.*

¹³⁶ *Id.*

speech than do their peers, might have contributed to this and previously reported COVID-19 superspreading events (2–5). These data demonstrate the high transmissibility of SARS-CoV-2 and the possibility of superemitters contributing to broad transmission in certain unique activities and circumstances.

....

It is recommended that persons avoid face-to-face contact with others, not gather in groups, avoid crowded places, maintain physical distancing of at least 6 feet to reduce transmission, and wear cloth face coverings in public settings where other social distancing measures are difficult to maintain.”¹³⁷

High COVID-19 Attack Rate Among Attendees at Events at a Church — Arkansas, March 2020¹³⁸

On March 16, 2020, the day that national social distancing guidelines were released (1), the Arkansas Department of Health (ADH) was notified of two cases of coronavirus disease 2019 (COVID-19) from a rural county of approximately 25,000 persons; these cases were the first identified in this county. The two cases occurred in a husband and wife; the husband is the pastor at a local church.

During March 6–8, the church hosted a 3-day children’s event which consisted of two separate 1.5-hour indoor sessions (one on March 6 and one on March 7) and two, 1-hour indoor sessions during normal church services on March 8. This event was led by two guests from another state. During each session, children participated in competitions to collect offerings by hand from adults, resulting in brief close contact among nearly all children and attending adults.

On March 7, food prepared by church members was served buffet-style. A separate Bible study event was held March 11; the pastor reported most attendees sat apart from one another in a large room at this event. Most children and some adults participated in singing during the children’s event; no singing occurred during the March 11 Bible study. Among all 94 persons who might have attended any of the events, 19 (20%) attended both the children’s event and Bible study.

During the investigation, two church participants who attended the March 6–8 children’s event were found to have had onset of symptoms on March 6 and 7; these represent the primary cases and likely were the source of infection of other church attendees. The two out-of-state guests developed respiratory symptoms during March 9–10 and later received diagnoses of laboratory-confirmed COVID-19, suggesting that exposure to the primary cases resulted in their infections. The two primary cases were not linked except through the church; the persons lived locally and reported no

¹³⁷ *Id.*

¹³⁸ https://www.cdc.gov/mmwr/volumes/69/wr/mm6920e2.htm?s_cid=mm6920e2_w

The findings in this report are subject to at least four limitations. First, some infected persons might have been missed because they did not seek testing, were ineligible for testing based on criteria at the time, or were unable to access testing. Second, although no previous cases had been reported from this county, undetected low-level community transmission was likely, and some patients in this cluster might have had exposures outside the church. Third, risk of exposure likely varied among attendees but could not be characterized because data regarding individual behaviors (e.g., shaking hands or hugging) were not collected. Finally, the number of cases beyond the cohort of church attendees likely is undercounted because tracking out-of-state transmission was not possible, and patients might not have identified church members as their source of exposure.

travel and had no known contact with a traveler or anyone with confirmed COVID-19. Patient interviews revealed no additional common exposures among church attendees.

The husband and wife were the first to be recognized by ADH among the 35 patients with laboratory-confirmed COVID-19 associated with church attendance identified through April 22; their illnesses represent the index cases. During the investigation, two persons who were symptomatic (not the husband and wife) during March 6–8 were identified; these are considered the primary cases because they likely initiated the chain of transmission among church attendees.

The estimated attack rate ranged from 38% (35 cases among all 92 church event attendees) to 78% (35 cases among 45 church event attendees who were tested for SARS-CoV-2).

During contact tracing, at least 26 additional persons with confirmed COVID-19 cases were identified among community members who reported contact with the church attendees and likely were infected by them; one of the additional persons was hospitalized and subsequently died.

Community Transmission of SARS-CoV-2 at Two Family Gatherings — Chicago, Illinois, February–March 2020¹³⁹

Most early reports of person-to-person SARS-CoV-2 transmission have been among household contacts, where the secondary attack rate has been estimated to exceed 10% (1), in health care facilities (2), and in congregate settings (3). However, widespread community transmission, as is currently being observed in the United States, requires more expansive transmission events between non-household contacts.

This report describes the cluster of 16 cases¹⁴⁰ of confirmed or probable COVID-19, including three deaths, likely resulting from transmission of SARS-CoV-2 at two family gatherings (a funeral and a birthday party).

The median interval from last contact with a patient with confirmed or probable COVID-19 to first symptom onset was 4 days. Within 3 weeks after mild respiratory symptoms were noted in the index patient, 15 other persons were likely infected with SARS-CoV-2, including three who died. Patient A1.1, the index patient, was

¹³⁹ *Id.*

¹⁴⁰ The findings in this investigation are subject to at least three limitations. First, lack of laboratory testing for probable cases means some probable COVID-19 patients might have instead experienced unrelated illnesses, although influenza-like illness was declining in Chicago at the time. Second, phylogenetic data, which could confirm presumed epidemiologic linkages, were unavailable. For example, patient B3.1 experienced exposure to two patients with confirmed COVID-19 in this cluster, and the causative exposure was presumed based on expected incubation periods. Patient D3.1 was a health care professional, and, despite not seeing any patients with known COVID-19, might have acquired SARS-CoV-2 during clinical practice rather than through contact with members of this cluster. Similarly, other members of the cluster might have experienced community exposures to SARS-CoV-2, although these transmission events occurred before widespread community transmission of SARS-CoV-2 in Chicago. Finally, despite intensive epidemiologic investigation, not every confirmed or probable case related to this cluster might have been detected. Persons who did not display symptoms were not evaluated for COVID-19, which, given increasing evidence of substantial asymptomatic infection (9), means the size of this cluster might be underestimated. *Id.*

apparently able to transmit infection to 10 other persons, despite having no household contacts and experiencing only mild symptoms for which medical care was not sought (patient A1.1 was only tested later as part of this epidemiologic investigation).

Identifying and Interrupting Superspreading Events—Implications for Control of Severe Acute Respiratory Syndrome Coronavirus 2¹⁴¹

Severe acute respiratory syndrome (SARS) coronavirus 2 (SARS-CoV-2) continues to spread (1). Although we still have limited information on the epidemiology of coronavirus disease (COVID-19), there have been multiple reports of superspreading events (SSEs)

SSEs highlight a major limitation of the concept of R_0 . The basic reproductive number R_0 , when presented as a mean or median value, does not capture the heterogeneity of transmission among infected persons (16); 2 pathogens with identical R_0 estimates may have markedly different patterns of transmission. Furthermore, the goal of a public health response is to drive the reproductive number to a value <1 , something that might not be possible in some situations without better prevention, recognition, and response to SSEs.

7. COVID-19 Pandemic Planning.

[August 8, 2020] Table 1. Parameter Values that vary among the five COVID-19 Pandemic Planning Scenarios.¹⁴²

The scenarios are intended to advance public health preparedness and planning. They are not predictions or estimates of the expected impact of COVID-19.

Scenario 5: Parameter values for disease severity, viral transmissibility, and pre-symptomatic and asymptomatic disease transmission that represent the best estimate, based on the latest surveillance data and scientific knowledge. Parameter values are based on data received by CDC through August 8, 2020.

Parameter	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5: Current Best Estimate
R_0^*	2.0		4.0		2.5
Infection Fatality Ratio†	0-19 years: 0.00002 20-49 years: 0.00007 50-69 years: 0.0025 70+ years: 0.028	0-19 years: 0.0001 20-49 years: 0.0003 50-69 years: 0.010 70+ years: 0.093			0-19 years: 0.00003 20-49 years: 0.0002 50-69 years: 0.005

¹⁴¹ https://wwwnc.cdc.gov/eid/article/26/6/20-0495_article

¹⁴² <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

Parameter	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5: Current Best Estimate
					70+ years: 0.054
Percent of infections that are asymptomatic^s	10%	70%	10%	70%	40%
Infectiousness of asymptomatic individuals relative to symptomatic^r	25%	100%	25%	100%	75%
Percentage of transmission occurring prior to symptom onset	30%	70%	30%	70%	50%

*The best estimate representative of the point estimates of R_0 from the following sources:

[August 8, 2020] From Table 2: CDC Parameter Values Common to the Five COVID-19 Pandemic Planning Scenarios.¹⁴³

The parameter values are likely to change as we obtain additional data about disease severity and viral transmissibility of COVID-19.

Parameter values are based on data received by CDC through August 8, 2020, including COVID-19 Case Surveillance Public Use Data (<https://data.cdc.gov/Case-Surveillance/COVID-19-Case-Surveillance-Public-Use-Data/vbim-akqf>); data from the Hospitalization Surveillance Network (COVID-NET) (through August 1); and data from Data Collation and Integration for Public Health Event Response (DCIPHER).

Pre-existing immunity Assumption, ASPR and CDC	No pre-existing immunity before the pandemic began in 2019. It is assumed that all members of the U.S. population were susceptible to infection prior to the pandemic.
Time from exposure to symptom onset[*]	~6 days (mean)
Time from symptom onset in an individual and symptom onset of a second person infected by that individual[†]	~6 days (mean)
Mean ratio of estimated infections to reported case counts, Overall (range)[§]	11 (6, 24)

¹⁴³ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

Parameter Values Related to Healthcare Usage	
Median number of days from symptom onset to SARS-CoV-2 test among SARS-CoV-2 positive patients (interquartile range)[†]	Overall: 3 (1, 6) days
Median number of days from symptom onset to hospitalization (interquartile range)^{**}	18-49 years: 6 (3, 10) days 50-64 years: 6 (2, 10) days ≥65 years: 4 (1, 9) days
Median number of days of hospitalization among those not admitted to ICU (interquartile range)^{††}	18-49 years: 3 (2, 5) days 50-64 years: 4 (2, 7) days ≥65 years: 6 (3, 10) days
Median number of days of hospitalization among those admitted to ICU (interquartile range)^{††,§§}	18-49 years: 11 (6, 20) days 50-64 years: 14 (8, 25) days ≥65 years: 12 (6, 20) days
Percent admitted to ICU among those hospitalized^{††}	18-49 years: 23.8% 50-64 years: 36.1% ≥65 years: 35.3%
Percent on mechanical ventilation among those hospitalized. Includes both non-ICU and ICU admissions^{††}	18-49 years: 12.0% 50-64 years: 22.1% ≥65 years: 21.1%
Percent that die among those hospitalized. Includes both non-ICU and ICU admissions^{††}	18-49 years: 2.4% 50-64 years: 10.0% ≥65 years: 26.6%
Median number of days of mechanical ventilation (interquartile range)^{**}	Overall: 6 (2, 12) days
Median number of days from symptom onset to death (interquartile range)^{**}	18-49 years: 15 (9, 25) days 50-64 years: 17 (10, 26) days ≥65 years: 13 (8, 21) days
Median number of days from death to reporting (interquartile range)^{†††}	18-49 years: 19 (5, 45) days 50-64 years: 21 (6, 46) days ≥65 years: 19 (5, 44) days

[March 19, 2021] Table 1. Parameter Values that vary among the five COVID-19 Pandemic Planning Scenarios.¹⁴⁴

The scenarios are intended to advance public health preparedness and planning. They are not predictions or estimates of the expected impact of COVID-19.

Scenario 5: Parameter values for disease severity, viral transmissibility, and pre-symptomatic and asymptomatic disease transmission that represent the best estimate, based on the latest surveillance data and scientific knowledge. Parameter values are based on data received by CDC through March 19, 2021.

Parameter	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5: Current Best Estimate
R₀*	2.0		4.0		2.5
Infection fatality ratio (Estimated number of deaths per 1,000,000 infections)[†]	0–17 years old: 6 18–49 years old: 150 50–64 years old: 1,800 65+ years old: 26,000		0–17 years old: 80 18–49 years old: 1,700 50–64 years old: 20,000 65+ years old: 270,000		0–17 years old: 20 18–49 years old: 500 50–64 years old: 6,000 65+ years old: 90,000
Percent of infections that are asymptomatic[§]	15%	70%	15%	70%	30%
Infectiousness of asymptomatic individuals relative to symptomatic[^]	25%	100%	25%	100%	75%
Percentage of transmission occurring prior to symptom onset^{**}	30%	70%	30%	70%	50%

¹⁴⁴ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>

[February 14, 2021] Table 2. Parameter Values Common to the Five COVID-19 Pandemic Planning Scenarios.¹⁴⁵

The parameter values are likely to change as we obtain additional data about disease severity and viral transmissibility of COVID-19.

Parameter values are based on data received by CDC between December 31, 2020, and February 14, 2021, including COVID-19 Case Surveillance Data (public use version of data: <https://data.cdc.gov/Case-Surveillance/COVID-19-Case-Surveillance-Public-Use-Data/vbim-akqf>); data from the Hospitalization Surveillance Network ([COVID-NET](#)) (through December 31, 2020); and data from Human and Health Services Protect (*HHS Protect*) (through February 14, 2021).

Parameter values Table 2

Pre-existing immunity Assumption, ASPR and CDC	No pre-existing immunity before the pandemic began in 2019. It is assumed that all members of the U.S. population were susceptible to infection prior to the pandemic.
Time from exposure to symptom onset*	~6 days (mean)
Time from symptom onset in an individual and symptom onset of a second person infected by that individual†	~6 days (mean)
Mean ratio of estimated infections to reported case counts, overall (range)§	11 (6, 24)
Parameter Values Related to Healthcare Usage	
Median number of days from symptom onset to SARS-CoV-2 test among SARS-CoV-2 positive patients (interquartile range)^	Overall: 2 (0, 4) days
Median number of days from symptom onset to hospitalization (interquartile range)**	0–17 years old: 2 (0, 7) days 18–49 years old: 6 (2, 10) days 50–64 years old: 6 (2, 10) days ≥65 years old: 4 (1, 9) days
Median number of days of hospitalization among those not admitted to ICU (interquartile range) ††	0–17 years old: 2 (1, 4) days 18–49 years old: 3 (2, 6) days 50–64 years old: 4 (2, 7) days ≥65 years old: 5 (3, 9) days

¹⁴⁵ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>

Median number of days of hospitalization among those admitted to the ICU (interquartile range)^{††,§§}	0–17 years old: 5 (2, 10.5) days 18–49 years old: 10 (6, 20) days 50–64 years old: 14 (8, 25) days ≥65 years old: 13 (7, 22) days
Percent admitted to the ICU among those hospitalized^{††}	0–17 years old: 27.5% 18–49 years old: 18.9% 50–64 years old: 27.1% ≥65 years old: 26.9%
Percent on mechanical ventilation among those hospitalized. Includes both non-ICU and ICU admissions^{††}	0–17 years old: 5.8% 18–49 years old: 9.0% 50–64 years old: 15.1% ≥65 years old: 15.6%
Percent that die among those hospitalized. Includes both non-ICU and ICU admissions^{††}	0–17 years old: 0.7% 18–49 years old: 2.1% 50–64 years old: 7.9% ≥65 years old: 18.8%
Median number of days of mechanical ventilation (interquartile range)^{**}	Overall: 5 (2, 11) days
Median number of days from symptom onset to death (interquartile range)^{**}	0–17 years old: 10 (4, 31) days 18–49 years old: 17 (10, 30) days 50–64 years old: 19 (11, 30) days ≥65 years old: 16 (9, 25) days
Median number of days from death to reporting (interquartile range)^{^^}	0–17 years old: 8 (3, 33) days 18–49 years old: 26 (5, 63) days 50–64 years old: 28 (5, 64) days ≥65 years old: 23 (4, 59) days

8. Community or “Herd” Immunity.

“Community immunity [or herd immunity]: A situation in which a sufficient proportion of a population is immune to an infectious disease (through vaccination and/or prior illness) to make its spread from person to person unlikely. Even individuals not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the disease has little opportunity to spread within the community....”¹⁴⁶

To reach herd immunity for COVID-19, likely 70% or more of the population would need to be immune. Without a vaccine, over 200 million Americans would have to get infected before we reach this threshold. Put another way, even if the current pace of the COVID-19 pandemic continues in the United States – with over 25,000 confirmed cases a day – it will be well into 2021 before we reach herd immunity.”¹⁴⁷

Nypost.com, Dr. Fauci says COVID-19 herd immunity may take 90%¹⁴⁸ to be infected or vaccinated:

“Dr. Anthony Fauci now says as much as 90 percent of the population may need to get vaccinated or infected to achieve herd immunity against COVID-19 — admitting in a new interview that he has been intentionally raising the bar based, in part, on what he thinks the country is ready to hear.

“We really don’t know what the real number is,” the nation’s top infectious disease expert told the New York Times.

“I think the real range is somewhere between 70 to 90 percent. But, I’m not going to say 90 percent.”

The director of the National Institute of Allergy and Infectious Diseases acknowledged that he’s been intentionally upping that number as science’s understanding of the virus has changed — and as Americans have become more confident in coronavirus vaccines.

....

He said he’s comfortable drawing the line at 90 percent herd immunity because he doesn’t believe the virus is more infectious than the measles, which falls in that range.

“I’d bet my house that COVID isn’t as contagious as measles,” he said.

Around 46 percent of Americans plan to take the vaccine at the earliest available opportunity, while 32 percent are willing to wait for others to get the shot first, according to a recent USA Today-Suffolk University survey.”

Latimes.com, December 26, 2020. Can COVID-19 vaccines get us to herd immunity?

¹⁴⁶ <https://www.cdc.gov/vaccines/terms/glossary.html#commimmunity>

¹⁴⁷ <https://coronavirus.jhu.edu/from-our-experts/early-herd-immunity-against-covid-19-a-dangerous-misconception>

¹⁴⁸ <https://nypost.com/2020/12/24/fauci-covid-herd-immunity-requires-90-to-be-infected-or-vaccinated/>

‘The jury is definitely still out’:¹⁴⁹

The aim of the vaccination campaign against COVID-19 is herd immunity — the point at which so few people are susceptible to infection that the virus runs out of places to go.

In the early days of the pandemic, epidemiologists estimated that would require inoculating about two-thirds of the U.S. population.

Now many of those same experts say that figure is almost certainly too low.

‘If you really want true herd immunity, where you get a blanket of protection over the country ... you want about 75 to 85% of the country to get vaccinated,’ Dr. Anthony Fauci, the nation’s top infectious-disease official, told a reporter last week. ‘I would say even closer to 85%.’

The shift reflects a deeper understanding of how the virus spreads — that it jumps from one person to another more easily than once thought.

The question of how many people must be vaccinated is of crucial importance as the world embarks on the biggest inoculation campaign in decades.

The goal of vaccination isn’t just to protect the individual who receives it but also to drape a fire blanket over a large enough portion of the population that the fire begins running out of fuel.

If too few people are vaccinated, the virus will keep finding enough new hosts to propagate itself — and continue to stress the healthcare system, delay economic recovery, necessitate social distancing and potentially surge again if vaccines lose effectiveness over time.

Whatever the threshold for herd immunity, public health officials face a substantial challenge.

An early December poll from the Associated Press-NORC Center for Public Affairs Research found that 46% of American adults planned to get vaccinated while 26% would decline and 27% were still undecided.

One group of researchers found that anti-vaccination messaging on social media has tripled since the start of the pandemic.

A particular obstacle could be vaccinating children and teenagers, a group that has not been hit especially hard by the pandemic and for which vaccines are still being tested. But at 22% of the U.S. population, they are important to any effort to achieve herd immunity and return to normal life.

When epidemiologists first aimed to model how many people would need to

¹⁴⁹ <https://www.yahoo.com/now/covid-19-vaccines-us-herd-110023026.html>

be vaccinated in order to drive the coronavirus toward extinction, they compared early transmission trends to those of other recent flu pandemics.

They noted how the coronavirus had a longer incubation period, more asymptomatic spread and higher contagion — estimating that the pandemic would probably drag on for 18 to 24 months.

“It likely won’t be halted until 60% to 70% of the population is immune,” said a report published by infectious-disease experts in April.

There are two paths to immunity: becoming infected with the virus and recovering, or getting vaccinated. Neither is a guarantee.

Based on data from clinical trials showing that the efficacy of the two authorized vaccines — from Pfizer and Moderna — is excellent but still imperfect, the threshold for herd immunity rises to around 74%.

But experts say even that calculation is still too simple.

“Those numbers are useful for thought experiments, but they don’t represent what’s likely to be the way we control the virus or its impacts,” said Harvard epidemiologist Marc Lipsitch. “Offering a kind of magic number requires some very strong assumptions about these vaccines.”

Many factors can come into play. If the virus becomes even more transmissible, the threshold for herd immunity would increase.

The targets could vary by location. In sparsely populated places where people adhere to social distancing guidelines, fewer people would have to be vaccinated to burn out the virus.

‘It’s going to be the sort of thing that we’re studying for a very long time to come,’ said William Hanage, an epidemiologist at the Center for Communicable Disease Dynamics at Harvard.

Then there are the vaccines themselves.

They were authorized based on rapid-fire clinical trials that showed recipients were highly unlikely to develop symptoms of COVID-19 — but did not determine whether the vaccines actually prevent people from becoming infected with the virus or transmitting it.

The degree to which the vaccines prevent transmission matters greatly in the equation for calculating herd immunity. In a bad-case scenario, the vaccines do so little to stop transmissions that herd immunity simply can’t be achieved through vaccination alone.

“At the moment, the jury is definitely still out,” Lipsitch said. “If I had to guess, there will be a component of herd immunity — I just don’t know how dramatic

it will be.”

It could turn out that reaching herd immunity depends not only on how many people are vaccinated but also which people. Inoculating those most likely to spread it — people who live or work in close quarters, for example — may do much more to contain the pandemic than vaccinating people who live in relative seclusion.

Given all these unknowns, Fauci brought his estimate to 85% — and has said it could be even higher.

The costs of not achieving herd immunity are substantial. If the virus continues to circulate broadly, even some people who are vaccinated will develop COVID-19. Hospitals will continue to confront surges of the virus, depleting their resources and compromising their ability to treat heart attacks, strokes and other emergencies.

Meanwhile, overall quality of life would continue to suffer. Schools, offices and restaurants would remain closed even for people who have been vaccinated.

Experts say that until the virus is circulating at extraordinarily low levels — such that the risk of becoming infected is close to zero — social distancing and mask-wearing are here to stay.

The final answer to the question of how many people need to be vaccinated won't be known until herd immunity is actually achieved. When epidemiologists start to see the test positivity rate falling to extremely low numbers, that's how they'll know the campaign is working.

But with the exception of smallpox, no virus that afflicts humans has ever been wiped out completely. Experts have been struggling with polio for decades, lately in conflict regions where vaccination campaigns have been disrupted.

They emphasize that in the age of globalization, herd immunity must eventually take into account almost every corner of the earth — a pathogen anywhere remains a threat everywhere.

‘I think it’s extremely unlikely that we would be able to eradicate this virus,’ Hanage said. ‘In reality, we have to accept that.’

‘However, we should be able to get to a point where we are going to be able to live without it markedly damaging our lives, without leading to surges that damage our healthcare, or large excessive mortality — and that is what we are seeking to achieve.’” (Emphasis added).

As of December 29, 2020, the CDC says:

“Experts do not know what percentage of people would need to get vaccinated

to achieve herd immunity to COVID-19. Herd immunity is a term used to describe when enough people have protection—either from previous infection or vaccination—that it is unlikely a virus or bacteria can spread and cause disease. As a result, everyone within the community is protected even if some people don't have any protection themselves. The percentage of people who need to have protection in order to achieve herd immunity varies by disease.”¹⁵⁰

As of May 19, 2021, the CDC has calculated the “Estimated Disease Burden of COVID-19.”¹⁵¹

Table 1: Preliminary Estimated COVID-19 Cumulative Incidence, by age group — United States, February 2020-March 2021

Age group	Infections		Symptomatic Illness		Hospitalizations	
	Estimate	95% UI*	Estimate	95% UI*	Estimate	95% UI*
0-4 yrs	4,466,773	3,640,856 – 5,603,223	3,811,216	3,238,789 – 4,568,978	50,030	40,862 – 61,134
5-17 yrs	22,203,414	12,209,186 – 17,452,081	18,929,814	16,037,674 – 22,755,339	141,611	111,674 – 178,368
18-49 yrs	55,616,991	46,355,840 – 67,031,661	47,402,926	41,781,099 – 54,104,814	1,338,235	1,133,895 – 1,590,638
50-64 yrs	19,685,301	16,501,914 – 23,681,510	16,778,695	14,831,745 – 19,123,545	1,430,340	1,258,736 – 1,638,294
65+ yrs	12,415,830	10,015,501 – 15,611,446	10,067,924	8,968,261 – 11,420,067	2,633,850	2,317,399 – 3,025,795
All ages	114,621,082	98,542,526 – 134,346,271	97,076,349	86,775,390 – 109,502,229	5,594,610	4,994,582 – 6,335,691

* Adjusted estimates and rates are presented in two parts: an uncertainty interval [UI] and a point estimate. The uncertainty interval provides a range in which the true number or rate of COVID-19 infections, symptomatic illnesses, or hospitalization would be expected to fall if the same study was repeated many times, and it gives an idea of the precision of the point estimate. A 95% uncertainty interval means that if the study were repeated 100 times, then 95 out of 100 times the uncertainty interval would contain the true point estimate. Conversely, in only 5 times out of a 100 would the uncertainty interval not contain the true point estimate.

¹⁵⁰ <https://www.doli.virginia.gov/wp-content/uploads/2021/01/BP-Final-Standard-for-SARS-CoV-2-that-Causes-COVID-19-DRAFT-1.4.2021.pdf>

¹⁵¹ <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/burden.html>

9. COVID-19 Virus Mutations.

Depending on the level of contagiousness of COVID-19 expressed in the R_0 ¹⁵² value, “the threshold for combined [COVID-19] vaccine efficacy and herd immunity needed for disease extinction” is estimated between 55% and 82% “(i.e., >82% of the population has to be immune, through either vaccination or prior infection, to achieve herd immunity to stop transmission).¹⁵³

“The new [SARS-CoV-2] coronavirus is an RNA virus: a collection of genetic material packed inside a protein shell. Once an RNA virus makes contact with a host, it starts to make new copies of itself that can go on to infect other cells.

RNA viruses, like the flu and measles, are more prone to changes and mutations compared with DNA viruses, such as herpes, smallpox, and human papillomavirus (HPV).

‘In the world of RNA viruses, change is the norm. We expect RNA viruses to change frequently. That’s just their nature,’ said Dr. Mark Schleiss, a pediatric infectious disease specialist and investigator with the Institute for Molecular Virology at the University of Minnesota.

SARS-CoV-2 is no exception, and over the past few months it has been mutating. But the virus has mutated at a very slow pace. And when it does mutate, the new copies aren’t far off from the original virus.

‘The sequences of the original isolates from China are very close to those in viruses circulating in the U.S. and the rest of the world,’ said Dr. John Rose, a senior research scientist in the department of pathology at Yale Medicine who’s helping develop a COVID-19 vaccine.

....

Early research from scientists at Los Alamos National Laboratory¹⁵⁴ shows that SARS-CoV-2 has mutated into a new form that may be more contagious.

The new strain is responsible for the vast majority of infections reported around the world since mid-March, according to the new study published in the preprint research website BioRxiv Thursday.

¹⁵² “The basic reproduction number (R_0), pronounced “R naught,” is intended to be an indicator of the contagiousness or transmissibility of infectious and parasitic agents.... R_0 has been described as being one of the fundamental and most often used metrics for the study of infectious disease dynamics (7–12). An R_0 for an infectious disease event is generally reported as a single numeric value or low–high range, and the interpretation is typically presented as straightforward; an outbreak is expected to continue if R_0 has a value >1 and to end if R_0 is <1 (13). The potential size of an outbreak or epidemic often is based on the magnitude of the R_0 value for that event (10), and R_0 can be used to estimate the proportion of the population that must be vaccinated to eliminate an infection from that population (14,15). R_0 values have been published for measles, polio, influenza, Ebola virus disease, HIV disease, a diversity of vectorborne infectious diseases, and many other communicable diseases (14,16–18).

https://wwwnc.cdc.gov/eid/article/25/1/17-1901_article

¹⁵³ https://wwwnc.cdc.gov/eid/article/26/7/20-0282_article#suggestedcitation

¹⁵⁴ <https://www.biorxiv.org/content/10.1101/2020.04.29.069054v1>

In total, the researchers identified 14 strains of COVID-19 and released their findings to help those working on vaccines and treatments.

That being said, the new dominant strain identified does seem to be more infectious in laboratory settings.

But scientists are now trying to understand how the variation behaves in the body — which may be very different from lab settings. Additionally, the study is in preprint, which means it hasn't yet been fully peer-reviewed.

It's also unclear whether the new mutation infects and sickens people differently. At this time, the illness and hospitalization rates caused by the new variation seems to be similar.”¹⁵⁵

Forbes.com, December 29, 2020. First U.S. Case Of New Covid Mutation¹⁵⁶
Discovered In Colorado:

“A new, highly contagious coronavirus variant that was first identified in Britain has reached the United States, officials in Colorado confirmed Tuesday, reporting the first known U.S. case of the strain more than two weeks after it was discovered — a worrying development as Covid-19 infections and deaths climb nationwide.

The variant was discovered in a man in his 20s who lives in Elbert County, a rural area near Denver, Gov. Jared Polis (D-Colo.) said in a tweet Tuesday afternoon.

The man has no travel history, Polis said, placing him at odds with many other patients in Europe who appeared to contract the variant while traveling in the United Kingdom.

....

Researchers believe this new coronavirus variant — which U.K. officials disclosed earlier this month — is about 56% more contagious than other versions of the virus, an alarming figure even though it doesn't appear to lead to deadlier infections. As of last week, the variant was already responsible for the majority of London's Covid-19 infections, and officials have partly blamed it for a recent spike in U.K. Covid-19 cases that has forced much of the country back into strict lockdowns. Dozens of countries have banned or restricted travel from the United Kingdom in response, including the United States, which began requiring all U.K. travelers to show a negative coronavirus test before flying to the U.S. this week.

....

Most infectious disease experts aren't surprised to see the new variant arrive in the United States. Last week, Dr. Anthony Fauci told ABC News it's “certainly possible” the mutation was already present in the country. But

¹⁵⁵ <https://www.healthline.com/health-news/what-to-know-about-mutation-and-covid-19#The-new-coronavirus-is-mutating,-but-very-slowly>

¹⁵⁶ <https://www.forbes.com/sites/joewalsh/2021/12/29/first-us-case-of-new-covid-mutation-discovered-in-colorado/?sh=5560175e1d79>

experts fear a more transmissible form of Covid-19 could make controlling the virus' spread even more difficult, adding to an already-dire surge in cases throughout the United States.” (Emphasis added).

CNN.com, June 14, 2021, “A new coronavirus variant is on the rise. Here's why experts are concerned”¹⁵⁷

“The Delta variant¹⁵⁸ is on its way to becoming the dominant strain of coronavirus in the US, raising concerns that outbreaks could hit unvaccinated people this fall.

And a new study shows the Delta variant is associated with almost double the risk of hospitalization compared to the Alpha variant.

The Alpha (B.1.1.7) variant, which is "stickier" and more contagious¹⁵⁹ than the original strain of novel coronavirus, became the dominant strain in the US¹⁶⁰ this spring.

But health experts worry the Alpha variant could be trumped by the Delta variant, which appears to be even more transmissible and may cause more severe illness¹⁶¹ for those not vaccinated.

As of June 14, 2021, about 10% of Covid-19 cases in the US can be attributed to the Delta variant. But that proportion is doubling every two weeks, Scott Gottlieb, a former commissioner of the US Food and Drug Administration, said in a CBS interview Sunday. He said the Delta variant will probably take over as the dominant strain of coronavirus in the US.

As of June 22, 2021, the Delta variant now makes up about 20% of all new COVID-19 cases in the U.S.¹⁶²

"I think in parts of the country where you have less vaccination -- particularly in parts of the South, where you have some cities where vaccination rates are low -- there's a risk that you could see outbreaks with this new variant," Gottlieb said.

While 52.4% of Americans have received at least one dose of vaccine, only 43.4% have been fully vaccinated, according to data Sunday from the US Centers for Disease Control and Prevention.

The Delta variant could pose a serious risk for states lagging in Covid-19 vaccinations, but the good news is Americans can stave off the danger by

¹⁵⁷ <https://www.cnn.com/2021/06/14/health/us-coronavirus-monday/index.html>

¹⁵⁸ <https://www.cnn.com/2021/06/10/health/delta-variant-india-explained-coronavirus-intl-cmd/index.html>

¹⁵⁹ <https://www.cnn.com/2021/04/12/health/b117-covid-variant-young-patients/index.html>

¹⁶⁰ <https://www.cnn.com/videos/health/2021/04/07/walensky-covid-19-uk-variant-sot-cohen-nr-vpx.cnn>

¹⁶¹ <https://www.cnn.com/2021/06/10/health/delta-variant-india-explained-coronavirus-intl-cmd/index.html>

¹⁶² <https://www.cnbc.com/2021/06/22/fauci-declares-delta-variant-greatest-threat-to-the-nations-efforts-to-eliminate-covid.html>

getting vaccinated.

Studies suggest those who are fully vaccinated have protection against the Delta variant.

"We have the tools to control this and defeat it," Gottlieb said. "We just need to use those tools."

New research shows the Delta variant may lead to more hospitalizations. The Delta variant -- or the B.1.617.2 strain first detected in India -- has been linked to about double the risk of hospitalization compared to the Alpha variant first found in the UK, according to the preliminary findings of a Scottish study published Monday in *The Lancet*.

The Alpha variant used to be the dominant strain in the UK. But last week, Health Secretary Matt Hancock said the Delta variant had taken over -- making up 91% of new cases in the UK."

CNBC.com, June 8, 2021, "Fauci says U.S. must vaccinate more people before Delta becomes dominant Covid variant in America"¹⁶³

"In the U.S., the Delta variant accounts for more than 6% of cases scientists have been able to sequence, he said. The actual number is likely higher, as the U.S. is running the genetic sequence on a fraction of cases.

"In the U.K., the Delta variant is rapidly emerging as the dominant variant ... It is replacing the B.1.1.7," Fauci said. "We cannot let that happen in the United States."

....

First detected in October, the Delta variant has spread to at least 62 countries, the World Health Organization said last week.

"We continue to observe significantly increased transmissibility and a growing number of countries reporting outbreaks associated with this variant," the WHO said of the Delta strain last week, noting that further study was a high priority.

The Delta strain has a stranglehold on India, causing a spike in infections and deaths that has clogged hospital systems. The Indian government announced Monday that the country will soon begin providing Covid-19 vaccines for free to all adults in the country.

Fauci also said that the Delta variant is more contagious and may be associated with a higher risk of hospitalization than the original "wild type" Covid-19 strain.

Studies also show that two doses of the Pfizer or AstraZeneca shots are

¹⁶³ <https://www.cnbc.com/2021/06/08/fauci-says-us-must-vaccinate-more-people-before-delta-becomes-dominant-covid-variant-in-america.html>

effective against the Delta strain, according to the National Institutes of Health.

Two doses of the Pfizer vaccine were shown to be 88% effective against the Delta variant, while two doses of the AstraZeneca shot were shown to be 60% effective against the strain, according to NIH data.

Fauci stressed the importance of getting two doses after NIH studies showed that, three weeks after being given, **just one dose of either vaccine provided only 33% efficacy against the Delta variant.**” (Emphasis added).

WRIC.com, Richmond, Virginia, June 23, 2021, "State's vaccine coordinator: Delta variant is spreading, gives look into what school may look like in the fall"¹⁶⁴

"Virginia hit the benchmark for vaccinations earlier this week, but the state's vaccine coordinator, Dr. Danny Avula, says there is still more work to be done.

On Monday, Governor Ralph Northam reported 70% of adults in Virginia have received at least one dose of the vaccine, but there are segments of the Commonwealth still reporting a 30% or 40% vaccination rate. It comes as the delta variant is already starting to spread.

'At the end of May the Delta variant was about 2% of our new infections and as of last week it was 10% and I think it's going to be much more than that,' Avula told our sister station, WAVY.

The good news is that those fully vaccinated don't need to worry. Luckily, he said the vaccine appears to be working against that variant and others that have emerged so far. 'So far, I think we've been lucky,' Avula said. 'These variants like the U-K variant, the alpha the delta, that have really emerged in different countries – our vaccines have been incredibly effective against them.'

So, what about the rest of the population who hasn't gotten the shot? 'What that means is that kids who are not vaccinated will likely at some point be vectors – they will spread this new variant widely,' Avula stated. The concern then becomes spreading the virus to unvaccinated adults.

'So, for segments in our community like in Southern or Southwest Virginia where the adult vaccination rate is about 40% that means that kids will contribute to the spread of disease – if we're not careful,' he said.'"

10. COVID-19 Vaccine Development and Deployment.

How COVID-19 Vaccines Work¹⁶⁵

¹⁶⁴ <https://www.wric.com/health/coronavirus/states-vaccine-coordinator-delta-variant-is-spreading-gives-look-into-what-school-may-look-like-in-the-fall/>

¹⁶⁵ https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/how-they-work.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fvaccines%2Fabout-vaccines%2Fhow-they-work.html

“COVID-19 vaccines help our bodies develop immunity to the virus that causes COVID-19 without us having to get the illness. Different types of vaccines work in different ways to offer protection, but with all types of vaccines, the body is left with a supply of “memory” T-lymphocytes as well as B-lymphocytes that will remember how to fight that virus in the future.

It typically takes a few weeks for the body to produce T-lymphocytes and B-lymphocytes after vaccination. Therefore, it is possible that a person could be infected with the virus that causes COVID-19 just before or just after vaccination and then get sick because the vaccine did not have enough time to provide protection.

Sometimes after vaccination, the process of building immunity can cause symptoms, such as fever. These symptoms are normal and are a sign that the body is building immunity.”

Authorized Vaccines

Currently, three vaccines are authorized and recommended to prevent COVID-19.¹⁶⁶

- Pfizer-BioNTech COVID-19 vaccine¹⁶⁷ [2 shots given 21 days apart]

“Based on evidence from clinical trials, the Pfizer-BioNTech vaccine was 95% effective at preventing laboratory-confirmed COVID-19 illness in people without evidence of previous infection. In clinical trials, the Pfizer-BioNTech vaccine was also highly effective at preventing laboratory-confirmed COVID-19 illness in adolescents aged 12–15 years, and the immune response in people aged 12–15 years was at least as strong as the immune response in people aged 16–25 years.”

- Moderna’s COVID-19 vaccine¹⁶⁸ [2 shots given 28 days apart]

- “Based on evidence from clinical trials, the Moderna vaccine was 94.1% effective at preventing laboratory-confirmed COVID-19 illness in people who received two doses who had no evidence of being previously infected. The vaccine was also highly effective in clinical trials at preventing COVID-19 among people of diverse age, sex, race, and ethnicity categories and among people with underlying medical conditions.”

- Johnson & Johnson’s/Janssen¹⁶⁹ [1 shot]

“The J&J/Janssen COVID-19 Vaccine was 66.3% effective in clinical trials (efficacy) at preventing laboratory-confirmed COVID-19 illness in people who had no evidence of prior infection. People had the most protection 2 weeks after getting vaccinated. The vaccine had high efficacy at preventing

¹⁶⁶ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines.html>

¹⁶⁷ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Pfizer-BioNTech.html>

¹⁶⁸ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Moderna.html>

¹⁶⁹ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/janssen.html>

hospitalization and death in people who did get sick. No one who got COVID-19 at least 4 weeks after receiving the J&J/Janssen COVID-19 Vaccine had to be hospitalized. Early evidence suggests that the J&J/Janssen COVID-19 Vaccine might provide protection against asymptomatic infection, which is when a person is infected by the virus that causes COVID-19 but does not get sick.”

Cost is not an obstacle to getting vaccinated against COVID-19

COVID-19 vaccines are available for everyone at no cost. Vaccines were paid for with taxpayer dollars and will be given to all people living in the United States, regardless of insurance or immigration status.¹⁷⁰

Previously infected people and access to a COVID-19 vaccine

You should be vaccinated regardless of whether you already had COVID-19. That’s because experts do not yet know how long you are protected from getting sick again after recovering from COVID-19. Even if you have already recovered from COVID-19, it is possible—although rare—that you could be infected with the virus that causes COVID-19 again. Studies have shown that in people who have recovered from COVID-19, vaccination provides a strong boost in protection. Learn more about [why getting vaccinated is a safer way to build protection](#) than getting infected.

If you were treated for COVID-19 with monoclonal antibodies or convalescent plasma, you should wait 90 days before getting a COVID-19 vaccine. Talk to your doctor if you are unsure what treatments you received or if you have more questions about getting a COVID-19 vaccine.

If you or your child have a history of multisystem inflammatory syndrome in adults or children ([MIS-A](#) or [MIS-C](#)), consider delaying vaccination until you or your child have recovered from being sick and for 90 days after the date of diagnosis of MIS-A or MIS-C. Learn more about the [clinical considerations](#) people with a history of multisystem MIS-C or MIS-A.”¹⁷¹

How long does immunity last?

“Getting COVID-19 may offer some natural protection, known as immunity. Current evidence suggests that reinfection with the virus that causes COVID-19 is uncommon in the 90 days after initial infection. However, experts don’t know for sure how long this protection lasts, and the risk of severe illness and death from COVID-19 far outweighs any benefits of natural immunity.”¹⁷²

Continued need to wear face covering and practice physical distancing after vaccination

On May 16, 2021, the CDC issued updated guidance on fully vaccinated persons.¹⁷³

¹⁷⁰ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/no-cost.html>

¹⁷¹ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html>

¹⁷² <https://www.cdc.gov/vaccines/covid-19/hcp/answering-questions.html>

¹⁷³ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html>

Fully vaccinated people can resume activities without wearing a mask or physically distancing, except where required by federal, state, local, tribal, or territorial laws, rules, and regulations, including local business and workplace guidance.

In general, people are considered fully vaccinated:

- 2 weeks after their second dose in a 2-dose series, such as the Pfizer or Moderna vaccines, or
- 2 weeks after a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine

If you don't meet these requirements, regardless of your age, you are NOT fully vaccinated. Keep taking all [precautions](#)¹⁷⁴ until you are fully vaccinated.

Vaccine rollout and timeline

ABC News, December 30, 2020.

“The U.S. COVID-19 vaccine rollout moved slower than expected this month,... vaccine experts and public health officials warned the bigger test will come next year when inventory finally expands and the broader public raises their hands for a shot.

‘It's really difficult to administer every dose when you are prioritizing it and trying to avoid waste,’ said Claire Hannan, executive director of the Association of Immunization Managers.

‘But when we get into a position of mass clinics and everyone has access, we'll be much more efficient in getting it out,’ she said.

[The federal government] initially pledged 300 million doses by January 2021 when announcing Operation Warp Speed, then later this fall dropped the estimate to 100 million. After Pfizer adjusted its production estimates, Health Secretary Alex Azar promised 40 million doses on hand and 20 million vaccinations by the end of the year.

Instead, the administration was on track to ship those 20 million doses by the first week of January -- enough for first doses in the two-dose vaccine -- with only 2.6 million vaccinations recorded by the federal government.”

U.S. Population

There are over 332,000,000 people living in the United States.¹⁷⁵

Vaccine deployment

Successful deployment of a COVID-19 vaccine will depend on the willingness of the

¹⁷⁴ <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

¹⁷⁵ <https://www.census.gov/popclock/>

U. S. population to actually take the vaccine. In a Reuters' survey¹⁷⁶ of 4,428 U.S. adults taken between May 13 and May 19:

“Fourteen percent of respondents said they were not at all interested in taking a vaccine, and 10% said they were not very interested. Another 11% were unsure.

....

Overall, 84% of respondents said vaccines for diseases such as measles are safe for both adults and children, suggesting that people hesitant to take a coronavirus vaccine might reconsider, depending on safety assurances they receive. For example, among those who said they were “not very” interested in taking the vaccine, 29% said they would be more interested if the FDA approved it.

....

In addition, misinformation about vaccines has grown more prevalent on social media during the pandemic, according to academic researchers.

‘It’s not surprising a significant percentage of Americans are not going to take the vaccine because of the terrible messaging we’ve had, the absence of a communication plan around the vaccine and this very aggressive anti-vaccine movement,’ said Peter Hotez, dean of the National School of Tropical Medicine at Baylor College of Medicine, where he is developing a vaccine.

....

The Reuters/Ipsos poll was conducted online, in English, throughout the United States and had a credibility interval, a measure of precision, of plus or minus 2 percentage points.”¹⁷⁷

VCU.edu, December 14, 2020. Study¹⁷⁸ finds more than half of respondents are unlikely to get COVID-19 vaccine under emergency use authorization:

“A new study led by a Virginia Commonwealth University professor is among the first to examine the psychological and social predictors of U.S. adults’ willingness to get a future COVID-19 vaccine and whether these predictors differ under an emergency use authorization release of the vaccine.

The study, “Willingness to Get the COVID-19 Vaccine with and without Emergency Use Authorization,” will be published in the *American Journal of Infection Control*. It involved a survey of 788 U.S. adults, and found that 59.9% of respondents were definitely or probably planning to receive a future coronavirus vaccine, while 18.8% were neutral and 21.3% were probably or definitely not planning to get it.

When asked if they would get the vaccine under an emergency use authorization, 46.9% of respondents said they were definitely, likely, or

¹⁷⁶ <https://www.reuters.com/article/us-health-coronavirus-vaccine-poll-exclu/exclusive-a-quarter-of-americans-are-hesitant-about-a-coronavirus-vaccine-reuters-ipsos-poll-idUSKBN22X19G>

¹⁷⁷ *Id.*

¹⁷⁸ https://news.vcu.edu/article/Study_finds_more_than_half_of_respondents_are_unlikely_to_get

somewhat willing to do so; while 53.1% said they were definitely, likely, or somewhat unwilling to do so.

“The biggest issue coming out of this study is that participants seemed worried about receiving the COVID-19 vaccine under emergency use authorization,” said lead author Jeanine Guidry, Ph.D., an assistant professor in the Richard T. Robertson School of Media and Culture in the College of Humanities and Sciences and director of the Media+Health Lab at VCU.

The study found that concerns about side effects were a significant barrier, Guidry noted.

“[Such concerns are] not unusual,” she said, “but we now also know that two of the vaccines — Pfizer and Moderna — may have some expected side effects ... [and that] may make people hesitate to get the vaccine.”

The study also found troubling disparities among demographic groups. For example, younger respondents were more likely than older respondents to express a willingness to get the vaccine. And it found that white respondents were more likely than Black respondents to be willing to get the vaccine, either under emergency use authorization or regular Food and Drug Administration approval.

“That is something researchers have found in other previous vaccine studies as well, but it is more worrying with COVID-19 because we know that Black Americans are infected with COVID-19 significantly more frequently than white Americans, and they are also more likely to die from the virus,” Guidry said.

“Unfortunately, there is history of medical mistreatment of African Americans and individuals from low-income communities in the U.S.,” said co-author Bernard Fuemmeler, Ph.D., a professor in the Department of Health Behavior and Policy in the VCU School of Medicine.

“Against this backdrop it is understandable that mistrust among certain communities will be an issue to contend with as we hope to make progress in delivering the vaccine to those most in need,” Fuemmeler said. “It starts with recognizing this history and providing people with the information they desire to alleviate their justifiable wariness about the vaccine.”

The researchers found that significant predictors of a willingness to get the coronavirus vaccine included education level and having health insurance, as well as a high-perceived susceptibility to COVID-19. Predictors of a willingness to get the vaccine under an emergency use authorization included age and race/ethnicity.” (Emphasis added).

NPR.org, December 15, 2020. Poll:¹⁷⁹ Americans Are Growing Less Reluctant To Take COVID-19 Vaccine:

“Now that federal regulators have authorized one COVID-19 vaccine for emergency use in the U.S. — and appear close to authorizing another — it seems Americans are growing less reluctant about receiving an inoculation themselves. The Kaiser Family Foundation, or KFF, released a poll Tuesday showing a significant leap in the number of people saying they definitely or probably would get vaccinated.

About 71% of respondents to the late November and early December survey said they would get a vaccine, up from 63% in an August/September poll. KFF says the increase was evident across all racial and ethnic groups surveyed, as well as both Democrats and Republicans.

Of course, since the previous poll, there have been important advances in the development of a vaccine for COVID-19, which has cost more than 300,000 lives in the U.S.”

While fully vaccinated rates are improving, they have not reached a range that could be considered able to achieve population or herd immunity. Here are fully vaccinated rates for some surrounding states as of June 15, 2021¹⁸⁰:

8. Maryland	51.95%
14. District of Columbia	49.09%
16. Virginia	48.36%
30. Kentucky	40.82%
37. North Carolina	37.85%
41. West Virginia	35.68%
46. Tennessee	33.58%

NOTE: As of June 22, 2021, 70.0% of Virginia's adult population has been fully vaccinated (approximately 15.9% of Virginia's population is 65 years and over.¹⁸¹

Unvaccinated and Not Fully Vaccinated People

APNews.com, June 24, 2021, "Nearly all COVID deaths in US are now among unvaccinated."¹⁸²

" Nearly all COVID-19 deaths in the U.S. now are in people who weren't vaccinated, a staggering demonstration of how effective the shots have been and an indication that deaths per day — now down to under 300 — could be

¹⁷⁹ <https://www.npr.org/sections/coronavirus-live-updates/2020/12/15/946761737/poll-americans-are-growing-less-reluctant-to-take-covid-19-vaccine>

¹⁸⁰ <https://www.beckershospitalreview.com/public-health/states-ranked-by-percentage-of-population-vaccinated-march-15.html>

¹⁸¹ <https://www.vdh.virginia.gov/coronavirus/covid-19-vaccine-summary/>

¹⁸² <https://apnews.com/article/coronavirus-pandemic-health-941fcf43d9731c76c16e7354f5d5e187>

practically zero if everyone eligible got the vaccine.

An Associated Press analysis of available government data from May shows that “breakthrough” infections in fully vaccinated people accounted for fewer than 1,200 of more than 853,000 COVID-19 hospitalizations. That’s about 0.1%.

And only about 150 of the more than 18,000 COVID-19 deaths in May were in fully vaccinated people. That translates to about 0.8%, or five deaths per day on average.

The AP analyzed figures provided by the Centers for Disease Control and Prevention. The CDC itself has not estimated what percentage of hospitalizations and deaths are in fully vaccinated people, citing limitations in the data.

Among them: Only about 45 states report breakthrough infections, and some are more aggressive than others in looking for such cases. So the data probably understates such infections, CDC officials said.

Still, the overall trend that emerges from the data echoes what many health care authorities are seeing around the country and what top experts are saying.

Earlier this month, Andy Slavitt, a former adviser to the Biden administration on COVID-19, suggested that 98% to 99% of the Americans dying of the coronavirus are unvaccinated.

And CDC Director Dr. Rochelle Walensky said on Tuesday that the vaccine is so effective that “nearly every death, especially among adults, due to COVID-19, is, at this point, entirely preventable.” She called such deaths 'particularly tragic.'"

CNN.com, June 22, 2021, "A coronavirus outbreak hit a Florida government building. Two people are dead but a vaccinated employee wasn't infected."¹⁸³

"Two people are dead and four of their coworkers were hospitalized after a Covid-19 outbreak swept through a government building in Manatee County, Florida.

The outbreak began in the IT department, according to Manatee County Administrator Scott Hopes, who is also an epidemiologist. Another person who worked on the same floor but in a different department also tested positive for coronavirus last week.

Of the six people infected, five were hospitalized. One employee who was in the hospital died and another employee who was not hospitalized also died, Hopes told CNN's Erin Burnett.

¹⁸³ <https://www.cnn.com/2021/06/22/us/florida-manatee-county-coronavirus-outbreak/index.html>

The only exposed employee in the IT office who was vaccinated did not get infected, Hopes said. "The clinical presentation gives me concern that we're dealing with a very infectious variant that is quite deadly," Hopes told Burnett.

The government building was closed on Friday as a precaution. It reopened Monday but officials didn't implement a mask requirement, instead keeping them optional."

USAToday.com, June 16, 2021, "People hospitalized with COVID-19 now have one overwhelming thing in common. They're not vaccinated."¹⁸⁴

"In Minnesota, the HealthPartners system has seen a "precipitous decline" in COVID-19 hospitalizations, says Dr. Mark Sannes, an infectious disease physician and senior medical director for the system, which operates nine hospitals and more than 55 clinics. But now, nearly every admitted patient he does see is unvaccinated.

"Less than 1% of our hospitalized COVID patients are vaccinated,"he said.

In Ohio, at University Hospitals Cleveland Medical Center, only 2% of the COVID-19 patients admitted in the last month were vaccinated, said Dr. Robert Salata, the hospital's physician-in-chief.

And at Sanford Health, which runs 44 medical centers and more than 200 clinics across the Dakotas, Minnesota and Iowa, less than 5% of the 1,456 patients admitted with COVID-19 so far this year were fully vaccinated, said spokesperson Angela Dejene.

Falling rates of COVID-19 across the United States mask a harsh reality – the overwhelming majority of those getting sick and being hospitalized today are unvaccinated, while vaccinated patients are becoming rare.

Hospitals in states with the lowest vaccination rates tend to have more COVID-19 patients in intensive care units, according to hospital data collected in the past week by the Department of Health and Human Services and vaccination rates published by the Centers for Disease Control and Prevention."

USAToday.com, June 3, 2021, " First in line, still no shot: Surprising number of hospital workers refuse vaccines"¹⁸⁵

" USA TODAY surveyed some of the largest hospital networks and public hospitals in the country. At the nine networks that responded, fully vaccinated rates ranged from 53% to 72%. Rates among 15 of the nation's largest public hospitals ranged from 51% to 91%.

¹⁸⁴ <https://www.usatoday.com/story/news/health/2021/06/16/majority-covid-19-hospital-patients-us-now-unvaccinated-younger/7684857002/>

¹⁸⁵ <https://www.usatoday.com/in-depth/news/investigations/2021/06/03/covid-19-vaccines-refused-surprising-number-hospital-workers/7432058002/>

The survey encompassed 276 hospitals, or about 4.5% of the nation's hospitals. Most fell below President Joe Biden's goal of 70% by July 4. Staff included ranged from workers with medical training, such as doctors and nurses, to those in support roles, such as cafeteria workers.

The fact that so many hospital workers remain unvaccinated is troubling news for public health officials who are counting on the vaccines to stop the spread of the virus. Experts worry that the rest of the population will follow suit.

"I think it'll be a bit of a struggle to get to that 70-to-75% vaccination rate," said Stacey Gabriel, the chief executive officer of the 80-bed Hocking Valley Community Hospital in Logan, Ohio, where only 50% of her workers are vaccinated."

Virginia Vaccination Data

As of June 22, 2021, 49.5% of the population in Virginia is fully vaccinated.¹⁸⁶

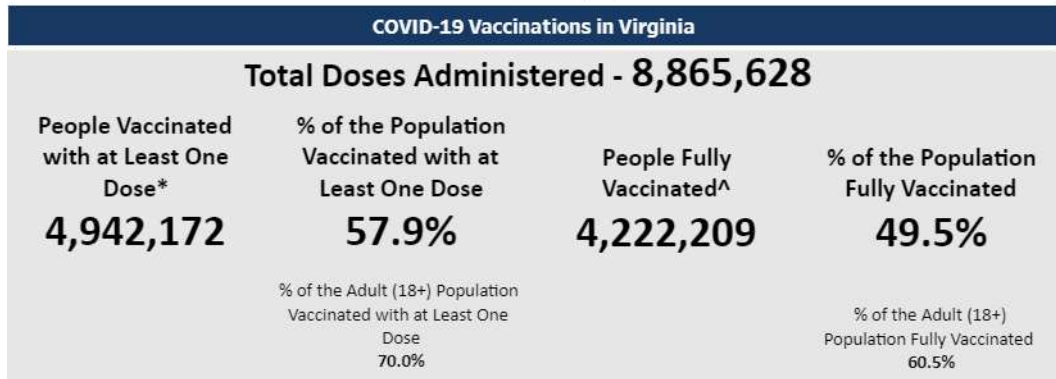
70.0% of the adult population has been fully vaccinated (approximately 15.9% of Virginia's population is 65 years and over¹⁸⁷).

57.9% of the population in Virginia is vaccinated with at least one dose.

¹⁸⁶ <https://www.vdh.virginia.gov/coronavirus/covid-19-vaccine-summary/>

¹⁸⁷ <https://www.vdh.virginia.gov/coronavirus/covid-19-vaccine-summary/>

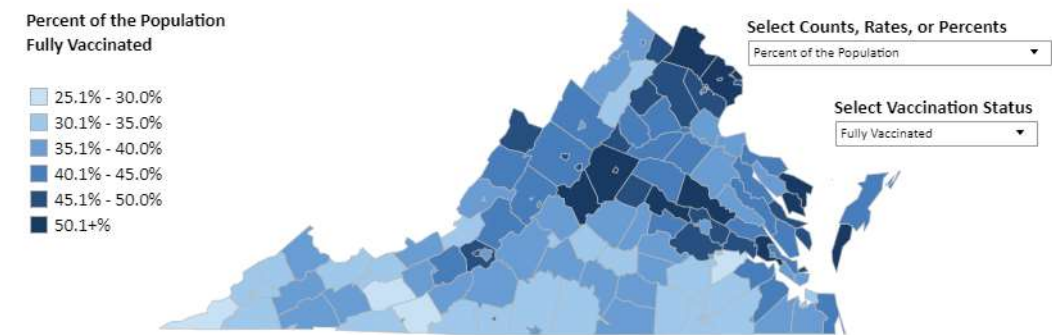
<https://www.census.gov/quickfacts/VA>



* People vaccinated with one dose of a two-dose vaccine and one dose of a single dose vaccine, including doses administered through the Federal CDC Pharmacy Partnership. Doses on the Federal Doses Administered dashboard are included.

^ People vaccinated with two doses of a two-dose vaccine and one dose of a single dose vaccine, including doses administered through the Federal CDC Pharmacy Partnership. Doses on the Federal Doses Administered dashboard are included.

People Vaccinated by Locality of Residence and Vaccination Status - Percent of the Population



Community and Workplace Transmission

Although U. S. and Virginia vaccination rates and case rates are very promising and heading in the right directions, most scientific sources indicate that COVID-19 exposures in the workplace will not be going away anytime soon:

An uneven vaccine rollout could eventually make coronavirus outbreaks look a bit like measles outbreaks,...A single person carrying the measles virus can infect 12 or more people, but the spread of the virus is mostly contained through high vaccination rates. There are, however, still outbreaks in communities where immunization rates are low....Occasionally, those outbreaks spill out into the wider community....it’s unlikely we’ll ever eradicate the coronavirus — not any time soon, anyway. There’s only one virus scientists have wiped out with a vaccine: smallpox. The World Health Organization began that effort in 1959, declaring the disease eradicated by 1980.¹⁸⁸

CDC modeling of “Projected Incident Cases by Epidemiological Week and by Scenario for Round 5” shows a wide variance of future incident cases depending on the prevalence of vaccinations and the use of NPI (NonPharmaceutical Interventions such as face coverings and physical distancing)).¹⁸⁹

¹⁸⁸ <https://www.sandiegouniontribune.com/news/health/story/2021-05-22/the-pandemic-will-end-but-the-coronavirus-is-probably-here-to-stay-heres-why>

¹⁸⁹ <https://covid19scenariomodelinghub.org/viz.html>

While down substantially, the U.S. 7-day average of COVID-19 related deaths is 325 per day; while the 7-day average for COVID-19 hospitalizations is 2,574. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

Though employee deaths, hospitalizations and outbreaks in Virginia are also down substantially, they continue to occur:

SUMMARY VOSH COVID-19 RESPONSE									
Dates	4/23/21	4/30/21	5/7/21	5/14/21	5/21/21	5/28/21	6/4/21	6/11/21	Total
Phone Calls									
Total Phone Calls	94	69	64	110	113	92	78	70	12948
UPAs Complaints OIS Statewide	19	8	12	7	4	1	4	1	1943 *
# Inspections	6	1	3	3	0	2	0	0	208 **
<i>Complaints, Referrals, Hospitalizations & Fatalities</i>									
<i>Inspections w/ Violations</i>	57	57	57	58	61	63	66	70	70
<i>Inspections Closed</i>	99	104	105	109	117	118	119	125	125
<i># of Violations Issued - Final Order Cases (Willful, Serious, OTS)</i>	148	198	198	202	207	211	221	232	232
<i>#EEs Exposed</i>	7065	12316	12316	12364	12519	12584	12690	12806	12806
# Hospitalizations	1	2	0	0	0	0	0	0	78 ***
Fatalities/Workplace deaths	0	1	2	0	0	1	0	0	44
# of Emails forwarded to Regional/Field Offices from MF COVID-19 positive Cases Reports (ETS) Complaints <i>(does not include reports submitted by phone in the Regional Offices).</i>	3	3	2	2	0	2	0	0	669
# REDCAP Notifications (Launched 09/28/20)	283	267	201	126	88	93	45	48	25832
# REDCAP Notifications (3 or more cases reported)	80	50	30	33	14	14	9	5	6714
* Time Range: 01/01/2020 to 06/11/2021 UPA numbers may change as Regions update the system.									
** <i>Inspections opened (Total: 208 - Draft + Final)</i>									
<i>% of COVID-19 Inspections closed - 60% (125)</i>									
<i>% of COVID-19 Inspections with violations - 34% (70)</i>									
*** <i>There are Employers submitting multiple notifications. Some of the hospitalizations reported to VOSH later resulted in fatalities.</i>									

Fatalities - Calendar Year	2020	2021	% [2021]
Total	57	24	33
COVID-19	31	13	54%
Fall	8	6	25%
Struck-By	12	4	17%
Caught-in	5	1	4%
Electrocution	1		0%

NOTE: The “REDCAP Notifications” row has statistics for employer reported outbreaks to VDH of 1 or more positive COVID-19 employee cases within a 14 day period of employees who were at the facility within the previous 14 days.

The “REDCAP Notifications (3 or more cases reported) row has statistics for employer reported outbreaks to DOLI of 3 or more positive COVID-19 employee cases within a 14 day period of employees who were at the facility within the previous 14 days. (During the week of 6/4/2021, the 5 reports of 3 or more cases to DOLI are included in the total of 48 REDCAP notifications overall).

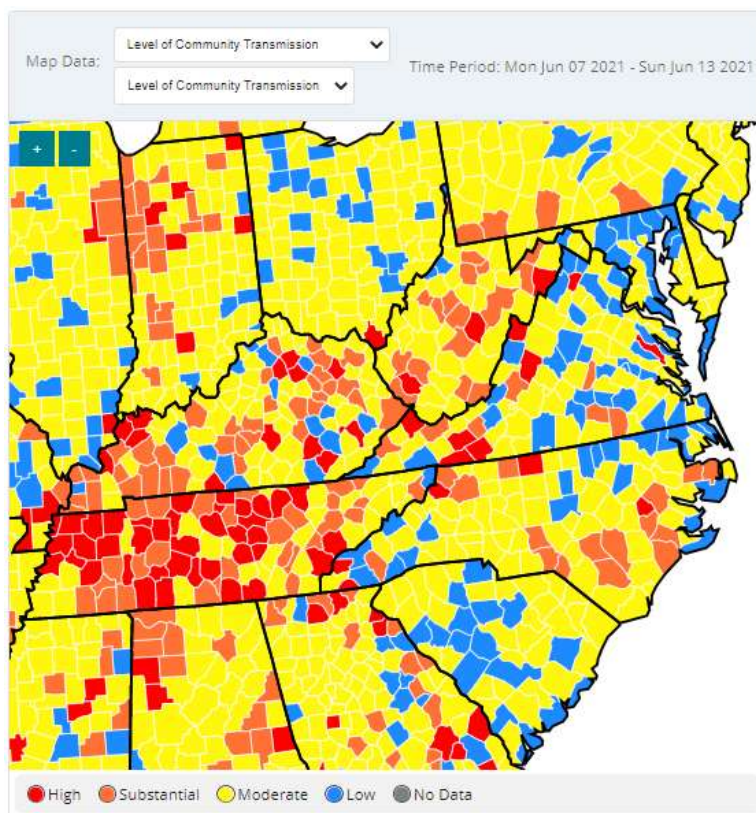
One state agency recently reported an outbreak of 21 COVID-19 cases at a call center

which resulted in four hospitalizations and one employee in critical condition. Initial indications are that the outbreak may have resulted from a reluctance of employees to be vaccinated.

In addition, some states have trouble spots as well – and as noted below, there remain some in Virginia.¹⁹⁰ Virginia community transmission rates can be found on a county-by-county basis at: <https://covid.cdc.gov/covid-data-tracker/#county-view>

You can see the following from the screenshot below (June 13, 2021):

- about 25-30% of Virginia counties have a low community transmission rate
- about 8% of Virginia counties have a high transmission rate,
- about 7% of Virginia counties having a substantial transmission rate
- the remaining 55-60% of Virginia counties have a moderate transmission rate



Current 7-days is Mon Jun 07 2021 - Sun Jun 13 2021 for case rate and Sun Jun 06 2021 - Sat Jun 12 2021 for percent positivity. The percent change in counties at each level of transmission is the absolute change compared to the previous 7-day period.

The jury is still out as to whether the United States will reach herd immunity levels (generally considered to be in the 70-85% range). Even if the country does reach herd/population immunity, it is possible to lose the immunity in the future, or go in and out of herd/population immunity depending on the season. Herd/population immunity is not immediately possible because “No one younger than 12 can get a Covid-19 vaccine in the US right now. The Pfizer/BioNTech vaccine is authorized for those age 12 and older, and the Moderna and

¹⁹⁰ <https://covid.cdc.gov/covid-data-tracker/#county-view>

Johnson & Johnson vaccines are authorized for adults 18 and older.”¹⁹¹

In addition, surveys continue to indicate that a certain percentage of the population will refuse to get vaccinated (“about 20% of people surveyed said they definitely would not get vaccinated or would only get vaccinated if their job or school required it, according to the Kaiser Family Foundation COVID-19 Vaccine Monitor.”).¹⁹²

Also, it is not currently known how long immunity from a natural infection lasts in a person, or how long it will last for fully vaccinated or partially vaccinated people. The virus has shown a propensity for mutations, some of which appear to be more infectious and therefore more easily spread. Increased travel in state, around the country and from other countries could make the U.S. fall out of herd/population immunity even after it is reached.

E. Virginia VWCC and VOSH Statistics.

1. Virginia Workers Compensation Statistics as of May 31, 2020.¹⁹³

Since February, 2020, the Virginia Workers’ Compensation Commission received 3,154 COVID-19 related claims as of May 31, 2020 in a wide variety of occupational settings, representing a nearly 44.5% increase in claims over a 20 day period since May 11, 2020 (2,182 claims).

NOTE 1: Individual private self-insurers are not included in these statistics.

NOTE 2: Most but not all claims are assigned a NAICS code (North American Industrial Classification Code). As of May 31, 2020, 18.4 % (581 claims) of claims were not assigned a NAICS code. A cursory review of the non-NAICS claims revealed that a significant number were in healthcare or long term care environments.

NOTE 3: Workers classified as independent contractors are not included in these statistics. There is a practice known as “misclassification”¹⁹⁴ of employees as independent contractors

¹⁹¹ <https://www.cnn.com/2021/03/30/health/herd-immunity-covid-shifts/index.html>

¹⁹² <https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-march-2021/>

¹⁹³ Virginia Department of Human Resources Workers’ Compensation Statistics as of May 31, 2020.

As of May 31, 2020, the Virginia Department of Human Resource Management (DHRM) Workers’ Compensation Division has received 42 claims involving COVID-19 exposure. Agencies involved included: Library of Virginia, State Corporation Commission, Virginia Alcoholic Beverage Control Authority, Virginia Commonwealth University, Virginia Department of Agriculture and Consumer Services, Virginia Department of Behavioral Health and Developmental Services, Virginia Department of Corrections, Virginia Department of Forestry, Virginia Department of Game and Inland Fisheries, Virginia Department of Health, Virginia Department of Juvenile Justice, Virginia Department of Military Affairs, Virginia Department of Motor Vehicles, and Virginia State Police.

¹⁹⁴ <https://www.doli.virginia.gov/vosh-programs/misclassification-in-the-workplace/>

that has been found to be prevalent in certain industries¹⁹⁵ in Virginia that impacts the ability to obtain accurate workers' compensation data.

The following industries had 10 or more claims filed as of May 31, 2020:

<u>NAICS</u> ¹⁹⁶	<u>Industry</u>
No NAICS	Restaurant: Fast Food (70)
322299	All Other Converted Paper Product Manufacturing (25)
445110	Supermarkets and Other Grocery (except Convenience) Stores (14)
452990	All Other General Merchandise Stores (11)
488119	Other Airport Operations (13)
531	Real Estate (33)
54151	Computer Programming (541511) and Design (541512) (13)
561320	Temporary Help Services (12)
561720	Janitorial Services (25)
621111	Offices of Physicians (except Mental Health Specialists) (97)
621498	All Other Outpatient Care Centers (33)
621511	Medical Laboratories (17)
621512	Diagnostic Imaging Centers (16)
621610	Home Health Care Services (12)
621999	All Other Miscellaneous Ambulatory Health Care Services (29)
622110	General Medical and Surgical Hospitals (457)
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals (40)
623311	Continuing Care Retirement Communities (79) (See NOTE 2 above)
721110	Hotels (except Casino Hotels) and Motels (18)
722310	Food Service Contractors (13)
921190	Other General Government Support (317)
922120	Police Protection (106)
922160	Fire Protection (125)
922190	Other Justice, Public Order, and Safety Activities (941)

2. Virginia Workers Compensation Statistics as of November 30, 2020.

Since February, 2020, the Virginia Workers' Compensation Commission received 9,773 COVID-19 related claims as of November 30, 2020.

3. Virginia Workers Compensation Statistics as of June 15, 2021.

Since February, 2020, the Virginia Workers' Compensation Commission received 15,770 COVID-19 related claims as of June 15, 2021.

¹⁹⁵

[http://www.dpor.virginia.gov/uploadedFiles/MainSite/Content/Licensees/JLARC_Employee%20Misclassification%20Report%20\(2012\).pdf](http://www.dpor.virginia.gov/uploadedFiles/MainSite/Content/Licensees/JLARC_Employee%20Misclassification%20Report%20(2012).pdf)

¹⁹⁶ North American Industrial Classification System, <https://www.census.gov/eos/www/naics/>

VWCC Reports Thirty-three (33) Employee Deaths as of June 15, 2021

NOTE: The June 15, 2021 report from the VWCC contains data on 23 employee deaths not currently included in VOSH COVID-19 Employee Death Statistics. VOSH is actively investigating this data issue to determine if these employee deaths fall within VOSH jurisdiction. If so, VOSH will open inspections for each case. If confirmed, 23 additional deaths would result in a 52% increase in employee deaths attributed to COVID-19 since February 1, 2020.

Date of Injury	Date Death	Year Of Birth	Industry Code	Industry Code Description
4/26/2021	5/15/2021 12:00:00 AM	1986	561320	Temporary Help Services
3/4/2021	3/31/2021 12:00:00 AM	1959	926120	Regulation and Administration of Transportation Programs
12/31/2020	2/17/2021 12:00:00 AM	1974	551112	Offices of Other Holding Companies
1/19/2021	2/2/2021 12:00:00 AM	1966		
12/21/2020	1/15/2021 12:00:00 AM	1961	562111	Solid Waste Collection
1/15/2021	1/15/2021 12:00:00 AM	1961	562111	Solid Waste Collection
12/15/2020	1/10/2021 12:00:00 AM	1948	541611	Administrative Management and General Management Consulting Services
12/17/2020	1/9/2021 12:00:00 AM	1967	926120	Regulation and Administration of Transportation Programs
1/7/2021	1/8/2021 12:00:00 AM	1954		
12/1/2020	1/1/2021 12:00:00 AM	1960	524126	Direct Property and Casualty Insurance Carriers
11/29/2020	11/29/2020 12:00:00 AM	1960	922190	Other Justice, Public Order, and Safety Activities
9/25/2020	11/3/2020 12:00:00 AM	1951	311613	Rendering and Meat Byproduct Processing
10/5/2020	10/22/2020 12:00:00 AM	1970	339999	All Other Miscellaneous Manufacturing
9/24/2020	10/4/2020 12:00:00 AM	1950	722310	Food Service Contractors
9/10/2020	9/11/2020 12:00:00 AM	1957	325212	Synthetic Rubber Manufacturing
8/31/2020	9/9/2020 12:00:00 AM	1953	921190	Other General Government Support
7/16/2020	8/16/2020 12:00:00 AM	1945	922190	Other Justice, Public Order, and Safety Activities
8/7/2020	8/13/2020 12:00:00 AM	1945	325613	Surface Active Agent Manufacturing
7/2/2020	7/27/2020 12:00:00 AM	1961		
5/12/2020	7/19/2020 12:00:00 AM	1959	621111	Offices of Physicians (except Mental Health Specialists)
5/28/2020	7/14/2020 12:00:00 AM	1969	622210	Psychiatric and Substance Abuse Hospitals
6/2/2020	6/8/2020 12:00:00 AM	1963	722310	Food Service Contractors

4/1/2020	5/24/2020 12:00:00 AM	1961	445110	Supermarkets and Other Grocery (except Convenience) Stores
5/22/2020	5/22/2020 12:00:00 AM	1975	561110	Office Administrative Services
5/3/2020	5/19/2020 12:00:00 AM	1958	621610	Home Health Care Services
3/31/2020	5/11/2020 12:00:00 AM	1966	453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)
4/24/2020	5/5/2020 12:00:00 AM	1963		
4/13/2020	4/20/2020 12:00:00 AM	1979	237990	Other Heavy and Civil Engineering Construction
4/19/2020	4/19/2020 12:00:00 AM		484121	General Freight Trucking, Long-Distance, Truckload
4/8/2020	4/12/2020 12:00:00 AM	1946	623311	Continuing Care Retirement Communities
3/20/2020	4/9/2020 12:00:00 AM	1969	721110	Hotels (except Casino Hotels) and Motels
3/28/2020	4/7/2020 12:00:00 AM	1951		
3/23/2020	4/3/2020 12:00:00 AM	1963	721110	Hotels (except Casino Hotels) and Motels

3. Deaths, Hospitalizations, and Employee Complaints reported to the Virginia Department of Labor and Industry.

Pursuant to Va. Code §40.1-51.1.D,¹⁹⁷ employers must report employee deaths and hospitalizations to DOLI.

NOTE: The VOSH Program has investigated an average of 37 annual work-related¹⁹⁸ employee deaths over the last five calendar years. The 31 COVID-19 death notifications in 2020 would represent 84% of the deaths investigated by VOSH in an average year.

The 13 COVID-19 death notifications in 2021 would represent 35% of the deaths investigated by VOSH in an average year.

Fatalities through June 11, 2021:

¹⁹⁷ <https://law.lis.virginia.gov/vacode/40.1-51.1/>

¹⁹⁸ NOTE: The VOSH Program will ultimately make a determination as to whether an employee's death due to COVID-19 was work-related or not. An infectious disease such as COVID-19 presents additional difficulties to investigators when it comes to determining work-relatedness.

Fatalities - Calendar Year	2020	2021	% [2021]
Total	57	24	33
COVID-19	31	13	54%
Fall	8	6	25%
Struck-By	12	4	17%
Caught-in	5	1	4%
Electrocution	1		0%

NOTE: The June 15, 2021 report from the VWCC contains data on 23 employee deaths not currently included in VOSH COVID-19 Employee Death Statistics. VOSH is actively investigating this data issue to determine if these employee deaths fall within VOSH jurisdiction. If so, VOSH will open inspections for each case. If confirmed, 23 additional deaths would result in a 52% increase in employee deaths attributed to COVID-19 since February 1, 2020.

SUMMARY VOSH COVID-19 RESPONSE										
	Dates	4/23/21	4/30/21	5/7/21	5/14/21	5/21/21	5/28/21	6/4/21	6/11/21	Total
Phone Calls										
Total Phone Calls		94	69	64	110	113	92	78	70	12948
UPAs Complaints OIS Statewide		19	8	12	7	4	1	4	1	1943 *
# Inspections		6	1	3	3	0	2	0	0	208 **
<i>Complaints, Referrals, Hospitalizations & Fatalities</i>										
<i>Inspections w/ Violations</i>		57	57	57	58	61	63	66	70	70
<i>Inspections Closed</i>		99	104	105	109	117	118	119	125	125
<i># of Violations Issued - Final Order Cases (Willful, Serious, OTS)</i>		148	198	198	202	207	211	221	232	232
<i>#EEs Exposed</i>		7065	12316	12316	12364	12519	12584	12690	12806	12806
# Hospitalizations		1	2	0	0	0	0	0	0	78 ***
Fatalities/Workplace deaths		0	1	2	0	0	1	0	0	44
# of Emails forwarded to Regional/Field Offices from MF COVID-19 positive Cases Reports (ETS) Complaints		3	3	2	2	0	2	0	0	669
<i>(does not include reports submitted by phone in the Regional Offices).</i>										
# REDCAP Notifications (Launched 09/28/20)		283	267	201	126	88	93	45	48	25832
# REDCAP Notifications (3 or more cases reported)		80	50	30	33	14	14	9	5	6714
<i>* Time Range: 01/01/2020 to 06/11/2021 UPA numbers may change as Regions update the system.</i>										
<i>**Inspections opened (Total: 208 - Draft + Final)</i>										
<i>% of COVID-19 Inspections closed - 60% (125)</i>										
<i>% of COVID-19 Inspections with violations - 34% (70)</i>										
<i>***There are Employers submitting multiple notifications. Some of the hospitalizations reported to VOSH later resulted in fatalities.</i>										

NOTE: “UPA” means unprogrammed activity (complaints, referrals, fatalities, hospitalizations).
“MF” means Occupational Safety Compliance Director Marta Fernandes

4. VOSH Inspection and Citation History.

NOTE: See ATTACHMENT F for VOSH Investigation and Inspection Procedures.

See ATTACHMENT H for a list of VOSH Violations Issued in COVID-19 Cases Opened from February 1, 2020 to June 16, 2021.

Inspections for All COVID-19 Inspections through June 16, 2021:

Inspections in Progress	39
Inspections Closed with No Violations	79
Inspections with Violations	68
Total Inspections	186

Violation Types

Serious	147	(64.2%)
Other-than-serious	79	(34.5%)
Willful	3	(1.3%)
Repeat	0	(0%)

Total Violations 229

Total Penalties Issued: \$551,140.00

g. Inspection Statistics by NAICS.¹⁹⁹

Virginia Department of Labor and Industry (DOLI)

Virginia Occupational Safety and Health (VOSH)

COVID-19 Inspections Conducted From January 1, 2020 to June 16, 2021

Site NAICS	NAICS Description	Insp With Viols Issued	No Citations Issued	Insp in Progress	Insp Closed	Employee Death	Ownership Type	Entry Date
	NAICS Sector 11: Agriculture, Forestry, Fishing and Hunting							
115114	Postharvest Crop Activities (except Cotton Ginning)	1				1	Private Sector	09/01/2020
111998	All Other Miscellaneous Crop Farming	1			1		Private Sector	09/18/2020

¹⁹⁹ North America Industrial Classification System.

114111	Finfish Fishing		1		1		Private Sector	10/30/2020
111421	Nursery and Tree Production	1			1		Private Sector	09/18/2020
115114	Postharvest Crop Activities (except Cotton Ginning)			1			Private Sector	04/08/2021
112512	Shellfish Farming			1		1	Private Sector	04/22/2021
	NAICS Sector 21-23: Mining, Quarrying, and Oil and Gas Extraction; Utilities; Construction							
221310	Water Supply and Irrigation Systems		1		1	1	Private Sector	06/02/2020
236118	Residential Remodelers		1		1		Private Sector	11/12/2020
238990	All Other Specialty Trade Contractors			1			Private Sector	02/24/2021
238310	Drywall and Insulation Contractors			1			Private Sector	03/09/2021
238320	Painting and Wall Covering Contractors		1		1		Private Sector	05/12/2021
	NAICS Sector 31-33: Manufacturing							
311615	Poultry Processing		1		1	1	Private Sector	04/28/2020
311612	Meat Processed from Carcasses		1		1		Private Sector	05/20/2020
311812	Commercial Bakeries		1		1		Private Sector	06/24/2020
327390	Other Concrete Product Manufacturing		1		1	1	Private Sector	07/15/2020
314110	Carpet and Rug Mills		1		1		Private Sector	08/07/2020
311821	Cookie and Cracker Manufacturing		1		1		Private Sector	09/01/2020
311612	Meat Processed from Carcasses	1			1		Private Sector	09/22/2020
333991	Power-Driven Handtool Manufacturing	1			1		Private Sector	09/30/2020
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing	1			1		Private Sector	10/07/2020
336211	Motor Vehicle Body Manufacturing	1			1		Private Sector	10/20/2020
321212	Softwood Veneer and Plywood Manufacturing		1		1	1	Private Sector	10/23/2020
326291	Rubber Product Manufacturing for Mechanical Use	1			1		Private Sector	10/29/2020
311613	Rendering and Meat Byproduct Processing	1			1		Private Sector	10/30/2020
321999	All Other Miscellaneous Wood Product Manufacturing	1			1		Private Sector	11/24/2020
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing	1			1		Private Sector	12/15/2020
337110	Wood Kitchen Cabinet and Countertop Manufacturing	1					Private Sector	12/22/2020

327991	Cut Stone and Stone Product Manufacturing	1					Private Sector	01/12/2021
337110	Wood Kitchen Cabinet and Countertop Manufacturing		1		1		Private Sector	01/13/2021
326191	Plastics Plumbing Fixture Manufacturing		1		1		Private Sector	02/08/2021
326211	Tire Manufacturing (except Retreading)			1		1	Private Sector	02/08/2021
326199	All Other Plastics Product Manufacturing			1			Private Sector	03/17/2021
324121	Asphalt Paving Mixture and Block Manufacturing		1		1		Private Sector	04/05/2021
	NAICS Sector 42: Wholesale Trade							
424410	General Line Grocery Merchant Wholesalers	1			1		Private Sector	07/31/2020
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	1				1	Private Sector	09/04/2020
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers		1		1		Private Sector	11/16/2020
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers		1		1		Private Sector	01/19/2021
423210	Furniture Merchant Wholesalers		1		1		Private Sector	02/12/2021
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	1					Private Sector	03/18/2021
	NAICS Sector 44-45: Retail Trade							
441120	Used Car Dealers		1		1	1	Private Sector	06/18/2020
442110	Furniture Stores	1			1	1	Private Sector	08/11/2020
441222	Boat Dealers	1					Private Sector	08/28/2020
444110	Home Centers		1		1		Private Sector	10/19/2020
453910	Pet and Pet Supplies Stores	1			1		Private Sector	11/02/2020
441310	Automotive Parts and Accessories Stores	1			1		Private Sector	11/18/2020
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers		1		1		Private Sector	11/23/2020
444110	Home Centers		1		1		Private Sector	12/15/2020
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	1					Private Sector	12/14/2020
444130	Hardware Stores		1		1		Private Sector	12/23/2020
451120	Hobby, Toy, and Game Stores		1		1		Private Sector	01/05/2021
441310	Automotive Parts and Accessories Stores		1		1		Private Sector	11/06/2020
451110	Sporting Goods Stores		1		1		Private Sector	01/08/2021
445110	Supermarkets and Other Grocery (except Convenience) Stores	1					Private Sector	01/13/2021

441310	Automotive Parts and Accessories Stores		1		1		Private Sector	01/21/2021
452110	Department Stores		1		1		Private Sector	01/21/2021
442110	Furniture Stores		1		1		Private Sector	04/20/2021
445210	Meat Markets			1			Private Sector	04/20/2021
445210	Meat Markets			1			Private Sector	04/20/2021
441110	New Car Dealers			1			Private Sector	01/26/2021
444130	Hardware Stores		1		1		Private Sector	01/29/2021
453910	Pet and Pet Supplies Stores	1			1		Private Sector	02/01/2021
444110	Home Centers		1		1		Private Sector	02/03/2021
441110	New Car Dealers		1		1		Private Sector	02/05/2021
453310	Used Merchandise Stores			1			Private Sector	02/25/2021
441120	Used Car Dealers	1					Private Sector	03/02/2021
441110	New Car Dealers			1			Private Sector	03/08/2021
445110	Supermarkets and Other Grocery (except Convenience) Stores			1			Private Sector	03/08/2021
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)		1		1		Private Sector	03/10/2021
441310	Automotive Parts and Accessories Stores		1		1		Private Sector	04/15/2021
446191	Food (Health) Supplement Stores			1			Private Sector	04/29/2021
	NAICS Sector 48-49: Transportation and Warehousing							
488119	Other Airport Operations		1		1	1	Private Sector	04/29/2020
485113	Bus and Other Motor Vehicle Transit Systems		1		1		Private Sector	06/08/2020
485310	Taxi Service	1			1		Private Sector	06/29/2020
492110	Couriers and Express Delivery Services		1		1		Private Sector	10/30/2020
492110	Couriers and Express Delivery Services	1					Private Sector	10/30/2020
493110	General Warehousing and Storage		1		1		Private Sector	12/09/2020
485999	All Other Transit and Ground Passenger Transportation	1			1		Private Sector	01/08/2021
485113	Bus and Other Motor Vehicle Transit Systems			1			Private Sector	01/12/2021
485113	Bus and Other Motor Vehicle Transit Systems			1			Private Sector	04/12/2021
	NAICS Sector 51: Information							

519120	Libraries and Archives		1		1		Local Government	09/14/2020
	NAICS Sector 52: Finance and Insurance							
522310	Mortgage and Nonmortgage Loan Brokers		1		1		Private Sector	12/30/2020
522310	Mortgage and Nonmortgage Loan Brokers	1					Private Sector	01/08/2021
524114	All Other Professional, Scientific, and Technical Services		1		1		Private Sector	02/04/2021
	NAICS Sector 53: Real Estate and Rental and Leasing							
531110	Lessors of Residential Buildings and Dwellings		1		1	1	Private Sector	05/26/2020
531110	Lessors of Residential Buildings and Dwellings			1		1	Private Sector	03/03/2021
	NAICS Sector 54: Professional, Scientific, and Technical Services							
541519	Other Computer Related Services		1		1		Private Sector	04/29/2020
541350	Building Inspection Services		1		1		Local Government	07/10/2020
	NAICS Sector 56: Administrative and Support and Waste Management and Remediation Services							
561422	Telemarketing Bureaus and Other Contact Centers	1				1	Private Sector	05/13/2020
561720	Janitorial Services		1		1		Private Sector	07/16/2020
561110	Office Administrative Services	1			1		Private Sector	08/12/2020
561720	Janitorial Services	1			1		Private Sector	06/26/2020
561612	Security Guards and Patrol Services		1		1	1	Private Sector	09/10/2020
561720	Janitorial Services	1				1	Private Sector	09/28/2020
562910	Remediation Services		1		1		Private Sector	10/02/2020
561612	Security Guards and Patrol Services	1					Private Sector	10/30/2020
561720	Janitorial Services		1		1		Private Sector	11/09/2020
561320	Temporary Help Services			1		1	Private Sector	05/26/2021
561790	Other Services to Buildings and Dwellings			1			Private Sector	04/13/2021
561720	Janitorial Services			1			Private Sector	02/10/2021
562212	Solid Waste Landfill			1			Private Sector	05/10/2021

	NAICS Sector 61: Educational Services							
611110	Elementary and Secondary Schools		1		1	1	Local Government	10/28/2020
	NAICS Sector 62: Health Care and Social Assistance							
623311	Continuing Care Retirement Communities	1			1	1	Private Sector	04/27/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1				1	Private Sector	04/30/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)		1		1		Private Sector	05/06/2020
622110	Nursing Care Facilities (Skilled Nursing Facilities)	1			1		Private Sector	05/08/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1				1	Private Sector	05/05/2020
621610	Home Health Care Services		1		1		Private Sector	05/13/2020
621491	HMO Medical Centers	1			1		Private Sector	05/20/2020
621610	Home Health Care Services	1			1	1	Private Sector	05/20/2020
622110	General Medical and Surgical Hospitals	1			1		Private Sector	05/29/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)		1		1		Private Sector	06/08/2020
621498	All Other Outpatient Care Centers	1			1		Private Sector	06/16/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)		1		1	1	Private Sector	06/23/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)		1		1		Private Sector	07/02/2020
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals	1					Private Sector	07/02/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1					Private Sector	07/02/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1			1		Private Sector	07/06/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)		1		1	1	Private Sector	07/27/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1					Private Sector	08/04/2020
623312	Assisted Living Facilities for the Elderly	1			1		Private Sector	08/07/2020
622110	General Medical and Surgical Hospitals		1		1		Private Sector	08/12/2020
622310	General Medical and Surgical Hospitals		1		1		Private Sector	08/13/2020
622110	General Medical and Surgical Hospitals		1		1		Private Sector	08/11/2020
623312	Assisted Living Facilities for the Elderly		1		1	1	Private Sector	09/04/2020
622210	Psychiatric and Substance Abuse Hospitals		1		1	1	State Government	09/06/2020

621210	Offices of Dentists	1			1		Private Sector	09/25/2020
621330	Offices of Mental Health Practitioners (except Physicians)		1		1		Private Sector	10/15/2020
621310	Offices of Chiropractors	1			1		Private Sector	10/28/2020
622110	General Medical and Surgical Hospitals		1		1		Private Sector	10/30/2020
623312	Assisted Living Facilities for the Elderly	1			1		Private Sector	11/19/2020
621420	Outpatient Mental Health and Substance Abuse Centers		1		1		Private Sector	11/19/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1				1	Private Sector	11/24/2020
623110	Offices of Chiropractors		1		1	1	Private Sector	12/07/2020
621310	Offices of Chiropractors	1					Private Sector	12/10/2020
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1			1		Private Sector	12/11/2020
621420	Outpatient Mental Health and Substance Abuse Centers			1		1	Private Sector	01/11/2021
623110	Nursing Care Facilities (Skilled Nursing Facilities)	1				1	Private Sector	01/13/2021
622110	General Medical and Surgical Hospitals		1		1		Private Sector	01/14/2021
621112	Offices of Physicians, Mental Health Specialists			1		1	Private Sector	01/29/2021
624190	Other Individual and Family Services			1			Private Sector	02/05/2021
622210	Psychiatric and Substance Abuse Hospitals			1		1	Private Sector	02/16/2021
621910	Ambulance Services	1					Private Sector	02/19/2021
622210	Psychiatric and Substance Abuse Hospitals			1			State Government	02/25/2021
623110	Nursing Care Facilities (Skilled Nursing Facilities)			1			Private Sector	03/02/2021
623311	Continuing Care Retirement Communities			1		1	Private Sector	03/03/2021
623311	Continuing Care Retirement Communities			1		1	Private Sector	03/03/2021
623210	Residential Intellectual and Developmental Disability Facilities		1		1		Private Sector	04/13/2021
623220	Residential Mental Health and Substance Abuse Facilities			1		1	State Government	05/26/2021
	NAICS 71: Arts, Entertainment, and Recreation							
713940	Fitness and Recreational Sports Centers			1			Private Sector	02/24/2021
	NAICS 72: Accommodation and Food Services							
721110	Hotels (except Casino Hotels) and Motels	1			1	1	Private Sector	06/01/2020

722310	Food Service Contractors		1		1		Private Sector	07/06/2020
722511	Full-Service Restaurants	1					Private Sector	08/20/2020
722511	Office Administrative Services	1					Private Sector	08/20/2020
722515	Snack and Nonalcoholic Beverage Bars		1		1		Private Sector	09/22/2020
722511	Full-Service Restaurants	1					Private Sector	10/08/2020
722513	Limited-Service Restaurants		1		1		Private Sector	10/27/2020
722513	Limited-Service Restaurants		1		1		Private Sector	01/14/2021
722511	Full-Service Restaurants			1			Private Sector	01/26/2021
722513	Limited-Service Restaurants		1		1		Private Sector	02/03/2021
722511	Full-Service Restaurants			1			Private Sector	02/03/2021
713210	Casinos (except Casino Hotels)		1		1		Private Sector	02/04/2021
721110	Hotels (except Casino Hotels) and Motels		1		1		Private Sector	03/02/2021
721110	Hotels (except Casino Hotels) and Motels		1		1		Private Sector	03/08/2021
721110	Hotels (except Casino Hotels) and Motels			1			Private Sector	03/08/2021
722513	Limited-Service Restaurants	1			1		Private Sector	01/26/2021
722511	Full-Service Restaurants			1			Private Sector	05/03/2021
	NAICS 81: Other Services (except Public Administration)							
811192	Car Washes	1			1		Private Sector	07/17/2020
812112	Beauty Salons	1					Private Sector	10/28/2020
812199	Other Personal Care Services	1					Private Sector	12/03/2020
811111	General Automotive Repair		1		1		Private Sector	01/06/2021
811121	Automotive Body, Paint, and Interior Repair and Maintenance			1			Private Sector	01/20/2021
811219	Other Electronic and Precision Equipment Repair and Maintenance	1					Private Sector	01/20/2021
812112	Automotive Exhaust System Repair		1		1		Private Sector	01/22/2021
813110	Religious Organizations			1		1	Private Sector	03/09/2021
812910	Pet Care (except Veterinary) Services			1			Private Sector	04/14/2021
811198	All Other Automotive Repair and Maintenance	1					Private Sector	05/03/2021
	NAICS Sector 92: Public Administration							

922120	Police Protection	1			1		Local Government	06/30/2020
921190	Other General Government Support		1		1	1	Local Government	08/25/2020
923120	Administration of Public Health Programs		1		1		Private Sector	08/25/2020
923120	Administration of Public Health Programs		1		1		Local Government	08/25/2020
922120	Administration of Public Health Programs		1		1	1	Local Government	08/27/2020
922140	Correctional Institutions	1			1	1	State Government	09/09/2020
922140	Correctional Institutions	1			1	1	Local Government	09/30/2020
922160	Fire Protection	1			1		Local Government	11/19/2020
922120	Police Protection			1		1	Local Government	01/19/2021
922140	Correctional Institutions	1				1	State Government	02/17/2021

Total Inspections: 186 **68** **79** **39** **117** **43**
36.6% **42.5%** **21.0%**

V. Economic and Workplace Impacts.

A. Economic Impact Analysis.

An economic impact analysis (EIA) meeting the requirements of Va. Code §2.2-4007.04²⁰⁰ was issued on January 11, 2021. The EIA was prepared by Chmura Economics & Analytics, a nationally recognized economic consulting firm.²⁰¹ **See Attachment I.**

A DOLI Addendum to the EIA was issued on January 11, 2021. **See Attachment J.**

B. Impact on Employers.

Employers will have to familiarize themselves with the amendments to the Final Permanent Standard in effect since January 27, 2021. Certain employers will have to train employees on the requirements of the standard based on the risk levels for its employees (see IV. Summary of proposed amendments to the Final Permanent Standard and attached text of proposed amendments to the Final Permanent Standard).

The Department will significantly supplement its COVID-19 webpage with education, training, and outreach materials that will assist employers and employees in complying with the proposed amendments to the Final Permanent Standard.

²⁰⁰ <https://law.lis.virginia.gov/vacode/title2.2/chapter40/section2.2-4007.04/>

²⁰¹ <http://www.chmuraecon.com/>

A substantial majority of the proposed substantive amendments concern issues that have already been addressed by Frequently Asked Questions (FAQs)²⁰² published by the Department at www.doli.virginia.gov and updated information provided by the CDC.

The regulatory burden for employers is substantially reduced for those employees that are fully vaccinated in non-healthcare settings.

- On June 21, 2021, OSHA issued its COVID-19 Emergency Temporary Standard, 1910.502, et. seq., applicable to healthcare services and healthcare support services. At its June 29, 2021 meeting, the Board is considering adoption of the COVID-19 ETS in Virginia which would expire within six months or when repealed by the Board, whichever occurs first. If adopted, application of the FPS to healthcare services and healthcare support services would be suspended while the COVID-19 ETS was in effect, and would reapply after the COVID-19 ETS was no longer in effect.

Employers should benefit from reductions in injuries, illnesses, and fatalities associated with employee exposure to SARS-CoV-2 and COVID-19 related hazards which would be addressed by any comprehensive regulation.

In addition, there may be an ancillary benefit to those employers whose establishments are frequented by the general public who may take some level of confidence in the safety and health of the physical establishment because of the requirements of this emergency temporary standard/emergency regulation.

C. Impact on Employees.

1. Vulnerabilities of Virginia's Workforce to SARS-CoV-2 and COVID-19 Hazards.

Those employees at high-risk for severe illness from COVID-19 are²⁰³:

²⁰² <https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

²⁰³ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>

Compared to younger adults, older adults are more likely to require hospitalization if they get COVID-19

	Hospitalization ¹	Death ²
18-29 years	Comparison Group	Comparison Group
30-39 years	2x higher	4x higher
40-49 years	3x higher	10x higher
50-64 years	4x higher	30x higher
65-74 years	5x higher	90x higher
75-84 years	8x higher	220x higher
85+ years	13x higher	630x higher

Adults of any age with certain underlying medical conditions are at increased risk for severe illness from the virus that causes COVID-19. Severe illness from COVID-19 is defined as hospitalization, admission to the ICU, intubation or mechanical ventilation, or death.

Adults of any age with the following conditions are at increased risk of severe illness from the virus that causes COVID-19:

- Cancer
- Chronic kidney disease
- COPD (chronic obstructive pulmonary disease)
- Down Syndrome
- Heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
- Immunocompromised state (weakened immune system) from solid organ transplant
- Obesity (body mass index [BMI] of 30 kg/m² or higher but < 40 kg/m²)
- Severe Obesity (BMI ≥ 40 kg/m²)
- Pregnancy
- Sickle cell disease
- Smoking
- Type 2 diabetes mellitus

COVID-19 is a new disease. Currently there are limited data and information about the impact of many underlying medical conditions on the risk for severe illness from COVID-19. Based on what we know at this time, adults of any age with the following conditions might be at an increased risk for severe illness from the virus that causes COVID-19:

- Asthma (moderate-to-severe)
- Cerebrovascular disease (affects blood vessels and blood supply to the brain)

- Cystic fibrosis
- Hypertension or high blood pressure
- Immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines
- Neurologic conditions, such as dementia
- Liver disease
- Overweight (BMI > 25 kg/m², but < 30 kg/m²)
- Pulmonary fibrosis (having damaged or scarred lung tissues)
- Thalassemia (a type of blood disorder)
- Type 1 diabetes mellitus²⁰⁴

2. National and Virginia Statistics.

Based on U. S. Census figures, “In 1998, adults ages 55 and older represented 12 percent of the American workforce. Twenty years later, this group represents 23 percent of the workforce, the largest labor force share of any age group. By 2028, nearly one in three people between the ages of 65 and 74 are expected to remain in the labor force, and more than 12 percent of people 75 and older will still be working, roughly tripling the rate at which the oldest Americans were working two decades ago.”²⁰⁵

NOTE: In 2008, the labor force participation rate for employees 65 and older in Virginia was 16%.²⁰⁶ In 2017 the U.S. Senate’s Special Committee on Aging noted that the average labor force participation rate of employees 65 years and older in the South Atlantic states, including Virginia, was 17.9%.²⁰⁷

The U.S. Census estimates that Virginia’s population as of July 1, 2019 was 8,535,519, and that 15.4% (1,314,469) of Virginia’s population was 65 years or older.²⁰⁸

A labor force participation rate for those 65 and older in Virginia of 17.9% would equate to 235,289 elderly employees.

A study by SeniorLiving.Org looked “at the jobs that are most common for seniors, how have their labor force participation rates changed over time, and what impacts might arise from the COVID-19 crisis.” Key findings include:

²⁰⁴ https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fgroups-at-higher-risk.html

²⁰⁵ <https://www.seniorliving.org/research/senior-employment-outlook-covid/>

²⁰⁶ [http://sfc.virginia.gov/pdf/health/2008%20Session/August%2020%20mtg/HHR%20-%20Perrone%20-%20UVA%20-%208.20.08%20\(B&W\).pdf](http://sfc.virginia.gov/pdf/health/2008%20Session/August%2020%20mtg/HHR%20-%20Perrone%20-%20UVA%20-%208.20.08%20(B&W).pdf)

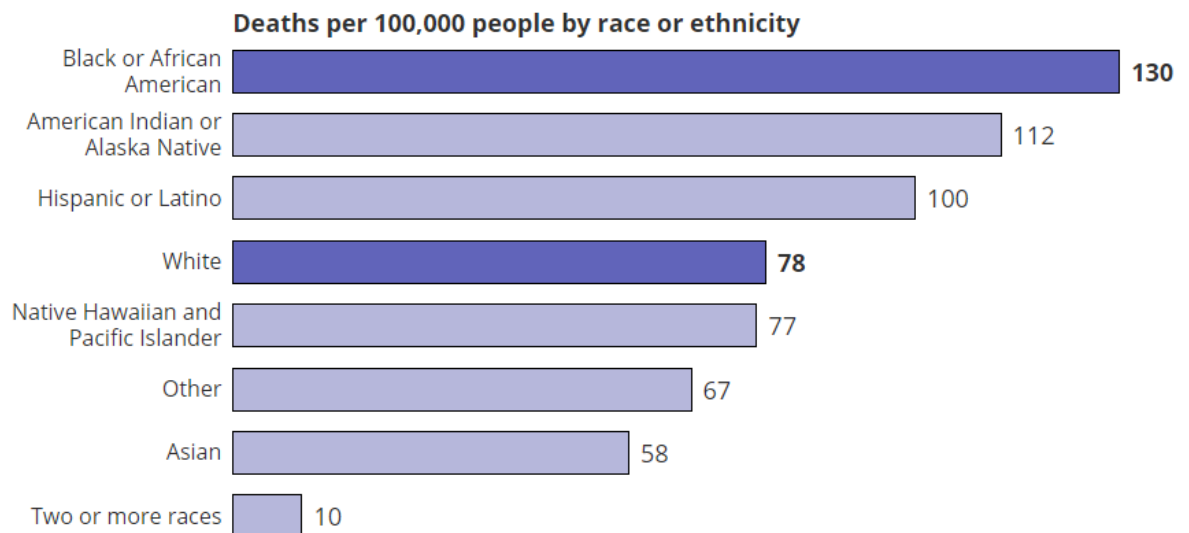
²⁰⁷ <https://www.aging.senate.gov/imo/media/doc/Aging%20Workforce%20Report%20FINAL.pdf>, p. 12.

²⁰⁸ <https://www.census.gov/quickfacts/fact/table/VA#>

- In all 50 states and the District of Columbia, at least 20 percent of adults ages 65 to 74 are in the workforce. In seven states, more than 30 percent are working.
- Since 2013, 46 of 51 had seen increases in workforce participation of 75-and-older residents. Seven states posted 20 percent gains, including Vermont, West Virginia, Maine, Georgia, Michigan, Rhode Island and Connecticut.
- Seniors represent significant portions of the workforce for many professions that require close contact with others, including bus drivers, ushers, ticket takers, taxi drivers, street vendors, chiropractors, dentists, barbers, etc.

Additionally, current data suggest a disproportionate burden of illness and death among racial and ethnic minority groups.²⁰⁹

Nationwide, Black people are dying at 1.7 times the rate of white people.



The CDC postulates that part of the reason for this disparity is that some racial and ethnic minority groups are disproportionately represented in essential work settings such as healthcare facilities, farms, factories, grocery stores, and public transportation.

Other factors postulated include the disproportionate lack of access to healthcare and health insurance, language barriers, discrimination, financial status, serious underlying health conditions, stigmatization, and other systemic inequalities.²¹⁰

Almost 40% of the population of Virginia are from a racial minority.²¹¹

²⁰⁹ <https://covidtracking.com/race>

²¹⁰ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

²¹¹ <https://www.census.gov/quickfacts/VA>

The Bureau of Labor Statistics (BLS) conducted an analysis of employment statistics entitled “How many workers are employed in sectors directly affected by COVID-19 shutdowns, where do they work, and how much do they earn?”²¹² The report looked at “six of the most directly exposed sectors include: Restaurants and Bars, Travel and Transportation, Entertainment (e.g., casinos and amusement parks), Personal Services (e.g., dentists, daycare providers, barbers), other sensitive Retail (e.g., department stores and car dealers), and sensitive Manufacturing (e.g., aircraft and car manufacturing).”

In all, 20.4 percent of all workers are employed in industries most immediately affected by the COVID-19 shutdowns”²¹³:

Table 1. Industry statistics, by firm size class									
Firm size (number of employees)	Total	All other	Most exposed sectors						
			Restaurants and bars	Travel and transportation	Entertainment	Personal services	Other sensitive retail	Sensitive manufacturing	Most exposed sectors combined
Employment levels in June 2019 (thousands)									
10 or less	14,139.9	10,813.4	1,124.6	140.1	209.2	845.7	779.8	227.1	3,326.5
11 to 50	22,257.7	14,994.6	4,022.0	545.2	541.1	743.5	961.4	449.9	7,263.1
51 to 100	10,572.4	7,644.2	1,533.8	198.5	294.7	100.9	556.5	243.8	2,928.2
101 to 500	25,483.5	20,893.5	1,668.0	558.9	642.0	146.2	830.9	744.0	4,590.0
More than 500	77,528.8	65,076.8	3,925.1	2,050.6	957.0	249.9	3,419.9	1,849.5	12,452.0
Total	149,982.3	119,422.5	12,273.5	3,493.3	2,644.0	2,086.2	6,548.5	3,514.3	30,559.8
Total wages paid in second quarter 2019 (billions of dollars)									
10 or less	\$144.894	\$120.886	\$5.183	\$0.926	\$1.951	\$7.731	\$5.844	\$2.373	\$24.008
11 to 50	242.971	194.789	19.428	3.350	2.581	7.412	9.954	5.457	48.182
51 to 100	132.246	108.932	8.192	1.674	1.649	1.010	7.550	3.239	23.314
101 to 500	358.286	314.502	8.519	5.413	5.783	1.453	12.052	10.564	43.784
More than 500	1,240.032	1,121.793	20.876	27.118	8.879	2.259	24.403	34.704	118.239
Total	2,118.429	1,860.902	62.198	38.481	20.843	19.865	59.803	56.337	257.527

²¹² <https://www.bls.gov/opub/mlr/2020/article/covid-19-shutdowns.htm>

²¹³ *Id.*

Table 1. Industry statistics, by firm size class

Firm size (number of employees)	Total	All other	Most exposed sectors						
			Restaurants and bars	Travel and transportation	Entertainment	Personal services	Other sensitive retail	Sensitive manufacturing	Most exposed sectors combined

Note: Firms are identified by Employer Identification Number.

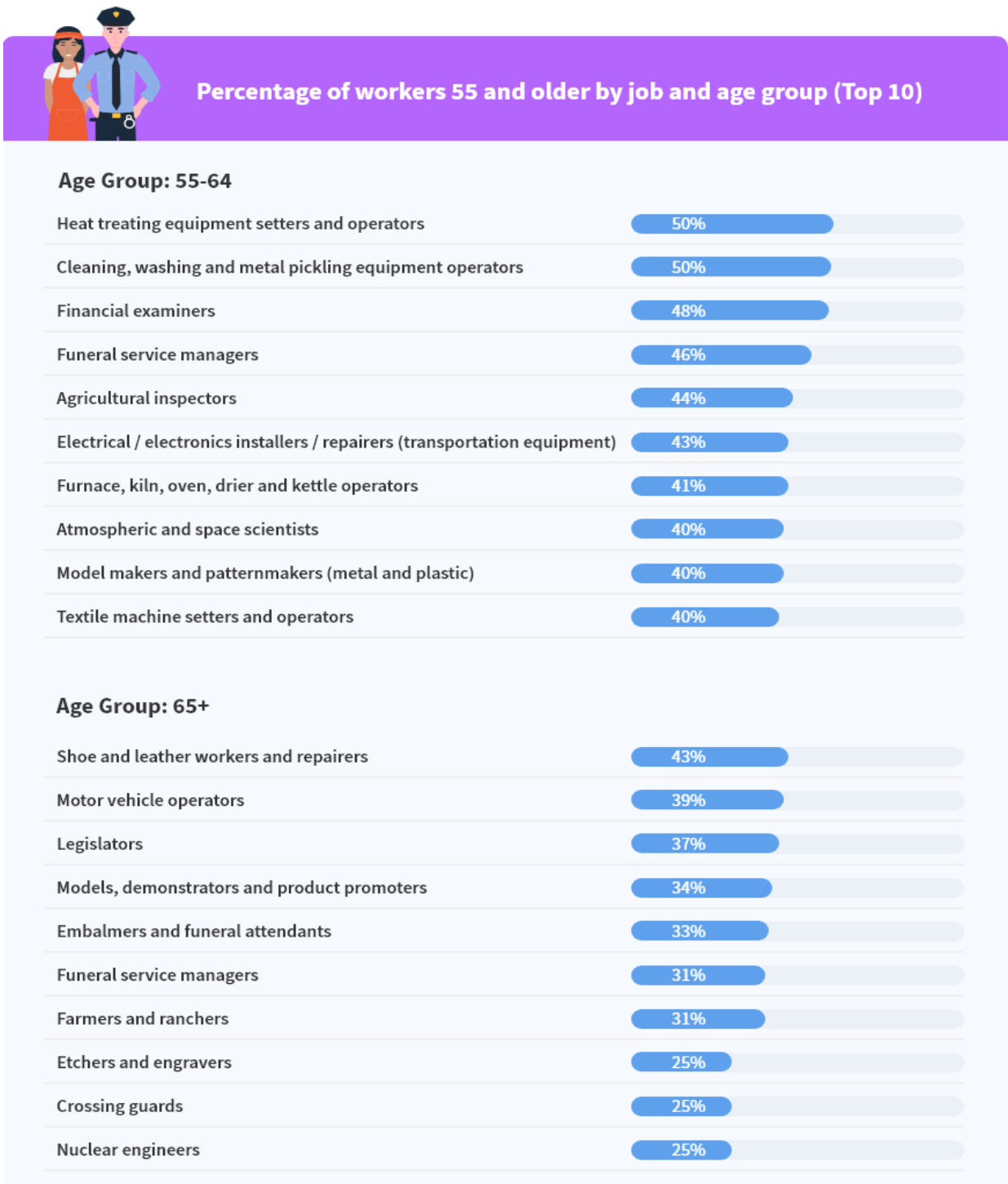
Source: Authors' calculations based on U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages data for June and second quarter 2019. The North American Industry Classification System codes used to define the most exposed sectors can be found in Joseph S. Vavra, "Shutdown sectors represent large share of all U.S. employment" (Chicago, IL: Becker Friedman Institute for Economics at the University of Chicago, March 31, 2020), <https://bfi.uchicago.edu/insight/blog/key-economic-facts-about-covid-19/>.

“Older adults make up a large percentage of many of the jobs in these industries. For example, nearly half of bus drivers are older than 55, while almost 1 in 5 ticket takers and ushers are 65 or older. And although the BLS didn’t specifically call them out, farmers have also been impacted by the toll of the virus, with both prices of commodities and consumption declining. The median age of farmers and ranchers in the U.S. is 56.1 years old.”²¹⁴



²¹⁴ <https://www.seniorliving.org/research/senior-employment-outlook-covid/>

“When it comes to specific job titles, a few roles are much more common for older adults than for others. For example, nearly 80 percent of funeral service managers are 55 and older, compared to much more physical roles like fence builders (7.3 percent) or lifeguards (5.8 percent).”²¹⁵



²¹⁵ *Id.*

Finally, the CDC conducted a study of “Selected health conditions and risk factors, by age: United States, selected years 1988–1994 through 2015–2016”²¹⁶ of the general population. Although the working population of the country is only a subset of the totals for the table, the data nonetheless demonstrates the significant risk that SARS-CoV-2 and COVID-19 related hazards pose to the U.S. and Virginia workers. Using the age adjusted statistical totals:

- 14.7% of the population suffer from diabetes,
- 12.2% from high cholesterol
- 30.2% suffer from hypertension
- 39.7% suffer from obesity

Table 21. Selected health conditions and risk factors, by age: United States, selected years 1988–1994 through 2015–2016

Excel version (with more data years and standard errors when available): https://www.cdc.gov/nchs/hus/contents2018.htm#Table_021.

[Data are based on interviews, physical examinations, and laboratory data of a sample of the civilian noninstitutionalized population]

Health condition	1988–1994	1999–2000	2001–2002	2003–2004	2005–2006	2007–2008	2009–2010	2011–2012	2013–2014	2015–2016
Diabetes¹										
Percent of adults aged 20 and over										
Total, age-adjusted ²	8.8	10.0	11.6	11.8	11.5	12.6	12.5	12.7	13.1	14.7
Total, crude	8.3	9.6	11.2	11.8	11.9	13.0	13.2	13.4	14.0	16.0
Hypercholesterolemia³										
Total, age-adjusted ⁴	22.8	25.5	24.6	27.9	27.4	27.6	27.2	28.2	27.4	26.9
Total, crude	21.5	24.5	24.2	27.9	28.1	28.8	28.6	30.4	29.3	29.6
High total cholesterol⁵										
Total, age-adjusted ⁴	20.8	18.3	16.5	16.9	15.6	14.2	13.2	12.7	11.1	12.2
Total, crude	19.6	17.7	16.4	17.0	15.9	14.6	13.6	13.1	11.1	12.5
Hypertension⁶										
Total, age-adjusted ⁴	25.5	30.0	29.7	32.1	30.5	31.2	30.0	30.0	30.8	30.2
Total, crude	24.1	28.9	28.9	32.5	31.7	32.6	31.9	32.5	33.5	33.2
Uncontrolled high blood pressure among persons with hypertension⁷										
Total, age-adjusted ⁴	77.2	71.9	68.3	63.8	63.0	56.2	55.7	54.6	51.3	59.7
Total, crude	73.9	69.1	65.4	60.8	56.6	51.8	46.7	48.0	46.1	51.5
Overweight or obesity⁸										
Total, age-adjusted ⁴	56.0	64.5	65.6	66.4	66.9	68.1	68.8	68.6	70.4	71.3
Total, crude	54.9	64.1	65.6	66.5	67.3	68.3	69.2	69.0	70.7	71.6
Obesity⁹										
Total, age-adjusted ⁴	22.9	30.5	30.5	32.3	34.4	33.7	35.7	34.9	37.8	39.7
Total, crude	22.3	30.3	30.6	32.3	34.7	33.9	35.9	35.1	37.9	39.8
Untreated dental caries¹⁰										
Total, age-adjusted ⁴	27.7	24.4	21.3	29.8	24.4	21.7	---	25.5	31.5	26.1
Total, crude	28.2	25.0	21.7	30.2	24.5	21.8	---	25.5	31.3	25.9
Obesity¹¹										
Percent of persons under age 20										
2–5 years	7.2	10.3	10.6	14.0	11.0	10.1	12.1	8.4	9.4	13.9
6–11 years	11.3	15.1	16.3	18.8	15.1	19.6	18.0	17.7	17.4	18.4
12–19 years	10.5	14.8	16.7	17.4	17.8	18.1	18.4	20.5	20.6	20.6
Untreated dental caries¹⁰										
5–19 years	24.3	23.6	21.2	25.6	16.2	16.9	14.6	17.5	19.6	14.3

²¹⁶ <https://www.cdc.gov/nchs/data/hus/2018/021.pdf>

3. Virginia Statistics.

Virginia's Adult Reported Diabetes Rate in 2020 was 10.9%.²¹⁷

Virginia's Hypertension Rate in 2015 was 33.2%²¹⁸

Virginia's Adult Reported High Cholesterol Rate²¹⁹ in 2020 was 32.7%.²²⁰

Virginia's Adult Reported Obesity Rate²²¹ in 2019 was 31.9%.²²²

All employees, but particularly those in high risk age and medical categories, would benefit from increased safety and health protections provided by a comprehensive regulation to address SARS-CoV-2 and COVID-19 related hazards. Employees in the affected industries would have to be trained on the requirements of any new regulation.

D. Impact on the Department of Labor and Industry.

No significant impact is anticipated on the Department. VOSH employees would be trained on the requirements of any amendments to the Final Permanent Standard. A VOSH Compliance Directive on Inspection and Enforcement Procedures would be developed by staff. Updates to training and outreach products would be developed by VOSH Cooperative Programs staff and made available to the regulated community, employees, and the general public at:

<https://www.doli.virginia.gov/covid-19-outreach-education-and-training/>

Contact Person:

Mr. Jay Withrow
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²¹⁷ https://www.americashealthrankings.org/explore/annual/measure/High_Chol/state/VA

²¹⁸ <https://www.vdh.virginia.gov/content/uploads/sites/65/2018/05/VA-Heart-Disease-FactSheetFINAL.pdf>

²¹⁹ Percentage of adults who reported having their cholesterol checked and were told by a health professional that it was high.

²²⁰ https://www.americashealthrankings.org/explore/annual/measure/High_Chol/state/VA

²²¹ Percentage of adults with a body mass index of 30.0 or higher based on reported height and weight (pre-2011 BRFSS methodology).

²²² <https://www.americashealthrankings.org/explore/annual/measure/Obesity/state/VA>

RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board consider for adoption the proposed amendments to the Final Permanent Standard, 16VAC25-220, Infectious Disease Prevention of the SARS-CoV-2 That Causes COVID-19.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation.

ATTACHMENT A: INDUSTRY SPECIFIC INFORMATION ASSOCIATED WITH ADOPTION OF THE EMERGENCY TEMPORARY STANDARD AND ORIGINAL FINAL PERMANENT STANDARD

The following is not intended to be an exhaustive list of all industries or job tasks with potential COVID-19 exposure risks (i.e., “very high,” “high,” “medium,” “lower”), but does provide a broad overview of the types of job tasks and hazards that expose employees to the various levels of COVID-19 exposure risk. The following also provides statistics and reports on work-related COVID-19 infections, non-fatal illnesses, hospitalizations, and deaths.

Reference to non-employee infections, non-fatal illnesses, hospitalizations, and deaths are provided to demonstrate the actual and potential exposure for employees at work whose job tasks involved close contact inside 6 feet with other COVID-19 infected employees and non-employees.

1. Meat and Poultry Processing.

The meat and poultry processing work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“Multiple outbreaks of COVID-19 among meat and poultry processing facility workers have occurred in the United States recently.

....

Workers involved in meat and poultry processing are not exposed to SARS-CoV-2 through the meat products they handle. However, their work environments—processing lines and other areas in busy plants where they have **close contact** with coworkers and supervisors—may contribute substantially to their potential exposures. The risk of occupational transmission of SARS-CoV-2 depends on several factors.

Some of these factors are described in the U.S. Department of Labor and U.S. Department of and Health and Human Services’ booklet “Guidance on Preparing Workplaces for COVID-19.”²²³ Distinctive factors that affect workers’ risk for exposure to SARS-CoV-2 in meat and poultry processing workplaces include:

- Distance between workers – meat and poultry processing workers often work **close** to one another on processing lines. Workers may also be near one another at other times, such as when clocking in or out, during breaks, or in locker/changing rooms.
- Duration of contact – meat and poultry processing workers often have **prolonged closeness** to coworkers (e.g., for 10-12 hours per shift). Continued contact with potentially infectious individuals increases the risk of SARS-CoV-2 transmission.
- Type of contact – meat and poultry processing workers may be exposed to the infectious virus through respiratory droplets in the air – for example, when workers in the plant who have the virus cough or sneeze. It is also possible that exposure could occur from contact with contaminated surfaces or objects, such as tools, workstations, or break room tables. Shared spaces such as break rooms, locker rooms, and entrances/exits to the facility may contribute to their risk.

²²³ <https://www.osha.gov/Publications/OSHA3990.pdf>

- Other distinctive factors that may increase risk among these workers include:
 - A common practice at some workplaces of sharing transportation such as ride-share vans or shuttle vehicles, car-pools, and public transportation.
 - Frequent contact with fellow workers in community settings in areas where there is ongoing community transmission.²²⁴
(Emphasis added).

Meat and Poultry Processing COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Newsobserver.com, May 23, 2020, “Coronavirus outbreaks at processors force NC farmers to start killing 1.5M chickens”

“[North Carolina] Agriculture officials said Thursday that 2,006 workers in 26 processing plants across the state have tested positive for coronavirus. Although some plants have closed temporarily to clean and disinfect, none have shut down in North Carolina.”²²⁵

Virginia Mercury.com, May 5, 2020, “COVID-19 cases keep climbing at Virginia poultry plants; some members of Congress seek better protections”

“COVID-19 cases continue to rise at Virginia’s Eastern Shore poultry plants, with Gov. Ralph Northam on Monday reporting more than 260 cases associated with two facilities run by Tyson Foods and Perdue Farms in Accomack County.

‘We are also still closely tracking cases in the Shenandoah Valley, which has a large number of plants — cases that have increased as well, but the increase is smaller and could be leveling off,’ said Northam. ‘Our focus right now remains on the Shore.’

Poultry plant-related cases now represent about 60 percent of Accomack’s confirmed cases, which according to the Virginia Department of Health totaled 425 Monday. Twenty-one people in the county have been hospitalized, and six have died. How much testing has been conducted is unclear.”²²⁶

CDC, May 8, 2020, “COVID-19 Among Workers in Meat and Poultry Processing Facilities — 19 States, April 2020”

“Persons in congregate work and residential locations are at increased risk for transmission and acquisition of respiratory infections.

....

Factors potentially affecting risk for infection include difficulties with workplace

²²⁴ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html>

²²⁵ <https://www.newsobserver.com/news/business/article242944156.html>

²²⁶ <https://www.nbc12.com/2020/05/05/covid-cases-keep-climbing-virginia-poultry-plants-some-members-congress-look-better-protections/>

physical distancing and hygiene and crowded living and transportation conditions.

....

Among workers, socioeconomic challenges might contribute to working while feeling ill, particularly if there are management practices such as bonuses that incentivize attendance.

....

By April 27, CDC had received aggregate data on COVID-19 cases from 19 of 23 states reporting at least one case related to this industry; there were 115 meat or poultry processing facilities with COVID-19 cases, including 4,913 workers with diagnosed COVID-19 (Table 1). Among 17 states reporting the number of workers in their affected facilities, 3.0% of 130,578 workers received diagnoses of COVID-19. The percentage of workers with diagnosed COVID-19 ranged from 0.6% to 18.2%. Twenty COVID-19–related deaths were reported among workers.

....

Sociocultural and economic challenges to COVID-19 prevention in meat and poultry processing facilities (Table 2) include accommodating the needs of workers from diverse backgrounds who speak different primary languages; one facility reported a workforce with 40 primary languages. This necessitates innovative approaches to educating and training employees and supervisors on safety and health information.

In addition, some employees were incentivized to work while ill as a result of medical leave and disability policies and attendance bonuses that could encourage working while experiencing symptoms.

Finally, many workers live in crowded, multigenerational settings and sometimes share transportation to and from work, contributing to increased risk for transmission of COVID-19 outside the facility itself. Changing transportation to and from the facilities to increase the number of vehicles and reduce the number of passengers per vehicle helped maintain physical distancing in some facilities.

Cases of COVID-19 have been observed in other congregate settings, including long-term care facilities (5), acute care hospitals (6), correctional facilities (7), and homeless shelters (8). Similarly, the crowded conditions for workers in meat and poultry processing facilities could result in high risk for SARS-CoV-2 transmission.

Respiratory disease outbreaks in this type of setting demonstrate the need for heightened attention to worker safety (9). However, COVID-19 among workers in meat and processing facilities could be due to viral transmission at the workplace or in the community.”²²⁷

2. Seafood Processing.

The seafood processing work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“During 2011-2017, seafood processing workers had the highest injury/illness rate of any U.S. maritime workers at 6,670 injuries/illnesses per 100,000 workers. Occupational hazards in

²²⁷ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e3.htm>

this industry include exposures to biological aerosols containing allergens, microorganisms, and toxins; bacteria and parasites; excessive noise levels; low temperatures; poor workplace organization; poor ergonomics; and contact with machinery and equipment.”²²⁸



[CDC photo of seafood processing employees working in close proximity to each other] Seafood processing worker transporting fresh mackerel while the production line prepares fish in the background.²²⁹

Seafood Processing COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Seafoodsource.com, Louisiana, May 21, 2020,

“Around 100 people at three crawfish farms in Louisiana have tested positive for COVID-19, state health officials announced earlier this week.

The Louisiana Department of Health declined to name the three crawfish farms, citing “active, evolving, protected investigations,” according to The Advocate.

Louisiana Office of Public Health Assistant Secretary Alex Billioux said the outbreaks were concentrated among migrant workers living in dormitory-like settings. The local crawfish industry is highly reliant on workers – many from Mexico – who use H-2B visas to live and work temporarily in the United States. According to Louisiana State University Assistant Professor of Agriculture Economics and Agribusiness Maria Bampasidou, a review of federal data showed Louisiana had 31 seafood processing

²²⁸ https://www.cdc.gov/niosh/programs/cms/shs/seafood_processing.html

²²⁹ *Id.*

facilities file for H-2B visas. Collectively, they received nearly all of the 1,467 positions they applied for. The workers live in trailers or bunkhouses provided by employers in exchange for a cut of workers' paychecks, depending on the type of visa, according to *The Advocate*.

David Savoy, the operator of a crawfish farm and processing facility near Church Point, Louisiana, said working and living conditions are tight in most of the industry's facilities.

'It's like a house with a family in it,' Savoy said. 'If one person gets it, there's a good chance everyone's going to get sick. That's just the reality of the situation.'"²³⁰

Newscentermaine.com, Portland, ME, May 18, 2020, "Bristol Seafood voluntarily closes after workers test positive for COVID-19"

"Bristol Seafood announced Monday it is voluntarily pausing production in its Portland Fish Pier processing plant after identifying confirmed positive cases of COVID-19 among staff members.

The Maine Center for Disease Control (Maine CDC) Director Dr. Nirav Shah said in the daily coronavirus briefing Monday that they began working with the company over the weekend to investigate the outbreak and collect additional samples for testing."²³¹

KATU.com, Astoria, OR, May 4, 2020, "11 at Astoria seafood facility test positive for coronavirus"

"Eleven employees at a seafood processing plant in Astoria have tested positive for COVID-19, health officials said Monday.

The Clatsop County Public Health investigation started Friday when they learned an employee at Bornstein Seafood facility tested positive for the novel coronavirus, COVID-19. They ran tests on 35 other employees and found that 11 others had the virus.

The county is working closely with the facility to test the rest of the company's workforce and started contact tracing with those people who tested positive.

Borstein's facility in Astoria is closed until further notice. The company also said its employees were told to self-isolate at home while they work with public health officials.

'The 11 positive cases reported Monday included four women (one aged 30-39 and three aged 40 to 49) and seven men (two aged 30 to 39, four aged 50 to 59 and one

²³⁰ <https://www.seafoodsource.com/news/supply-trade/covid-19-outbreak-sickens-100-workers-in-louisiana-crawfish-industry>

²³¹ <https://www.newscentermaine.com/article/news/health/coronavirus/bristol-seafood-voluntarily-closes-after-workers-test-positive-for-covid-19/97-6dbe22cd-1014-474e-9152-c054c42d5cb6>

aged 60 to 69),’ Clatsop County Public Health said.”²³²

3. Food Processing.

The food processing work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

To the extent that food processing employees “...work environments—processing lines and other areas in busy plants where they have close contact with coworkers and supervisors” mirror those in the meat and poultry processing industries, they are exposed to the same hazards and undertake the same job tasks that result in “medium” and “low” risk exposures.

Food Processing COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Martinsvillebulletin.com, Martinsville, VA, May 27, 2020, “Monogram Snacks in Henry County will shut down voluntarily for COVID-19 testing after positive tests lead to complaints about employee’s safety filed with state and OSHA”

“Angela Hairston’s brother is living in isolation at a hotel, separated from his 81-year-old mother at their home in Henry County. **He is listed statistically as a “confirmed COVID-19 male, 56 years old,” along with five of his coworkers at Monogram Snacks in Martinsville.**

But Hairston’s brother not only contracted the coronavirus, **he also continued to work after being tested because he said he feared loss of income or being fired by Monogram if he didn’t.**

....

The Bulletin obtained a copy of the complaint alleging “unsafe work practices and a lack of appropriate safeguards to prevent employee injuries.”

The complaint also alleges several employees, including Hairston’s brother, have been injured on the job and that “workers are reluctant to raise concerns about conditions and procedures that they consider to be potentially hazardous with supervisors because of a fear of retaliation due to the overall company culture.”

Said Hairston: ‘OSHA did not appear to address those concerns, and the conditions ... deteriorated further in the midst of COVID-19. My brother lives with my mother, who is 81 years old and has a number of chronic health issues. Due to her age and underlying medical conditions, she is in the high-risk category for severe illness from COVID-19 ... and the virus ... could be deadly given her underlying health issues.’

Monogram Foods Communications Coordinator Sally Vaughan released a statement late Tuesday in which she praised the management and employees.

²³² <https://katu.com/news/local/11-employees-at-astoria-borstein-seafood-processing-facility-test-positive-for-covid-19-closure>

‘To date, our leaders and team members at our Martinsville, Virginia plant have done an incredible job preventing the spread of COVID-19 by implementing and executing our practices and protocols and providing constant oversight on risk reduction and mitigation,’ Vaughan said. **‘Less than 1% of our nearly 650 team members at Martinsville have tested positive for COVID-19 during the pandemic.’**

Monogram Foods employs 630 people in three manufacturing centers on a 54-acre site at the Patriot Centre Industrial Park in Henry County. The company produces prepackaged snacks.

....

On May 12, Roanoke Regional Health Director Paul Saunier notified Hairston by letter of the findings by VOSH.

‘Based on the employer’s investigation results and the documentation the employer has provided to our agency, the employer is operating in accordance with the Governor’s Executive Orders and is implementing appropriate preventive measures,’ Saunier wrote. “VOSH has determined that the investigation can now be closed.”

Hairston wrote back to Saunier that she was appalled that VOSH would accept statements made by Luffman without verifying them, so she took her concerns to her Facebook page.

On May 19, Saunier notified Hairston that VOSH had opened a second investigation on Monogram Snacks.”²³³

Oregonlive.com, Vancouver, WA, May 22, 2020, “Vancouver frozen fruit processor reports 27 coronavirus cases”

“A Vancouver food processing company says 27 of its employees have COVID-19. It may be the Portland area’s biggest workplace outbreak reported thus far, excluding the healthcare sector.

Josh Hinerfeld, CEO of Firestone Pacific Foods, said the company had its first confirmed case midday Sunday and learned of two more later that afternoon. The Vancouver plant shut down Monday but the infection total has now grown to 27, including 17 new cases Friday.

....

Firestone processes frozen fruit.”²³⁴

Vadogwood.com, Virginia, May 21, 2020, “Here Are All the Virginia Factories With Coronavirus Outbreaks”

“At least seven workers at the facility in Chesterfield County have tested positive for COVID-19 and are now in quarantine at home, WRIC-TV in Richmond reported. A spokesperson for Maruchan Virginia Inc., which is a subsidiary of Toyo Suisan Kaisha Ltd in Tokyo, told the news station that the factory remains open despite the positive

²³³ https://www.martinsvillebulletin.com/news/local/monogram-snacks-in-henry-county-will-shut-down-voluntarily-for-covid-19-testing-after-positive/article_665228f4-4673-59d4-b5a5-d19824a49ac0.html

²³⁴ <https://www.oregonlive.com/business/2020/05/vancouver-frozen-fruit-processor-reports-10-coronavirus-cases.html>

cases.”²³⁵

“We can confirm the Maruchan Virginia report about employees testing positive for COVID-19 at their Chesterfield facility,” Chesterfield Health District Director Dr. Alexander Samuel said in a statement to Fox5.”²³⁶

Oregonlive.com, Albany, OR, May 12, 2020, “Oregon cites National Frozen Foods, site of coronavirus outbreak, for unsafe practices”

“Oregon regulators cited an Albany fruit and vegetable processor Monday for safety violations after a coronavirus outbreak there infected at least 34.

National Frozen Foods faces a \$2,000 penalty for failing to adopt practices to enable workers to stay at least six feet apart from one another.

....

[Oregon] OSHA said it inspected the Albany plant on April 20 in response to worker complaints. The regulatory agency said National Frozen Food allowed employees on frozen packaging lines to work within two to four feet of one another.”²³⁷

4. Healthcare, Nursing Home Care,²³⁸ and Long Term Care.²³⁹

The healthcare, nursing home care and long term care work environment contains various hazards and job tasks which present the full spectrum or exposure risks (Very high, High, Medium, Lower):

Very high – “Performing aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on known or suspected COVID-19 patients. Collecting or handling specimens from known or suspected COVID-19 patients.”²⁴⁰

High – “Entering a known or suspected COVID-19 patient’s room. Providing care for a known or suspected COVID-19 patient not involving aerosol-generating procedures.”²⁴¹

Medium – “Providing care to the general public who are not known or suspected COVID-19 patients. Working at busy staff work areas within a healthcare facility.”²⁴²

Lower – “Performing administrative duties in non-public areas of healthcare facilities,

²³⁵ <https://www.ktvu.com/news/coronavirus-outbreak-at-maruchan-ramen-noodle-factory-sickens-at-least-7-workers-in-virginia>

²³⁶ <https://www.fox5dc.com/news/health-officials-cant-provide-updates-on-covid-19-outbreak-at-virginia-maruchan-ramen-factory>

²³⁷ <https://www.oregonlive.com/business/2020/05/oregon-cites-national-frozen-foods-site-of-coronavirus-outbreak-for-unsafe-practices.html>

²³⁸ OSHA publication “COVID-19 Guidance for Nursing Home and Long-Term Care Facility Workers” references “OSHA’s COVID-19 guidance for healthcare workers and employers.”

²³⁹ *Id.*

²⁴⁰ <https://www.osha.gov/SLTC/covid-19/healthcare-workers.html>

²⁴¹ *Id.*

²⁴² *Id.*

away from other staff members.”²⁴³

Healthcare, Nursing Home Care and Long Term Care COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

CDC.gov, May 31, 2020, “Cases & Deaths among Healthcare Personnel [HCP]”

“Data were collected from 1,417,310 people, but healthcare personnel status was only available for 304,479 (21.5%) people. For the 66,447 cases of COVID-19 among healthcare personnel, death status was only available for 37,485 (56.4%).

Cases among HCP: 66,447

Deaths among HCP: 318²⁴⁴

Usatoday.com, April 13, 2020, referencing *Cincinnati Enquirer* story, “Health care workers in Ohio are testing positive for COVID-19 at an alarming rate”

“More than 1,300 health care workers in Ohio have tested positive for the novel coronavirus since the pandemic began, accounting for about 1 of every 5 positive tests in the state.

But Ohio’s public health officials aren’t talking about where all those employees work, how they’re doing now or how many may have been infected in “hot spots,” or clusters of positive tests.

State and local health departments, the Ohio Hospital Association, the Health Collaborative of Greater Cincinnati and the hospitals themselves all have refused to provide details beyond a statewide total.

The reason? Most say revealing more information could jeopardize the privacy of infected employees.

They say more specific numbers for hospitals, or even for entire cities or counties, could allow someone to figure out who got sick, thereby violating the workers’ privacy rights.

....

Not everyone thinks the secrecy is a good idea. Shortages of protective equipment and tests, along with the daily challenges of coping with a pandemic, mean health care workers are at significant risk every time they go to work.

More information about what’s happening in those workplaces, some say, could identify locations that need additional help and resources protecting the people who

²⁴³ *Id.*

²⁴⁴ <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

work there.

‘From a health care worker perspective, I think those numbers can be beneficial,’ said Michelle Thoman, president of the Registered Nurses Association at the University of Cincinnati Medical Center. ‘If you see that numbers in your facility or hospital are climbing, you can be prepared for that.’²⁴⁵ (Emphasis added).

WRIC.com, Richmond, VA, April 30, 2020, “Canterbury Rehabilitation & Healthcare Center reports 50th COVID-19 death”

“Officials at Canterbury Rehabilitation & Healthcare Center in Henrico County today reported the facility’s 50th coronavirus-related death. The resident died yesterday in a hospital.

Canterbury officials also reported that 51 patients who previously tested positive for COVID-19 have fully recovered. A cluster of COVID-19 deaths and infections have been reported at Canterbury Rehabilitation & Healthcare Center since the outbreak began.

More than 100 residents and staff members have tested positive for the virus, making Canterbury one of the worst clusters of cases in the United States. Recent reports obtained by 8News state that Canterbury is certified as a 190-bed facility.²⁴⁶

Beginning April 1, 2020, the Virginia Department of Health (VDH) conducted an assessment of the Canterbury Rehabilitation facility and of the 141 residents, 91 tested positive for COVID-19 (64.5%).²⁴⁷

CDC, March 27, 2020, “COVID-19 in a Long-Term Care Facility — King County, Washington, February 27–March 9, 2020”

“On February 28, 2020, a case of coronavirus disease (COVID-19) was identified in a woman resident of a long-term care skilled nursing facility (facility A) in King County, Washington.* Epidemiologic investigation of facility A identified 129 cases of COVID-19 associated with facility A, including 81 of the residents, 34 staff members, and 14 visitors; 23 persons died. Limitations in effective infection control and prevention and staff members working in multiple facilities contributed to intra- and inter-facility spread.

COVID-19 can spread rapidly in long-term residential care facilities, and persons with chronic underlying medical conditions are at greater risk for COVID-19–associated severe disease and death. Long-term care facilities should take proactive steps to protect the health of residents and preserve the health care workforce by identifying and excluding potentially infected staff members and visitors, ensuring early recognition of potentially infected patients, and implementing appropriate infection control measures.

²⁴⁵ <https://www.usatoday.com/story/news/nation/2020/04/13/ohio-health-care-workers-test-positive-covid-19-alarming-rate/2981253001/>

²⁴⁶ <https://www.wric.com/health/coronavirus/canterbury-rehabilitation-healthcare-center-reports-50th-covid-19-death/>

²⁴⁷ <https://www.vdh.virginia.gov/content/uploads/sites/96/2020/05/Canterbury-04-16-2020-COVID-Focus-POC.pdf>

....

Reported symptom onset dates for facility residents and staff members ranged from February 16 to March 5. The median patient age was 81 years (range = 54–100 years) among facility residents, 42.5 years (range = 22–79 years) among staff members, and 62.5 years (range = 52–88 years) among visitors; 84 (65.1%) patients were women (Table). Overall, 56.8% of facility A residents, 35.7% of visitors, and 5.9% of staff members with COVID-19 were hospitalized.

Preliminary case fatality rates among residents and visitors as of March 9 were 27.2% and 7.1%, respectively; no deaths occurred among staff members. The most common chronic underlying conditions among facility residents were hypertension (69.1%), cardiac disease (56.8%), renal disease (43.2%), diabetes (37.0%), obesity (33.3%), and pulmonary disease (32.1%). Six residents and one visitor had hypertension as their only chronic underlying condition.

....

Information received from the survey and on-site visits identified factors that likely contributed to the vulnerability of these facilities, including 1) staff members who worked while symptomatic; 2) staff members who worked in more than one facility; 3) inadequate familiarity and adherence to standard, droplet, and contact precautions and eye protection recommendations; 4) challenges to implementing infection control practices including inadequate supplies of PPE and other items (e.g., alcohol-based hand sanitizer) §; 5) delayed recognition of cases because of low index of suspicion, limited testing availability, and difficulty identifying persons with COVID-19 based on signs and symptoms alone.

....

The findings in this report suggest that once COVID-19 has been introduced into a long-term care facility, it has the potential to result in high attack rates among residents, staff members, and visitors.”²⁴⁸

5. Dental Services.

Dental work environment contains various hazards and job tasks which present “high”, “medium” (close contact), and “lower” risk exposures:

“The practice of dentistry involves the use of rotary dental and surgical instruments, such as handpieces or ultrasonic scalers and air-water syringes. These instruments create a visible spray that can contain particle droplets of water, saliva, blood, microorganisms, and other debris. Surgical masks protect mucous membranes of the mouth and nose from droplet spatter, but they do not provide complete protection against inhalation of airborne infectious agents. There are currently no data available to assess the risk of SARS-CoV-2 transmission during dental practice.”²⁴⁹

Dentist Offices COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

²⁴⁸ https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e1.htm?s_cid=mm6912e1_w

²⁴⁹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/dental-settings.html>

NBCbayarea.com, May, 14, 2020, “Potential COVID Aerosol Hazards in the Dentist Chair”

“I can't express enough how dangerous it is in a dental office right now, we have the ability to be asymptomatic and spread this to other people as much as we're looking out for our own safety,” said Cindi Roddan, a dental hygienist, adding, ‘Everything that we do in dentistry creates aerosols. It is so dangerous.’

Dental Hygienist Tops List of Jobs Exposed to Disease. Dental hygienists are potentially exposed to disease on a daily basis, according to federal employment data. Professions are ranked on a scale in which 100 represents daily contact, 75 is weekly, 50 is monthly and 25 is daily.

Occupation	Context
Dental Hygienists	100
Acute Care Nurses	100
Family and General Practitioners	100
Internists, General	100
Critical Care Nurses	99
Hospitalists	99
Oral and Maxillofacial Surgeons	99
Respiratory Therapists	98
Respiratory Therapy Technicians	98
Anesthesiologist Assistants	97
Occupational Therapy Aides	97
Orderlies	97
Dental Assistants	96
Medical and Clinical Laboratory Technologists	96
Nurse Anesthetists	96
Urologists	96
Allergists and Immunologists	95
Dentists, General	95
Radiation Therapists	95
Registered Nurses	95

Table: Sean Myers/NBC Bay Area • Source: the National Center for O*NET Development • Created with Datawrapper

High speed drills, ultrasonic scalers and air-water syringes are the tools used in dentistry. According to the Centers for Disease Control they are also potent spreaders of coronavirus because they “create a visible spray that contains large droplets of water, saliva, blood, microorganisms and other debris.”

If a patient is infected with the COVID-19 virus, even if they show no symptoms, those aerosols can contain enough of the virus to infect a dental hygienist, or even the next patient who sits in the dental chair.” (Emphasis added).

Dental-tribune.com, Jakarta, Indonesia, April 16, 2020, “Dentists in Indonesia are dying from COVID-19”

“The Indonesian Medical Association has confirmed that 24 medical professionals have died in the country from COVID-19, six of whom were dentists. Not all of those who died were working on the front line in the battle against the illness. The government’s COVID-19 response team has called on the health ministry to protect doctors and dentists by advising them to close their practices.”²⁵⁰

Bridgemi.com, April 10, 2020, Michigan, “Ascension doctor becomes 7th Michigan health care worker to die of coronavirus”²⁵¹

“Seven health care workers in southeast Michigan have now died from complications of the coronavirus, including a doctor at Ascension Macomb Hospital who graduated from Wayne State University.

....

One of them was Dr. Chris Firlit, a 37-year-old husband and father of three. Firlit was a member of the Wayne State University's class of 2018, and lived in Berkley.

Firlit was a senior resident in the oral maxillofacial surgery program at Ascension Macomb Hospital. Wayne State announced his death Tuesday and said he had died this week, but did not provide the exact date.”

Docseducation.com, April 9, 2020, “The Pandemic and the Dentist”²⁵²

“Risk to the Dental Professional

....

The dental professional is particularly at risk if one is working on an infected patient or an asymptomatic carrier because of close contact with the patient and the risk of blood, saliva and droplet exposure. In Italy, there were 7 dental professionals who died of COVID-19 during the pandemic.”

Medrxiv.org, April 5, 2020, “Physician Deaths from Corona Virus Disease (COVID-19)”²⁵³

“RESULTS: We found 198 physician deaths from COVID-19, but complete details were missing for 49 individuals. The average age of the physicians that died was 63.4 years (range 28 to 90 years) and the median age was 66 years of age. Ninety percent of the deceased physicians were male (175/194). General practitioners and emergency room doctors (78/192), respirologists (5/192), internal medicine specialists (11/192) and anesthesiologists (6/192) comprised 52% of those dying. Two percent of the deceased were epidemiologists (4/192), 2% were infectious disease specialists (4/192), **5% were dentists (9/192)**, 4% were ENT (8/192), and 4% were ophthalmologists (7/192). The countries with the most reported physician deaths were Italy (79/198), Iran (43/198), China (16/198), Philippines (14/198), United States

²⁵⁰ <https://www.dental-tribune.com/news/dentists-in-indonesia-are-dying-from-covid-19/>

²⁵¹ <https://www.bridgemi.com/michigan-health-watch/ascension-doctor-becomes-7th-michigan-health-care-worker-die-coronavirus>

²⁵² <https://www.docseducation.com/blog/pandemic-and-dentist>

²⁵³ <https://www.medrxiv.org/content/10.1101/2020.04.05.20054494v1.full.pdf>

(9/192) and Indonesia (7/192).” (Emphasis added).

6. Morgue and Mortuary Services

The morgue and mortuary services work environment contains various hazards and job tasks which can present risk exposures at all levels:

Very high – “Morgue workers performing autopsies, which generally involve aerosol-generating procedures, on the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.”²⁵⁴

High – “Mortuary workers involved in preparing (e.g., for burial or cremation) the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.”²⁵⁵

Medium – “Medium exposure risk jobs include those that require frequent and/or close contact with (i.e., within 6 feet of) people who may be infected with SARS-CoV-2, but who are not known or suspected COVID-19 patients....In areas where there is ongoing community transmission, workers in this category may have contact with the general public [funerals] (e.g., schools, high-population-density work environments, some high-volume retail settings).”²⁵⁶

Lower – “Lower exposure risk (caution) jobs are those that do not require contact with people known to be, or suspected of being, infected with SARS-CoV-2 nor frequent close contact with (i.e., within 6 feet of) the general public. Workers in this category have minimal occupational contact with the public and other coworkers [administrative services associated with funerals].”²⁵⁷

Morgue and Mortuary Services COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Tuscon.com, Tucson, AZ, May 2, 2020, “Illnesses at Tucson funeral home highlight risks to 'last responders' during pandemic”

“Numerous employees at a Tucson funeral home contracted coronavirus, but experts say it is unlikely they were infected by the body of a COVID-19 victim.

Adair Funeral Homes temporarily closed its Dodge Chapel after “a number” of staff members fell ill and were sent home to recover in self-quarantine, according to a written statement from the company.

The incident highlights lingering questions about how the virus is transmitted, and it

²⁵⁴ <https://www.osha.gov/Publications/OSHA3990.pdf> at page 19.

²⁵⁵ *Id.*

²⁵⁶ *Id.* at page 20.

²⁵⁷ *Id.* at page 20.

underscores the essential work still being done by so-called “last responders” in the community’s morgues and mortuaries.

‘They really are heroes, but they don’t get the recognition they deserve, because it’s death and nobody wants to talk about that,’ said Judith Stapley, executive director of the Arizona State Board of Funeral Directors and Embalmers.

Adair did not identify the suspected source of the outbreak. It’s unclear if the Dodge Chapel has handled any of the more than 80 people who have died from the coronavirus in Pima County.

Dr. Greg Hess, chief medical examiner for the county, said it is doubtful the outbreak at the mortuary came from a corpse.

‘Are we hearing that someone has contracted COVID from a dead body? We’re not,’ Hess said. ‘It’s possible, but honestly there is a much greater risk of contracting it from somewhere else.’²⁵⁸

CDC.gov, “Community Transmission of SARS-CoV-2 at Two Family Gatherings [including a Funeral]” — Chicago, Illinois, February–March 2020

“Most early reports of person-to-person SARS-CoV-2 transmission have been among household contacts, where the secondary attack rate has been estimated to exceed 10% (1), in health care facilities (2), and in congregate settings (3).

However, widespread community transmission, as is currently being observed in the United States, requires more expansive transmission events between non-household contacts. In February and March 2020, the Chicago Department of Public Health (CDPH) investigated a large, multifamily cluster of COVID-19. Patients with confirmed COVID-19 and their close contacts were interviewed to better understand non-household, community transmission of SARS-CoV-2. This report describes the cluster of 16 cases of confirmed or probable COVID-19, including three deaths, likely resulting from transmission of SARS-CoV-2 at two family gatherings (a funeral and a birthday party).²⁵⁹ (Emphasis added).

7. Veterinary Services.

²⁵⁸ https://tucson.com/news/local/illnesses-at-tucson-funeral-home-highlight-risks-to-last-responders-during-pandemic/article_e0ea6dbc-721b-5b46-a30b-609fcdd9ae5a.html

²⁵⁹ https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e1.htm?s_cid=mm6915e1_w

“The findings in this investigation are subject to at least three limitations. First, lack of laboratory testing for probable cases means some probable COVID-19 patients might have instead experienced unrelated illnesses, although influenza-like illness was declining in Chicago at the time. Second, phylogenetic data, which could confirm presumed epidemiologic linkages, were unavailable. For example, patient B3.1 experienced exposure to two patients with confirmed COVID-19 in this cluster, and the causative exposure was presumed based on expected incubation periods. Patient D3.1 was a health care professional, and, despite not seeing any patients with known COVID-19, might have acquired SARS-CoV-2 during clinical practice rather than through contact with members of this cluster. Similarly, other members of the cluster might have experienced community exposures to SARS-CoV-2, although these transmission events occurred before widespread community transmission of SARS-CoV-2 in Chicago. Finally, despite intensive epidemiologic investigation, not every confirmed or probable case related to this cluster might have been detected. Persons who did not display symptoms were not evaluated for COVID-19, which, given increasing evidence of substantial asymptomatic infection (9), means the size of this cluster might be underestimated.” *Id.*

The veterinary work environment contains various hazards and job tasks which present “medium” (close contact), and “lower” risk exposures:

“The greatest risk of COVID-19 exposure to staff at veterinary clinics comes from person-to-person transmission through respiratory droplets from coughing, sneezing, or talking, which is the main way SARS-CoV-2 spreads.

....

We are still learning about this novel zoonotic virus, and it appears that in some rare situations, human to animal transmission can occur.

CDC is aware of a small number animals, including dogs and cats, to be infected with SARS-CoV-2 after close contact with people with COVID-19. The United States Department of Agriculture (USDA) and CDC recently reported confirmed infection with SARS-CoV-2 in two pet cats with mild respiratory illness in New York, which were the first confirmed cases of SARS-CoV-2 infections in companion animals in the United States. Both cats are expected to recover. The cats had close contact with people confirmed or suspected to have COVID-19, suggesting human-to-cat spread. Further studies are needed to understand if and how different animals could be affected by SARS-CoV-2.

Limited information is available to characterize the spectrum of clinical illness associated with SARS-CoV-2 infection in animals. Clinical signs thought to be compatible with SARS-CoV-2 infection in animals include fever, coughing, difficulty breathing or shortness of breath, lethargy, sneezing, nasal/ocular discharge, vomiting, and diarrhea.

....

If a pet owner currently has respiratory symptoms or is a suspected of or confirmed to have COVID-19, they should not visit the veterinary facility. Consider whether a telemedicine consult is appropriate. If possible, a healthy friend or family member from outside their household should bring the animal to the veterinary clinic. The clinic should use all appropriate precautions to minimize contact with the person bringing the animal to the clinic. If there is an emergency with the animal, the animal should not be denied care.

If a pet owner is suspected or confirmed to have COVID-19 and must bring their pet to the clinic, the following actions should be taken:

- Communicate via phone call or video chat to maintain social distancing.
- Retrieve the animal from the owner’s vehicle (also called curbside) to prevent the owner from having to enter the clinic or hospital.
- Maintain social distancing and PPE recommendations when interacting with clients.
- Request smaller animals be brought in a plastic carrier to facilitate disinfection of the carrier after use. Also advise the owner to leave all non-essential items at home to avoid unnecessary opportunities for additional exposure.²⁶⁰

Veterinary COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Avma.org, May 29, 2020, “Remembering veterinarians who have died during the pandemic:”

²⁶⁰ <https://www.cdc.gov/coronavirus/2019-ncov/community/veterinarians.html>

“Wildlife, avian veterinarian honored. Dr. Peter Sakas (Illinois ’83), a staff veterinarian at the Animal Hospital and Bird Medical Center in Niles, Illinois, died on March 30 of COVID-19. In his work, he focused on wildlife veterinary medicine. Those who knew him say he was charismatic, had a big personality, and cared deeply for his clients and their animals.

....

‘There has been a lot of attention on human health care front-line workers, but I think people often forget that veterinarians are front-line health care workers too,’ Dr. Courtney Sakas said. ‘My father told us that he was never going to retire because he loved his job so much. I knew he was going to continue working as long as he possibly could to keep caring for the clients and animals he loved, even if it meant putting himself at risk.’”²⁶¹

“A community-focused veterinarian celebrated. Dr. Julie R. Butler (Cornell ’83), founder of 145th Street Animal Hospital in the Harlem neighborhood of New York City, died on April 4. In her personal life, Dr. Butler was an advocate of the arts who made an excellent lemon meringue pie.

....

In her professional life, Dr. Butler was the kind of veterinarian who never turned away an animal.

Dr. Butler was the co-founder of New York Save Animals in Veterinary Emergency, a nonprofit organization that provides financial assistance for pets who need emergency care. She also served as past president of the VMA of New York City. She spent over 30 years serving the Harlem community, and she used her experience to educate and mentor other veterinary professionals.

Kylie Lang, a veterinary technician, said Dr. Butler was a role model who made work enjoyable.”²⁶²

8. Hand Labor Operations in Agriculture.

Hand labor operations in agriculture contain various hazards and job tasks which present “medium” (close contact), and “lower” risk exposures:

Northcarolinahealthnews.org, March 13, 2020, “For migrant workers in NC, coronavirus may be hard to avoid”

“As the growing season ramps up in North Carolina, agencies that care for and about migrant and seasonal farmworkers are hastily preparing to screen and educate them about coronavirus.

Migrant workers aren’t especially susceptible to coronavirus, but their living conditions during the growing season — trailers and rooms that house many workers — could put them at greater risk of catching the virus, which spreads

²⁶¹ <https://www.avma.org/javma-news/2020-07-01/remembering-veterinarians-who-have-died-during-pandemic>

²⁶² *Id.*

through droplets, close contact and surfaces.

....

‘They all share the same bathroom, they all share the same kitchen, they’re all usually within the same living area,’ said Amy Elkins, an outreach worker at North Carolina Farmworkers’ Project, a Benson-based organization that serves an average of 3,000 migrant and seasonal workers a year. ‘So if we have one case inside a camp, it is most likely that everyone is going to be infected.’

....

Her colleague, Janeth Tapia, the organization’s outreach coordinator, said that migrant farmworkers are used to working through illness and are reluctant to reveal that they are sick for fear of being sent to their home countries before the end of the growing season.

‘That’s something we see a lot,’ Elkins said. ‘We’ll have someone who just gets pneumonia or hurts their foot and can’t work. The farmer will give them one or two days and (if the employee does not recover) he’s on a bus back to Mexico.’²⁶³

Hand Labor Operations Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Bloomberg.com, May 29, 2020, “Every Single Worker Has Covid at One U.S. Farm on Eve of Harvest”

“One farm in Tennessee distributed Covid-19 tests to all of its workers after an employee came down with the virus. It turned out that every single one of its roughly 200 employees had been infected.

In New Jersey, more than 50 workers had the virus at a farm in Gloucester County, adding to nearly 60 who fell ill in neighboring Salem County. Washington state’s Yakima County, an agricultural area that produces apples, cherries, pears and most of the nation’s hops, has the highest per capita infection rate of any county on the West Coast.

The outbreaks underscore the latest pandemic threat to food supply: Farm workers are getting sick and spreading the illness just as the U.S. heads into the peak of the summer produce season. In all likelihood, the cases will keep climbing as more than half a million seasonal employees crowd onto buses to move among farms across the country and get housed together in cramped bunkhouse-style dormitories.

....

The early outbreaks are already starting to draw comparisons to the infections that plunged the U.S. meat industry into crisis over the past few months. Analysts and experts are warning that thousands of farm workers are vulnerable to contracting the disease.

²⁶³ <https://www.northcarolinahealthnews.org/2020/03/13/for-migrant-workers-in-nc-coronavirus-may-be-hard-to-avoid/>

....

Unlike grain crops that rely on machinery, America's fruits and vegetables are mostly picked and packed by hand, in long shifts out in the open -- a typically undesirable job in major economies. So the position typically goes to immigrants, who make up about three quarters of U.S. farm workers.

A workforce of seasonal migrants travels across the nation, following harvest patterns. Most come from Mexico and Latin America through key entry points like southern California, and go further by bus, often for hours, sometimes for days.

There are as many as 2.7 million hired farm workers in the U.S., including migrant, seasonal, year-round and guest-program workers, according to the Migrant Clinicians Network. While many migrants have their permanent residence in the U.S., moving from location to location during the warmer months, others enter through the federal H2A visa program. Still, roughly half of hired crop farmworkers lack legal immigration status, according to the U.S. Department of Agriculture.

These are some of the most vulnerable populations in the U.S., subjected to tough working conditions for little pay and meager benefits. Most don't have access to adequate health care. Many don't speak English.

Without them, it would be nearly impossible to keep America's produce aisles filled. And yet, there's no one collecting national numbers on how many are falling sick.

'There is woefully inadequate surveillance of what's happening with Covid-19 and farm workers,' said Erik Nicholson, a national vice president for the United Farm Workers. 'There is no central reporting, which is crazy because these are essential businesses.'"²⁶⁴ (Emphasis added).

WBGO.org, New Jersey, May 12, 2020, "Coronavirus update: Cases spike among farmworkers"

"More than half the seasonal workers at a South Jersey farm have tested positive for COVID-19, raising fears of an unchecked outbreak ahead of the blueberry and other harvests.

At least 59 migrant workers at a farm in Upper Pittsgrove, in rural Salem County, have been infected, NJ Spotlight reported Monday. The news came just as the state Department of Health and local federally qualified health centers prepared to launch a testing program for all such workers.

Upper Pittsgrove Mayor Jack Cimprich said he didn't know how the farmer was isolating infected workers in camp dormitories, dining halls and fields. "I

²⁶⁴ <https://www.bloomberg.com/news/articles/2020-05-29/every-single-worker-has-covid-at-one-u-s-farm-on-eve-of-harvest>

wouldn't be surprised, in fact, if it hasn't spread to the whole group," he told NJ Spotlight.

Several thousand migrant farmworkers — many from Mexico, Haiti, Puerto Rico and Central America — come to the region for the spring and summer harvests. One immigrant advocate interviewed by the outlet called the rise in cases among workers “a potential crisis.”²⁶⁵

9. Correctional and Detention Facilities.

The correctional and detention facilities work environments contain various hazards and job tasks which present, high, medium (close contact) to lower risk exposures:

NOTE: Virginia correctional facilities have clinics that provide certain medical services to inmates.

“Correctional and detention facilities face challenges in controlling the spread of infectious diseases because of crowded, shared environments and potential introductions by staff members and new intakes.

....

An estimated 2.1 million U.S. adults are housed within approximately 5,000 correctional and detention facilities on any given day (1). Many facilities face significant challenges in controlling the spread of highly infectious pathogens such as SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19).

Such challenges include crowded dormitories, shared lavatories, limited medical and isolation resources, daily entry and exit of staff members and visitors, continual introduction of newly incarcerated or detained persons, and transport of incarcerated or detained persons in multiperson vehicles for court-related, medical, or security reasons (2,3). During April 22–28, 2020, aggregate data on COVID-19 cases were reported to CDC by 37 of 54 state and territorial health department jurisdictions.

Thirty-two (86%) jurisdictions reported at least one laboratory-confirmed case from a total of 420 correctional and detention facilities. Among these facilities, COVID-19 was diagnosed in 4,893 incarcerated or detained persons and 2,778 facility staff members, resulting in 88 deaths in incarcerated or detained persons and 15 deaths among staff members. Prompt identification of COVID-19 cases and consistent application of prevention measures, such as symptom screening and quarantine, are critical to protecting incarcerated and detained persons and staff members.

....

Approximately one half of facilities with COVID-19 cases reported them among staff members but not among incarcerated persons.²⁶⁶

Correctional Facility and Detention Center COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this

²⁶⁵ <https://www.wbgo.org/post/coronavirus-update-cases-spike-among-farmworkers-nj-curbs-wave-parades#stream/0>

²⁶⁶ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6919e1.htm>

industry.

The Virginia Department of Corrections website²⁶⁷ as of Noon, May 29, 2020, Cases by location, reports that 132 staff and contractors (active cases), and 1,171 offenders have tested positive COVID-19. Seven (7) offenders have died:

LOCATION	OFFENDERS ON-SITE	OFFENDERS IN HOSPITALS	DEATH OF COVID-19 POSITIVE OFFENDER	TOTAL POSITIVE OFFENDERS onsite + hospital + deaths + releases + recovered + transfers in - transfers out	STAFF active cases including employees & contractors
Appalachian Men's CCAP	0	0	0	0	0
Augusta Correctional Center	0	0	0	0	1
Baskerville Correctional Center	0	0	0	0	1
Bland Correctional Center	0	0	0	0	0
Brunswick CCAP	0	0	0	0	0
Buckingham Correctional Center	44	2	3	113	8
Caroline Correctional Unit	0	0	0	0	0
Central Virginia Correctional Unit #13	1	0	0	57	2
Chesterfield Women's CCAP	0	0	0	0	0
Coffeewood Correctional Center	0	0	0	0	0
Cold Springs CCAP	0	0	0	0	0
Cold Springs Correctional Unit #10	0	0	0	0	0
Deerfield Correctional Center (includes Deerfield Work Centers)	20	1	1	78	3
Dillwyn Correctional Center	121	2	1	322	9
Fluvanna Correctional Center for Women	0	0	0	0	0
Green Rock Correctional Center	0	0	0	0	0
Greensville Correctional Center (includes Greensville Work Center)	190	2	0	193	53
Halifax Correctional Unit	0	0	0	0	0
Harrisonburg Men's CCAP	5	0	0	26	1
Haynesville Correctional Center	114	3	0	246	9
Haynesville Correctional Unit #17	0	0	0	0	0

²⁶⁷ <https://www.vadoc.virginia.gov/news-press-releases/2020/covid-19-updates/>

LOCATION	OFFENDERS ON-SITE	OFFENDERS IN HOSPITALS	DEATH OF COVID-19 POSITIVE OFFENDER	TOTAL POSITIVE OFFENDERS onsite + hospital + deaths + releases + recovered + transfers in - transfers out	STAFF active cases including employees & contractors
Indian Creek Correctional Center	0	0	0	0	1
Keen Mountain Correctional Center	0	0	0	0	0
Lawrenceville Correctional Center	0	0	0	0	0
Lunenburg Correctional Center	0	0	0	0	0
Marion Correctional Treatment Center	0	0	0	0	0
Nottoway Correctional Center (includes Nottoway Work Center)	0	0	0	0	4
Patrick Henry Correctional Unit	0	0	0	0	0
Pocahontas State Correctional Center	0	0	0	0	0
Red Onion State Prison	0	0	0	0	0
River North Correctional Center	0	0	0	0	1
Rustburg Correctional Unit	0	0	0	0	0
St. Brides Correctional Center	0	0	0	0	1
Stafford Men's CCAP	0	0	0	0	0
State Farm Correctional Complex	19	1	0	20	17
Sussex I State Prison	0	0	0	0	3
Sussex II State Prison	23	1	1	71	7
Virginia Correctional Center for Women (includes State Farm Work Center)	2	0	1	45	9
Wallens Ridge State Prison	0	0	0	0	2
Wise Correctional Unit	0	0	0	0	0
Probation & Parole — Eastern Region	n/a	n/a	n/a	n/a	0
Probation & Parole — Central Region	n/a	n/a	n/a	n/a	0
Probation & Parole — Western Region	n/a	n/a	n/a	n/a	0
Administration & Operations	n/a	n/a	n/a	n/a	0
TOTALS	539	12	7	1171	132

Rrjva.org, Riverside Regional Jail, May 28, 2020, “COVID-19 Information as of May 28, 2020”

“Current Statistics:

Currently we have 45 positive cases of COVID-19 in the inmate population, We also have seven (7) staff members who have tested positive.

....

We have designated several living areas for quarantine. When inmates are initially booked in, they are placed in precautionary quarantine for 14 days. Once they are cleared, they are moved to general population.

Should an inmate test positive in general population, all inmates and staff that have been in contact are isolated and tested. If a significant number of inmates in that area were exposed, the entire living area is placed on isolation.

Staff that test positive are placed on leave until cleared by a physician.”²⁶⁸

Usatoday.com, April 27, 2020, “Isolated and scared: The plight of juveniles locked up during the coronavirus pandemic”

“Arjanae Avula talks to her younger brother twice a week. Phone calls last about three minutes before they’re cut off. During their last conversation, she said, he was crying.

....

Her 18-year-old brother is at Bon Air Juvenile Correctional Center, a coronavirus hot spot near Richmond, Virginia, where 27 youths and 10 employees have tested positive for COVID-19.”



This photo shows the Bon Air Juvenile Correctional Center in Bon Air, Va., Tuesday, April 21, 2020. The Virginia Department of Corrections said Monday that it will dramatically increase testing of inmates as the state struggles to control the spread of the coronavirus in prisons across the state. *Steve Helber, AP*

²⁶⁸ <https://rrjva.org/wp/covid-19/>

10. Manufacturing

“The manufacturing work environment—production or assembly lines and other areas in busy plants where workers have close contact with coworkers and supervisors [medium risk exposure] — may contribute substantially to workers’ potential exposures. The risk of occupational transmission of SARS-CoV-2 depends on several factors. (Emphasis added).

....

Distinctive factors that affect workers’ risk for exposure to SARS-CoV-2 in manufacturing workplaces include:

- Distance between workers – Manufacturing workers often work close to one another on production or assembly lines. Workers may also be near one another at other times, such as when clocking in or out, during breaks, or in locker/changing rooms.
- Duration of contact – Manufacturing workers often have prolonged closeness to coworkers (e.g., for 8–12 hours per shift). Continued contact with potentially infectious individuals increases the risk of SARS-CoV-2 transmission.
- Type of contact – Manufacturing workers may be exposed to the infectious virus through respiratory droplets in the air—for example, when workers in a plant who have the virus cough or sneeze. It is also possible that exposure could occur from contact with contaminated surfaces or objects, such as tools, workstations, or break room tables. Shared spaces such as break rooms, locker rooms, and entrances/exits to the facility may contribute to their risk.
- Other distinctive factors that may increase risk among these workers include:
 - A common practice at some workplaces of sharing transportation such as ride-share vans or shuttle vehicles, car-pools, and public transportation
- Frequent contact with fellow workers in community settings in areas where there is ongoing community transmission²⁶⁹

Manufacturing COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

NBCnews.com, May 16, 2020, “Midwest manufacturing workers sound alarm over COVID-19 outbreaks”

“But outbreaks at manufacturing facilities that make everything from wind turbine parts to soap have also sickened scores of workers while garnering far less attention.

....

TPI Composites, a manufacturer of wind blades, shut down its Newton, Iowa, facility after approximately 20 percent of employees tested positive for the

²⁶⁹ <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-manufacturing-workers-employers.html>

coronavirus, according to a May 2 news release.²⁷⁰ At least one worker has died.

....

Kyle Brown, 54, worked at TPI Composites for eight years, most recently in the maintenance department, his wife, Pamela Dennen, told NBC News in a phone interview. Brown died from COVID-19 on April 29.

....

Almost 500 miles away in Grand Forks, North Dakota, workers said they were ignored in March when they raised alarms about safety conditions at LM Wind Power, a General Electric-owned plant that produces wind turbine blades, according to the company's website. Weeks later, 145 people tested positive for COVID-19, according to the North Dakota Department of Health. Fifteen of those employees live outside of North Dakota, while 130 are North Dakota residents, the department told NBC News. At least one employee from the plant has died, but GE did not confirm whether it was related to the coronavirus.

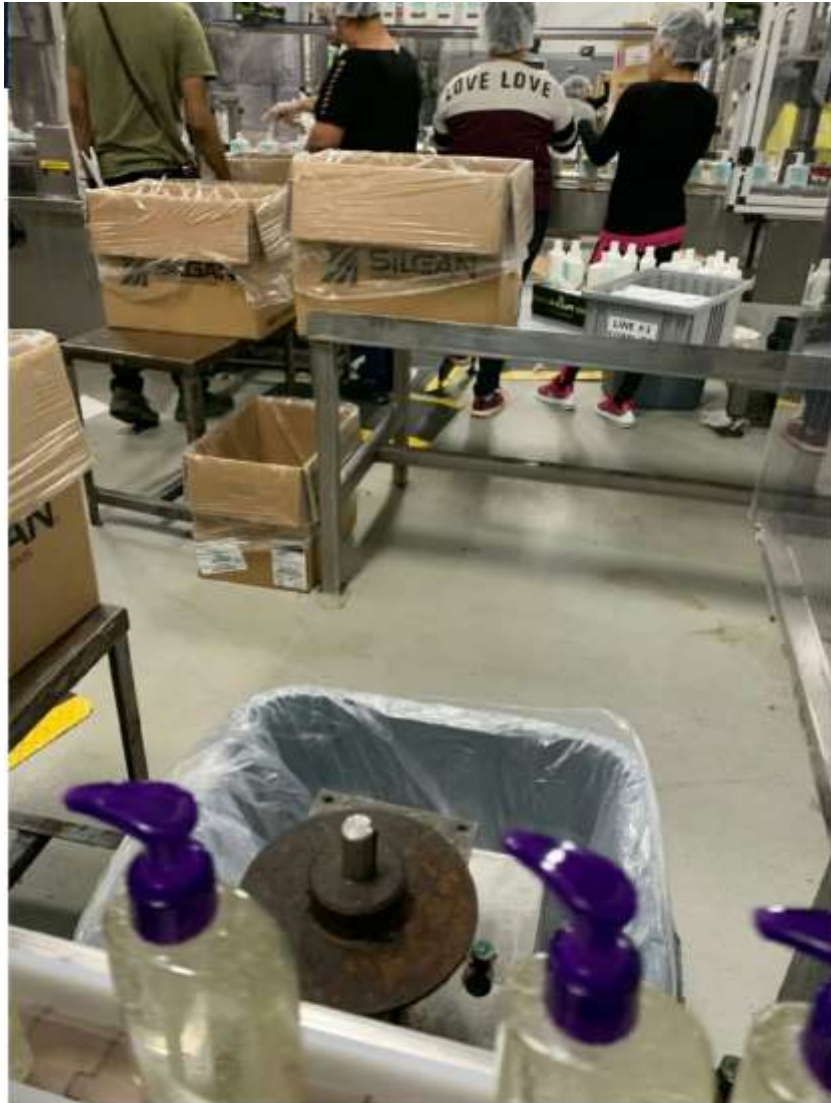
....

Three weeks after Boushee raised concerns, the outbreak at LM Wind Power was so widespread that North Dakota's Department of Health issued an executive order mandating all plant employees remain under quarantine for two weeks.²⁷¹ (Emphasis added).

²⁷⁰ <https://www.nbcnews.com/news/us-news/midwest-manufacturing-workers-sound-alarm-over-covid-19-outbreaks-n1207391>

"TPI Composites, Inc. Provides Update on COVID-19 Testing Results of Its Newton, Iowa Associates May 2, 2020. SCOTTSDALE, Ariz., May 02, 2020 (GLOBE NEWSWIRE) -- TPI Composites, Inc. (Nasdaq: TPIC), the only independent manufacturer of composite wind blades with a global footprint, announced today that it has completed COVID-19 testing on nearly all of its Newton, Iowa associates. Following an increase in COVID-19 cases in Jasper, Marshall, and Polk counties, as well as a significant number of positive cases in our plant in Newton, Iowa, and in collaboration with the State of Iowa, TPI proactively conducted mandatory COVID-19 testing for nearly all of its associates at its Newton facility on April 25, 2020. During this time, TPI paused production and undertook another deep clean of the facility. TPI also provided all associates' family members with surgical masks to help prevent further community spread, and offered hotel rooms to associates who tested negative to allow for isolation. TPI has received the majority of the test results and approximately 20% of its Newton associates have tested positive to date, which is representative of test results in the broader community."

²⁷¹ <https://www.nbcnews.com/news/us-news/midwest-manufacturing-workers-sound-alarm-over-covid-19-outbreaks-n1207391>



Workers are shown on the manufacturing line at Voyant Beauty in late March. The company makes soaps, lotions and beauty products for major brands in Countryside, Illinois. One temporary worker from Voyant has died from COVID-19, and others said the company hasn't done enough to keep them safe. Chicago Workers Collaborative

Above photo: “Workers are shown on the manufacturing line at Voyant Beauty in late March. The company makes soaps, lotions and beauty products for major brands in Countryside, Illinois. One temporary worker from Voyant has died from COVID-19, and others said the company hasn't done enough to keep them safe.” (Emphasis added).

11. Construction.

The construction work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“Potential sources of exposure include having close contact with a coworker or member of the public who is ill with COVID-19 and touching your nose, mouth, or eyes after touching surfaces contaminated with the virus or handling items that others

infected with COVID-19 have touched.”²⁷² (Emphasis added).

[Excerpt from April 27, 2020 NABTU (North American Building Trades Unions) and CPWR (CPWR – The Center for Construction Research and Training) COVID-19 Standards for U.S. Construction Sites]

“Respiratory protection: If workers need to be near each other to perform tasks or when working in close quarters, such as confined space work, they should wear a NIOSH-approved respirator implemented under a full respiratory protection program. NIOSH-approved respirators include filtering facepiece and elastomeric negative or positive pressure half or full facepiece respirators equipped with N95, N99, N100, R95, P95, P99, or P100 filters. Cloth face coverings are not respirators and do not replace physical distancing or respirators required when workers are in close proximity. However, cloth face coverings should be provided in other circumstances when required or recommended by state or local governments.”²⁷³

[Excerpt from April 30, 2020 Associated General Contractors (AGC) response to “NABTU COVID-19 Standards for U.S. Construction Sites”]

“Required Use of Respirators

In accordance with recent guidance issued by the CDC and OSHA, AGC recognizes that requiring workers to cover their mouths and noses will help with preventing the spread of COVID-19. Both agencies have recommended face coverings and/or face masks and not necessarily respiratory protection when social distancing cannot be achieved. It is our concern that the requirement, or mandate, to use respiratory protection will significantly increase the number of contractors who will be required to implement and maintain a written respiratory protection program as nearly every construction worker will, at some point, be required to work within six feet of a coworker to complete an assigned task.

Based on our review of the OSHA Guidance for Preparing Workplaces for COVID-19, which was prepared in partnership with the Department of Health and Human Services, construction would be considered low risk for most operations/tasks. According to the guidance, additional PPE is not recommended for workers in the low exposure risk group. It advises that workers in low risk occupations should continue to use the PPE, if any, that they would ordinarily use for other job tasks. And while some operations/tasks may fall into the medium risk category, the recommended PPE for this category does not specifically state respiratory protection must be worn. In fact, the OSHA guidance states that only in rare situations would workers in this risk category be required to use respirators. It is our belief that this level of protection is unnecessary, and that contractors allowing the use of some form of face covering or face mask will provide adequate protection to affected workers.”²⁷⁴ (Emphasis added).

Construction COVID-19 Reports and Statistics

²⁷² <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/construction-workers.html>

²⁷³ https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf

²⁷⁴ <https://www.agc.org/sites/default/files/Files/Safety%20%26%20Health/NABTU%20Covid%204.30.20.pdf>

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

NOTE: Reports are limited to Virginia and states contiguous to or near Virginia: North Carolina, Washington, DC, Maryland, West Virginia, Georgia, Pennsylvania, and Tennessee as construction contractors from those states are known to regularly conduct work in Virginia.

Charlotte Observer, May 22, 2020, “38 test positive for COVID-19 at uptown tower construction site, prompting a shutdown”

“Thirty-eight workers at the construction site for an uptown apartment tower have tested positive for the coronavirus and the project has shut down temporarily, the general contractor said Friday.

As a result of the spike in cases, most of which occurred in the past week, Hoar Construction decided to shut down the job site until June 1, Randall Curtis, the company’s executive vice president and chief operating officer, said in a statement.

While it is closed, Curtis said, Hoar will conduct a deep cleaning and sterilization of the site, which is along North College Street between 8th and 9th streets. Hoar will work with a third-party company to beef up screening on the site when it reopens, he said.”

....

It’s the latest outbreak at a Charlotte construction site, after the general contractor for the expansion of the Charlotte Convention Center confirmed four positive COVID-19 cases on that site earlier this week.

....

Curtis said up until now, Hoar has recommended the use of face coverings, but will now require it for all employees on the site. He said the company has taken a number of measures, including screening employees prior to entering the jobsite, adding handwashing and sanitation stations, and putting up social distancing markers.”²⁷⁵

Newschannel5.com, Nashville, TN, May 21, 2020, “Mass testing at construction site reveals 74 workers with COVID-19”

“Mass testing of workers at a Nashville construction site has revealed more than 70 cases of COVID-19. The Metro Health Department is monitoring the site on the campus of Montgomery Bell Academy, a prominent private school off West End Avenue. General Contractor Brasfield & Gorrie is overseeing construction of an athletic facility on the campus.

Emails obtained by News Channel 5 Investigates reveal the "first positive case" on the site was discovered earlier this month. In one email, General

²⁷⁵ <https://www.charlotteobserver.com/news/business/biz-columns-blogs/development/article242928141.html>

Contractor Brasfield & Gorrie "confirmed multiple positive cases of COVID-19 among our subcontractor employees."

The contractor then closed the site for five days for cleaning and testing of workers."²⁷⁶

WataugaDemocrat.com, Boone, NC, May 14, 2020, "16 App State construction workers test positive for COVID-19"

"Appalachian State announced on May 14 that 16 subcontracted workers for a campus construction project have tested positive for COVID-19. The workers are not Watauga County residents."²⁷⁷

Baltimore Sun, Baltimore, MD, "As construction in Maryland continues amid coronavirus, some are grateful for work while others worry about safety"

"They're staggering workers, trying to make sure there are fewer electricians, laborers and contractors on building sites at the same time. They're using video when possible to conduct meetings and site visits. But in the world of construction, workers don't always have masks, and they're almost all using the same portable toilets.

....

The state health department said it does not track the number of cases on construction sites, but the Department of General Services said five construction sites are shut down due to possible COVID-19 threats.

WAMU.org, Washington, DC, May 6, 2020, "Construction Stops In Parts of the Air and Space Museum After Workers Contract COVID-19"

"Four construction workers at the Smithsonian's National Air and Space Museum have tested positive for COVID-19, leading parts of the site to shutter for a "deep cleaning," the Huffington Post reports."²⁷⁸

WSLS.com, Roanoke, VA, May 5, 2020, "25 COVID-19 cases connected to Cave Spring High School construction work"

"ROANOKE, Va. – More than two dozen coronavirus cases are connected to construction work at a local high school, according to Roanoke County Public Schools officials.

The president of Avis Construction, Troy Smith, spoke to the Roanoke County school board on Tuesday and reported as many as 25 cases of COVID-19 that are related to construction work at Cave Spring High School.

²⁷⁶ <https://www.newschannel5.com/news/newschannel-5-investigates/mass-testing-at-construction-site-reveals-74-workers-with-covid-19>

²⁷⁷ https://www.wataugademocrat.com/covid19/16-app-state-construction-workers-test-positive-for-covid-19/article_303494af-b54d-57f6-8b59-1d75b50b5843.html

²⁷⁸ <https://wamu.org/story/20/05/04/coronavirus-latest-dc-maryland-virginia-week-of-may4/#smithsonian>

Smith told school board members that not all 25 cases are construction workers, but rather, some are family members of workers.

School officials told 10 News that most cases are in workers from different out-of-state subcontractors.

All work was halted at the Cave Spring High School construction site on Monday, per recommendation from the health department.”²⁷⁹
(Emphasis added).

DCist.com, Washington, DC, April 30, 2020, “More COVID-19 Cases Reported At D.C. Construction Sites”

“More than a dozen COVID-19 cases have been reported at a residential construction site in Navy Yard, and it’s not the only site with concerns. Fears over the virus spreading further at the renovation of a congressional office building could lead to a shorter workweek at the site to prevent the spread of the virus.

There have been between 14 and 18 positive COVID cases among construction workers at D.C. Crossing, an 818-unit residential building under construction in Navy Yard, a source tells DCist. (The source asked for anonymity to protect workers at the site who shared information.) A spokesperson for the Maryland-based Clark Construction Group, which is helping the project, confirmed that there had been positive cases in mid-April, but the infected workers had not been at the worksite since. The spokesperson did not confirm how many positive cases there had been.

‘In each instance, Clark quickly performed contact tracing to identify areas of the project and workers that may have been impacted. We have kept the subcontractors and the developer informed of each confirmed case. We have worked with leadership from our subcontracting partners to ensure that workers who may have had contact with the affected individuals have taken appropriate measures in accordance with guidance provided by the CDC, including self-quarantining,’ the spokesperson said.

‘Through our thorough contact tracing and investigation, we have not been able to confirm where the individuals contracted COVID-19,’ they added.

....

Over at the Cannon House Office Building, where Clark Construction is conducting an extensive renovation of the 120-year-old building, the possibility of two new positive cases has forced the contractor to close the site from Thursday through Sunday.

....

At least 11 workers at the Cannon House Office Building project have tested positive for COVID-19 so far, as DCist reported last week.”²⁸⁰

²⁷⁹ <https://www.wsls.com/news/local/2020/05/06/25-covid-19-cases-connected-to-cave-spring-high-school-construction-work/>

²⁸⁰ <https://dcist.com/story/20/04/30/more-covid-19-cases-reported-at-d-c-construction-sites/>

Newsbreak.com, Baltimore, MD, “Worker at Havre de Grace school construction site dies from coronavirus; site shut down day prior when he tested positive”

“Harford County schools and the company managing construction of the new Havre de Grace Middle/High School building shut down the site earlier this week after learning a contracted worker tested positive for the novel coronavirus. The worker died the next day.”²⁸¹

WJBF.com, April 16, 2020, “Plant Vogtle asking employees to voluntarily stay home amid COVID-19 outbreak”

“Augusta, Ga. (WJBF) – Representatives at Plant Vogtle tell WJBF they have seen an increase recently in positive COVID-19 cases among the workforce at Units 3 and 4 with over 40 positive test results so far. As a result, Georgia Power is asking for volunteers among the craft worker ranks to stay at home during this COVID crisis.”²⁸² (Emphasis added).

12. Air Transportation.

The air transportation work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“As a customer service representative or gate agent, potential sources of exposure could include assisting a person with COVID-19 in close contact or by touching your mouth, nose, or eyes; or handling passenger items, such as baggage, boarding passes, identification documents, credit cards, and mobile devices.”²⁸³ (Emphasis added).

“For baggage or cargo handlers, while the general risk remains low, potential sources of exposure could include surfaces touched or handled by a person with COVID-19 or by touching your mouth, nose, or eyes.”²⁸⁴ (Emphasis added).

“As an airport custodial staff, while the general risk remains low, potential sources of exposure could include handling solid waste or cleaning public facilities (such as waste bins, tables, chairs, basins, toilets) with which a person with COVID-19 has interacted or by touching your mouth, nose, or eyes.”²⁸⁵ (Emphasis added).

“As an airport passenger service worker, potential sources of exposure can occur from assisting, transporting, or escorting a person with COVID-19 and their belongings or by touching your mouth, nose, or eyes.”²⁸⁶

“As an aircraft maintenance worker, you could be exposed to COVID-19 in situations

²⁸¹ <https://www.baltimoresun.com/coronavirus/cng-ag-hdg-school-covid-death-20200410-tuzdevg2s5ghjhdqngv6bdkw3u-story.html>

²⁸² <https://www.wjbf.com/csra-news/plant-vogtle-asking-employees-to-voluntarily-stay-home-amid-covid-19-outbreak/>

²⁸³ <https://www.cdc.gov/coronavirus/2019-ncov/community/airport-customer-factsheet.html>

²⁸⁴ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airport-baggage-cargo-handlers.html>

²⁸⁵ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airport-custodial-staff.html>

²⁸⁶ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airport-passenger-assistance-workers.html>

such as when you have close contact with someone with COVID-19, when you touch surfaces while repairing aircraft interiors and lavatories that have been touched or handled by a person with COVID-19, or by touching your mouth, nose, or eyes.”²⁸⁷ (Emphasis added).

“As an airline catering kitchen worker, you could be exposed to COVID-19 in situations such as having close contact with someone with COVID-19 or touching your mouth, nose, or eyes after handling frequently touched items used by someone with COVID-19 such as catering or food service carts or solid waste.”²⁸⁸ (Emphasis added).

“As an airline catering truck driver or helper, you could be exposed to COVID-19 in situations such as having close contact with someone with COVID-19 or touching your mouth, nose, or eyes after handling frequently touched items used by someone with COVID-19 such as catering and food service carts, used non-disposable food service items (e.g., utensils and serving trays), and solid waste.”²⁸⁹ (Emphasis added).

“As an airport retail or food service worker, potential sources of exposure can occur while working in an airport store, bar, restaurant, or food concession stand if you are if in close contact with someone with COVID-19 or by touching your mouth, nose, or eyes after handling items used by someone with COVID-19.”²⁹⁰ (Emphasis added).

Air Transportation COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Travelandleisure.com, March 27, 2020, “American and United Airlines Both Lose Employees to Coronavirus in Same Week”

“Both American and United Airlines lost employees this week due to complications from the coronavirus. American Airlines flight attendants received the news of the death of their colleague — Paul Frishkorn — on Thursday evening in a joint letter from the airline’s senior VP of flight service and presidents of the Association of Professional Flight Attendants (APFA).

A spokesperson for United also confirmed the death of their employee — Carlos Consuegra, a United ramp worker at Newark Liberty Airport — to T+L. Consuegra passed away earlier this week.²⁹¹

The 65-year-old Philadelphia-based flight attendant had worked with American Airlines since 1997. He had been twice honored as one of the airline’s Flight Service Champions for excellent customer service. He was also a union representative with the APFA.

²⁸⁷ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/aircraft-maintenance-workers.html>

²⁸⁸ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airline-catering-kitchen-workers.html>

²⁸⁹ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/airline-catering-truck-drivers.html>

²⁹⁰ <https://www.cdc.gov/coronavirus/2019-ncov/community/airport-retail-factsheet.html>

²⁹¹ <https://www.travelandleisure.com/airlines-airports/american-united-airlines-confirm-employee-deaths-coronavirus>

NBCnews.com, April 29, 2020, “TSA says 500 of its employees have tested positive for COVID-19”

“Five hundred people who work for the Transportation Security Administration have tested positive for COVID-19, including four people who died from the disease, the agency said Wednesday.

Of the 500 who tested positive, 208 recovered from the illness caused by the coronavirus, the agency said in a statement.

Almost 40 percent of positive cases were found in employees working in the three major airports serving the greater New York City region.”²⁹²

USAToday.com, May 3, 2020, “COVID-19 deaths among FedEx workers in Newark leave families, employees questioning company’s response”

“Pamela Pope spent her days doing a mix of work at FedEx’s Newark Liberty International Airport facility, from office work to deliveries and helping unload cargo from the dozens of planes flying in and out every day. It was a job she loved, and one the 56-year-old from Neptune, New Jersey, had done for more than half her life.

....

Pope died of coronavirus on April 25, her sister said.

The day prior, eight FedEx Express domestic workers' deaths were cited in an internal document obtained by the Memphis Commercial Appeal and Bergen Record.

At least five fatalities have occurred in Newark, according to family members who spoke with reporters from both newspapers. The death of a sixth person, identified as a FedEx Newark worker on her personal LinkedIn and Facebook accounts, was also attributed to COVID-19 complications in the social media posts of family members. Attempts to reach that family were unsuccessful.”²⁹³

Tsa.gov, May 31, 2020, “TSA Confirmed COVID-19 Cases”

“Overall, TSA has had 621 federal employees test positive for COVID-19. 423 employees have recovered, and 6 have unfortunately died as a result of the virus. We have also been notified that one screening contractor has passed away due to the virus.”²⁹⁴

UPDATE: January 4, 2020²⁹⁵

²⁹² <https://www.nbcboston.com/news/national-international/tsa-says-500-of-its-employees-have-tested-positive-for-covid-19/2115915/>

²⁹³ <https://www.usatoday.com/story/news/nation/2020/05/02/coronavirus-least-8-fatal-cases-fedex-workers-complaints-mount/3071150001/>

²⁹⁴ <https://www.tsa.gov/coronavirus>

²⁹⁵ <https://www.tsa.gov/coronavirus>

“Since the beginning of the pandemic, TSA has cumulatively had 5,154 federal employees test positive for COVID-19. 4,303 employees have recovered, and 12 have unfortunately died after contracting the virus. We have also been notified that one screening contractor has passed away due to the virus.”

13. Ground Transportation.

The ground transportation work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

Long-haul Truck Drivers – “As a long-haul truck driver, you spend many hours alone in the cab of your truck. However, there are times when you will be at increased risk of exposure to COVID-19. For long-haul truck drivers, potential sources of exposure include having close contact with truck stop attendants, store workers, dock workers, other truck drivers, or others with COVID-19, and touching your nose, mouth, or eyes after contacting surfaces touched or handled by a person with COVID-19.”²⁹⁶ (Emphasis added).

Bus Transit Operators – “For bus transit operators, potential sources of exposure include having close contact with a bus passenger with COVID-19, by contacting surfaces touched or handled by a person with COVID-19, or by touching your mouth, nose, or eyes.”²⁹⁷ (Emphasis added).

Rail Transit Operators – “For rail transit operators, potential sources of exposure include having close contact with a passenger with COVID-19, by contacting surfaces touched or handled by a person with COVID-19, or by touching your mouth, nose, or eyes.”²⁹⁸ (Emphasis added).

Transit Maintenance Workers – “For transit maintenance workers, potential sources of exposure include close contact with a coworker with COVID-19, contacting surfaces touched or handled by a person with COVID-19, or by touching your mouth, nose, or eyes.”²⁹⁹ (Emphasis added).

Transit Station Workers – “For transit station workers, potential sources of exposure include having close contact with a transit passenger with COVID-19, by touching surfaces contaminated with coronavirus, or by touching your mouth, nose, or eyes.”³⁰⁰ (Emphasis added).

Mail and Parcel Delivery Workers – “As a mail and parcel delivery driver, potential sources of exposure include having close contact with co-workers or delivery recipients, or when you touch surfaces touched or handled by a person who has COVID-19.”³⁰¹ (Emphasis added).

²⁹⁶ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/long-haul-trucking.html>

²⁹⁷ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/bus-transit-operator.html>

²⁹⁸ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/rail-transit-operator.html>

²⁹⁹ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/transit-maintenance-worker.html>

³⁰⁰ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/transit-station-workers.html>

³⁰¹ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/mail-parcel-drivers.html>

Rideshare, Taxi, Limo, and other Passenger Drivers-for-Hire – “As a driver-for-hire, potential sources of exposure include having close contact with passengers with COVID-19, or touching surfaces touched or handled by a person with COVID-19.”³⁰² (Emphasis added).

Food and Grocery Pick-up and Delivery Drivers – “Potential sources of exposure include having close contact with individuals with COVID-19 when picking up or delivering food or groceries, or by touching surfaces touched or handled by a person with COVID-19.”³⁰³ (Emphasis added).

“Coronavirus in the United States—Considerations for Travelers

....

Travel increases your chances of getting and spreading COVID-19. We don’t know if one type of travel is safer than others; however, airports, bus stations, train stations, and rest stops are all places travelers can be exposed to the virus in the air and on surfaces. These are also places where it can be hard to social distance (keep 6 feet apart from other people)....

- Air travel: Air travel requires spending time in security lines and airport terminals, which can bring you in close contact with other people and frequently touched surfaces. Most viruses and other germs do not spread easily on flights because of how air circulates and is filtered on airplanes. However, social distancing is difficult on crowded flights, and you may have to sit near others (within 6 feet), sometimes for hours. This may increase your risk for exposure to the virus that causes COVID-19.
- Bus or train travel: Traveling on buses and trains for any length of time can involve sitting or standing within 6 feet of others....”³⁰⁴ (Emphasis added).

Ground Transportation COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Thecity.nyc, New York City, April 7, 2020 “Bus Drivers Hardest Hit by Deaths as COVID-19 Devastates MTA”

“For 15 years, Ernesto Hernandez drove MTA buses around his home borough of Brooklyn, based out of the Jackie Gleason depot in Sunset Park.

....

Hernandez, 57, kept that routine, his son said, until he started to feel lousy on March 20. ‘He thought it was allergies,’ Jimenez said. A little more than a week later, Hernandez became one of the MTA’s first COVID-19 fatalities during the pandemic — and one of seven bus operators, so far, to die from coronavirus.

³⁰² <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/rideshare-drivers-for-hire.html>

³⁰³ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/food-grocery-drivers.html>

³⁰⁴ <https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-in-the-us.html>

Among the at least 33 subway and bus workers who have died from COVID-19, the MTA's bus drivers have taken the biggest hit in an agency with more than 74,000 employees.

By comparison, the NYPD has lost 13 members to COVID-19 from a workforce of more than 55,000 people, while the FDNY has suffered two deaths among its more than 40,000 employees.”³⁰⁵ (Emphasis added).

Theguardian.com, April 20, 2020, “Revealed: nearly 100 US transit workers have died of Covid-19 amid lack of basic protections”

“Interviews with union officials, workers and transit authorities in a dozen major cities reveal that:

- At least 94 transit workers have succumbed to coronavirus, according to two national transit unions, New York City transit officials, and workers in New Orleans. This number includes many kinds of workers who keep transit systems running, from mechanics and maintenance workers to bus and subway operators. The number of all transit workers who have died of coronavirus across the US is likely higher.
- The New York City area has seen the majority of American transit worker deaths, with 68 fatalities among employees of the Metropolitan Transportation Authority as of Friday afternoon. Nearly 2,500 MTA transit employees had tested positive, and more than 4,000 were in quarantine, a spokesman said.
- At least 24 more transit union members have died in other cities, according to two major transit unions. Bus drivers have died from coronavirus in Boston; Chicago; St Louis; Detroit; Seattle; Newark and Dover, New Jersey; Richmond, Virginia; and Washington DC, among others. In New Orleans, city bus drivers said they had lost three colleagues to coronavirus, only one of them a union member.”³⁰⁶ (Emphasis added).

14. Water Transportation.

The water transportation work environment contains various hazards and job tasks which present “high”, “medium” (close contact) and “lower” risk exposures:

NOTE: Cruise ships provide medical services for passengers, including known or suspected COVID-19 passengers and crew.

Water Transportation COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this

³⁰⁵ <https://www.thecity.nyc/health/2020/4/7/21216831/bus-drivers-hardest-hit-by-deaths-as-covid-19-devastates-mta>

³⁰⁶ <https://www.theguardian.com/world/2020/apr/20/us-bus-drivers-lack-life-saving-basic-protections-transit-worker-deaths-coronavirus>

industry.

ABCnews.go.com, April 14, 2020, “Employees sue Celebrity Cruises over COVID-19 response”

“A class action lawsuit filed Tuesday on behalf of over a thousand Celebrity Cruises employees alleges the company failed to protect its crew members working aboard ships amid the novel coronavirus outbreak.

The suit comes less than two weeks after a crew member working on the Celebrity Infinity died after being medically evacuated by the U.S. Coast Guard. The USCG confirmed the employee had coronavirus-like symptoms.

....

According to the CDC, over the last two months outbreaks on three cruise ships have caused more than 800 confirmed cases of coronavirus in the United States among passengers and crew, including 10 deaths.”³⁰⁷

Businessinsider.com, April 12, 2020, “All the cruise ships that have had confirmed cases of COVID-19 onboard”

“...Here's a look at the cruise ships at the center of the coronavirus crisis on the high seas.”³⁰⁸

³⁰⁷ <https://abcnews.go.com/Business/cruise-employees-sue-celebrity-covid-19-response/story?id=70147214>

³⁰⁸ <https://www.businessinsider.com/cruise-ships-with-confirmed-covid-19-cases-during-coronavirus-pandemic-2020-4>

Cruise ships with COVID-19 outbreaks

SHIP	PARENT COMPANY	CONFIRMED COVID-19 CASES
Diamond Princess	Carnival Corp.	712
Ruby Princess	Carnival Corp.	612
Oasis of the Seas	Royal Caribbean Cruises	157
Grand Princess	Carnival Corp.	78
Celebrity Eclipse	Royal Caribbean Cruises	76
MS A'Sara	Gate 1 Travel	45
Disney Wonder	Walt Disney Company	38
Costa Luminosa	Carnival Corp.	36
Symphony of the Seas	Royal Caribbean Cruises	31
Artania	Phoenix Reisen	27
Voyager of the Seas	Royal Caribbean Cruises	26
Ovation of the Seas	Royal Caribbean Cruises	23
Carnival Freedom	Carnival Corp.	14
Celebrity Solstice	Royal Caribbean Cruises	11
Zaandam	Carnival Corp.	9
World Dream	Genting Hong Kong	8
Silver Explorer	Royal Caribbean Cruises	6
Costa Favolosa	Carnival Corp.	6
MS Braemar	Bonheur ASA	5
Marella Explorer 2	TUI Group	5
Majesty of the Seas	Royal Caribbean Cruises	2
Costa Magica	Carnival Corp.	2
Celebrity Apex	Royal Caribbean Cruises	2
MSC Opera	Mediterranean Shipping Company	2
Jewel of the Seas	Royal Caribbean Cruises	2
Sun Princess	Carnival Corp.	1
Carnival Valor	Carnival Corp.	1
Celebrity Infinity	Royal Caribbean Cruises	1
Explorer of the Seas	Royal Caribbean Cruises	1
Norwegian Bliss	Norwegian Cruise Line Holdings	1
Norwegian Breakaway	Norwegian Cruise Line Holdings	1
Silver Shadow	Royal Caribbean Cruises	1
Costa Victoria	Carnival Corp.	1
Norwegian Encore	Norwegian Cruise Line Holdings	1
MSC Fantasia	Mediterranean Shipping Company	1

Sources: CDC; The Guardian; KUSI; NBC News; CNN; Independent; Western Australia DOH; The New South Wales Ministry of Health; Australian Broadcasting Corporation; Holland America PR; Miami Herald; COVID-19 Cruise Tracker; NY Times; USA Today; Seatrade Cruise News; WKBN; South Florida Sun Sentinel; SILive.com; WESH; TUI Group; Cruise Law News; The Daily Mail; Axios

Updated as of April 9, 2020.

BUSINESS INSIDER

15. Post-Secondary and Higher Education.

The post-secondary and higher education work environments contains various hazards and job tasks which present “high”, “medium” (close contact) and “lower” risk exposures:

NOTE: Many colleges and universities provide on campus medical services for suspected covid-19 students. College and university affiliated hospitals provide medical services for suspected COVID-19 and COVID-19 positive students and members of the general public.

“Considerations for Institutes of Higher Education (IHE)

....

The more an individual interacts with others, and the longer that interaction, the higher the risk of COVID-19 spread. The risk of COVID-19 spread increases in IHE non-residential and residential (i.e., on-campus housing) settings as follows:

- Lowest Risk: Faculty and students engage in virtual-only learning options, activities, and events.
- More Risk: Small in-person classes, activities, and events. Individuals remain spaced at least 6 feet apart and do not share objects (e.g., hybrid virtual and in-person class structures or staggered/rotated scheduling to accommodate smaller class sizes).
- Highest Risk: Full-sized in-person classes, activities, and events. Students are not spaced apart, share classroom materials or supplies, and mix between classes and activities.”³⁰⁹

Post-secondary and Higher Education COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

WBEZ.org, April 2, 2020, “A City Colleges Of Chicago Employee Has Died Of COVID-19. Staffers Say Conditions Are Unsafe.”

“Employees at Wright College, one of the City Colleges of Chicago, are mourning the death of a campus clerical worker, Carmelita Cristobal, who died of complications from COVID-19 on March 30. Employees remembered Cristobal as a beautiful person. ‘If you needed help, she helped you,’ said Audrey Butler, executive vice president of the clerical workers. Butler worked with Cristobal, who was 71, for years. She said Cristobal’s husband had contracted the virus as well.

Staffers are accusing City Colleges' leadership of failing to do enough to ensure employee safety. At least nine cases have been confirmed at multiple campuses so far. Union leaders representing faculty and staff painted a chaotic picture of safety protocols across the seven colleges during a virtual press

³⁰⁹ <https://www.cdc.gov/coronavirus/2019-ncov/community/colleges-universities/considerations.html>

conference Thursday.”³¹⁰

Clickondetroit.com, Detroit, MI, “Wayne State University employee studying at college for degree in sociology dies from coronavirus”

“A Wayne State University employee who was also studying for a degree in sociology at the college died from complications related to the coronavirus, WSU president Roy Wilson announced Saturday.

Darrin Adams worked at WSU for almost six years as a custodian primarily in the Manoogian Hall.

“This pandemic has hit Detroit hard, and we have all watched with great concern as the cases in our city have mounted. Unfortunately, our campus is not immune. We have had a number of cases, and now we mourn the loss of one of our employees.”³¹¹

16. Child Care Programs, Pre-school, Elementary, and Secondary Education.

The child care, pre-school, elementary, secondary education work environments contains various hazards and job tasks which present “high”, “medium” (close contact) and “lower” risk exposures:

NOTE: Some schools provide on campus medical/nursing services for suspected COVID-19 students.

School Nutrition Professionals – “For school nutrition professionals...working in meal preparation and/or distribution at a school/school district site or other public settings, potential sources of exposure include close contact with co-workers, students, and families with COVID-19 and touching your nose, mouth, or eyes after touching contaminated surfaces or handling items that others infected with COVID-19 have touched. Currently there is no evidence to support transmission of COVID-19 is spread through food.”³¹² (Emphasis added).

US K-12 Schools and Child Care Programs – “Schools, working together with local health departments, have an important role in slowing the spread of diseases to help ensure students have safe and healthy learning environments. Schools serve students, staff, and visitors from throughout the community. All of these people may have close contact in the school setting, often sharing spaces, equipment, and supplies.

Information about COVID-19 in children is somewhat limited, but the information that is available suggests that children with confirmed COVID-19 generally had mild symptoms. Person-to-person spread from or to children, as among adults, is thought to occur mainly via respiratory droplets produced when an infected person coughs,

³¹⁰ <https://www.wbez.org/stories/a-city-colleges-of-chicago-employee-has-died-of-covid-19-staffers-say-conditions-are-unsafe/4e12e670-cd2b-4d32-9352-a4bbe9aa9708>

³¹¹ <https://www.clickondetroit.com/news/local/2020/04/04/wayne-state-university-employee-studying-at-college-for-degree-in-sociology-dies-from-coronavirus/>

³¹² <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/school-nutrition-professionals.html>

sneezes, or talks. Recent studies indicate that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19.

However, a small percentage of children have been reported to have more severe illness. Older adults and people who have serious underlying medical conditions are at highest risk of severe illness from COVID-19. Despite lower risk of serious illness among most children, children with COVID-19-like symptoms should avoid contact with others who might be at high risk for severe illness from COVID-19.³¹³ (Emphasis added).

Child Care Programs, Pre-school, Elementary, and Secondary Education.COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

WTVR.com, Richmond, VA, May 27, 2020, “Richmond principal diagnosed with COVID-19; his wife hospitalized”

“Parents and students who picked-up computers or supplies from Richmond’s Mary Munford Elementary School over the last two weeks have been asked to self-isolate for 14 days.

That’s because the school’s principal Greg Muzik was at those events and has since tested positive for COVID-19.

‘The only time that we’ve had any kind of event of any kind where I was around a lot of people was the computer distribution,’ Muzik told CBS 6 via Zoom on Wednesday. Muzik notified parents about his diagnosis on the school’s PTA website.

‘Both my wife and I have tested positive for COVID,’ he wrote. ‘So far I am doing just fine and just isolating at home.’

....

The school system indicated the employee was asymptomatic while attending events at the school.”³¹⁴

ABC7ny.com, New York City, NY, May 11, 2020, “Coronavirus News: 30 teachers among 74 DOE employees to die of COVID-19”

The New York City Department of Education said it has now lost 74 employees to COVID-19. On Monday, official announced the two new deaths. All but four of the 74 DOE employees who died were based in schools across the city. The other 70 school-based employees include:

³¹³ https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/guidance-for-schools.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fguidance-for-schools.html

³¹⁴ <https://www.wtvr.com/news/local-news/richmond-principal-diagnosed-with-covid-19-families-told-to-self-isolate>

- 28 are paraprofessionals
- 30 are teachers
- 2 are food service staffers
- 2 are administrators
- 2 are facilities staff
- 2 are school aides
- 2 are guidance counselors
- 1 is a parent coordinator
- 1 is a School Computer Technology Specialist³¹⁵

Blog.edweek.org, April 30, 2020, “A Third of Teachers Are at Higher Risk of Severe Illness From COVID-19”

“As states begin to consider what reopening schools might look like, a new analysis of federal data warns that teachers could be more susceptible to severe illness from COVID-19.

About 29 percent of teachers are aged 50 and older, federal data show. Older adults are at higher risk for severe illness from COVID-19—92 percent of deaths related to the disease in the United States were of people aged 55 and older, and that age group also has higher rates of coronavirus-related hospitalizations than younger adults. And as the brief report by the research group Child Trends points out, teachers have significantly more social contact than the average adult, since they're in close quarters with dozens of students every day.

Already, teachers' workplaces rank among the "germiest"—one study found that teachers have nearly 27 times more germs on their computer keyboards than other professions studied. Teachers report that they frequently come down with colds and other garden-variety illnesses over the course of the school year. After all, children are "effective transmitters of respiratory germs," Donna Mazyck, the executive director of the National Association of School Nurses, told Education Week earlier this year.

The immune system naturally deteriorates with age, the Child Trends report notes. Also, teachers are more likely to report being stressed at work than average people, and some research suggests that stress can weaken the immune system.”³¹⁶

17. Restaurants and Bars.

The restaurants and bars work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

³¹⁵ <https://abc7ny.com/teacher-deaths-doe-department-of-education-schools/6173896/>

³¹⁶

https://blogs.edweek.org/teachers/teaching_now/2020/04/a_third_of_teachers_are_at_higher_risk_of_severe_illness_from_covid-19.html

“The more an individual interacts with others, and the longer that interaction, the higher the risk of COVID-19 spread. The risk of COVID-19 spread increases in a restaurant or bar setting as follows:

- Lowest Risk: Food service limited to drive-through, delivery, take-out, and curbside pickup.
- More Risk: Drive-through, delivery, take-out, and curbside pickup emphasized. On-site dining limited to outdoor seating. Seating capacity reduced to allow tables to be spaced at least 6 feet apart.
- Even More Risk: On-site dining with both indoor and outdoor seating. Seating capacity reduced to allow tables to be spaced at least 6 feet apart.
- Highest Risk: On-site dining with both indoor and outdoor seating. Seating capacity not reduced and tables not spaced at least 6 feet apart.³¹⁷

Restaurants and Bars COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

CNN.com, May 24, 2020, Ozarks, MI, “Pool party at Lake of the Ozarks in Missouri draws a packed crowd”

“Video posted by a reporter shows partiers [at a bar] crowded together in a pool at the Lake of the Ozarks, Missouri, this Memorial Day weekend.

....

The gathering violates social distancing measures intended to limit the spread of Covid-19. As part of Missouri's reopening plan announced earlier this month, state officials said restaurants may offer dining-in services but must adhere to social distancing and other precautionary public health measures.



The bar posted on Facebook that this was its launch of a summer party called

³¹⁷ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/business-employers/bars-restaurants.html>

“Zero Ducks Given Pool Party.” It advertised several DJs and bands performing throughout the event. The venue has worked with and taken the advice of government officials and management teams and will be following social distancing guidelines. Extra precautions and safety measures will be taken to provide a safe environment for you to enjoy the event,’ the bar said.

USAtoday.com, May 29, 2020, “Lake of the Ozarks pool partier tests positive for coronavirus”

“SPRINGFIELD, Missouri -- A week after images of Memorial Day weekend revelers jammed into a Lake of the Ozarks pool party at Backwater Jack's Bar & Grill in Osage Beach made international headlines, the Camden County Health Department announced that a Boone County resident tested positive for the novel coronavirus after visiting the Lake of the Ozarks area over the holiday weekend.

The Boone County subject arrived at the lake on Saturday, May 23, and "developed illness" on Sunday, according to a news release obtained by LakeNewsOnline.com, which like the News-Leader is part of the USA TODAY Network.

The infected person "was likely incubating illness and possibly infectious at the time of the visit," the health department said.”³¹⁸

Ny.eater.com, May 22, 2020, “Coronavirus, Those We’ve Lost”

“In NYC, where COVID-19 has hit harder than anywhere else in the country, the number of people dying in the restaurant industry is growing.

...

Only three weeks after COVID-19 cases were confirmed in New York City, the metropolis became the epicenter of the virus in the United States. Restaurants and bars completely shut down for dine-in service on March 16. And weeks later, the virus has shown a dramatic and tragic impact on people within the dining community.

Top chefs and restaurateurs like Floyd Cardoz, neighborhood stalwarts like butcher Moe Albanese, and lesser-known, behind-the-scene chefs like Jesus Roman Melendez from Jean-Georges Vongerichten’s Nougatine have all died due to the virus. As of Thursday, May 21, in NYC, more than 200,000 people have tested positive for COVID-19 and 20,491 people have died.

....

Jimmy Glenn, 89, bar owner

....

Lloyd Porter, 49, restaurateur

....

Michael Halkias, 82, event space owner

³¹⁸ <https://www.usatoday.com/story/news/health/2020/05/29/lake-ozarks-pool-party-missouri-resident-coronavirus/5288079002/>

....
Jonathan Adewumi, 57, restaurateur
....
Victor Morales, 33, bar assistant
....
Deodoro Monge Gutierrez, chef and restaurateur
....
Miguel Grande, 52, chef
....
Domingo Vega, 45, restaurateur and chef
....
Vincent Mesa, 76, chef
....
Vincent Cirelli Sabatino, 68, food vendor
....
Jose Torres, 73, chef and restaurateur
....
Miguel Torres, chef
....
Samuel Hargress, Jr., 84, bar owner
....
Panayiotis Peter Panayiotou, 65, restaurateur
....
Kathleen Elizabeth McNulty, 80, restaurateur
....
Joe Joyce, 74, bar owner
....
Moe Albanese, 95, butcher
....
Kamal Ahmed, 69, hotel banquet worker
....
Joseph Migliucci, 81, restaurateur
....
Kosta Kasimis, 84, restaurateur
....
Jesus Roman Melendez, 49, chef
....
Andreas Koutsoudakis, 59, restaurateur
....
Floyd Cardoz, 59, restaurateur and chef³¹⁹

18. Grocery Store and Food Retail (Including General Retail).

The grocery store and food retail work environments contain various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“As a grocery or food retail worker, potential sources of exposures include close

³¹⁹ <https://ny.eater.com/2020/5/6/21229781/nyc-coronavirus-death-restaurant-workers-chefs>

contact for prolonged periods of time with a customer with COVID-19 and touching your nose, mouth, or eyes after handling items, cash, or merchandise that customers with COVID-19 have touched.”³²⁰

Grocery Store and Food Retail COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Boston.com, May 27, 2020, Quoting story from the *Washington Post*, “COVID-19 has killed 100 grocery store workers. Vitalina Williams was one of the first.”

“The couple [David and Vitalina Williams] worked at grocery stores near their Salem home: Vitalina Williams as a cashier at a Market Basket in Salem and security at a Walmart in Lynn, while David Williams stocked shelves at a Market Basket in Danvers. When the coronavirus pandemic hit the United States in March, they were concerned but needed to pick up extra hours to pay bills. Both were given gloves but no masks.

By the end of March, both were sick with COVID-19, the disease the virus causes. He recovered quickly, but her condition continued to deteriorate. On March 28, she was hospitalized and put on a ventilator. A week later, she died. Vitalina Williams was 59.

“As somebody who shared everything with her, it rattles in the back of my head, ‘Did I give it to her?’ ” he said. “‘Did I get it first and give it to her, or did she give it to me?’ To be honest, I don’t know.”

The Williamses’ jobs were deemed essential — putting them at grave risk of infection. At least 5,500 grocery store employees have tested positive for the novel coronavirus since late March, according to a recent *Washington Post* investigation and 100 workers have died of the virus. Vitalina Williams was one of the first.

....

David Williams stocks shelves, constantly changing out of his latex gloves as he wears holes into them. He isn’t sure whether his wife regularly wore gloves or whether she caught the virus at work. But two other employees at the Market Basket location where Vitalina Williams worked tested positive around the time she died.”³²¹ (Emphasis added).

Richmond.com, Richmond, VA, May 15, 2020, “Half of people around Richmond aren’t wearing masks to go to the store. We counted.”

“After weeks of saying that healthy people didn’t need to wear masks in public, elected leaders and health officials across the country in April reversed course and began recommending them in stores and places where it’s difficult to stay

³²⁰ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/grocery-food-retail-workers.html>

³²¹ <https://www.boston.com/news/coronavirus/2020/05/27/covid-19-has-killed-100-grocery-store-workers-vitalina-williams-was-one-of-the-first>

6 feet apart. You can't get on a plane or in an Uber without one. People are required to wear one when they leave home in New York.

But in Virginia, you can still get into a Walmart, or a Home Depot or an ABC store with an uncovered face.

Richmond Times-Dispatch reporters spent nearly 15 hours observing nearly 2,900 people entering stores for groceries and other supplies in the city and neighboring localities this week. More than half — 1,480 — didn't wear a mask or other face covering. Two dozen more were doing it wrong: A woman walked into the Home Depot in Chester on Wednesday with a black headband wrapped behind her neck and over her mouth, with nothing covering her nose.

....

A recent study and computer model from the University of California, Berkeley's International Computer Science Institute and Hong Kong University of Science and Technology suggested that if 80% of people would wear masks in public, the spread of the coronavirus would plummet. But the impact of masks falls dramatically in the model if the rate of people using them dips below 50%.

....

The message on masks has been jumbled since the coronavirus spread here in March: Officials with the U.S. Centers for Disease Control and Prevention and the World Health Organization initially said people shouldn't wear them, as the world grappled with a shortage of specialized N95 masks for medical personnel and first responders.

The agencies reversed course last month, announcing that face coverings can help keep people from infecting others — even if they don't protect the wearer.”³²² (Emphasis added).

9news.com, Colorado, May 16, 2020, “Costco & Walmart among grocery stores with COVID-19 outbreaks”

“There are now six grocery stores with COVID-19 outbreaks in Colorado.

Data released from the Colorado Department of Health and Environment (CDPHE) on Wednesday shows 67 confirmed COVID-19 staff cases in grocery stores throughout Colorado, four probable staff cases and three deaths.

....

These are the six grocery stores in Colorado with COVID-19 outbreaks:

King Soopers - 1155 E. 9th Ave., Denver, 8 confirmed staff cases

Costco - 1470 South Havana St., Aurora, 6 confirmed staff cases

Walmart - 14000 E. Exposition Ave., Aurora, 14 confirmed staff cases and 3 deaths

Mi Pueblo Market, 9171 Washington St., Thornton, 19 confirmed staff cases

³²² https://www.richmond.com/special-report/coronavirus/half-of-people-around-richmond-arent-wearing-masks-to-go-to-the-store-we-counted/article_7cd4a541-986b-5a1e-b4e9-b0e7f99147d3.html

Carniceria Sonora, 347 N. 1st St., Montrose, 7 confirmed staff cases
City Market, 400 N. Parkway, Breckenridge, 13 confirmed staff cases and 4
probable staff cases³²³ (Emphasis added).

Businessinsider.com, April 13, 2020, “At least 30 grocery store workers have died from the coronavirus, and their colleagues are pleading for shoppers to wear masks and respect social distancing”

“ At least 30 grocery store workers have died from the coronavirus so far, and at least 3000 have stopped working because they've been exposed or gotten sick.

In a media call on Monday, the United Food and Commercial Workers International Union, or UFCW, told journalists that over 30 of its members had died from the coronavirus. UFCW, which represents about 1.3 million grocery store workers and food processing workers, is pushing for increased protection from the government for its members. The union is asking the CDC to classify grocery workers as first responders, and to give them priority for testing and protective equipment.

Those 30 deaths are only the ones the union has accounted for, said UFCW president Marc Perrone. There are many chains, such as Whole Foods and Trader Joe's, that aren't part of the union and aren't included in the data UFCW collects.

....

In a survey conducted by the UFCW of 5000 grocery store workers, 85% of respondents said they had seen customers violating social distancing guidelines.³²⁴ (Emphasis added).

General Retail

Detroitnews.com, May 15, 2020, “Michiganians flock to Ohio to enjoy state's reopening”

“Ohio Gov. Mike DeWine on Friday restarted parts of his state's economy, with selected businesses opening for the first time since he issued a stay-at-home order on March 22 in response to the coronavirus emergency.

Michiganians like Hamade of Temperance flocked across the border for goods and services still not available in their own state. Dozens of vehicles bearing Michigan license plates were parked outside Toledo businesses that reopened Friday.

....

Hilary Wilcox said she understands that "Michigan is a little crazier" than Ohio as far as being impacted by the COVID-19 virus. Ohio has reported 26,954

³²³ <https://www.9news.com/article/news/health/coronavirus/costco-walmart-among-grocery-store-covid-19-outbreaks/73-bde0be4d-e1e3-41f1-a56d-8cf2356d6dde>

³²⁴ <https://www.businessinsider.com/grocery-store-worker-deaths-from-coronavirus-at-least-30-nationwide-2020-4>

COVID cases, with 1,581 deaths. That compares to 50,079 cases and 4,825 deaths in Michigan as of Friday.

"I'm just excited Ohio is opening up, and that I live close enough to drive here," said Wilcox, 31, who made the 75-mile trip from her Wixom home to enjoy her version of normal — an afternoon of lunch and shopping with her friend.

....

Rylee Rasmussen, 19, and her 14-year-old sister, Ragean Rasmussen, of Carleton in Monroe County said their shopping excursion Friday was their first since Whitmer imposed the original stay-at-home order March 24.

"It feels weird," Rylee Rasmussen said as she and her sister strolled through the Dick's Sporting Goods store in Franklin Park Mall. "We're not really looking for anything; we just wanted to get out."

Like most of the store's customers, the sisters did not wear masks.³²⁵



19. Drug Stores and Pharmacies.

The drug store and pharmacy work environments contain various hazards and job tasks which present “high”, “medium” (close contact) and “lower” risk exposures:

“Reduce risk during COVID-19 testing and other close-contact pharmacy care services

Pharmacies that are participating in public health testing for COVID-19 should communicate with local and state public health staff to determine which persons meet the criteria for testing. State and local health departments will

³²⁵Photo: Hilary Wilcox of Wixom spent Friday afternoon shopping at Franklin Park Mall in Toledo. (Photo: Max Ortiz, The Detroit News)” (Emphasis added).

inform pharmacies about procedures to collect, store, and ship specimens appropriately, including during afterhours or on weekends/holidays. Some pharmacies are including self-collection options.

In the “CDC Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings,” there is guidance for collecting respiratory specimens.

Pharmacy staff conducting COVID-19 testing and other close-contact patient care procedures that will likely elicit coughs or sneezes (e.g., influenza and strep testing) should be provided with appropriate PPE. Staff who use respirators must be familiar with proper use and follow a complete respiratory protection program that complies with OSHA Respiratory Protection standard (29 CFR 1910.134). Staff should also have training in the appropriate donning and doffing of PPE. Cloth face coverings should NOT be worn by staff instead of a respirator or facemask if more than source control is required.”³²⁶

Drug Stores and Pharmacies COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Propublica.org, April 9, 2020, “Pharmacy Workers Are Coming Down With COVID-19. But They Can’t Afford to Stop Working.”

“A few days later, during routine calls to customers about medication ready for pickup, Peralta learned that the customer whom he had helped had tested positive for COVID-19. Peralta notified his manager that he may have been exposed to the virus. The manager checked with headquarters and told him to keep working, Peralta said.

Toward the end of March, Peralta and two colleagues started to come down with telltale symptoms: A loss of smell and taste. Fatigue. Body aches. He realized that he might be laid up for weeks — far longer than his sick pay would last.

....

Without sufficient safeguards, pharmacies could become vectors for spreading the coronavirus within communities, according to Denis Nash, a professor of epidemiology at the CUNY School of Public Health. “This is not a hospital setting per se, but it is a busy place where sick people may be going at a time when transmission of SARS-CoV-2 is high,” he said.”³²⁷

20. Personal Care, Personal Grooming, Salon, and Spa Services,

The personal care, personal grooming, salon, and spa services work environment contains various hazards and job tasks which present “medium” (close contact) to

³²⁶ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/pharmacies.html>

³²⁷ <https://www.propublica.org/article/pharmacy-workers-are-coming-down-with-covid-19-but-they-cant-afford-to-stop-working>

“lower” risk exposures:

Personal Care, Personal Grooming, Salon, and Spa Services COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

CNN.com, Missouri, May 24, 2020, “A second hairstylist who worked while symptomatic potentially exposed 56 clients to Covid-19, officials say”

“The Springfield-Greene Health Department announced Saturday that a second hairstylist tested positive for coronavirus, and may have exposed 56 clients at the same Great Clips salon. A day earlier, officials had said another hairstylist with coronavirus at the same salon potentially exposed 84 customers and seven coworkers. Both stylists had symptoms while at work, officials said. They did not provide details on their conditions or when they tested positive.”³²⁸ (Emphasis added).

CNN.com, Missouri, May 23, 2020, “A hairstylist worked while symptomatic and exposed 91 people to coronavirus”

“A hairstylist with coronavirus worked for eight days this month while symptomatic, exposing as many as 91 customers and coworkers in Missouri, health officials said.

‘In this instance, the 84 customers exposed got services from the hairstylist at Great Clips,’ said Clay Goddard, director of the Springfield-Greene County Health Department. In addition to the customers, seven coworkers were also notified of exposure.

It's unclear when the stylist tested positive but the infection is believed to have happened while traveling. The stylist worked May 12 through Wednesday, health officials said Friday. At the time, businesses such as barbershops and hair salons were allowed to operate in the state.

‘The individual and their clients were wearing face coverings. The 84 clients potentially directly exposed will be notified by the Health Department and be offered testing, as will seven coworkers,’ the Springfield-Greene County Health Department said in a statement.’ It is the hope of the department that because face coverings were worn throughout this exposure timeline, no additional cases will result.”³²⁹ (Emphasis added).

ABC7News.com, California, May 7, 2020, “Coronavirus: First case of COVID-19 community spread in California tracked to nail salon, Newsom reveals in press

³²⁸ <https://www.cnn.com/2020/05/24/us/missouri-hairstylists-coronavirus-clients-trnd/index.html>

³²⁹ <https://www.cnn.com/2020/05/23/us/missouri-hairstylist-coronavirus-trnd/index.html>

conference”

“The first case of community spread of novel coronavirus in California can be tracked back to a nail salon, Gov. Gavin Newsom revealed in a press conference Thursday.

The announcement wasn't part of the governor's prepared remarks; he mentioned it only in response to a question about why churches and salons aren't being allowed to open in Stage 2 of the state's reopening.

‘This whole thing started in the state of California - the first community spread - in a nail salon. I just want to remind you, remind everybody, of that. I'm very worried about that.’

‘Community spread’ means the virus was locally contracted, not from traveling to a foreign country or by being in close proximity who recently traveled to a foreign country.

The first case of community spread in California was known to have occurred in Solano County in February. The county told ABC7 News, ‘Solano Public Health cannot confirm this information and we did not release this information when the first COVID-19 community spread occurred.’

Nail salons, spas, barbershops and the like are included in Stage 3 of reopening. They are considered higher risk environments because the business necessitates close proximity between people. Newsom pointed out that nail technicians typically wear face masks and even sometimes gloves, yet COVID-19 was apparently still transmitted. That makes the reopening of such businesses particularly challenging.”³³⁰

21. Sports and Entertainment, and Mass Gatherings.

The sports and entertainment venue work environments contain various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“Large events and mass gatherings can contribute to the spread of COVID-19 in the United States via travelers who attend these events and introduce the virus to new communities. Examples of large events and mass gatherings include conferences, festivals, parades, concerts, sporting events, weddings, and other types of assemblies. These events can be planned not only by organizations and communities but also by individuals.

....

Larger gatherings (for example, more than 250 people) offer more opportunities for person-to-person contact and therefore pose greater risk of COVID-19 transmission.

....

Based on what is currently known about the virus, spread from person-to-person

³³⁰ <https://abc7news.com/first-case-of-coronavirus-in-california-nail-salon-covid-nails/6161231/>

happens most frequently among close contacts (within 6 feet).”³³¹

Sports and Entertainment, and Mass Gatherings COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Bleacherreport.com, “Timeline of Coronavirus' Impact on Sports”

“Saturday, March 14

10:44 p.m.: Cleveland State women's basketball head coach Chris Kielsmeier has tested positive for COVID-19, the school announced, per ESPN.

8:05 p.m.: ESPN's Adrian Wojnarowski and Stadium and The Athletic's Shams Charania reported that Detroit Pistons big man Christian Wood tested positive for the coronavirus. Per Charania, Wood "has shown no symptoms and is doing well." The 24-year-old played on March 7 against the Utah Jazz, who have two players (Rudy Gobert and Donovan Mitchell) who have tested positive for the coronavirus.

....

Tuesday, March 17

....

3:57 p.m.: The Brooklyn Nets announced four players tested positive for the coronavirus. Only one of the four is showing symptoms. The organization says it's currently notifying anyone who has had known contact with the players, including recent opponents.

....

Thursday, March 19

....

7:17 p.m.: Two Los Angeles Lakers players tested positive for COVID-19, per Shams Charania of Stadium and The Athletic. Mark Medina of USA Today reported Wednesday that "the majority" of Lakers players received tests that morning at the team's practice facility in El Segundo, California. Charania noted that the Lakers may test other players who did not take part in those tests.

6:11 p.m.: The Philadelphia 76ers announced three members of the organization have received positive tests for the coronavirus.”³³²

Richmond Times Dispatch, April 16, 2020, “Dozens protest social distancing orders as Virginia's death toll passes 200”

³³¹ <https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/mass-gatherings-ready-for-covid-19.html>

³³² <https://bleacherreport.com/articles/2880569-timeline-of-coronavirus-impact-on-sports>



A Virginia Capitol Police officer asked demonstrators to maintain social distancing guidelines during Thursday's protest at Capitol Square. Organizers plan to hold another protest May 1.

DANIEL SANGJIB MIN/RTD

“A Virginia Capitol Police officer asked demonstrators to maintain social distancing guidelines during Thursday’s protest at Capitol Square. Organizers plan to hold another protest May 1.”

22. Homeless Shelters.

The homeless shelter work environments contain various hazards and job tasks which present “high”, “medium” (close contact) and “lower” risk exposures:

“People experiencing homelessness are at risk for infection during community spread of COVID-19.

....

Continuing homeless services during community spread of COVID-19 is critical, and homeless shelters should not close or exclude people who are having symptoms or test positive for COVID-19 without a plan for where these clients can safely access services and stay.

Decisions about whether clients with mild illness due to suspected or confirmed COVID-19 should remain in a shelter, or be directed to alternative housing sites, should be made in coordination with local health authorities. Community coalitions should identify additional temporary housing and shelter sites that are able to provide appropriate services, supplies, and staffing. Ideally, these additional sites should include:

- Overflow sites to accommodate shelter decompression (to reduce crowding) and higher shelter demands
- Isolation sites for people who are confirmed to be positive for COVID-19

- Quarantine sites for people who are waiting to be tested, or who know that they were exposed to COVID-19
- Protective housing for people who are at highest risk of severe COVID-19

Depending on resources and staff availability, non-group housing options (such as hotels/motels) that have individual rooms should be considered for the overflow, quarantine, and protective housing sites.”³³³

Homeless Shelter COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Voiceofoc.org, Orange County, CA, May 29, 2020, “Coronavirus Outbreak Hits Second Orange County Homeless Shelter”

“The Fullerton Armory’s replacement shelter at Independence Park has become the second Orange County homeless shelter to have an outbreak of coronavirus cases, according to county officials.

....

The Fullerton outbreak was about a week ago, and people who tested positive were moved into the county’s motel sheltering program, county Chief Executive Officer Frank Kim said Friday in response to Voice of OC’s questions.

....

Late Friday, county spokeswoman Molly Nichelson said two people tested positive at one shelter in OC and 11 people at another, none of whom were hospitalized. She declined to say which shelter had two cases and which had 11, citing privacy.

The first known shelter outbreak was at the Salvation Army shelter in Anaheim, where two staff members tested positive for coronavirus in late March. It wasn’t clear if more people have since tested positive at the Anaheim shelter.”³³⁴ (Emphasis added).

KHOU.com, Houston, TX, May 25, 2020, “77 positive coronavirus cases reported at Houston homeless shelter”

“Eichenbaum said 69 residents and eight staff members have now tested positive at one shelter. ‘I consider it a spike, it seems to be isolated right now,’ Eichenbaum said. The cases are all at the Men’s Development Center downtown. Right now, it’s not accepting new clients and the city is vowing to increase homeless testing.”³³⁵ (Emphasis added).

23. Fitness, Gyms, and Exercise Facilities.

³³³ <https://www.cdc.gov/coronavirus/2019-ncov/community/homeless-shelters/plan-prepare-respond.html>

³³⁴ <https://voiceofoc.org/2020/05/coronavirus-outbreak-hits-second-orange-county-homeless-shelter/>

³³⁵ <https://www.khou.com/article/news/health/coronavirus/77-positive-covid-19-cases-at-houston-homeless-shelter/285-f8ad7306-cb8d-4471-b8bb-4ce310ebd3a7>

The fitness, gyms, and exercise facility work environments contain various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“During 24 days in Cheonan, South Korea, 112 persons were infected with severe acute respiratory syndrome coronavirus 2 associated with fitness dance classes at 12 sports facilities. Intense physical exercise in densely populated sports facilities could increase risk for infection. Vigorous exercise in confined spaces should be minimized during outbreaks.

....

By March 9, we identified 112 COVID-19 cases associated with fitness dance classes in 12 different sports facilities in Cheonan (Figure). All cases were confirmed by RT-PCR; 82 (73.2%) were symptomatic and 30 (26.8%) were asymptomatic at the time of laboratory confirmation. Instructors with very mild symptoms, such as coughs, taught classes for ≈ 1 week after attending the workshop (Appendix). The instructors and students met only during classes, which lasted for 50 minutes 2 times per week, and did not have contact outside of class.

On average, students developed symptoms 3.5 days after participating in a fitness dance class (3). Most (50.9%) cases were the result of transmission from instructors to fitness class participants; 38 cases (33.9%) were in-family transmission from instructors and students; and 17 cases (15.2%) were from transmission during meetings with coworkers or acquaintances.

....

Characteristics that might have led to transmission from the instructors in Cheonan include large class sizes, small spaces, and intensity of the workouts. The moist, warm atmosphere in a sports facility coupled with turbulent air flow generated by intense physical exercise can cause more dense transmission of isolated droplets. Classes from which secondary COVID-19 cases were identified included 5–22 students in a room ≈ 60 m² during 50 minutes of intense exercise. We did not identify cases among classes with < 5 participants in the same space.

Of note, instructor C taught Pilates and yoga for classes of 7–8 students in the same facility at the same time as instructor B (Figure; Appendix Table 2), but none of her students tested positive for the virus. We hypothesize that the lower intensity of Pilates and yoga did not cause the same transmission effects as those of the more intense fitness dance classes.”^{336, 337}

24. Call Centers.

The call center work environments contain various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

³³⁶ https://wwwnc.cdc.gov/eid/article/26/8/20-0633_article

³³⁷ *Id.* “A limitation of our study is the unavailability of a complete roster of visitors to the sports facilities, which might have meant we missed infections among students during surveillance and investigation efforts. Discovery of outbreak cases centered on exercise facilities led to a survey of instructors who participated in a fitness dance workshop and provided clues to identifying additional cases among students. Early identification of asymptomatic persons with RT-PCR–confirmed infections helped block further transmissions. Because of the increased possibility of infection through droplets, vigorous exercise in closely confined spaces should be avoided during the current outbreak, as should public gatherings, even in small groups.”

“Coronavirus Disease Outbreak in Call Center, South Korea

....
We describe the epidemiology of a coronavirus disease (COVID-19) outbreak in a call center in South Korea. We obtained information on demographic characteristics by using standardized epidemiologic investigation forms. We performed descriptive analyses and reported the results as frequencies and proportions for categorical variables. Of 1,143 persons who were tested for COVID-19, a total of 97 (8.5%, 95% CI 7.0%–10.3%) had confirmed cases.

Of these, 94 were working in an 11th-floor call center with 216 employees, translating to an attack rate of 43.5% (95% CI 36.9%–50.4%). The household secondary attack rate among symptomatic case-patients was 16.2% (95% CI 11.6%–22.0%). Of the 97 persons with confirmed COVID-19, only 4 (1.9%) remained asymptomatic within 14 days of quarantine, and none of their household contacts acquired secondary infections.

....
However, if we restrict our results to the 11th floor, the attack rate was as high as 43.5%. This outbreak shows alarmingly that severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) can be exceptionally contagious in crowded office settings such as a call center. The magnitude of the outbreak illustrates how a high-density work environment can become a high-risk site for the spread of COVID-19 and potentially a source of further transmission. Nearly all the case-patients were on one side of the building on 11th floor.

Severe acute respiratory syndrome coronavirus, the predecessor of SARS-CoV-2, exhibited multiple superspreading events in 2002 and 2003, in which a few persons infected others, resulting in many secondary cases. Despite considerable interaction between workers on different floors of building X in the elevators and lobby, spread of COVID-19 was limited almost exclusively to the 11th floor, which indicates that the duration of interaction (or contact) was likely the main facilitator for further spreading of SARS-CoV-2.

....
In summary, this outbreak exemplifies the threat posed by SARS-CoV-2 with its propensity to cause large outbreaks among persons in office workplaces.”^{338 339}

Call Center COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

³³⁸ https://wwwnc.cdc.gov/eid/article/26/8/20-1274_article

³³⁹ *Id.* “This outbreak investigation has several limitations. First, we could not track these cases to another cluster, making it difficult to identify the actual index case-patient. Second, not all clinical information was available for all confirmed cases, prohibiting detailed description of clinical syndromes. Date of symptom onset by office seat would be informative in understanding SARS-CoV-2 transmission in close contact area. However, our findings demonstrate the power of screening all potentially exposed persons and show that early containment can be implemented and used in the middle of national COVID-19 outbreak. By testing all potentially exposed persons and their contacts to facilitate the isolation of symptomatic and asymptomatic COVID-19 case-patients, we might have helped interrupt transmission chains. In light of the shift to a global pandemic, we recommend that public health authorities conduct active surveillance and epidemiologic investigation in this rapidly evolving landscape of COVID-19.”

Martinsvillebulletin.com, Martinsville, VA, May 13, 2020, “Martinsville call center Young Williams sees outbreak of COVID-19, including one death”

“An outbreak of COVID-19 has hit a Martinsville call center that has had six positive cases and one death among its employees.”

A spokesperson for the Virginia Department of Social Services confirmed via email that six employees of Young Williams Child Support Services, located in the Clocktower Building off Commonwealth Boulevard, have tested positive for the virus as of Wednesday morning.”³⁴⁰

25. Package Processing Facilities.

The package processing facility work environment contains various hazards and job tasks which present “medium” (close contact) to “lower” risk exposures:

“...production or assembly lines and other areas in busy plants where workers have close contact with coworkers and supervisors—may contribute substantially to workers’ potential exposures.”³⁴¹

Package Processing Facilities COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

NBCnews.com, May 21, 2020,” Eighth Amazon warehouse worker dies from COVID-19”

“Another Amazon warehouse worker has died from COVID-19, bringing the total known deaths to eight employees, the company said Thursday.

The female employee worked in packing at the fulfillment center outside Cleveland in North Randall, Ohio, known as CLE2, Amazon said. She had been with the company since November 2018.

The employee last went to work on April 30, the same day she was diagnosed, said Amazon spokesperson Lisa Levandowski. The e-commerce giant learned of her positive test results on May 8 and was informed of her death by her sister-in-law on May 18.

....

NBC News has confirmed that seven other Amazon warehouse workers have died after testing positive for coronavirus in Staten Island, New York;

³⁴⁰ https://www.martinsvillebulletin.com/news/local/martinsville-call-center-young-williams-sees-outbreak-of-covid-19-including-one-death/article_4d116bb4-0dbd-58b4-bc21-984a9faa3053.html

³⁴¹ <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-manufacturing-workers-employers.html>, NOTE: The CDC guidance in this document is for manufacturing workers, but to the extent that work conditions at package processing facilities mirror the work activities described in the document, the same exposure risk level analysis can be reasonably applied to package processing facilities.

Waukegan, Illinois; Hawthorne, California; Tracy, California; Bethpage, New York; Jeffersonville, Indiana; and Indianapolis, Indiana.”³⁴² (Emphasis added).

Washingtonpost.com, March 25, 2020, “Amazon workers test positive for covid-19 at 10 U.S. warehouses”

“The U.S. coronavirus outbreak has spread to at least 10 Amazon warehouses, infecting workers racing to deliver massive volumes of packages for consumers leery of leaving their homes to shop.

In the past few days, workers tested positive for covid-19 at Amazon warehouses and shipping facilities across the country, from New York to California and Michigan to Texas. In some cases, Amazon shut down facilities for cleaning, and some workers who were in close contact with their infected colleagues have been quarantined.

26. Emergency Responders Including Police, Fire, Emergency Medical Services.

The emergency responder work environment contains various hazards and job tasks which present “high”, “medium” (close contact) to “lower” risk exposures:

“Emergency medical services (EMS) play a vital role in responding to requests for assistance, triaging patients, and providing emergency medical treatment and transport for ill persons. However, unlike patient care in the controlled environment of a healthcare facility, care and transports by EMS present unique challenges because of the nature of the setting, enclosed space during transport, frequent need for rapid medical decision-making, interventions with limited information, and a varying range of patient acuity and jurisdictional healthcare resources.”³⁴³ (Emphasis added).

Emergency Responder COVID-19 Reports and Statistics

The following is not intended to be an exhaustive list of COVID-19 outbreaks in this industry.

Thecity.nyc, New York City, April 7, 2020 “Bus Drivers Hardest Hit by Deaths as COVID-19 Devastates MTA”

“By comparison, the NYPD has lost 13 members to COVID-19 from a workforce of more than 55,000 people, while the FDNY has suffered two deaths among its more than 40,000 employees.”³⁴⁴ (Emphasis added).

Pressherald.com, “Seven state public health and emergency workers report COVID-19 symptoms”

³⁴² <https://www.yahoo.com/lifestyle/eighth-amazon-warehouse-worker-dies-003500221.html>

³⁴³ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>

³⁴⁴ <https://www.thecity.nyc/health/2020/4/7/21216831/bus-drivers-hardest-hit-by-deaths-as-covid-19-devastates-mta>

“Seven employees who work at the Maine Emergency Management Agency experienced symptoms similar to COVID-19 and called in sick Thursday, forcing the state to shift its daily media briefing to a virtual event.”³⁴⁵

Ems1.com, May 4, 2020, “COVID-19: EMS Deaths, Tracking the coronavirus-related deaths of EMTs and paramedics”

“As COVID-19 continues to spread around the country, the first responders on the front lines are increasingly vulnerable of contracting the virus. As was feared, the death toll now includes a growing number of EMS personnel.

What follows is a compilation of the reports, by state, of EMS personnel who have died of coronavirus-related complications. For cities with multiple diagnoses, the links are ordered chronologically, with the top being the most recent.

Note: Not all of these deaths have been confirmed as line-of-duty deaths. Deputy Chief Billy Goldfeder shared an update from the Public Safety Officers’ Benefits program as to how COVID-19 deaths will be classified.

COLORADO

Denver — Colo. paramedic, Paul Cary, 66, dies from COVID-19

MICHIGAN

Huron Township — Mich. paramedic and former fire Lt., Paul Novicki, 51, dies from COVID-19

MISSISSIPPI

Natchez — Miss. AMR paramedic, David Martin, dies from COVID-19 complications

MISSOURI

Kansas City — Mo. EMT, Billy Birmingham, dies from COVID-19

NEW JERSEY

Passaic — City of Passaic firefighter-EMT, Israel Tolentino, 33, has died from COVID-19

Hackensack — Past Hackensack Volunteer Ambulance Corps captain and life member, Reuven Maroth, dies from COVID-19

Newark — EMT Liana Sá, of Monmouth-Ocean Hospital Service Corporation and Watchung Rescue Squad, dies from COVID-19

Pompton Lakes — North Bergen and Saint Clare's Hospital EMT Kevin Leiva, 24, dies from COVID-19 complications

³⁴⁵ <https://www.pressherald.com/2020/05/28/maine-reports-3-more-deaths-52-additional-covid-19-cases/>

Bergen County — Physician and NJSEA EMS member, Dr. Frank Molinari, has died from COVID-19

Monmouth County — NJ firefighter-EMT, Robert Weber, dies from COVID-19 complications

West Orange — RWJBarnabas Health EMS educator, Robert Tarrant, has died from COVID-19

Elizabeth — Trinitas Regional Medical Center EMT, Solomon Donald, dies from COVID-19

Chatham — Atlantic Health EMS educator, former Chatham police captain, Bill Nauta, 72, dies from COVID-19

Morristown — Atlantic Mobile Health EMT, Scott Geiger, dies due to COVID-19 complications

Bergen County — Firefighter, EMS instructor and NJSEA EMT, John Ferrarella, dies from COVID-19

Woodbridge — NJ volunteer EMS chief, John Careccia, 74, dies from COVID-19

Bergen County — NJ EMT, former fire chief, David Pinto, 70, dies from COVID-19 complications

NEW YORK

New York City — FDNY ambulance mechanic, James Villecco, 55, dies from COVID-19

New York City — FDNY EMT and 9/11 responder, Gregory Hodge, 59, dies from COVID-19

New York City — NYU Langone Hospital paramedic, former FDNY EMS member, Tony Thomas, dies from COVID-19

Valley Stream — LODD: NY firefighter-EMT and 9/11 responder, Mike Field, dies from COVID-19

New York City — FDNY EMT, John Redd, 63, dies due to COVID-19

New York City — FDNY EMT, Idris Bey, 60, dies due to COVID-19

New York City — FDNY EMT, 30-year EMS veteran, Richard Seaberry, 63, dies due to COVID-19

Blooming Grove — NY ambulance volunteer, Sal Mancuso, 66, dies from COVID-19

PENNSYLVANIA

Delaware County — Pa. first responders, healthcare professionals mourn paramedic, Kevin Bundy, who died from COVID-19

Robesonia — Pa. assistant fire chief and EMT, Robert Zerman, 49, dies from COVID-19³⁴⁶

³⁴⁶ <https://www.ems1.com/coronavirus-covid-19/articles/covid-19-ems-deaths-jk5zWFziwYVYUaM4/>

ATTACHMENT B: CURRENT LAWS AND REGULATIONS

RECOGNIZED MITIGATION STRATEGIES FOR COVID-19 NOT COVERED BY VOSH REGULATIONS OR STANDARDS

VA. CODE §40.1-51(A), THE “GENERAL DUTY CLAUSE”

Neither OSHA nor VOSH has a regulation specific to SARS-CoV-2 or COVID-19 or infectious diseases generally.³⁴⁷

Certain VOSH regulations (identical to OSHA counterparts unless otherwise noted) can be used to address some SARS-CoV-2 or COVID-19 hazards.

1. VOSH Regulations

a. General Industry.

General requirements to provide personal protective equipment to employees in General Industry are contained in:

1910.132 (Personal Protective Equipment)³⁴⁸,

1910.133 (Eye and Face Protection)³⁴⁹, however, the scope of the regulation is limited to exposure “to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.” It does not reference exposure to airborne biological hazards.

1910.134 (Respiratory Protection)³⁵⁰,

1910.138 (Hand Protection)³⁵¹

1910.141 (Sanitation)³⁵²

1910.142 (Temporary Labor Camps)³⁵³

1910.1200 (Hazard Communication)³⁵⁴ (i.e., regulatory requirements for employee

³⁴⁷ Following the H1N1 virus outbreak in 2009, the AFL-CIO petitioned OSHA on May 28, 2009 for an infectious disease standard to be promulgated. In 2010, OSHA published a Request for Information toward developing an infectious disease standard, held stakeholder meetings, and conducted site visits. A regulatory framework document was created. In Spring 2017, on OSHA’s Regulatory Agenda an infectious disease standard was placed under long term action. No subsequent actions have been taken by OSHA toward this standard during the current administration. <https://www.osha.gov/dsg/id/>. The AFL-CIO has again recently petitioned OSHA for a standard covering COVID-19 exposure risks, and on May 18, 2020 filed a petition in the U.S. Circuit Court of Appeals for the District of Columbia asking the court to order OSHA to promulgate such a rule. *In re: AFL-CIO*, dkt. no. 20-1158 (D.C. Cir. 2020).

³⁴⁸ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132>

³⁴⁹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.133>

³⁵⁰ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>

³⁵¹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.138>

³⁵² <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.141>

³⁵³ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.142>

³⁵⁴ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200>

use of certain cleaning chemicals)

1910.1045 (Occupational Exposure to Hazardous Chemicals in Laboratories)³⁵⁵

b. Construction Industry.

1926.21(b)(2)³⁵⁶ (Safety Training and Education)

1926.59 (Hazard Communication)³⁵⁷ (i.e., regulatory requirements for employee use of certain cleaning chemicals)

1926.28³⁵⁸ and 1926.95³⁵⁹, (Personal Protective Equipment)

NOTE: The Construction Industry does not have a requirement comparable to 1910.132(d) which requires General Industry employers to conduct a written workplace assessment to “determine if hazards are present, or are likely to be present, which necessitate the use of” PPE.³⁶⁰

1926.102 (Eye and Face Protection)³⁶¹; however, the scope of the regulation is limited to exposure “to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.” It does not reference exposure to airborne biological hazards.

1926.103 (Respiratory Protection)³⁶²

NOTE: The Construction Industry Standards do not have a “Hand Protection” regulation similar to 1910.138.

16VAC25-160³⁶³ (Construction Industry Sanitation Standard – Virginia unique regulation that is the functional equivalent of 1926.51 for Construction), sanitation requirements are

³⁵⁵ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1450>

³⁵⁶ <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.21>

³⁵⁷ <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.59>

³⁵⁸ <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.28>

³⁵⁹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.95>

³⁶⁰ 1910.132(d), Hazard assessment and equipment selection.

1910.132(d)(1), The employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the employer shall:

1910.132(d)(1)(i), Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;

1910.132(d)(1)(ii), Communicate selection decisions to each affected employee; and,

1910.132(d)(1)(iii), Select PPE that properly fits each affected employee.

Note: Non-mandatory appendix B contains an example of procedures that would comply with the requirement for a hazard assessment.

1910.132(d)(2)

The employer shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.

³⁶¹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.102>

³⁶² <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.103>

³⁶³ <https://leg1.state.va.us/cgi-bin/legp504.exe?000+reg+16VAC25-160-10>

limited to “Toilet facilities shall be operational and maintained in a clean and sanitary condition.”

c. Agriculture Industry.

1928.21(a)(1)³⁶⁴ (Temporary Labor Camps, 1910.142 applies to agricultural operations)

1928.21(a)(5)³⁶⁵ (Hazard Communication, 1910.1200 applies to agricultural operations) (i.e., regulatory requirements for employee use of certain cleaning chemicals)

1910.142 (Temporary Labor Camps)³⁶⁶ applies to the Agriculture Industry

16VAC25-180³⁶⁷ (Field Sanitation - Virginia unique regulation that is the functional equivalent of 1928.110 for Agriculture), sanitation requirements are limited to “(3) Maintenance. Potable drinking water and toilet and handwashing facilities shall be maintained in accordance with appropriate public health sanitation practices, including the following:

(i) Drinking water containers shall be constructed of materials that maintain water quality, shall be refilled daily or more often as necessary, shall be kept covered and shall be regularly cleaned.

(ii) Toilet facilities shall be operational and maintained in clean and sanitary condition.

(iii) Handwashing facilities shall be refilled with potable water as necessary to ensure an adequate supply and shall be maintained in a clean and sanitary condition; and

(iv) Disposal of wastes from facilities shall not cause unsanitary conditions.

NOTE: There are no regulatory requirements in the Agriculture Industry for PPE, including respiratory protection.

d. Maritime Industry.

NOTE: VOSH has jurisdiction of state and local government maritime related activities only. OSHA retains jurisdiction over private sector maritime activities in Virginia.

1915.88³⁶⁸, Shipyard Employment (Sanitation)

1915.152³⁶⁹, Shipyard Employment (Personal Protective Equipment)

³⁶⁴ <https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.21>

³⁶⁵ <https://www.osha.gov/laws-regs/regulations/standardnumber/1928/1928.21>

³⁶⁶ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.142>

³⁶⁷ <https://leg1.state.va.us/cgi-bin/legp504.exe?000+reg+16VAC25-180-10>

³⁶⁸ <https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915.88>

³⁶⁹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915.152>

1915.153³⁷⁰, Shipyard Employment (Eye and Face Protection); however, the scope of the regulation is limited to exposure “to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.” It does not reference exposure to airborne biological hazards.

1915.154³⁷¹, Shipyard Employment (Respiratory Protection)

1915.157³⁷², Shipyard Employment (Hand and Body Protection)

1917.127³⁷³, Marine Terminal Operations (Sanitation)

1917.1(a)(2)(vi)³⁷⁴, Marine Terminal Operations (Hazard Communication, 1910.1200)

1917.92 and 1917.1(a)(2)(x)³⁷⁵, Marine Terminal Operations (Respiratory Protection, 1910.134)

1917.91³⁷⁶, Marine Terminal Operations (Eye and Face Protection)

1917.95³⁷⁷, Marine Terminal Operations (PPE, Other Protective Measures)

1918.95³⁷⁸, Longshoring (Sanitation)

1918.90³⁷⁹, Longshoring (Hazard Communication)

1918.102³⁸⁰ Longshoring (Respiratory Protection)

1918.101³⁸¹ Longshoring (Eye and Face Protection)

2. Recognized Mitigation Strategies for COVID-19 Not Covered by VOSH Regulations or Standards.

There are no VOSH or OSHA regulations or standards that would require:

Physical distancing of at least six feet where feasible (also known as Social Distancing)

Disinfection of work areas where known or suspected COVID-19 employees or other

³⁷⁰ <https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915.153>

³⁷¹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915.154>

³⁷² <https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915.157>

³⁷³ <https://www.osha.gov/laws-regs/regulations/standardnumber/1917/1917.127>

³⁷⁴ [https://www.osha.gov/laws-regs/regulations/standardnumber/1917/1917.1#1917.1\(a\)\(2\)\(ix\)](https://www.osha.gov/laws-regs/regulations/standardnumber/1917/1917.1#1917.1(a)(2)(ix))

³⁷⁵ *Id.*

³⁷⁶ <https://www.osha.gov/laws-regs/regulations/standardnumber/1917/1917.91>

³⁷⁷ <https://www.osha.gov/laws-regs/regulations/standardnumber/1917/1917.95>

³⁷⁸ <https://www.osha.gov/laws-regs/regulations/standardnumber/1918/1918.95>

³⁷⁹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1918/1918.90>

³⁸⁰ <https://www.osha.gov/laws-regs/regulations/standardnumber/1918/1918.102>

³⁸¹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1918/1918.101>

persons accessed or worked³⁸²

Employers to develop policies and procedures for employees to report when they are sick or experiencing symptoms consistent with COVID-19

Employers to, prior to the commencement of each work shift, prescreen of employees and other persons to verify each employee or person is not COVID-19 symptomatic

Employers to prohibit known and suspected COVID-19 employees and other persons from reporting to or being allowed to remain at work or on a job site until cleared for return

Employers to develop and implement policies and procedures for known COVID-19 or suspected COVID-19 employees to return to work using either a symptom-based or test-based strategy depending on local healthcare and testing circumstances

Employers to prohibit COVID-19 positive employees from reporting to or being allowed to remain at work or on a job site until cleared for return to work

Employers to provide employees assigned to work stations and in frequent contact with other persons inside six feet with alcohol based hand sanitizers at their workstations

Employers with hazards or job tasks classified at very high, high, or medium exposure risk to develop a written Infectious Disease Preparedness and Response Plan

Employee training on SARS-CoV-2 and COVID-19 hazards, with the exception of

³⁸² <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.141>

1910.141(a)(3)(i) provides that “All places of employment shall be kept **clean** to the extent that the nature of the work allows.” (Emphasis added). The term “sanitary” is not used, although it is used in reference to “washing facilities”, “waste disposal”, “food storage”, “sweepings”, and “drinking water”.

1910.141(a)(4)(i) provides that “Any receptacle used for putrescible solid or liquid waste or refuse shall be so constructed that it does not leak and may be thoroughly cleaned and maintained in a **sanitary** condition. Such a receptacle shall be equipped with a solid tight-fitting cover, unless it can be maintained in a **sanitary** condition without a cover. This requirement does not prohibit the use of receptacles which are designed to permit the maintenance of a **sanitary** condition without regard to the aforementioned requirements.” (Emphasis added).

1910.141(a)(4)(ii) provides that “All sweepings, solid or liquid wastes, refuse, and garbage shall be removed in such a manner as to avoid creating a menace to health and as often as necessary or appropriate to maintain the place of employment in a **sanitary** condition.” (Emphasis added).

1910.141(b)(1)(iii) provides that “Portable drinking water dispensers shall be designed, constructed, and serviced so that **sanitary** conditions are maintained, shall be capable of being closed, and shall be equipped with a tap.” (Emphasis added).

1910.141(d)(1) provides that “Washing facilities shall be maintained in a **sanitary** condition.” (Emphasis added).

1910.141(g)(3) provides that “Waste disposal containers. Receptacles constructed of smooth, corrosion resistant, easily cleanable, or disposable materials, shall be provided and used for the disposal of waste food. The number, size, and location of such receptacles shall encourage their use and not result in overfilling. They shall be emptied not less frequently than once each working day, unless unused, and shall be maintained in a **clean and sanitary** condition. Receptacles shall be provided with a solid tight-fitting cover unless **sanitary** conditions can be maintained without use of a cover.” (Emphasis added).

1910.141(g)(4) provides that “**Sanitary** storage. No food or beverages shall be stored in toilet rooms or in an area exposed to a toxic material.” (Emphasis added).

1926.21(b)(2) referenced above for the Construction Industry

NOTE: Employers that provide training to employees will be able to avail themselves of an affirmative defense to VOSH citations and penalties known as the “Employee Misconduct Defense,” which is codified in VOSH regulation 16 VAC 25-60-260.B:³⁸³

B. A citation issued under subsection A of this section to an employer who violates any VOSH law, standard, rule, or regulation shall be vacated if such employer demonstrates that:

1. Employees of such employer have been provided with the proper training and equipment to prevent such a violation;
2. Work rules designed to prevent such a violation have been established and adequately communicated to employees by such employer and have been effectively enforced when such a violation has been discovered;
3. The failure of employees to observe work rules led to the violation; and
4. Reasonable steps have been taken by such employer to discover any such violation. (Emphasis added)

In order for an employer to avail themselves of the above affirmative defense, which can result in dismissal of COVID-19 citations and penalties, they have to be able to demonstrate that employees were trained on hazards regulated by and the requirements of the ETS/ER. Including a training requirement in the ETS/ER will assure that employers have preserved an important legal right.

3. Va. Code §40.1-51(a), the “General Duty Clause”.

While neither OSHA nor VOSH has a regulation specific to SARS-CoV-2 or COVID-19, Va. Code §40.1-51(a), otherwise known as the “general duty clause” (the Virginia equivalent to §5(a)(1))³⁸⁴ of the OSH Act of 1970), provides that:

“It shall be the duty of every employer to furnish to each of his employees safe employment and a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees....”

While Congress intended that the primary method of compliance and enforcement under the OSH Act of 1970 would be through the adoption of occupational safety and health

³⁸³ <https://leg1.state.va.us/cgi-bin/legp504.exe?000+reg+16VAC25-60-260>

³⁸⁴ https://www.osha.gov/laws-regs/oshact/section_5, 29 U.S.C. § 654(a)(1).

standards³⁸⁵, it also provided the general duty clause as an enforcement tool that could be used in the absence of an OSHA (or VOSH) regulation.

As is evident from the wording of the general duty statute, it does not directly address the issue of SARS-CoV-2 or COVID-19 related hazards. While preferable to no enforcement tool at all, the general duty clause does not provide either the regulated community, employees, or the VOSH Program with substantive and consistent requirements on how to reduce or eliminate SARS-CoV-2 or COVID-19 related hazards.

Federal case law has established that the general duty clause can be used to address “serious” recognized hazards to which employees of the cited employer are exposed through reference to such things as national consensus standards, manufacturer’s requirements, requirements of the Centers for Disease Control (CDC), or an employer’s safety and health rules.

However, there are limitations to use of the general duty clause that make it problematic to enforce and result in its infrequent use. The recent 2019 decision of the Occupational Safety and Health Review Commission’s (OSHRC) in *Secretary of Labor v. A. H. Sturgill Roofing, Inc.*,³⁸⁶ demonstrates the complexities and difficulties of establishing a heat-related illness general duty “recognized hazard” and accompanying violation in a case where an employee of a roofing contractor collapsed and later died with a diagnosis of heat stroke where the employee’s core body temperature was determined to be 105.4°F.³⁸⁷

One limitation of use of the general duty clause can result in unfortunate outcomes in at a worksite with multiple employers. For instance, a general duty clause violation can only be issued to an employer whose own employees were exposed to the alleged hazardous condition.³⁸⁸ In the context of a COVID-19 situation, consider a subcontractor who sends one employee to a multi-employer worksite who is COVID-19 positive and knowingly allows that employee to work around disease free employees of a second subcontractor, which results in the transmission of the disease to one or more of the second contractors’ employees.

In such a situation, because no uninfected employees of the first contractor were exposed to the disease at the worksite, the contractor who created the hazard could not be issued a general duty violation or accompanying monetary penalty.

There is no ability to cite “other-than-serious” general duty violations (“other than serious” violations normally do not carry a monetary penalty) because the statutory language specifies that the hazard be one that is “causing or likely to cause death or serious physical harm.”

In the context of the COVID-19 pandemic, the primary problem with the use of the general duty clause is the inability to use it to enforce any national consensus standard, manufacturer’s

³⁸⁵ *The Law of Occupational Safety and Health*, Nothstein, 1981, page 259.

³⁸⁶ OSHRC Docket No. 13-0224, https://www.oshrc.gov/assets/1/18/A.H. Sturgill Roofing Inc.%5E13-0224%5EComplete_Decision_signed%5E022819%5EFINAL.pdf?8324

³⁸⁷ *Id.* at pages 2-3, Contributing factors included that the worker had some preexisting medical conditions, it was his first day on the job, and the outside temperature at the time of collapse was estimated to be 82°F with 51 percent relative humidity. The work took place on a flat roof with periods of direct sun alternating with clouds; and involved removing a single-ply sheet rubber membrane and Styrofoam insulation so that a new roof could be installed.

³⁸⁸

https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\181\GDoc_DOLI_5354_v6.pdf, VOSH Field Operations Manual (FOM), Chapter 10, page 18)

requirements, CDC recommendations, or employer safety and health rules which use “should,” “may,” “it is recommended,” and similar non-mandatory language.³⁸⁹

a. Use of the General Duty Clause to Enforce OSHA and CDC Guidelines.

All of the “Guidelines” published by OSHA, both of general application and directed to specific industries are by their own wording, unenforceable under the General Duty Clause:

“This guidance is not a standard or regulation, and it creates no new legal obligations. It contains recommendations as well as descriptions of mandatory safety and health standards. The recommendations are advisory in nature, informational in content, and are intended to assist employers in providing a safe and healthful workplace.”³⁹⁰

With regard to CDC guidelines generally, as an example, its “Meat and Poultry Processing Workers and Employers, Interim Guidance from CDC and the Occupational Safety and Health Administration (OSHA)”³⁹¹ states that:

“All meat and poultry processing facilities developing plans for continuing operations in the setting of COVID-19 occurring among workers or in the surrounding community should (1) work directly with appropriate state and local public health officials and occupational safety and health professionals; (2) incorporate relevant aspects of CDC guidance, including but not limited to this document and the CDC’s Critical Infrastructure Guidance; and (3) incorporate guidance from other authoritative sources or regulatory bodies as needed.”³⁹² (Emphasis added).

The above-referenced CDC Interim Guidance document contains very little “mandatory” language:

- “shall” is never used
- “much” is used 8 times but mostly with regard to OSHA regulatory requirements
- “should” is used 56 times
- “may” is used 39 times
- “recommend” or “recommendation” is used 7 times

In addition, the large majority of CDC’s documents providing employers with mitigation strategies for COVID-19 identify them as “recommendations” rather than mandatory requirements, which makes use of the General Duty Clause to enforce them very problematic.

³⁸⁹ Courts and the [Occupational Safety and Health Review] Commission have held that OSHA must define an alleged hazard in such a way as to give the employer fair notice of its obligations under the OSH Act. In *Ruhlin Co.* [Ruhlin Co., 21 OSH Cases 1779], the Commission held that the employer ‘lacked fair notice that it could have an obligation under section 5(a)(1) to require its employees to wear high visibility vests.’ The Commission found that a May 2004 interpretive letter by OSHA refers to a provision of the Federal Highway Administration manual which contained optional, not mandatory language.”

³⁹⁰ <https://www.osha.gov/Publications/OSHA3990.pdf>, at page 2.

³⁹¹ <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html>

³⁹² *Id.*

For instance, the CDC’s “Interim Guidance for Restaurants and Bars”³⁹³ appears unenforceable under the General Duty Clause, even though the body of the document lists what read like “requirements” without any qualifying “should” or “may” language, because the opening paragraph says the following:

“This guidance provides considerations for businesses in the food service industry (e.g., restaurants and bars) on ways to maintain healthy business operations and a safe and healthy work environment for employees, while reducing the risk of COVID-19 spread for both employees and customers. Employers should follow applicable Occupational Safety and Health Administration (OSHA) and CDC guidance for businesses to plan and respond to COVID-19. All decisions about implementing these recommendations should be made in collaboration with local health officials and other State and local authorities who can help assess the current level of mitigation needed based on levels of COVID-19 community transmission and the capacities of the local public health and healthcare systems. CDC is releasing this interim guidance, laid out in a series of three steps, to inform a gradual scale up of activities towards pre-COVID-19 operating practices. The scope and nature of community mitigation suggested decreases from Step 1 to Step 3. Some amount of community mitigation is necessary across all steps until a vaccine or therapeutic drug becomes widely available.” (Emphasis added).

b. Use of the General Duty Clause to Enforce “Mandatory” Requirements in Virginia Executive Orders.

Where Virginia Executive Order 61³⁹⁴ provides for mandatory measures to be taken by an employer to protect employees (e.g., wearing of “face covering” or “physical distancing” of 6 feet), the Department believes that it would be able to use the General Duty Clause to enforce such requirements. However, only those mitigation measures that contain “mandatory” language that result in protection for employees can be enforced using the General Duty Clause.

4. Va. Code §18.2-422, Prohibition of wearing of masks in certain places; exceptions.³⁹⁵

Section 18.2-422 provides as follows:

“It shall be unlawful for any person over 16 years of age to, with the intent to conceal his identity, wear any mask, hood or other device whereby a substantial portion of the face is hidden or covered so as to conceal the identity of the wearer, to be or appear in any public place, or upon any private property in this Commonwealth without first having obtained from the owner or tenant thereof consent to do so in writing. However, the provisions of this section shall not apply to persons (i) wearing traditional holiday costumes; (ii) engaged in professions, trades, employment or other activities and wearing protective masks which are deemed necessary for the physical safety of the

³⁹³ <https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/CDC-Activities-Initiatives-for-COVID-19-Response.pdf#page=53>

³⁹⁴ [https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-61-and-Order-of-Public-Health-Emergency-Three---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorviriniagov/executive-actions/EO-61-and-Order-of-Public-Health-Emergency-Three---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-(COVID-19).pdf)

³⁹⁵ <https://law.lis.virginia.gov/vacode/18.2-422/>

wearer or other persons; (iii) engaged in any bona fide theatrical production or masquerade ball; or (iv) wearing a mask, hood or other device for bona fide medical reasons upon (a) the advice of a licensed physician or osteopath and carrying on his person an affidavit from the physician or osteopath specifying the medical necessity for wearing the device and the date on which the wearing of the device will no longer be necessary and providing a brief description of the device, or (b) the declaration of a disaster or state of emergency by the Governor in response to a public health emergency where the emergency declaration expressly waives this section, defines the mask appropriate for the emergency, and provides for the duration of the waiver. The violation of any provisions of this section is a Class 6 felony.” (Emphasis added).

Virginia Executive Order 62 continues the waiver of Va. Code §18.2-422 of the Code of Virginia so as to allow the wearing of a medical mask, respirator, or any other protective face covering for the purpose of facilitating the protection of one’s personal health in response to the COVID-19 public health emergency declared by the State Health Commissioner on February 7, 2020, and reflected in Executive Order 51 declaring a state of emergency in the Commonwealth. Executive Order 51 is so further amended. This waiver is effective as of March 12, 2020.

ATTACHMENT C: OTHER STATE COVID-19 LAWS, STANDARDS AND REGULATIONS

Washington.

The State of Washington’s Division of Occupational Safety and Health (DOSH) just enacted Emergency COVID-19 Safety Rules³⁹⁶ on “Prohibited Business Activities and Conditions for Operations.”³⁹⁷

DOSH enacted an emergency rule that, on its face, allows the agency to cite Washington employers who fail to follow the patchwork of rules and guidance related to COVID-19, as set out by the State of Washington and associated safety and health authorities.

Oregon.

Effective November 16, 2020, adopted a Temporary Rule Addressing COVID-19 Workplace Risks,³⁹⁸ which applies to all employees working in places of employment subject to Oregon OSHA’s jurisdiction.

On May 11, 2020, Oregon adopted a Temporary Rule addressing the COVID-19 emergency in employer-provided housing, labor-intensive agricultural operations, and agricultural transportation.

The Oregon Occupational Safety and Health Administration (Oregon OSHA) adopted a temporary rule³⁹⁹ addressing the COVID-19 emergency in employer-provided housing, labor-intensive agricultural operations, and agricultural transportation with an effective date of May 11, 2020 and end date of October 23, 2020.⁴⁰⁰ The temporary rule provides for:

- enhanced sanitation requirements for toilet and handwashing facilities in the field;
- procedures to identify and isolate suspect COVID-19 cases “with sleeping, eating, and bathroom accommodations that are separate from others” (“Sick people should be isolated from others, have adequate hygiene facilities, and be taken care of by only one person in the household. If such isolation is not possible, follow guidance provided by the Oregon Health Authority or the local public health authority to make appropriate arrangements”.);
- procedures for isolating confirmed COVID-19 cases and only housing them with other confirmed cases with separate bathroom, cooking and eating facilities separate from people who have not been diagnosed with COVID-19. (“Sick people should be isolated from others, have adequate hygiene facilities, and be taken care of by only one person in the household. If such isolation is not possible, follow guidance provided by the Oregon Health Authority or the local public health authority to make appropriate arrangements.”); and
- “Affected employers must post a notice describing the requirements of these rules, including their application to COVID-19 risks, and advising where workers may file complaints regarding field sanitation matters. It must be in the language of the majority of the workers.”

³⁹⁶ https://www.lni.wa.gov/rulemaking-activity/AO20-10/2010CR103E.pdf?utm_medium=email&utm_source=govdelivery

³⁹⁷ <https://www.environmentalsafetyupdate.com/states/washington/wa-dosh-issues-emergency-covid-19-safety-rule-mandating-compliance-with-emergency-proclamation-and-safe-start-reopening-guidance/>

³⁹⁸ <https://osha.oregon.gov/OSHARules/div1/437-001-0744.pdf>

³⁹⁹ <https://osha.oregon.gov/OSHARules/adopted/2020/ao2-2020-text-emergency-rules-ag-covid.pdf>

⁴⁰⁰ *Id.*

NOTE: The Virginia Department of Health is responsible for conducting pre-occupancy inspections of temporary labor camps under 1910.142, and has issued “Interim Guidance for Migrant Labor Camp Operators and Employees Regarding COVID-19.”⁴⁰¹

California.

The California Division of Occupational Safety and Health (Cal/OSHA) Aerosol Transmissible Diseases (ATD) standard⁴⁰² is aimed at preventing worker illness from infectious diseases that can be transmitted by inhaling air that contains viruses (including SARS-CoV-2), bacteria or other disease-causing organisms. The Cal/OSHA ATD standard is only mandatory for certain healthcare employers in California.

Cal/OSHA also adopted COVID-19 Prevention Emergency Temporary Standards⁴⁰³ on December 1, 2020. These new temporary standards apply to most workers in California not covered by Cal/OSHA’s ATD standard.

⁴⁰¹ <https://www.vdh.virginia.gov/environmental-health/environmental-health-services/migrant-labor-camps/9505-2/>

⁴⁰² <https://www.cdph.ca.gov/Programs/CCDC/DCDC/DEODC/OHB/Pages/ATDStd.aspx>

⁴⁰³ <https://www.dir.ca.gov/dosh/coronavirus/ETS.html>

ATTACHMENT D: FINDING OF “GRAVE DANGER” TO SUPPORT THE ADOPTION OF THE EMERGENCY TEMPORARY STANDARD (ETS) AND FINAL PERMANENT STANDARD (FPS) FOR INFECTIOUS DISEASE PREVENTION OF THE SARS-COV-2 VIRUS THAT CAUSES COVID-19, 16VAC25-220, EFFECTIVE JULY 27, 2020 AND JANUARY 27, 2021, RESPECTIVELY

Workplace exposures to SARS-CoV-2 and COVID-19 constitute a grave danger to employees and employers in Virginia necessitating the adoption of an emergency temporary standard **and final permanent standard** pursuant to Va. Code §40.1-22(6a).

1. Statutory Construction of Va. Code §40.1-22(6a).

Va. Code §40.1-22(6), is specific to the Board and provides procedures for adopting an Emergency Temporary Standard:

§ 40.1-22. Safety and Health Codes Commission continued as Safety and Health Codes Board.

....

(6) Chapter 40 (§ 2.2-4000 et seq.) of Title 2.2 shall apply to the adoption of rules and regulations under this section and to proceedings before the Board.

(6a) The Board shall provide, without regard to the requirements of Chapter 40 (§ 2.2-4000 et seq.) of Title 2.2, for an emergency temporary standard to take immediate effect upon publication in a newspaper of general circulation, published in the City of Richmond, Virginia, if it determines that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and that such emergency standard is necessary to protect employees from such danger. The publication mentioned herein shall constitute notice that the Board intends to adopt such standard within a period of six months. The Board by similar publication shall prior to the expiration of six months give notice of the time and date of, and conduct a hearing on, the adoption of a permanent standard. The emergency temporary standard shall expire within six months or when superseded by a permanent standard, whichever occurs first, or when repealed by the Board.

(Emphasis added).

The terms “grave danger” and “necessity” are not defined in the statute, but have been addressed in federal court cases surrounding federal OSHA’s similar statutory requirement in the OSH Act, §6(c) (identical language underlined):

“(1) The Secretary shall provide, without regard to the requirements of chapter 5, title 5, Unites States Code, for an emergency temporary standard to take immediate effect upon publication in the Federal Register if he determines –

(A) that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and
(B) that such emergency standard is necessary to protect employees from such danger. (Emphasis added).

29 U.S.C. § 655(c).

From *Asbestos Information Ass'n/North America v. OSHA*, 727 F.2d 415 (5th Cir. 1984) – review of OSHA’s Emergency Temporary Standard (ETS) lowering the PEL for asbestos under Section 6(c) of the OSH Act (29 U.S.C. § 655(c):

“As the Supreme Court has noted, the determination of what constitutes a risk worthy of Agency action is a policy consideration that belongs, in the first instance to the Agency. [citation omitted] The Secretary determined that eighty lives at risk is a grave danger. We are not prepared to say it is not. The Agency need not support its conclusion ‘with anything approaching scientific certainty. [citation omitted] ... so long as the Agency supports its conclusion with ‘a body of reputable scientific thought,’ it may ‘use conservative assumptions’ to support that conclusion. The Agency also has prerogative to choose between conflicting evidence of equivalent quality, and a court will consider a finding consistent with one authority or another to be supported by substantial evidence.”

From *Florida Peach Growers Ass'n v. Dept. of Labor*, 489 F.2d 120 (5th Cir. 1974) – review of OSHA ETS regarding protecting farmworkers from exposure to certain pesticides during cultivation of various crops:

“The Act requires determination of danger from exposure to harmful substances, not just a danger of exposure; and, not exposure to just a danger, but to a grave danger; and, not the necessity of just a temporary standard, but that an emergency standard is necessary.

OSHA relied on a report finding that 800 persons are killed annually from the improper use of pesticides, and 80,000 injured. The court found this did not support a conclusion that the per se use of the pesticides presents a “grave danger.” *Id.* at 131. There was not enough data in the record on deaths from use of pesticide in the workplace (as opposed to ingestion by children, etc.).

The court looked at petitioner’s evidence “detailing the generally mild nature of the relatively few cases of illness reported by crop workers exposed solely to residues. ... from time to time a group of workers will experience nausea, excessive salivation and perspiration, blurred vision, abdominal cramps, vomiting, and diarrhea, in approximately that sequence....these are not grave illnesses, however, and do not support a determination of a grave danger....no deaths have been conclusively attributed to exposure to residues.” *Id.* at 131.

The court said “We reject any suggestion that deaths must occur before health and safety standards may be adopted. Nevertheless, the danger of incurable, permanent, or fatal consequences to workers, as opposed to easily curable and fleeting effects on their health, becomes important in the consideration of the necessity for emergency measures to meet a grave danger.” *Id.* at 132.

From *International Union, United Auto., Aerospace, and Agr. Implement Workers of America, UAW v. Donovan*, 590 F. Supp. 747 (D.D.C. 1984), where OSHA declined to promulgate an ETS on formaldehyde in the workplace. The court action was brought in district court challenging decision under the federal APA:

“The ‘grave danger’ and ‘necessity’ findings must be based on evidence of actual, prevailing industrial conditions, i.e., current levels of employee exposure to the substance in question.” *Id.* at 751.

From *Dry Color Mfrs. Ass’n, Inc. v. Brennan*, 486 F.2d 98 (3d Cir. 1973), a review of OSHA’s emergency regulations regarding 14 carcinogenic substances under Section 6(c) of the OSH Act (29 U.S.C. § 655(c)):

“...the most that can be said is that DCB and EI pose a ‘potential’ cancer hazard to men. Although the danger to cancer is surely “grave,” subsection 6(c)(1) of the Act requires a grave danger of exposure to substances ‘determined to be toxic or physically harmful.’ 486 F.2d 98, 104.

“While the Act does not require an absolute certainty as to the deleterious effect of a substance on man, an emergency temporary standard must be supported by evidence that shows more than some possibility that a substance may cause cancer in man. On this record, the evidence supplies no more than some possibility that DCB and EI may cause cancer in man.” *Id.* at 104-5.

Finding that SARS-CoV-2 and COVID-19 constitute a grave danger to employees in Virginia that necessitates the adoption of an emergency temporary standard [and final permanent standard] to protect Virginia employees from such danger.

The staff of the Department of Labor and Industry recommends that the Board find that SARS-CoV-2 and COVID-19 related hazard and job task employee exposures constitute a grave danger to employees in Virginia that necessitate the adoption of an emergency temporary standard to protect Virginia employees from the spread of the SARS-CoV-2 virus that causes COVID-19 under Va. Code §40.1-22(6a).

As is supported by the information presented below and in the administrative record presented to the Board, there currently exists in the Commonwealth of Virginia an emergency situation due to the ongoing spread of the potentially deadly SARS-CoV-2 virus that causes COVID-19.

A state of emergency has been declared by Governor Northam, due to the presence of COVID-19, a communicable disease which poses a public health threat as declared by the State Health Commissioner.

In the context of the Board’s authority to regulate occupational safety and health hazards in Virginia, COVID-19 poses a threat of “material impairment of health or functional capacity” to employees. The threat is new, immediate, dangerous, and potentially life threatening to employees and presents a grave danger to employees that necessitates the adoption of an emergency temporary standard.

The onslaught of the SARS-CoV-2 virus and COVID-19 disease are by their own definitions new and “novel,” involving a sudden, unforeseen, and fast spreading epidemic which evolved into a worldwide pandemic in a matter of months. In the U.S. it quickly spread to all 50 states and territories and became one of the leading causes of death in the country in just four months at over 112,000 deaths so far. As of June 11, 2020, thirty-seven

(37) U.S. jurisdictions report more than 10,000 COVID-19 cases,⁴⁰⁴ including the Virginia border states of Maryland (over 60,100 cases, and 2,875 deaths), North Carolina (over 38,100, and 1,053 deaths), Kentucky (over 11,800, and 484 deaths), Tennessee (over 28,000, and 456 deaths). The District of Columbia has over 9,500 cases, and 499 deaths.⁴⁰⁵

Virginia now has 52,647 cases, 5,306 people hospitalizations, and 1,520 deaths as of June 11, 2020. The COVID-19 impact on Virginia’s employees and employers has been widespread, significant and devastating. Employee deaths under VOSH investigation now total 11 in a span of four months (which would represent 30% of the average number of deaths investigated by VOSH on a calendar year basis), with at least four employee hospitalizations under VOSH investigation. Both are expected to increase over the coming months.

According to Virginia Workers’ Compensation Commission statistics, over 3,150 claims have been submitted in a four month period across a wide range of industries and job classifications. On May 11, 2020, VWCC was reporting 2,182 workers’ compensation claims; and by May 31, 2020 the total had increased by 972 claims to 3,154, a 44.5% increase in a 20 day time period. For a number of reasons, these numbers significantly underrepresent the number of actual workers’ compensation claims and COVID-19 illnesses suffered by Virginia employees on the job. In addition, over 40 claims have been submitted for Virginia state employees from a wide variety of agencies during the same period.

According to a CDC study, among U.S. COVID-19 cases with known disposition, the proportion of persons who were hospitalized was 19%. The proportion of persons with COVID-19 admitted to the intensive care unit (ICU) was 6%.⁴⁰⁶

The federal and state governments have almost universally acknowledged the emergency presented by the disease with declarations of emergencies around the country and implementation of a combination of voluntary and mandatory mitigation efforts to attempt to slow the progress of the disease. The effectiveness of those efforts remain an open question. Statistics, studies, and news reports demonstrate that employees are becoming infected, seriously ill, and dying from COVID-19 because of workplace exposures in a wide variety of industries.

Complications can include pneumonia and trouble breathing, organ failure in several organs, heart problems, a severe lung condition that causes a low amount of oxygen to go through your bloodstream to your organs (acute respiratory distress syndrome), blood clots, acute kidney injury, additional viral and bacterial infections, permanent long term injury to the body, and death.

Early studies indicate that COVID-19’s “infection fatality rate” may be substantially higher than the seasonal influenza – potentially resulting in death ten or more times frequently than the seasonal flu.

Susceptibility to COVID-19 is near universal in the workplace as there is no pre-existing immunity to this novel virus among humans. There is currently no specific treatment for or

⁴⁰⁴ <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

⁴⁰⁵ <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

⁴⁰⁶ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

vaccine to prevent COVID-19. The best way to prevent workplace related illness is to prevent workplace exposure to the SARS-CoV-2 virus.

SARS-CoV-2 is easily transmitted through the air from person-to-person through respiratory aerosols created by coughing, sneezing, talking, and even singing. Epidemiologic studies have documented SARS-CoV-2 transmission during the pre-symptomatic incubation period, and asymptomatic transmission has been suggested in other reports. SARS-CoV-2 aerosols can settle and deposit on environmental surfaces where they can remain viable for days, although it is thought that transmission of the virus in this manner is not thought to be the primary mode of transmission.

The CDC's current best estimate of the percentage of persons with positive COVID-19 infections that are asymptomatic is 35%. The CDC's current best estimate of the percentage of COVID-19 disease transmission occurring prior to symptom onset is 40%. This means that until an effective vaccine is developed and deployed, healthy employees will run a continuing risk of exposure to COVID-19 despite an employer's best efforts to conduct pre-shift screening of employees, customers, and other persons to identify suspected COVID-19 carriers of the disease.

Researchers think that the reproduction number for COVID-19 is between 2 and 3, which means that one person can infect two to three other people. There are also documented cases in the U.S. of "superspreader" events where, one person has been shown to have infected dozens of people at a single mass gathering event.

"The threshold for combined [COVID-19] vaccine efficacy, once one is developed and herd immunity needed for disease extinction" is estimated between 55% and 82% "(i.e., >82% of the population has to be immune, through either vaccination or prior infection, to achieve herd immunity to stop transmission)." Development and deployment of a vaccine in the United States remains at least six months away and perhaps many more months beyond that.

CDC's current "best guess" is that — in a scenario without any further social distancing or other efforts to control the spread of the virus — roughly 4 million patients would be hospitalized in the U.S. with COVID-19 and 500,000 would die over the course of the pandemic.

Although all employees are potentially susceptible to serious health complications from exposure to the SARS-CoV-2 virus and COVID-19 disease, there are sound reasons to be significantly concerned about workplace exposures to employees in high risk categories (age and medical condition). A substantial portion of the workforce are individuals of 65 years or older, or suffering from chronic medical conditions such as diabetes, obesity, hypertension, high cholesterol, or underlying respiratory conditions.

Continued spread of the virus in the general population and the workplace is anticipated for months to come. The disease is spread through "very, very casual interpersonal contact." Despite all the efforts of national, state, and local government leaders, there are currently (as of June 4, 2020) 19 states that have averaged more new cases over the past week than the prior week, while 13 are holding steady and 18 are seeing a downward trend. In addition, it is still widely expected that a late fall or early winter second wave of COVID-19 could be

even more deadly in the U. S., as it would coincide with the flu season, which already puts a strain on hospitals.

There is ample evidence to support the conclusion that spread of the SARS-CoV-2 virus and the potentially deadly COVID-19 disease will persist in Virginia's workplaces for many months to come. It is well documented that employers will be confronted with employees who work despite being symptomatic for fear of job loss, and customers who will refuse to observe physical distancing or face covering requirements, even in the face of Governor's executive orders, thereby exposing employees to a continuing risk of exposure unless mandatory mitigation efforts are implemented through an emergency regulation.

In addition, as contractors from other states cross borders into and out of Virginia, combined with the loosening of travel restrictions and opening of state economies, more people from other states and localities with ongoing high rates of community transmission will potentially bring the SARS-CoV-2 virus and COVID-19 disease to Virginia's workplaces and communities.

As previously noted, there is currently no vaccine for COVID-19. While officials are hopeful a vaccine to prevent COVID-19 will be ready in the first half of 2021, it's far from guaranteed. Producing and deploying a vaccine to a sufficient number of the U. S. population (over 329,000,000 people) to achieve a minimum of 50% of the population with effective COVID-19 antibodies will take some time to accomplish. In addition the fact that the vaccine may have an effectiveness rate below 100%, successful deployment of a vaccine will depend on the willingness of the U.S. population to actually take the vaccine. There is evidence to support a conclusion that a not insignificant portion of the population may refuse to take the vaccine.

The need for an emergency temporary standard is demonstrated by the rapid and overwhelmingly widespread onslaught of the SARS-CoV-2 virus and COVID-19 disease in the country, to states surrounding Virginia, and to Virginia itself and its places of employment. The deadly virus is both new and "novel," involving a sudden, unforeseen, and fast spreading epidemic which evolved into a worldwide pandemic in a matter of months.

A significant number of employee deaths and workers' compensation claims have been reported in Virginia in just a four month period. Virginia employees are becoming infected, seriously ill, and dying from COVID-19 because of workplace exposures in a wide variety of industries.

Susceptibility to COVID-19 is near universal in the workplace as there is no pre-existing immunity to this novel virus among humans. There is currently no specific treatment for or vaccine to prevent COVID-19. Development and deployment of a vaccine in the United States remains at least six months away and perhaps many more months beyond that.

Due to the high potential for pre-symptomatic and asymptomatic persons to unknowingly spread the SARS-CoV-2 virus in a public or workplace setting, until an effective vaccine is developed and deployed, healthy employees will run a continuing risk of exposure to COVID-19 despite an employer's best efforts to conduct pre-shift screening of employees, customers, and other persons to identify suspected COVID-19 carriers of the disease.

The most effective way to ensure that no Virginia “employee will suffer material impairment of health or functional capacity” is to prevent the spread of workplace related COVID-19 infections through the adoption of mandatory employee protection and virus mitigation requirements.

There currently is no occupational law, standard, or regulation that specifically addresses infectious diseases such as the SARS-CoV-2 virus that causes the COVID-19 disease. While there are some VOSH regulations that can be applied toward some mitigation efforts (i.e., personal protective equipment, respiratory protection equipment), those regulations are not universal across all Virginia industries, and none would require:

- Physical distancing of at least six feet where feasible
- Disinfection of work areas where known or suspected COVID-19 employees or other persons accessed or worked⁴⁰⁷
- Employers to develop policies and procedures for employees to report when they are sick or experiencing symptoms consistent with COVID-19
- Employers to, prior to the commencement of each work shift, prescreen of employees to verify each employee is not COVID-19 symptomatic
- Employers to prohibit known and suspected COVID-19 employees from reporting to or being allowed to remain at work or on a job site until cleared for return to work
- Employers to develop and implement policies and procedures for known COVID-19 or suspected COVID-19 employees to return to work using either a symptom-based or test-based strategy depending on local healthcare and testing circumstances
- Employers to prohibit COVID-19 positive employees from reporting to or being allowed to remain at work or on a job site until cleared for return to work
- Employers to provide employees assigned to work stations and in frequent contact with

⁴⁰⁷ <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.141>

1910.141(a)(3)(i) provides that “All places of employment shall be kept **clean** to the extent that the nature of the work allows.” (Emphasis added). The term “sanitary” is not used, although it is used in reference to “washing facilities”, “waste disposal”, “food storage”, “sweepings”, and “drinking water”.

1910.141(a)(4)(i) provides that “Any receptacle used for putrescible solid or liquid waste or refuse shall be so constructed that it does not leak and may be thoroughly cleaned and maintained in a **sanitary** condition. Such a receptacle shall be equipped with a solid tight-fitting cover, unless it can be maintained in a **sanitary** condition without a cover. This requirement does not prohibit the use of receptacles which are designed to permit the maintenance of a **sanitary** condition without regard to the aforementioned requirements.” (Emphasis added).

1910.141(a)(4)(ii) provides that “All sweepings, solid or liquid wastes, refuse, and garbage shall be removed in such a manner as to avoid creating a menace to health and as often as necessary or appropriate to maintain the place of employment in a **sanitary** condition.” (Emphasis added).

1910.141(b)(1)(iii) provides that “Portable drinking water dispensers shall be designed, constructed, and serviced so that **sanitary** conditions are maintained, shall be capable of being closed, and shall be equipped with a tap.” (Emphasis added).

1910.141(d)(1) provides that “Washing facilities shall be maintained in a **sanitary** condition.” (Emphasis added).

1910.141(g)(3) provides that “Waste disposal containers. Receptacles constructed of smooth, corrosion resistant, easily cleanable, or disposable materials, shall be provided and used for the disposal of waste food. The number, size, and location of such receptacles shall encourage their use and not result in overfilling. They shall be emptied not less frequently than once each working day, unless unused, and shall be maintained in a **clean and sanitary** condition. Receptacles shall be provided with a solid tight-fitting cover unless **sanitary** conditions can be maintained without use of a cover.” (Emphasis added).

1910.141(g)(4) provides that “**Sanitary** storage. No food or beverages shall be stored in toilet rooms or in an area exposed to a toxic material.” (Emphasis added).

- other persons inside six feet with alcohol based hand sanitizers at their workstations
- Employers with hazards or job tasks classified at very high, high, or medium exposure risk to develop a written Infectious Disease Preparedness and Response Plan
- Employee training on SARS-CoV-2 and COVID-19 hazards, with the exception of 1926.21(b)(2) requirements for the Construction Industry⁴⁰⁸

The current patchwork of VOSH and OSHA standards and regulations do not ensure that similarly situated employees and employers exposed to the same SARS-CoV-2 and COVID-19 related hazards and job tasks in similar exposure settings are provided the same level of occupational safety and health protections. Examples include but are not limited to:

- Construction Industry employers would be required to provide training to employees on an emergency temporary standard/emergency regulation, but no other employers covered by VOSH jurisdiction would be required to do so. Section 1926.21(b)(2)⁴⁰⁹ (Safety Training and Education).
- The Agricultural Industry has no standards or regulations to provide respiratory or personal protective equipment to employees.
- Sanitation requirements in the Construction Industry are limited to “Toilet facilities shall be operational and maintained in a clean and sanitary condition.”
- Neither the Construction Industry nor the Agricultural Industry have a requirement comparable to 1910.132(d) which requires General Industry employers to conduct a written workplace assessment to “determine if hazards are present, or are likely to be present, which necessitate the use of” PPE.⁴¹⁰

The Board’s statutory mandate in Va. Code §40.1-22(5) to:

“... adopt, alter, amend, or repeal rules and regulations to further, protect and promote the safety and health of employees in places of employment over which it has jurisdiction and to effect compliance with the federal OSH Act of 1970...as may be necessary to carry out its functions established under this title. The Commissioner shall enforce such rules and regulations. All such rules and regulations shall be designed to protect and promote the safety and health of such

⁴⁰⁸With the exception of the Construction Industry regulation at 1926.21(b)(2) (Safety Training and Education)

⁴⁰⁹ <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.21>

⁴¹⁰ 1910.132(d), Hazard assessment and equipment selection.

1910.132(d)(1), The employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE). If such hazards are present, or likely to be present, the employer shall:

1910.132(d)(1)(i), Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;

1910.132(d)(1)(ii), Communicate selection decisions to each affected employee; and,

1910.132(d)(1)(iii), Select PPE that properly fits each affected employee.

Note: Non-mandatory appendix B contains an example of procedures that would comply with the requirement for a hazard assessment.

1910.132(d)(2)

The employer shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.

employees. In making such rules and regulations to protect the occupational safety and health of employees, the Board shall adopt the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity. However, such standards shall be at least as stringent as the standards promulgated by the Federal Occupational Safety and Health Act of 1970 (P.L. 91-596). In addition to the attainment of the highest degree of health and safety protection for the employee, other considerations shall be the latest available scientific data in the field, the feasibility of the standards, and experience gained under this and other health and safety laws....” (Emphasis added).

As is discussed in greater detail in section above, while the General Duty Clause, Va. Code §40.1-51(a), can be used in certain limited circumstances to enforce mandatory requirements in Governor Northam’s Executive Orders, there are severe limitations to its use that make it problematic to enforce and results in its infrequent use. As is evident from the wording of the statute, it does not directly address the issue of SARS-CoV-2 or COVID-19 related hazards.

While preferable to no enforcement tool at all, the general duty clause does not provide either the regulated community, employees, or the VOSH Program with substantive and consistent requirements on how to reduce or eliminate SARS-CoV-2 or COVID-19 related hazards, serious illnesses and deaths, that can otherwise be clearly and uniformly established in an emergency temporary standard. It cannot be used to enforce OSHA Guidelines at all, and can only be used to enforce CDC guidelines that use “mandatory” language such as “shall” and “will” as opposed to language that “suggests” or “recommends” employer action through words such as “should” or “may”. Of the specific mitigation efforts listed above only the physical distancing and enhanced sanitation requirements are addressed in Governor Northam’s Executive Orders and therefore enforceable through the General Duty Clause.

Further, federal OSHA has taken the position that it will not be promulgating an emergency temporary standard pursuant to its authority under the OSH Act of 1970,⁴¹¹ instead opting to rely upon many voluntary guidelines for various business sectors. These guidelines, while useful for employers with the intention of complying with health and safety standards, will be irrelevant for businesses who choose not to take steps to protect employees from the grave danger posed by COVID-19.

Many of the guidelines are explicit that they are voluntary, and may not be used to impose legal obligations upon employers. Employers’ voluntary compliance with relevant guidelines, which has also been asserted by OSHA as a reason a standard is unnecessary, is antithetical to the goal of protecting all employees, particularly in those workplaces with recalcitrant employers.

An emergency regulation is also necessary to establish clear baseline standards employers can rely upon as to how to protect employees, rather than having them rely upon ad hoc “interim” guidance documents from various agencies. In a similar case where federal OSHA relied solely upon voluntary guidance and employers’ voluntary compliance instead of an

⁴¹¹ https://www.osha.gov/laws-regs/oshact/section_6

emergency temporary standard, the D.C. Circuit Court of Appeals found OSHA had “embarked upon the least responsive course short of inaction” and ordered OSHA to expedite rulemaking for an ethylene oxide standard. *Public Citizen Health Research Group v. Aucter*, 702 F.2d 1150, 1153 (D.C. Cir. 1983).

The following items are intended to support and supplement the above finding, but the Board reserves the right to rely on other evidence presented in the administrative record to support the finding and its decision to adopt an emergency temporary standard [and final permanent standard], should it decide to do so.

- On February 7, 2020, the State Health Commissioner declared COVID-19 a communicable disease of public health threat⁴¹² as defined in Va. Code §44-146.16 in part as “an illness of public health significance...caused by a specific or suspected infectious agent that may be reasonably expected or is known to be readily transmitted directly or indirectly from one individual to another and has been found to create a risk of death or significant injury or impairment...”
- In the context of VOSH’s jurisdiction over places of employment and the Safety and Health Codes Board’s authority to regulate occupational safety and health hazards in Virginia, COVID-19 poses a threat of “material impairment of health or functional capacity” to employees. Va. Code §40.1-22(5).
- Infectious respiratory diseases can spread in a workplace setting when a healthy person comes in contact with virus particles expelled by someone who is sick — usually through a cough or sneeze.⁴¹³ SARS-CoV-2 is easily transmitted through the air from person-to-person through respiratory aerosols, and the aerosols can settle and deposit on environmental surfaces where they can remain viable for days.⁴¹⁴
- Susceptibility to COVID-19 will be universal in the workplace as there is no pre-existing immunity to this novel virus among humans. “The virus is spread through very, very casual interpersonal contact.” W. David Hardy, a professor of infectious disease at Johns Hopkins University School of Medicine, told STAT.⁴¹⁵
- “Although most people with COVID-19 have mild to moderate symptoms, the [COVID-19] disease can cause severe medical complications and lead to death in some people. Older adults or people with existing chronic medical conditions are at greater risk of becoming seriously ill with COVID-19.”⁴¹⁶ “Younger adults are also being hospitalized in the U.S. Adults 20–44 account for 20% of hospitalizations, 12% of ICU admissions.”⁴¹⁷ Some research indicates that SARS-CoV-2 infection can cause significant morbidity in

⁴¹² <https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/Order-of-the-Governor-and-State-Health-Commissioner-Declaration-of-Public-Health-Emergency.pdf>

⁴¹³ <https://www.statnews.com/2020/04/14/how-much-of-the-coronavirus-does-it-take-to-make-you-sick/>

⁴¹⁴ <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/coronavirus-disease-2019-covid-19-frequently-asked-questions>

⁴¹⁵ <https://www.statnews.com/2020/04/14/how-much-of-the-coronavirus-does-it-take-to-make-you-sick/>

⁴¹⁶ <https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-20479963>

⁴¹⁷

https://www.hopkinsguides.com/hopkins/view/Johns_Hopkins_ABX_Guide/540747/all/Coronavirus_COVID_19_SA_RS_CoV_2

relatively young persons without severe underlying medical conditions.⁴¹⁸

- “Those most at risk are ‘people 65 years and older, people who live in a nursing home or long-term care facility, people with chronic lung, heart, kidney and liver disease,’ said Dr. Gary Weinstein, pulmonologist/critical care medicine specialist at Texas Health Presbyterian Hospital Dallas (Texas Health Dallas). Additionally, he said others who could be at risk are those with compromised immune systems and people with morbid obesity or diabetes. “Finally, when patients have lung failure, they frequently have failure or dysfunction of their other organs, such as the kidney, heart, and brain.”⁴¹⁹ (Emphasis added).
- In all 50 states and the District of Columbia, at least 20 percent of adults ages 65 to 74 are in the workforce. In seven states, more than 30 percent are working. Since 2013, 46 of 51 had seen increases in workforce participation of 75-and-older residents. Seniors represent significant portions of the workforce for many professions that require close contact with others, including bus drivers, ushers, ticket takers, taxi drivers, street vendors, chiropractors, dentists, barbers and many more.⁴²⁰
- The CDC conducted a study of “Selected health conditions and risk factors, by age: United States, selected years 1988–1994 through 2015–2016”⁴²¹ of the general population. Although the working population of the country is only a subset of the totals for the table, the data nonetheless demonstrates the significant risk that SARS-CoV-2 and COVID-19 related hazards pose to the U.S. and Virginia workers. Using the age adjusted statistical totals:
 - 14.7% of the population suffer from diabetes
 - 12.2% from high cholesterol
 - 30.2% suffer from hypertension
 - 39.7% suffer from obesity

NOTE: Virginia’s Adult Diabetes Rate in 2019 was 10.5%.⁴²²

Virginia’s Hypertension Rate in 2015 was 33.2%⁴²³

Virginia’s Adult High Cholesterol Rate⁴²⁴ in 2019 was 33%.⁴²⁵

⁴¹⁸ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6918e1.htm>

⁴¹⁹ <https://www.healthline.com/health-news/what-we-know-about-the-long-term-effects-of-covid-19#COVID-19-might-affect-the-brain-stem>

⁴²⁰ <https://www.seniorliving.org/research/senior-employment-outlook-covid/>

⁴²¹ <https://www.cdc.gov/nchs/data/hus/2018/021.pdf>

⁴²² https://www.americashealthrankings.org/explore/annual/measure/High_Chol/state/VA

⁴²³ <https://www.vdh.virginia.gov/content/uploads/sites/65/2018/05/VA-Heart-Disease-FactSheetFINAL.pdf>

⁴²⁴ Percentage of adults who reported having their cholesterol checked and were told by a health professional that it was high.

⁴²⁵ https://www.americashealthrankings.org/explore/annual/measure/High_Chol/state/VA

Virginia's Adult Obesity Rate⁴²⁶ in 2019 was 30.3%.⁴²⁷

- The largest cohort of >44,000 persons with COVID-19 from China showed that illness severity can range from mild to critical:
 - Mild to moderate (mild symptoms up to mild pneumonia): **81%**
 - Severe (dyspnea, hypoxia, or >50% lung involvement on imaging): **14%**
 - Critical (respiratory failure, shock, or multi-organ system dysfunction): **5%**
- “In this study, all deaths occurred among patients with critical illness and the overall case fatality rate was 2.3%. The case fatality rate among patients with critical disease was 49%. Among children in China, illness severity was lower with 94% having asymptomatic, mild or moderate disease, 5% having severe disease, and <1% having critical disease. Among U.S. COVID-19 cases with known disposition, the proportion of persons who were hospitalized was 19%. The proportion of persons with COVID-19 admitted to the intensive care unit (ICU) was 6%.”⁴²⁸ (Emphasis added).
- Asymptomatic and Pre-Symptomatic Transmission. Epidemiologic studies have documented SARS-CoV-2 transmission during the pre-symptomatic incubation period, and asymptomatic transmission has been suggested in other reports. Virologic studies have also detected SARS-CoV-2 with RT-PCR low cycle thresholds, indicating larger quantities of viral RNA, and cultured viable virus among persons with asymptomatic and pre-symptomatic SARS-CoV-2 infection. The exact degree of SARS-CoV-2 viral RNA shedding that confers risk of transmission is not yet clear. Risk of transmission is thought to be greatest when patients are symptomatic since viral shedding is greatest at the time of symptom onset and declines over the course of several days to weeks. However, the proportion of SARS-CoV-2 transmission in the population due to asymptomatic or pre-symptomatic infection compared to symptomatic infection is unclear.⁴²⁹
- “Complications can include pneumonia and trouble breathing, organ failure in several organs, heart problems, a severe lung condition that causes a low amount of oxygen to go through your bloodstream to your organs (acute respiratory distress syndrome), blood clots, acute kidney injury, additional viral and bacterial infections.”⁴³⁰
- There is significant evidence of workplace exposures for employees to COVID-19 in many different industries in Virginia and around the country (see section IV.O.1 to .26).
- Early studies indicate that COVID-19 “infection fatality rate” may be substantially higher than the seasonal influenza. The generally accepted approximate IFR-S of seasonal influenza is 0.1%.⁴³¹ A study by the University of Washington using data through April 20, 2020, calculated the U.S. “infection mortality rate” among symptomatic cases (IFR-

⁴²⁶ Percentage of adults with a body mass index of 30.0 or higher based on reported height and weight (pre-2011 BRFSS methodology).

⁴²⁷ <https://www.americashealthrankings.org/learn/reports/2019-annual-report/state-summaries-virginia>

⁴²⁸ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

⁴²⁹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

⁴³⁰ *Id.*

⁴³¹ *Id.* referencing <https://www.cdc.gov/flu/about/burden/2018-2019.html>

S) to be 1.3%⁴³² [13 times the seasonal influenza rate]. Another study calculated a global IFR of 1.04%⁴³³ [10.4 times the seasonal influenza rate]. A study by the London School of Hygiene and Tropical Medicine estimated the infection fatality rate on the Diamond Princess Cruise Ship to be 1.2%⁴³⁴ [12 times the seasonal influenza rate] Nearly the entire cruise ships 3,711 passengers and crew were tested.

- The CDC’s current best estimate of the percentage of persons with positive COVID-19 infections that are asymptomatic is 35%.⁴³⁵ The CDC’s current best estimate of the percentage of COVID-19 disease transmission occurring prior to symptom onset is 40%.⁴³⁶ This means that until an effective vaccine is developed and deployed, healthy employees will run a continuing risk of exposure to COVID-19 despite an employer’s best efforts to conduct pre-shift screening of employees.
- The CDC has documented multiple “superspreaders” of the virus at mass gathering events involving a choir practice,⁴³⁷ a church service,⁴³⁸ a funeral,⁴³⁹ and a birthday party⁴⁴⁰ where dozens of persons were infected by a single “superemitter” of the virus.
- Since February, 2020, the Virginia Workers’ Compensation Commission has received 3,154 COVID-19 related claims as of May 31, 2020 in a wide variety of occupational settings, representing a nearly 44.5% increase in claims over a 20 day period since May 11, 2020 (2,182 claims).
- Since February, 2020, the Virginia Department of Human Resources Workers’ Compensation Statistics has received 42 COVID-19 related claims for state employees in

⁴³² <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2020.00455>; Study assumptions: We make three assumptions for our analysis: (1) Errors in the numerator and the denominator lead to underreporting of true COVID-19 deaths and cases, respectively; error is smaller for deaths than for cases. (2) Both the errors are declining over time. (3) The errors in the denominator are declining at a faster rate than the error in the numerator.

Assumption #1 is self-evident; both the deaths and the actual cases are undercounted during the initial phase of the epidemic. Because deaths are much more visible events than infections, which, in the case of COVID-19, can go asymptomatic during the first few days of infection, we posit that, at any point in time, the errors in the denominator are larger than the errors in the numerator. Hence, this assumption leads to CFR estimates being larger than the IFR-S, which is typically believed to be true based on observed data.

Assumption #2 is our central assumption, which states that under some stationary processes of care delivery, health care supply, and reporting, which are all believed to be improving over time, the errors in both the numerator and the denominator are declining. It implies that we are improving in the measurement of both the numerator and denominator over time, albeit at different rates in different jurisdictions.

Assumption #3 posits that the error in the denominator is declining faster than the error in the numerator. This assumption indicates that the CFR rates, based on the number of cumulative COVID-19 deaths and the cumulative reported COVID-19 cases, are declining over time and are confirmed based on our observed data (described in detail below).

⁴³³ <https://www.medrxiv.org/content/10.1101/2020.05.11.20098780v1>

⁴³⁴ <https://www.medrxiv.org/content/10.1101/2020.03.05.20031773v2>

⁴³⁵ <https://www.cnn.com/2020/05/22/health/cdc-coronavirus-estimates-symptoms-deaths/index.html>

⁴³⁶ *Id.*

⁴³⁷ <https://www.cdc.gov/mmwr/volumes/69/wr/mm6919e6.htm>

⁴³⁸ https://www.cdc.gov/mmwr/volumes/69/wr/mm6920e2.htm?s_cid=mm6920e2_w

⁴³⁹ https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e1.htm?s_cid=mm6915e1_w

⁴⁴⁰ *Id.*

a wide variety of occupational settings (see section IV.A.2).

- Pursuant to Va. Code §40.1-51.1.D⁴⁴¹, eight (8) COVID-19 related employee deaths have been reported by employers to the Department. An additional three (3) employee deaths have been reported to the Department by the Virginia Workers' Compensation Commission.
- The VOSH Program has investigated an average of 37 annual work-related employee deaths over the last five calendar years. The eleven (11) COVID-19 death notifications so far in 2020 would represent 30% of the deaths investigated by VOSH in an average year. It is not unreasonable to assume that had no mitigation efforts been undertaken by state and local governments beginning in mid-March (e.g., stay at home requests and orders, business shutdowns, physical distancing requirements, face covering recommendations and requirements, etc.), that the number of COVID-19 death notifications would be even higher than the 11 reported to date. It is anticipated that VOSH will be receiving more notifications of employee deaths in the coming weeks and months.
- “[As of May 20, 2020] The CDC's current "best guess" is that — in a scenario without any further social distancing or other efforts to control the spread of the virus — roughly 4 million patients would be hospitalized in the U.S. with COVID-19 and 500,000 would die over the course of the pandemic. That's according to the agency's new parameters that the Center for Public Integrity plugged into a simple epidemiological model.”⁴⁴²
- Researchers think that the R_0 [reproduction number] for COVID-19 is between 2 and 3. This means that one person can infect two to three other people.⁴⁴³ Depending on the level of contagiousness of COVID-19 expressed in the R_0 ⁴⁴⁴ value, “the threshold for combined [COVID-19] vaccine efficacy and herd immunity needed for disease extinction” is estimated between 55% and 82% “(i.e., >82% of the population has to be immune, through either vaccination or prior infection, to achieve herd immunity to stop transmission).”⁴⁴⁵
- There is anecdotal evidence to support the conclusion that employers will be confronted with employees who work despite being symptomatic and customers who will refuse to observe physical distancing or face covering requirements, even in the face of Governor’s

⁴⁴¹ <https://law.lis.virginia.gov/vacode/40.1-51.1/>

⁴⁴² <https://www.npr.org/sections/health-shots/2020/05/22/860981956/scientists-say-new-lower-cdc-estimates-for-severity-of-covid-19-are-optimistic>

⁴⁴³ <https://www.webmd.com/lung/what-is-herd-immunity#1>

⁴⁴⁴ “The basic reproduction number (R_0), pronounced “R naught,” is intended to be an indicator of the contagiousness or transmissibility of infectious and parasitic agents.... R_0 has been described as being one of the fundamental and most often used metrics for the study of infectious disease dynamics (7–12). An R_0 for an infectious disease event is generally reported as a single numeric value or low–high range, and the interpretation is typically presented as straightforward; an outbreak is expected to continue if R_0 has a value >1 and to end if R_0 is <1 (13). The potential size of an outbreak or epidemic often is based on the magnitude of the R_0 value for that event (10), and R_0 can be used to estimate the proportion of the population that must be vaccinated to eliminate an infection from that population (14,15). R_0 values have been published for measles, polio, influenza, Ebola virus disease, HIV disease, a diversity of vectorborne infectious diseases, and many other communicable diseases (14,16–18).

https://wwwnc.cdc.gov/eid/article/25/1/17-1901_article

⁴⁴⁵ https://wwwnc.cdc.gov/eid/article/26/7/20-0282_article#suggestedcitation

executive orders (see section IV.O.17, Restaurants and Bars; section IV.O.18, Grocery Retail and Food Retail; section IV.O.20, Personal Care, Personal Grooming, Salon, and Spa Services; section IV.O.21, Sports and Entertainment, and Mass Gatherings).

- “As U.S. states push forward with reopening plans, nearly as many are seeing coronavirus caseloads trending upward as those where case numbers are declining, an analysis of Johns Hopkins data shows. Nineteen states have averaged more new cases over the past week than the prior week, while 13 are holding steady and 18 are seeing a downward trend. Louisiana is one of those downward-trending states and is set to begin Phase 2 of its plan to reopen the economy Friday, allowing businesses to open at 50% capacity, according to Gov. John Bel Edwards....Texas and Florida are still recording increasing weekly averages of new cases as they take steps toward reopening.”⁴⁴⁶
- “It is not yet known whether weather and temperature affect the spread of COVID-19. Some other viruses, like those that cause the common cold and flu, spread more during cold weather months but that does not mean it is impossible to become sick with these viruses during other months. There is much more to learn about the transmissibility, severity, and other features associated with COVID-19 and investigations are ongoing.”⁴⁴⁷
- “Robert Redfield, MD, the director of the Centers for Disease Control and Prevention (CDC), warned yesterday [April 21, 2020] that a late fall or early winter wave of COVID-19 could be even more deadly in the United States, as it would coincide with the flu season, which already puts a strain on hospitals.”⁴⁴⁸
- There is currently no vaccine for COVID-19. “U.S. officials and scientists are hopeful a vaccine to prevent Covid-19 will be ready in the first half of 2021 - 12 to 18 months since Chinese scientists first identified the coronavirus and mapped its genetic sequence. It’s far from guaranteed. Even the most optimistic epidemiologists hedge their bets when they say it could be ready that quickly. And a lot can go wrong that could delay their progress, scientists and infectious disease experts warn.”⁴⁴⁹
- Producing and deploying a vaccine to a sufficient number of the U. S. population (over 329,000,000 people) to achieve a minimum of 50% of the populations with effective COVID-19 antibodies will take some time to accomplish. The U.S. Census estimates that Virginia’s population as of July 1, 2019 was 8,535,519, and that 15.4% (1,314,469) of Virginia’s population was 65 years or older.⁴⁵⁰
- Successful deployment of a COVID-19 vaccine will depend on the willingness of the U.S. population to actually take the vaccine. In a Reuters’ survey⁴⁵¹ of 4,428 U.S. adults taken between May 13 and May 19: “Fourteen percent of respondents said they were not at all

⁴⁴⁶ <https://www.cnn.com/2020/06/04/health/us-coronavirus-thursday/index.html>

⁴⁴⁷ <https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Coronavirus-Disease-2019-Basics>

⁴⁴⁸ <https://www.cidrap.umn.edu/news-perspective/2020/04/coroner-first-us-covid-19-death-occurred-early-february>

⁴⁴⁹ <https://www.cnbc.com/2020/05/21/coronavirus-vaccine-why-it-may-be-ready-early-next-year-and-what-could-go-wrong.html>

⁴⁵⁰ <https://www.census.gov/quickfacts/fact/table/VA#>

⁴⁵¹ <https://www.reuters.com/article/us-health-coronavirus-vaccine-poll-exclu/exclusive-a-quarter-of-americans-are-hesitant-about-a-coronavirus-vaccine-reuters-ipsos-poll-idUSKBN22X19G>

interested in taking a vaccine, and 10% said they were not very interested. Another 11% were unsure.”

- The SARS-CoV-2 virus and COVID-19 disease continue to constitute a grave danger to unvaccinated, not fully vaccinated, and otherwise at risk employees in the same manner that it did prior to the wide scale availability of vaccines. Currently, three vaccines are authorized and recommended to prevent COVID-19 in the U.S.⁴⁵²

There are over 332,000,000 people living in the United States.⁴⁵³

While fully vaccinated rates are improving, they have not reached a range that could be considered able to achieve population or herd immunity. Here are fully vaccinated rates for some surrounding states as of June 15, 2021:

8. Maryland	51.95%
14. District of Columbia	49.09%
16. Virginia	48.36%
30. Kentucky	40.82%
37. North Carolina	37.85%
41. West Virginia	35.68%
46. Tennessee	33.58%

NOTE: As of June 22, 2021, 70.0% of Virginia's adult population has been fully vaccinated (approximately 15.9% of Virginia's population is 65 years and over.⁴⁵⁴

The jury is still out as to whether the United States will reach herd immunity levels (generally considered to be in the 70-85% range). Even if the country does reach herd/population immunity, it is possible to lose the immunity in the future, or go in and out of herd/population immunity depending on the season. Herd/population immunity is not immediately possible because “No one younger than 12 can get a Covid-19 vaccine in the US right now. The Pfizer/BioNTech vaccine is authorized for those age 12 and older, and the Moderna and Johnson & Johnson vaccines are authorized for adults 18 and older.”⁴⁵⁵

In addition, surveys continue to indicate that a certain percentage of the population will refuse to get vaccinated (“about 20% of people surveyed said they definitely would not get vaccinated or would only get vaccinated if their job or school required it, according to the Kaiser Family Foundation COVID-19 Vaccine Monitor.”).⁴⁵⁶

Also, it is not currently known how long immunity from a natural infection lasts in a person, or how long it will last for fully vaccinated or partially vaccinated people. The virus has shown a propensity for mutations, some of which appear to be more infectious

⁴⁵² <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines.html>

⁴⁵³ <https://www.census.gov/popclock/>

⁴⁵⁴ <https://www.vdh.virginia.gov/coronavirus/covid-19-vaccine-summary/>

⁴⁵⁵ <https://www.cnn.com/2021/03/30/health/herd-immunity-covid-shifts/index.html>

⁴⁵⁶ <https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-march-2021/>

and therefore more easily spread. Increased travel in state, around the country and from other countries could make the U.S. fall out of herd/population immunity even after it is reached.

“The Delta variant is on its way to becoming the dominant strain of coronavirus in the US, raising concerns that outbreaks could hit unvaccinated people this fall.⁴⁵⁷”

And a new study shows the Delta variant is associated with almost double the risk of hospitalization compared to the Alpha variant.

The Alpha (B.1.1.7) variant, which is "stickier" and more contagious than the original strain of novel coronavirus, became the dominant strain in the US this spring.

But health experts worry the Alpha variant could be trumped by the Delta variant, which appears to be even more transmissible and may cause more severe illness for those not vaccinated.

As of June 14, 2021, about 10% of Covid-19 cases in the US can be attributed to the Delta variant. But that proportion is doubling every two weeks, Scott Gottlieb, a former commissioner of the US Food and Drug Administration, said in a CBS interview Sunday. He said the Delta variant will probably take over as the dominant strain of coronavirus in the US.

As of June 22, 2021, the Delta variant now makes up about 20% of all new COVID-19 cases in the U.S.⁴⁵⁸

- Since February, 2020, the Virginia Workers' Compensation Commission received 15,770 COVID-19 related claims as of June 15, 2021.
- During the course of the pandemic, VOSH has inspected 44 workplace deaths. The June 15, 2021 report from the VWCC contains data on 23 employee deaths not currently included in VOSH COVID-19 Employee Death Statistics. VOSH is actively investigating this data issue to determine if these employee deaths fall within VOSH jurisdiction. If so, VOSH will open inspections for each case. If confirmed, 23 additional deaths would result in a 52% increase in employee deaths attributed to COVID-19 since February 1, 2020.
- Virginia community transmission rates⁴⁵⁹ can be found on a county-by-county basis at: <https://covid.cdc.gov/covid-data-tracker/#county-view>

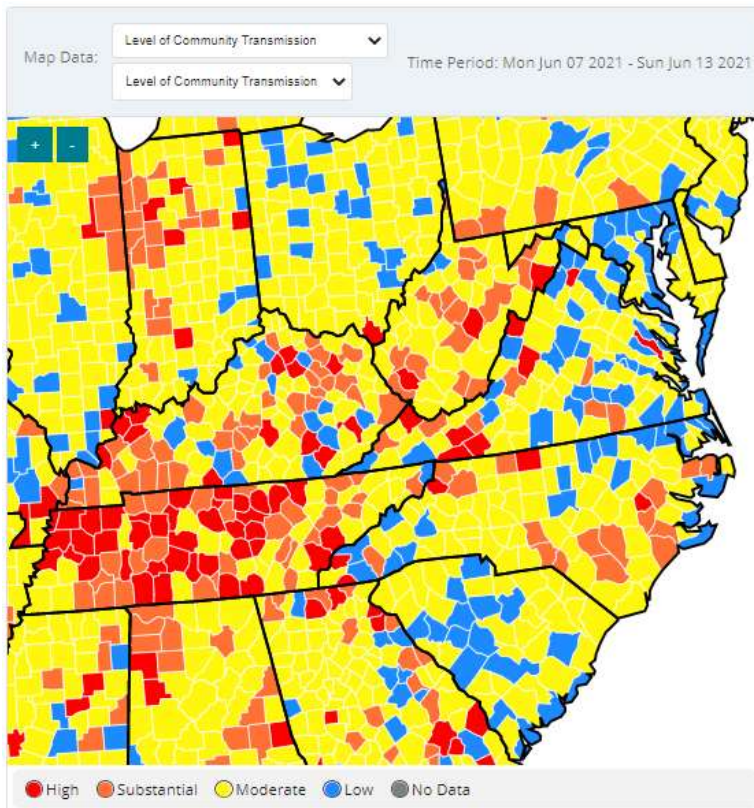
You can see the following from the screenshot below (June 13, 2021):

- about 25-30% of Virginia counties have a low community transmission rate
- about 8% of Virginia counties have a high transmission rate,
- about 7% of Virginia counties having a substantial transmission rate
- the remaining 55-60% of Virginia counties have a moderate transmission rate

⁴⁵⁷ <https://www.cnn.com/2021/06/14/health/us-coronavirus-monday/index.html>

⁴⁵⁸ <https://www.cnbc.com/2021/06/22/fauci-declares-delta-variant-greatest-threat-to-the-nations-efforts-to-eliminate-covid.html>

⁴⁵⁹ <https://covid.cdc.gov/covid-data-tracker/#county-view>



Current 7-days is Mon Jun 07 2021 - Sun Jun 13 2021 for case rate and Sun Jun 06 2021 - Sat Jun 12 2021 for percent positivity. The percent change in counties at each level of transmission is the absolute change compared to the previous 7-day period.

- APNews.com, June 24, 2021, " Nearly all COVID deaths in US are now among unvaccinated."⁴⁶⁰

" Nearly all COVID-19 deaths in the U.S. now are in people who weren't vaccinated, a staggering demonstration of how effective the shots have been and an indication that deaths per day — now down to under 300 — could be practically zero if everyone eligible got the vaccine.

An Associated Press analysis of available government data from May shows that "breakthrough" infections in fully vaccinated people accounted for fewer than 1,200 of more than 853,000 COVID-19 hospitalizations. That's about 0.1%.

And only about 150 of the more than 18,000 COVID-19 deaths in May were in fully vaccinated people. That translates to about 0.8%, or five deaths per day on average.

The AP analyzed figures provided by the Centers for Disease Control and Prevention. The CDC itself has not estimated what percentage of hospitalizations and deaths are in fully vaccinated people, citing limitations in the data.

⁴⁶⁰ <https://apnews.com/article/coronavirus-pandemic-health-941fcf43d9731c76c16e7354f5d5e187>

Among them: Only about 45 states report breakthrough infections, and some are more aggressive than others in looking for such cases. So the data probably understates such infections, CDC officials said.

Still, the overall trend that emerges from the data echoes what many health care authorities are seeing around the country and what top experts are saying.

Earlier this month, Andy Slavitt, a former adviser to the Biden administration on COVID-19, suggested that 98% to 99% of the Americans dying of the coronavirus are unvaccinated.

And CDC Director Dr. Rochelle Walensky said on Tuesday that the vaccine is so effective that “nearly every death, especially among adults, due to COVID-19, is, at this point, entirely preventable.” She called such deaths 'particularly tragic.'"

- WRIC.com, Richmond, Virginia, June 23, 2021, "State's vaccine coordinator: Delta variant is spreading, gives look into what school may look like in the fall"⁴⁶¹

"Virginia hit the benchmark for vaccinations earlier this week, but the state's vaccine coordinator, Dr. Danny Avula, says there is still more work to be done.

On Monday, Governor Ralph Northam reported 70% of adults in Virginia have received at least one dose of the vaccine, but there are segments of the Commonwealth still reporting a 30% or 40% vaccination rate. It comes as the delta variant is already starting to spread.

'At the end of May the Delta variant was about 2% of our new infections and as of last week it was 10% and I think it's going to be much more than that,' Avula told our sister station, WAVY.

The good news is that those fully vaccinated don't need to worry. Luckily, he said the vaccine appears to be working against that variant and others that have emerged so far. 'So far, I think we've been lucky,' Avula said. 'These variants like the U-K variant, the alpha the delta, that have really emerged in different countries – our vaccines have been incredibly effective against them.'

So, what about the rest of the population who hasn't gotten the shot?

'What that means is that kids who are not vaccinated will likely at some point be vectors – they will spread this new variant widely,' Avula stated.

The concern then becomes spreading the virus to unvaccinated adults.

'So, for segments in our community like in Southern or Southwest Virginia where the adult vaccination rate is about 40% that means that kids will contribute to the spread of disease – if we're not careful,' he said.'"

⁴⁶¹ <https://www.wric.com/health/coronavirus/states-vaccine-coordinator-delta-variant-is-spreading-gives-look-into-what-school-may-look-like-in-the-fall/>

ATTACHMENT E: OSHA RECORDKEEPING GUIDELINES FOR RECORDING COVID-19 OCCUPATIONALLY RELATED CASES

OSHA's changing guidance in April and May, 2020, concerning employer responsibilities to record COVID-19 occupationally related illnesses has over the short term resulted in reduced access to accurate workplace exposure and illness data related to COVID-19.

On **April 10, 2020**, OSHA issued a memorandum on "Enforcement Guidance for Recording Cases of Coronavirus Disease 2019 (COVID-19)"⁴⁶² to provide "interim guidance to Compliance Safety and Health Officers (CSHOs) for enforcing the requirements of 29 CFR Part 1904 with respect to the recording of occupational illnesses, specifically cases of Coronavirus Disease 2019 (COVID-19)....This guidance is intended to be time-limited to the current public health crisis:

Under OSHA's recordkeeping requirements, COVID-19 is a recordable illness, and employers are responsible for recording cases of COVID-19, if: (1) the case is a confirmed case of COVID-19, as defined by Centers for Disease Control and Prevention (CDC);[1] (2) the case is work-related as defined by 29 CFR § 1904.5;[2] and (3) the case involves one or more of the general recording criteria set forth in 29 CFR § 1904.7.[3] On March 11, the World Health Organization (WHO) declared COVID-19 a global pandemic, and the extent of transmission is a rapidly evolving issue.

In areas where there is ongoing community transmission, employers other than those in the healthcare industry, emergency response organizations (e.g., emergency medical, firefighting, and law enforcement services), and correctional institutions may have difficulty making determinations about whether workers who contracted COVID-19 did so due to exposures at work. In light of those difficulties, OSHA is exercising its enforcement discretion in order to provide certainty to the regulated community.

Employers of workers in the healthcare industry, emergency response organizations (e.g., emergency medical, firefighting, and law enforcement services), and correctional institutions must continue to make work-relatedness determinations pursuant to 29 CFR § 1904. Until further notice, however, OSHA will not enforce 29 CFR § 1904 to require other employers to make the same work-relatedness determinations, except where:

1. There is objective evidence that a COVID-19 case may be work-related. This could include, for example, a number of cases developing among workers who work closely together without an alternative explanation; and
2. The evidence was reasonably available to the employer. For purposes of this memorandum, examples of reasonably available evidence include information given to the employer by employees, as well as information that an employer learns regarding its employees' health and safety in the ordinary course of managing its business and employees.

This enforcement policy will help employers focus their response efforts on implementing good hygiene practices in their workplaces, and otherwise mitigating

⁴⁶² <https://www.osha.gov/memos/2020-04-10/enforcement-guidance-recording-cases-coronavirus-disease-2019-covid-19>

COVID-19's effects, rather than on making difficult work-relatedness decisions in circumstances where there is community transmission. (Emphasis added).

On **May 19, 2020**⁴⁶³, OSHA revised its April 10, 2020 guidance as follows:

“Confirmed cases of COVID-19 have now been found in nearly all parts of the country, and outbreaks among workers in industries other than healthcare, emergency response, or correctional institutions have been identified. As transmission and prevention of infection have become better understood, both the government and the private sector have taken rapid and evolving steps to slow the virus's spread, protect employees, and adapt to new ways of doing business. As the virus's spread now slows in certain areas of the country, states are taking steps to reopen their economies and workers are returning to their workplaces. All these facts—incidence, adaptation, and the return of the workforce—indicate that employers should be taking action to determine whether employee COVID-19 illnesses are work-related and thus recordable. Given the nature of the disease and ubiquity of community spread, however, in many instances it remains difficult to determine whether a COVID-19 illness is work-related, especially when an employee has experienced potential exposure both in and out of the workplace.

In light of these considerations, OSHA is exercising its enforcement discretion in order to provide certainty to employers and workers. Accordingly, until further notice, OSHA will enforce the recordkeeping requirements of 29 CFR 1904 for employee COVID-19 illnesses for all employers according to the guidelines below.

....

Because of the difficulty with determining work-relatedness, OSHA is exercising enforcement discretion to assess employers' efforts in making work-related determinations. In determining whether an employer has complied with this obligation and made a reasonable determination of work-relatedness, CSHOs should apply the following considerations:

- The reasonableness of the employer's investigation into work-relatedness. Employers, especially small employers, should not be expected to undertake extensive medical inquiries, given employee privacy concerns and most employers' lack of expertise in this area. It is sufficient in most circumstances for the employer, when it learns of an employee's COVID-19 illness, (1) to ask the employee how he believes he contracted the COVID-19 illness; (2) while respecting employee privacy, discuss with the employee his work and out-of-work activities that may have led to the COVID-19 illness; and (3) review the employee's work environment for potential SARS-CoV-2 exposure. The review in (3) should be informed by any other instances of workers in that environment contracting COVID-19 illness.
- The evidence available to the employer. The evidence that a COVID-19 illness was work-related should be considered based on the information reasonably available to the employer at the time it made its work-relatedness determination. If the employer later learns more information related to an employee's COVID-19 illness, then that information should be taken into account as well in determining whether an employer made a reasonable work-relatedness determination.

⁴⁶³ <https://www.osha.gov/memos/2020-05-19/revised-enforcement-guidance-recording-cases-coronavirus-disease-2019-covid-19>

- The evidence that a COVID-19 illness was contracted at work. CSHOs should take into account all reasonably available evidence, in the manner described above, to determine whether an employer has complied with its recording obligation. This cannot be reduced to a ready formula, but certain types of evidence may weigh in favor of or against work-relatedness. For instance:
 - COVID-19 illnesses are likely work-related when several cases develop among workers who work closely together and there is no alternative explanation.
 - An employee's COVID-19 illness is likely work-related if it is contracted shortly after lengthy, close exposure to a particular customer or coworker who has a confirmed case of COVID-19 and there is no alternative explanation.
 - An employee's COVID-19 illness is likely work-related if his job duties include having frequent, close exposure to the general public in a locality with ongoing community transmission and there is no alternative explanation.
 - An employee's COVID-19 illness is likely not work-related if she is the only worker to contract COVID-19 in her vicinity and her job duties do not include having frequent contact with the general public, regardless of the rate of community spread.
 - An employee's COVID-19 illness is likely not work-related if he, outside the workplace, closely and frequently associates with someone (e.g., a family member, significant other, or close friend) who (1) has COVID-19; (2) is not a coworker, and (3) exposes the employee during the period in which the individual is likely infectious.
 - CSHOs should give due weight to any evidence of causation, pertaining to the employee illness, at issue provided by medical providers, public health authorities, or the employee herself.

If, after the reasonable and good faith inquiry described above, the employer cannot determine whether it is more likely than not that exposure in the workplace played a causal role with respect to a particular case of COVID-19, the employer does not need to record that COVID-19 illness.” (Emphasis added).

ATTACHMENT F: VOSH INVESTIGATION AND INSPECTION PROCEDURES

1. VOSH Inspection Priority Categories.

<u>Priority</u>	<u>Category</u>
First	Imminent Danger as defined in the VOSH <u>Administrative Regulation Manual</u> (ARM).
Second	Fatality Inspections (regardless of whether our inspection is in response to specific evidence of hazardous conditions or not).
Third	Accident / First Report of Accident Inspections.
Fourth	Complaints / Referrals.
Fifth	Follow-up / Monitoring.
Sixth	Programmed Inspections, i.e., General Schedule, Construction Schedule, National & Local Emphasis Programs AND unprogrammed inspections in response to alleged hazardous working conditions that would normally be classified as Other-Than-Serious.

2. VOSH Informal Investigation and Inspection Procedures.

COVID-19 “Investigations”

- Informal investigations (phone/fax/email/letter) are often conducted in response to employee complaints (with the permission of the employee); and referrals from the Virginia Department of Health
- The employer is provided the opportunity to provide a response to the complaint/referral items with a short turnaround time
- If no response or an unsatisfactory response is received, an inspection will be conducted
- If the response is considered satisfactory, it is provided to the Complainant for review and comment. If the Complainant provides reasonable information challenging the validity of the response provided, an inspection will be conducted.

Summary of How VOSH Initially Handled COVID-19 Related Complaints Early in the Pandemic:

COVID-19 related employee complaints received by the VOSH program that are within VOSH's jurisdiction are being addressed with employers. In an abundance of caution, at the beginning of the COVID-19 outbreak in Virginia the Department decided to modify its normal complaint processing procedures for both the safety and health of the employees at the work sites and its VOSH compliance officers by trying to limit exposure to the virus as much as possible while carrying out statutory enforcement mandates.

Rather than conducting a combination of onsite inspections and informal investigations as is the case under normal situations, COVID-19 complaints were initially handled through the VOSH program's complaint investigation process, which involves contacting the employer by phone, fax, email, or letter.

VOSH informed the employer of the complaint allegation and required a written response concerning the validity of the complaint allegation, any safety and health measures taken to date to protect employees against potential COVID-19 related hazards, and any measures to be taken in response to valid complaint allegations.

Employers were required to post a copy of VOSH's correspondence where it would be readily accessible for review by employees; and provide a copy of the correspondence and the employer's response to a representative of any recognized union or safety committee at the facility. Complainants were provided a copy of the employer's response.

Depending on the specific facts of the employee's alleged complaint, an employer's failure to respond or inadequate response could result in additional contact by the VOSH program with the employer, a referral to local law enforcement officials, an onsite VOSH inspection, or other enforcement options available to the VOSH program.

COVID-19 "Inspections"

- Can result in violations and substantial penalties
- Inspections are opened for COVID-19 related employee deaths
- Inspections may be opened for COVID-19 related hospitalizations or handled through an investigation
- Inspection files with proposed violations will be reviewed by Headquarters and receive a legal review before a decision to issue or not issue is made

3. Violation and Penalty Structure.

The emergency temporary standard/emergency regulation would be enforced in the same manner as all other VOSH laws, standards, and regulations. The types of civil violations that VOSH can cite are "serious", "other than serious", "repeat", "willful," and "failure to abate. Maximum penalties for each type are:

Serious and Other-than-serious \$13,277

Willful and Repeat	\$132,764
Failure-to-Abate	\$13,277 per day

In calculating penalties, Va. Code §40.1-49.4.A.4 .a provides:

In determining the amount of any proposed penalty [the Commissioner] shall give due consideration to the appropriateness of the penalty with respect to the size of the business of the employer being charged, the gravity of the violation, the good faith of the employer, and the history of previous violations. (Emphasis added).

Chapter 11 of the VOSH FOM explains how penalties are calculated:

https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\181\GDoc_DOLI_5354_v6.pdf

Employers can receive penalty reductions for “size” based on the number of employees as follows:

1 - 25	70%
26-100	40%
101-250	20%
251 or more	zero

A penalty reduction of up to 25 percent is permitted in recognition of an employer’s “good faith” in increments of 0%, 5%, 10%, 15%, 20% and 25%.

History. A reduction of 10% shall be given to employers who have not been cited by VOSH for any serious, willful or repeated violations in the past three years.

The minimum penalty for a serious violation is \$600.00.

4. Employee Misconduct Defense.

The “Employee Misconduct” affirmative defense to VOSH citations and penalties is codified in VOSH regulation 16 VAC 25-60-260.B:

B. A citation issued under subsection A of this section to an employer who violates any VOSH law, standard, rule, or regulation shall be vacated if such employer demonstrates that:

1. Employees of such employer have been provided with the proper training and equipment to prevent such a violation;
2. Work rules designed to prevent such a violation have been established and adequately communicated to employees by such employer and have been **effectively enforced** when such a violation has been discovered;

3. The failure of employees to observe work rules led to the violation; and

4. Reasonable steps have been taken by such employer to discover any such violation. (Emphasis added)

5. De Minimis Violation Policy.

Va. Code §40.1-49.4.A.2⁴⁶⁴ provides “The Commissioner may prescribe procedures for calling to the employer's attention *de minimis* violations which have no direct or immediate relationship to safety and health.” (Emphasis added).

The Virginia Occupational Safety and Health (VOSH) Field Operations Manual (FOM)⁴⁶⁵ describes the Commissioner’s procedures for *de minimis* violations in Chapter 10, pp. 38-39:

De minimis violations are violations of standards which have no direct or immediate relationship to safety or health. Compliance Officers identifying *de minimis* violations of a VOSH standard shall not issue a citation for that violation, but should verbally notify the employer and make a note of the situation in the inspection case file. The criteria for classifying a violation as *de minimis* are as follows:

1. Employer Complies with Clear Intent of Standard.

An employer complies with the clear intent of the standard but deviates from its particular requirements in a manner that has no direct or immediate relationship to employee safety or health. These deviations may involve distance specifications, construction material requirements, use of incorrect color, minor variations from recordkeeping, testing, or inspection regulations, or the like.

....

2. Employer Complies with Proposed Standard.

An employer complies with a proposed standard or amendment or a consensus standard rather than with the standard in effect at the time of the inspection and the employer’s action clearly provides equal or greater employee protection or the employer complies with a written interpretation issued by OSHA or VOSH.

3. Employer Technically Exceeds Standard.

An employer’s workplace is at the “state of the art” which is technically beyond the requirements of the applicable standard and provides equivalent or more effective employee safety or health protection.

Note: Maximum professional discretion must be exercised in determining the point at which noncompliance with a standard constitutes a *de minimis* violation.

⁴⁶⁴ <https://law.lis.virginia.gov/vacode/40.1-49.4/>

⁴⁶⁵

https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\181\GDoc_DOLI_5354_v6.pdf

The FOM⁴⁶⁶ further provides:

The Compliance Officer shall discuss all conditions noted during the walkaround considered to be *de minimis*, indicating that such conditions are subject to review by the Regional Safety or Health Director in the same manner as apparent violations but, if finally classified as *de minimis*, will not be included on the citation. (Emphasis added).

6. Multi-employer Worksite Regulation and Defense.

Section 16VAC25-60-260.F contains requirements for employers:

“F. On multi-employer worksites for all covered industries, citations shall normally be issued to an employer whose employee is exposed to an occupational hazard (the exposing employer). Additionally, the following employers shall normally be cited, whether or not their own employees are exposed:

1. The employer who actually creates the hazard (the creating employer);
2. The employer who is either:
 - a. Responsible, by contract or through actual practice for safety and health conditions on the entire worksite, and has the authority for ensuring that the hazardous condition is corrected (the controlling employer); or
 - b. Responsible, by contract or through actual practice for safety and health conditions for a specific area of the worksite or specific work practice or specific phase of a construction project, and has the authority for ensuring that the hazardous condition is corrected (the controlling employer); or
3. The employer who has the responsibility for actually correcting the hazard (the correcting employer).

Section 16VAC25-60-260.G contains the multi-employer worksite defense:

“G. A citation issued under subsection F of this section to an exposing employer who violates any VOSH law, standard, rule, or regulation shall be vacated if such employer demonstrates that:

1. The employer did not create the hazard;
2. The employer did not have the responsibility or the authority to have the hazard corrected;
3. The employer did not have the ability to correct or remove the hazard;

⁴⁶⁶ *Id.* at Chapter 5, p. 76.

4. The employer can demonstrate that the creating, the controlling, or the correcting employers, as appropriate, have been specifically notified of the hazards to which the employer's employees were exposed;
5. The employer has instructed his employees to recognize the hazard and, where necessary, informed them how to avoid the dangers associated with it;
6. Where feasible, an exposing employer must have taken appropriate alternative means of protecting employees from the hazard; and
7. When extreme circumstances justify it, the exposing employer shall have removed the employer's employees from the job.

Report on “How COVID-19 Deaths Are Counted”.⁴⁶⁷

“As coronavirus has swept through the United States, finding the true number of people who have been infected has been stymied due to lack of testing. Now, official counts of coronavirus deaths are being challenged, too.

....

The reality is that assigning a cause of death is not always straightforward, even pre-pandemic, and a patchwork of local rules and regulations makes getting valid national data challenging. However, data on excess deaths in the United States over the past several months suggest that COVID-19 deaths are probably being undercounted rather than over counted.

....

Death certificates can be signed by a physician who was responsible for a patient who died in a hospital, which accounts for many COVID-19 deaths. They can also be signed by medical examiners or coroners, who are independent officials who work for individual counties or cities. ‘Many COVID-19 death certificates are being handled by physicians unless the death occurred outside of the hospital, in which case a medical examiner or coroner would step in’, said Dr. Sally Aiken, the president of the National Association of Medical Examiners (NAME).

....

For COVID-19, the immediate cause of death might be listed as respiratory distress, with the second line reading “due to COVID-19.” Contributing factors such as heart disease, diabetes or high blood pressure would then be listed further down. This has led to some confusion by people arguing that the “real” cause of death was heart disease or diabetes, Aiken said, but that’s not the case.

‘Without the COVID19 being the last straw or the thing that led to the chain of events that led to death, they probably wouldn’t have died,’ she said.

....

‘Most COVID-19 deaths seen at Mount Sinai Health System in New York are in people who have comorbid (or co-occurring) conditions such as coronary artery disease or kidney disease’, said Dr. Mary Fowkes, the chief of autopsy services at Mount Sinai. But it’s not typically difficult to tell what killed them.

‘Most of the cases are pretty straightforward,’ Fowkes told Live Science. ‘The lungs are usually so severely involved with pathology, so they are two to three times or more the normal weight of a normal lung.’

(The excess weight is due to fluid and cell detritus from damaged lung tissues.)

....

Another complication for assigning a cause of death for COVID-19 is that some younger people have died of strokes and heart attacks and then tested positive for COVID-19 without any history of respiratory symptoms. The virus is now known to cause blood clots, suggesting that COVID-19 was the killer in these cases, too. Fowkes and her colleagues conducted a microscopic inspection of the brains of 20 COVID-19 victims in her hospital system and found that six of them contained tiny blood clots that had caused small strokes before death.

⁴⁶⁷ <https://www.scientificamerican.com/article/how-covid-19-deaths-are-counted/>

‘We’re seeing it in younger patients than you would expect, and we’re seeing it in a distribution that you wouldn’t expect, so we think it’s related to the COVID,’ Fowkes said.

The Centers for Disease Control and Prevention (CDC) has issued guidelines⁴⁶⁸ for how to attribute a death to COVID-19. The guidelines urge using information from COVID-19 testing, where possible, but also allow for deaths to be listed as “presumed” or “probable” COVID-19 based on symptoms and the best clinical judgment of the person filling out the death certificate. A medical examiner trying to determine a cause of death in the absence of testing would comb medical records and query family and loved ones about the person’s symptoms before they died, Aiken said. Postmortem COVID-19 tests may be possible, depending on the jurisdiction.”⁴⁶⁹

⁴⁶⁸ <https://www.cdc.gov/nchs/covid19/coding-and-reporting.htm>

⁴⁶⁹ *Id.*

ATTACHMENT H: VOSH Violations Issued in COVID-19 Cases Opened From February 1, 2020 to December 30, 2020

VOSH Violations Issued in COVID-19 Cases Opened From February 1, 2020 to December 30, 2020		
NOTE: 43 of the 94 Inspections Opened During the Period Remain in Progress		
Violation	Initial Violation Type	Standard
16VAC25-220-40.B.5	Serious	ETS
16VAC25-220-40.G	Serious	ETS
16VAC25-220-40.K.5	Serious	ETS
16VAC25-220-60.C.1.e	Serious	ETS
16VAC25-220-60.C.1.k	Serious	ETS
1904.29(a)	Other-than-Serious	Recordkeeping
1904.29(b)(3)	Other-than-Serious	Recordkeeping
1904.30(a)	Other-than-Serious	Recordkeeping
1904.33(a)	Other-than-Serious	Recordkeeping
1904.40(a)	Other-than-Serious	Recordkeeping
1904.5(a)	Other-than-Serious	Recordkeeping
1910.1030(c)(1)(ii)	Serious	Bloodborne Pathogens
1910.1030(c)(1)(ii)	Serious	Bloodborne Pathogens
1910.1030(c)(2)(i)	Serious	Bloodborne Pathogens
1910.1030(f)(1)(i)	Other-than-Serious	Bloodborne Pathogens
1910.1030(g)(2)(ii)(B)	Other-than-Serious	Bloodborne Pathogens
1910.1030(g)(2)(ii)(B)	Other-than-Serious	Bloodborne Pathogens
1910.1030(h)(2)	Serious	Bloodborne Pathogens
1910.1200(e)(1)	Other-than-Serious	Hazard Communication
1910.1200(e)(1)	Other-than-Serious	Hazard Communication
1910.1200(e)(1)	Serious	Hazard Communication
1910.1200(e)(1)	Serious	Hazard Communication
1910.1200(e)(1)	Serious	Hazard Communication
1910.1200(e)(1)	Other-than-Serious	Hazard Communication
1910.1200(f)(6)	Serious	Hazard Communication
1910.1200(f)(6)(ii)	Serious	Hazard Communication
1910.1200(g)(11)	Other-than-Serious	Hazard Communication
1910.1200(g)(8)	Serious	Hazard Communication
1910.1200(g)(8)	Other-than-Serious	Hazard Communication
1910.1200(g)(8)	Serious	Hazard Communication
1910.1200(g)(8)	Other-than-Serious	Hazard Communication
1910.1200(g)(8)	Other-than-Serious	Hazard Communication
1910.1200(h)(1)	Other-than-Serious	Hazard Communication
1910.1200(h)(1)	Serious	Hazard Communication
1910.1200(h)(1)	Serious	Hazard Communication
1910.1200(h)(1)	Serious	Hazard Communication

1910.1200(h)(1)	Other-than-Serious	Hazard Communication
1910.132(d)(1)	Serious	PPE
1910.132(d)(1)	Serious	PPE
1910.132(d)(1)(i)	Serious	PPE
1910.132(d)(1)(i)	Serious	PPE
1910.132(d)(2)	Other-than-Serious	PPE
1910.132(d)(2)	Serious	PPE
1910.132(d)(2)	Other-than-Serious	PPE
1910.132(d)(2)	Serious	PPE
1910.132(d)(2)	Other-than-Serious	PPE
1910.132(d)(2)	Other-than-Serious	PPE
1910.132(d)(2)	Other-than-Serious	PPE
1910.132(d)(2)	Other-than-Serious	PPE
1910.132(f)(1)	Serious	PPE
1910.133(a)(1)	Serious	Eye and Face Protection
1910.134(c)(1)	Other-than-Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(c)(1)	Serious	Respiratory Protection
1910.134(d)(1)(i)	Serious	Respiratory Protection
1910.134(d)(1)(ii)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(1)	Serious	Respiratory Protection
1910.134(e)(6)(i)	Other-than-Serious	Respiratory Protection
1910.134(e)(6)(i)	Other-than-Serious	Respiratory Protection
1910.134(f)(1)	Serious	Respiratory Protection
1910.134(f)(1)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(f)(2)	Serious	Respiratory Protection
1910.134(h)(1)	Other-than-Serious	Respiratory Protection

1910.134(m)(1)	Serious	Respiratory Protection
1910.134(m)(1)	Serious	Respiratory Protection
1910.134(m)(2)(i)	Other-than-Serious	Respiratory Protection
1910.134(m)(2)(i)	Serious	Respiratory Protection
1910.134(m)(2)(i)	Serious	Respiratory Protection
1910.134(m)(2)(i)(B)	Other-than-Serious	Respiratory Protection
1910.134(m)(2)(i)(B)	Other-than-Serious	Respiratory Protection
1910.134(m)(2)(i)(C)	Other-than-Serious	Respiratory Protection
1910.134(m)(2)(i)(E)	Other-than-Serious	Respiratory Protection
1910.134(m)(2)(i)(E)	Other-than-Serious	Respiratory Protection
1910.134(m)(4)	Serious	Respiratory Protection
1910.141(a)(3)(i)	Serious	Sanitation
1910.151(b)	Other-than-Serious	First Aid
40.1-51.1.A	Serious	General Duty Clause
40.1-51.1.A	Serious	General Duty Clause
40.1-51.1.A	Serious	General Duty Clause
40.1-51.1.D	Other-than-Serious	Failure to Notify DOLI

ATTACHMENT I: January 11, 2021, Economic Impact Proposed Standard for Infectious Disease Prevention of The Sars-Cov-2 Virus That Causes Covid-19, Prepared by Chmura Economics and Analytics



PREPARED FOR
Virginia Department of Labor and Industry



January 11, 2021

ECONOMIC IMPACT
PROPOSED STANDARD FOR
INFECTIOUSDISEASE
PREVENTION OF THE SARS-

COV-2 VIRUS THAT CAUSES COVID-19



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Background

During the COVID-19 pandemic, the Commonwealth of Virginia was the first state to issue a mandatory COVID-19 Emergency Temporary Standard (ETS) establishing workplace safety and health requirements. The ETS, 16VAC25-220, was first published by the Virginia Safety and Health Codes Board (“Board”) and the Virginia Department of Labor and Industry (DOLI) with an effective date of July 27, 2020 and applied to all Virginia employers under the jurisdiction of the Virginia Occupational Safety and Health (VOSH) program. The ETS lapses on January 26, 2021.

The Board and DOLI are in the process of considering replacing the ETS with a permanent standard (16VAC25-220) which, if adopted, would be effective on or after January 27, 2021. This standard is designed to supplement and enhance existing Virginia Occupational Safety and Health (VOSH) laws, rules, regulations, and standards applicable directly or indirectly to SARS-CoV-2 virus or COVID-19 disease-related hazards.

Chmura Economics & Analytics (Chmura) was commissioned to conduct the economic impact analysis for the standard 16VAC25-220. Chmura understands there are several components to the economic impact analysis of the proposed regulation. The analysis will include the following elements:

- Number of businesses and other entities impacted, including the number of small businesses impacted
- Localities disproportionately impacted
- Projected number of persons and employment positions to be affected
- Projected costs to affected businesses, localities, or entities of implementing or complying with the standard, including training costs, costs for personal protective equipment, costs for installing physical barriers, etc.

Information from DOLI indicates that some items listed in this standard overlap with existing federal or state regulations, or governor’s executive orders issued during the COVID-19

pandemic. This economic impact analysis only assesses incremental cost to Virginia businesses.

As noted in this document, a number of the requirements with associated costs related to the Commonwealth's response to the COVID-19 pandemic are contained in various Governor's executive orders, including, most recently, Executive Order 72. To the extent that a requirement is included in both executive orders and the standard, DOLI does not consider the standard to impose any new cost burden on a covered locality or employer.

In addition, many of the costs associated with dealing with workplace hazards associated with COVID-19 are the result of requirements contained in current federal OSHA or VOSH unique standards and regulations already applicable to local governments, and therefore DOLI does not consider them to be new costs associated with adoption of the standard.

The following are federal OSHA identical and state unique standards and regulations applicable in the construction industry, agriculture industry, public sector maritime industry,¹ and general industry (“general industry” covers all employers not otherwise classified as construction, agriculture, or maritime) that can be used in certain situations to address COVID-19 hazards in the workplace:

General Industry

- 1910.132, Personal Protective Equipment in General Industry (including Workplace Assessment)
- 1910.133, Eye and Face Protection in General Industry
- 1910.134, Respiratory Protection in General Industry
- 1910.138, Hand Protection
- 1910.141, Sanitation in General Industry (including Handwashing Facilities)
- 1910.1030, Bloodborne Pathogens in General Industry
- 1910.1450, Occupational Exposure to Hazardous Chemicals in Laboratories in General Industry

Construction Industry

- 1926.95, Criteria for Personal Protective Equipment in Construction
- 1926.102, Eye and Face Protection in Construction
- 1926.103, Respiratory Protection in Construction
- 16VAC25-160, Sanitation in Construction (including Handwashing Facilities)

Agriculture

- 16VAC25-190, Field Sanitation (including Handwashing Facilities) in Agriculture

Public Sector Maritime

- 1915.152, Shipyard Employment (Personal Protective Equipment)
- 1915.153, Shipyard Employment (Eye and Face Protection)
- 1915.154, Shipyard Employment (Respiratory Protection)
- 1915.157, Shipyard Employment (Hand and Body Protection)
- 1917.127, Marine Terminal Operations (Sanitation)
- 1917.92 and 1917.1(a)(2)(x), Marine Terminal Operations (Respiratory Protection, 1910.134)
- 1917.91, Marine Terminal Operations (Eye and Face Protection)
- 1917.95, Marine Terminal Operations (PPE, Other Protective Measures)

- 1918.95, Longshoring (Sanitation)
 - 1918.102, Longshoring (Respiratory Protection)
 - 1918.101, Longshoring (Eye and Face Protection)
-

¹ VOSH standards and regulations only apply to public sector maritime employers and employees. OSHA retains jurisdiction over private sector maritime employers and employees in Virginia.

Multiple Industries

- 16VAC25-220, Emergency Temporary Standard in General Industry, Construction, Agriculture and Public Sector Maritime
- 1904, Recording and Reporting Occupational Injuries and Illness in General Industry, Construction, Agriculture and Public Sector Maritime
- 1910.142, Temporary Labor Camps (including Handwashing Facilities) in Agriculture and General Industry
- 1910.1020, Access to Employee Exposure and Medical Records in General Industry, Construction, and Public Sector Maritime (excludes Agriculture)
- 1910.1200, Hazard Communication in General Industry, Construction, Agriculture and Public Sector Maritime
- 16VAC25-60-120 (General Industry), 16VAC25-60-130 (Construction Industry), 16VAC25-60-140 (Agriculture), and 16VAC25-60-150 (Public Sector Maritime),
 - The above standards provide that manufacturer's specifications and limitations are applicable to the operation, training, use, installation, inspection, testing, repair and maintenance of all machinery, vehicles, tools, materials and equipment, which can be used to apply to operation and maintenance of air handling systems in accordance with manufacturer's instructions.

In addition, Va. Code §40.1-51.1.A, provides that:

“ A. It shall be the duty of every employer to furnish to each employee safe employment and a place of employment that is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees and to comply with all applicable occupational safety and health rules and regulations promulgated under this title.”

Otherwise known as the “general duty clause” (the Virginia equivalent to §5(a)(1)) of the OSH Act of 1970), Va. Code §40.1-

51.1.A can be used to address “serious” recognized hazards to which employees of the cited employer are exposed through reference to such things as national consensus standards, manufacturer’s requirements, requirements of the Centers for Disease Control (CDC), or an employer’s safety and health rules.

To the extent that the general duty clause could be used by DOLI to address COVID-19 workplace hazards to the same extent as and in the same manner as the standard were the standard not in effect, DOLI does not consider any of the costs associated with such use of the clause to be new costs associated with adoption of the standard.

2 Business Categorization

In the standard 16VAC25-220, different requirements apply to different businesses based on the “exposure risk level,” which is defined as an assessment of the possibility that an employee could be exposed to hazards or job tasks associated with the SARS-CoV-2 virus and the COVID-19 disease. In this standard, hazard and job tasks are divided into four risk exposure levels: very high, high, medium, and lower. However, since workplace standards for businesses with jobs having very high or high risks are the same (16VA25-220-50 applies to both risk levels), these two risk levels are grouped together in this study.

Very high exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure to known or suspected sources of the SARS-CoV-2 virus (e.g., laboratory samples) or persons known or suspected to be infected with the SARS-CoV-2 virus, including, but not limited to, during specific medical, postmortem, or laboratory procedures.

High exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARS-CoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk. Those businesses with such hazards and job tasks may include, but are not limited to, many healthcare delivery and support services, first responder services, medical transport services, and mortuary services.

Medium exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus. Those businesses with such hazards and job tasks may include, but are not limited to, food processing, agriculture, manufacturing, education, retail, entertainment, food services, passenger transportation, and lodging.

Lower exposure risk hazards or job tasks are those not otherwise classified as very high, high, or medium exposure risk that do not require contact inside six feet with persons known to be, or suspected of being, or who may be infected with SARS-CoV-2. Employees in this category have minimal occupational contact with other employees, other persons, or the general public, such as in an office building setting; or are able to achieve minimal occupational contact with others through the implementation of engineering, administrative and work practice controls.²

As the standard notes, “It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower exposure risk for purposes of application of the requirements of this standard. It is further recognized that various required job tasks prohibit an employee from being able to observe physical distancing from other persons.”

While the technical categorization of exposure risk is based on job tasks or job functions, Chmura uses the same category of risk levels to define business as well. In this study, any businesses with high-risk job tasks are classified as high-risk businesses, even if some job tasks in those businesses are of medium or lower risk. Other businesses are defined accordingly. In addition, to estimate the number of business and jobs impacted by 16VAC25-220, Chmura worked with

² Above definitions are from the document: 16VAC25-220, Revised Proposed Permanent Standard for Infectious Disease Prevention of the SARS-Cov-2 Virus that Causes COVID-19, DOLI, December 10, 2020.

DOLI to classify different industries into the above four risk levels based on the North America Industry Classification System (NAICS) code.

Chmura uses the latest employment and establishment data to estimate number of businesses that may be affected by the regulation. The latest establishment data were for the year 2019, while the latest employment data were for the four quarters ending with the second quarter of 2020.³ This economic impact analysis also estimates the number of small businesses—defined as those with fewer than 500 employees or six million dollars of annual revenues. The business firm size data were from U.S. Census Business Survey for 2018.⁴

Table 2.1 presents the estimated number of Virginia business establishments and employment. In 2019, there were an estimated 285,486 establishments in Virginia, with 13,522 being categorized as very high or high risk, 122,753 establishments classified as being medium risk, and the rest classified as being lower risk. The latest employment data show that there were 4.1 million workers in Virginia as of the second quarter of 2020, with 361,408 working in very-high- or high-risk businesses, 2.0 million in medium-risk business, and 1.8 million in lower-risk businesses. Almost all Virginia establishments (99.6%) have fewer than 500 employees, and 74.4% of jobs in Virginia are in small businesses.

Table 2.1: Estimated Virginia Business Establishments and Employment

Exposure Risk Level	All Businesses		Small Businesses		Percent of Small Business	
	Establishment (2019)	Employment (Q2-2020)	Establishment (2019)	Employment (Q2-2020)	Establishment (2019)	Employment (Q2-2020)
Very High or High	13,522	361,408	13,474	266,627	99.6%	73.8%
Medium	122,753	2,019,672	122,243	1,579,407	99.6%	78.2%
Lower	149,211	1,750,265	148,698	1,228,249	99.7%	70.2%
Total	285,486	4,131,345	284,415	3,074,283	99.6%	74.4%

Source: U.S. Census and JobsEQ by Chmura

In estimating the economic impact of 16VAC25-220, Chmura focuses on the incremental cost due to this standard. For example, if certain stipulations of this standard overlap with existing federal or state regulations or governor's executive orders, this standard will not cause additional cost for affected businesses. With regard to the issue of face coverings, for instance, Governor Northam issued Executive Order 72 on December 10, 2020, which requires all employees of all businesses in certain industries—including retail and food services, and entertainment—to wear a face covering while working at their place of employment.⁵ While the above requirement is in place, there would be no incremental cost associated with wearing a face covering applicable to DOLI's standard. Chmura

worked with DOLI to identify the standards that exceed existing federal and state regulations, thus resulting in incremental costs for Virginia businesses.

The standard 16VAC25-220 has nine sections, numbered 16VAC25-220-10 to 16VAC25-220-90. The section of 16VAC25-220-10 outlines the purpose, scope, and applicability; 16VAC25-220-20 stipulates the effective date of the standard; and 16VAC25-220-30 defines terminologies used in the standard. Furthermore, 16VAC25-220-90 states that discrimination

³ The affected businesses presented in this report are measured by the number business establishments, not the number of firms. For example, a bank can have many branches in Virginia, and each branch is a separate establishment. The employment number will be simply referred as the second quarter of 2020.

⁴ In this analysis, Chmura only used the number of employees to classify establishments into small business, as revenue information is not available.

⁵ Source: [https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-72-and-Order-of-Public-Health-Emergency-Nine-Common-Sense-Surge-Restrictions-Certain-Temporary-Restrictions-Due-to-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-72-and-Order-of-Public-Health-Emergency-Nine-Common-Sense-Surge-Restrictions-Certain-Temporary-Restrictions-Due-to-Novel-Coronavirus-(COVID-19).pdf)

against an employee for exercising rights under this standard is prohibited. Those four sections do not result in incremental costs for businesses in Virginia and are excluded from this analysis. As a result, the rest of the report will evaluate the economic impact of the five sections, 16VAC25-220-40 to 16VAC25-220-80.

3. Impact of 16VAC25-220-40

a. Economic Impact

16VAC25-220-40 outlines the mandatory requirements for all employers in Virginia. There are 13 sections lettered A to M. Under each section, there are additional sub-sections. Some of these sections do not result in additional costs for businesses. For example, Section A states “employers shall ensure compliance with the requirements in this section to protect employees in all exposure risk levels from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease”. This requirement itself does not incur additional cost for businesses.⁶

Some requirements overlap with existing regulations and executive orders. Section B is related to exposure assessment, notification requirements, and employee access to exposure and medical records. The current regulations by the federal Occupation Safety and Health Administration (OSHA) have required employers in general industry (excluding construction, agriculture, and maritime industries) to assess workplace hazards.⁷ Thus, Section B will not incur additional costs for Virginia businesses except for businesses in construction, agriculture, and maritime industries. For businesses in those three industries, it is estimated that risk assessment, discussion with sub-contractors, notifying employees, and having a system to report positive COVID-19 cases may take approximately four to five hours of staff time to perform.

Section C is related to the return-to-work policies all businesses need to have regarding infected employees, or those suspected to be infected by the SARS-CoV-2 virus. The key component of Section C is that those infected or suspected to be infected are not allowed to return to work. While those stipulations may cause businesses to lose potential revenues, those requirements are already in effect under Virginia Department of Health requirements for isolation of infected employees and quarantine of people who were in close contact with an infected person.⁸ The only cost for a business is to develop policies and procedures related to employees. It is estimated that approximately seven to ten hours may be needed to develop such policies. The Virginia Department of Health provides guidelines for this, which could reduce the time needed to develop this plan.⁹

Section D concerns the establishment and implementation of policies and procedures that “ensure employees observe physical distancing while on the job and during paid breaks on the employer’s property”. There is no incremental cost for Virginia businesses, as similar stipulations have been in effect since the Executive Order 72 was issued by Virginia Governor Northam on December 10, 2020;¹⁰ while some restrictions were also in place under previous executive orders, including Amended Executive Order 63 issued on November 13, 2020.¹¹

Section E is related to the access to common areas and breakrooms in the workplace, requiring businesses to limit occupancy of such areas, provide hand-washing facilities or supplies, post signage, and to clean and sanitize such areas. There is no incremental cost for businesses from this requirement, as stipulations related to signage, cleaning, and

⁶ All direct quotes in this document are from: 16VAC25-220, Revised Proposed Permanent Standard for Infectious Disease Prevention of the SARS-Cov-2 Virus that Causes COVID-19, DOLI, December 10, 2020, unless noted otherwise. The Appendix includes the itemized list of cost estimates.

⁷ Source: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132>

⁸ Source: https://www.vdh.virginia.gov/coronavirus/frequently-asked-questions/virginia-questions/#_heading=h.3rdrjn

⁹ Source: <https://www.vdh.virginia.gov/coronavirus/vdh-interim-guidance-for-implementing-safety-practices-for-critical-infrastructure-workers-non-healthcare-during-widespread-community-transmission-in-virginia/>

¹⁰ Source: <https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/Forward-Virginia-Phase-Three-Guidelines-December-2020.pdf>

¹¹ Source: <https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-63-AMENDED-and-Order-Of-Public-Health-Emergency-Five---Requirement-To-Wear-Face-Covering-While-Inside-Buildings.pdf>

disinfecting common areas have been in effect due to the Executive Order 72 issued by Virginia Governor Northam. The requirement of a hand-washing facilities is covered in existing OSHA and DOLI standards and regulations.

Section F is associated with multiple employees occupying a vehicle for work purposes. Businesses are required to develop a procedure when maintaining social distance is not feasible while traveling for work, and need to provide face coverings for employees. It is estimated that approximately one to two staff hours may be needed to develop such policies. The face-covering requirement results in no incremental cost for businesses, as similar stipulations have been in effect due to Executive Order 72; while some restrictions were also in place under previous executive orders, including Amended Executive Order 63.

Section G, H, and I are regulations related to wearing face covering in workplaces when social distancing is not feasible. Those requirements generate no incremental cost for businesses, as similar stipulations have been in effect due to the Executive Order 72, and the previous Executive Order 63.

Section J is related to the use of face shields when the use of face coverings would be “contrary to the employee's health or safety because of a medical condition.” The current OSHA regulation 1910.132 has required employers in general industry (excluding construction, agriculture, and maritime industries) to provide personal protective equipment (PPE) for their employees.¹² Thus, Section J stipulations will not incur additional costs for businesses except for businesses in construction, agriculture, and maritime industries. For businesses in those three industries, face shields can be acquired for a price ranging from \$1.00 to \$7.00 per piece.¹³ The cost of face shields is lower if purchased directly from overseas producers, but additional shipping costs will apply, which could be approximately half of the unit price.¹⁴

Section K concerns the process to apply for a waiver related to face coverings, and does not generate incremental cost for Virginia businesses.

Section L involves sanitation and disinfection standards at the workplace. Section M requires employers to provide PPE for employees in situations when “engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection.” These requirements generate no incremental cost for businesses, as similar stipulations have been in effect due to the Executive Order 72; while some restrictions were also in place under previous executive orders, including Amended Executive Order 61 issued on May 8, 2020.¹⁵

In summary, 16VAC25-220-40 generates limited incremental costs for businesses in Virginia, as most of the regulations specific to SARS-CoV-2 virus overlap with existing regulations businesses are required to follow. The only additional costs are staff hours to develop policies and procedures related to return-to-work and travel policies. For businesses in construction, agriculture, and maritime industries not covered by existing rules, there are additional costs to conduct a risk assessment and provide face shields.

¹² Source: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132>

¹³ Source: <https://www.qualitylogoproducts.com/bulk-face-shields.htm>

¹⁴ Source: https://www.made-in-china.com/products-search/hot-china-products/Wholesale_Face_Shield.html

¹⁵ Source: [https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-61-and-Order-of-Public-Health-Emergency-Three---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-61-and-Order-of-Public-Health-Emergency-Three---Phase-One-Easing-Of-Certain-Temporary-Restrictions-Due-To-Novel-Coronavirus-(COVID-19).pdf)

b. Businesses and Entities Affected

16VAC25-220-40 will affect all businesses in Virginia, estimated at 285,456 establishments in 2019, with employment of 4.1 million as of the second quarter of 2020. For establishments in construction, agriculture, and maritime industries, it is estimated that there were 23,654 Virginia businesses in these industries in 2019, with total employment being 279,636 as of the second quarter of 2020.

c. Localities Particularly Affected

Since 16VAC25-220-40 applies to all businesses, no locality will be particularly affected by this proposed regulatory action.

For some stipulations that will incur additional costs for construction, agriculture, and maritime industries, some localities in Virginia will be disproportionately affected. As

Table 3.1 shows, many of those are rural counties with a large number of workers in the agriculture industry.

d. Projected Impact on Employment

The proposed regulations will have minimal impact on the overall employment of the state, since the estimated incremental monetary costs are limited and only apply to businesses in construction, agriculture, and maritime industries. Other costs are staff hours, and can be accommodated by existing staff without the need to hire additional workers.

e. Small Businesses Impact

It is estimated that the number of small businesses impacted was 284,415, based on 2019 figures, with an associated employment of 3.1 million as of the second quarter of 2020. For businesses in construction, agriculture,

Table 3.1 Top Ten Localities with Highest Percentage of Employment in Construction, Agriculture and Maritime Industries

Locality	Percent of Employment
Manassas Park City, Virginia	36.9%
Highland County, Virginia	30.8%
Charles City County, Virginia	30.1%
Amelia County, Virginia	26.9%
Cumberland County, Virginia	26.4%
Northampton County, Virginia	23.3%
Powhatan County, Virginia	22.3%
King and Queen County, Virginia	22.1%
Floyd County, Virginia	21.8%
Rappahannock County, Virginia	21.5%
Virginia State Average	6.8%

Source: JobsEQ by Chmura

and maritime industries, it is estimated that 23,632 standards are in use. The standards industry has a total employment of 259,719 as of the second quarter of 2020.

4. Impact of 16VAC25-220-50

a. Economic Impact

16VAC25-220-50 outlines the mandatory requirements for employers in Virginia categorized as having very high or high exposure risks. There are four sections lettered A to D under this standard, with additional subsections under each section. Some of those sections or subsections do not result in additional costs for businesses. For example, Section A defines the businesses this standard should apply to and does not incur additional cost for businesses.

As the standard notes, “It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower exposure risk for purposes of application of the requirements of this standard. It is further recognized that various required job tasks prohibit an employee from being able to observe physical distancing from other persons.”

- **Section B**

Section B is related to the engineering controls for very-high-risk or high-risk businesses. Specifically, subsection B.1 and

B.2 state that air-handling systems under the control of these businesses need to meet manufacturing instructions and additional operating instructions specific for SARS-CoV-2 virus. Pre-existing Virginia Occupational Safety and Health Administration (VOSH) regulations already require that employers to comply with “the manufacturer’s specifications and limitations applicable to the operation, training, use, installation, inspection, testing, repair and maintenance of all machinery, vehicles, tools, materials and equipment”.¹⁶ It is estimated that the subsections B1 and B2 will not generate incremental costs for Virginia businesses with very high or high exposure risks.

Subsection B.3 states that “hospitalized patients known or suspected to be infected with the SARS-CoV-2 virus, where feasible and available, shall be placed in airborne infection isolation room (AIIRs)”. Subsection B.4 states that employers “shall use AIIRs when available for performing aerosol-generating procedures on patients with known or suspected to be infected with the SARS-CoV-2 virus”. The Virginia Department of Health has existing regulations regarding hospitals and AIIRs, and the utilization of AIIRs is dependent on the availability. It is thus estimated that subsections B3 and B4 will not generate incremental costs for Virginia businesses with very high or high exposure risks.

Subsection B.5 regulates postmortem activities, “employers shall use autopsy suites or other similar isolation facilities when performing aerosol-generating procedures on the bodies of persons known or suspected to be infected with the SARS-CoV-2 virus at the time of their death.” For businesses involved in postmortem activities without such a facility, the cost of construction for a new unit can be substantial in the range of tens of thousand dollars.¹⁷ Rental is an option during the pandemic. It is estimated that rental rate of a cold storage facility with fan-filter unit, based on CDC recommendations, may range from \$2,000 to \$3,000 a month.¹⁸

Subsection B.6 is related to the handling of specimens from patients or persons known or suspected to be infected with the SARS-CoV-2 virus, and it needs to follow precautions associated with Biosafety Level 3 (BSL-3). All laboratories licensed

¹⁶ Source: 16VAC25-60-120 [General Industry], <https://law.lis.virginia.gov/admincode/title16/agency25/chapter60/section120/>

¹⁷ Source: <https://massfatalityresponse.com/decident-refrigeration/morgue-trailer-systems/>

¹⁸ Source: <https://www.kwipped.com/rentals/restaurant/walkin-cold-storage-trailers-and-containers/1022>

by Virginia Department of Health are required to meet BSL-2 or BSL-3 standards. It is estimated that Subsection B6 will not generate incremental costs for businesses.

Subsection B.7 states that “to the extent feasible, employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 and COVID-19 virus transmission.” The cost of a physical barrier ranges from \$50 to \$300, depending on the size of such barriers.¹⁹ The cost of physical barriers is lower if purchased directly from overseas producers, but substantial additional shipping costs will apply.²⁰ In addition, this requirement is optional for businesses and may not result in incremental costs if other mitigation strategies are implemented.

- **Section C**

Section C is related to administrative and work practice control of employers categorized as having very high and high risk exposures.

Subsection C.1 requires pre-screening or surveying of employees before the commencement of each work shift. Affected businesses will develop a certain screening method and devote staff hours to perform the screening. Guidelines from the Virginia Department of Health for screening include temperature checks and asking several screening questions.²¹ It is estimated that the cost of a digital non-contact thermometer ranges from \$20 to \$80.²² The cost is lower if purchased directly from overseas producers, but additional shipping costs will apply.²³ However, please note that although it is a generally accepted practice, the standard does not specifically require that employers check the temperatures of employees. Businesses need to have dedicated staff to perform screening. It is estimated that screening of each employee may take two to five minutes.

Subsections C.2 and C.3 require employers to follow existing guidelines and limit or restrict access to work areas, and they do not result in incremental costs for businesses.

Subsection C.4 requires employers to post signs “requesting patients and family members to immediately report signs and/or symptoms of respiratory illness on arrival at the healthcare facility and use disposable face coverings.” The cost of plastic signs ranges from \$6.10 to \$9.40, for workplace uses, depending on the size of signs.²⁴

Subsection C.5 requires employers to “offer enhanced medical monitoring of employees during COVID-19 outbreaks.” This section does not provide details regarding what constitutes the enhanced medical monitoring. It

is assumed that the enhanced medical monitoring may involve checking temperatures and other vital signs of employees such as blood oxygen levels and asking various screening questions. The overall costs involve the purchasing of medical devices as well as assigning employees to perform monitoring. It is estimated that the cost of a digital non-contact thermometers ranges from

\$20 to \$80, while cost of blood oxygen monitors range from \$20 to \$50 per unit.²⁵ It is assumed that since monitoring is an

¹⁹ Source: <https://www.zumaooffice.com/search.aspx?keyword=physical+barriers>; <https://www.dgsretail.com/P1711/Portable-Freestanding-Sneeze-Guard-Desk-Countertops-Acrylic-W/Base-24x24H>

²⁰ Source: https://www.alibaba.com/showroom/plastic+shield+for+countertop.html?fsb=y&IndexArea=product_en&CatId=&SearchText=plastic+shield+for+countertop&isGalleryList=G

²¹ Source: <https://www.vdh.virginia.gov/coronavirus/vdh-interim-guidance-for-implementing-safety-practices-for-critical-infrastructure-workers-non-healthcare-during-widespread-community-transmission-in-virginia/>

²² <https://www.zumaooffice.com/search.aspx?keyword=thermometer>

²³ https://www.alibaba.com/showroom/thermometer.html?fsb=y&IndexArea=product_en&CatId=100009295&SearchText=thermometer&isGalleryList=G

²⁴ Source: <https://www.zumaooffice.com/search.aspx?keyword=social+distancing+sign>

²⁵ <https://www.4mdmedical.com/ssearch?q=pulse+oximeter>

ongoing process, dedicated employees are needed for businesses with a larger number of workers, such as hospitals. A study done by Vanderbilt University Medical Center shows that one full-time monitoring worker is needed for 800 employees.²⁶

Subsection C.6 states that business shall offer psychological and behavioral support when feasible. Since this is not a required mandate, it is estimated that it does not generate incremental costs for businesses.

Subsection C.7 requires that in healthcare settings, employers shall provide alcohol-based hand sanitizers containing at least 60% ethanol or 70% isopropanol to employees, emergency responders, and other personnel. The cost of hand sanitizer is estimated to be around \$5.00 for bottles around 12 to 17 ounces, or \$35 per gallon.²⁷

Subsection C.8 requires that “employers shall provide face coverings to non-employees suspected to be infected with SARS-CoV-2 virus to contain respiratory secretions until the non-employees are able to leave the site.” The cost of face coverings, such as a standard disposable face covering, is about \$0.10 per piece, when purchased in bulk.²⁸

While some Subsections from C.1 to C.8 necessitate that businesses with very high or high risk exposure incur incremental costs to meet those requirements, Subsection C.9 states that employers shall implement flexible worksites, flexible work hours, and flexible meeting and travel options, when feasible. Those options can provide significant cost savings for businesses. For employers that can work from home or conduct meetings remotely, businesses do not need to comply with the regulations related to the workplace. Other provisions under Subsection C.9, including increasing social distances and delivering services remotely, do not generate additional costs for businesses as they are optional mitigation strategies.

- **Section D**

Section D is related to the personal protection equipment (PPE) in the workplace. It requires employers to assess hazardous risks, complete a written certification, and implement respiratory protection programs. Those requirements are similar to those in 16VAC25-220-40, Section B. The current regulations by Occupational Safety and Health Administration (OSHA) have required employers in general industry (excluding construction, agriculture, and maritime industries) to assess workplace hazards.²⁹ Since none of the businesses with very high or high risk exposure are in the above three industries, Section D will not incur additional costs for all businesses.

In summary, 16VAC25-220-50 will incur additional costs for employers with very high or high exposure risk. Most of those costs are related to administrative control, such as conducting screening, installing physical barriers,

posting signs, having hand sanitizers, and providing face coverings for non-employees. Only businesses with postmortem activities may need to invest in special facilities if they do not currently have one, which can have a substantial price tag. Large employers may need to have dedicated staff to perform enhanced medical screening. However, those employers can mitigate those costs by adopting more flexible work-site and work-hours arrangements.³⁰

²⁶ Source: <https://www.vumc.org/coronavirus/latest-news/medical-surveillance-key-covid-19-response-vumc>

²⁷ Source: https://www.bulkofficesupply.com/search.aspx?keyword=hand+sanitizer&onatalp=4024471056375168968&fph=0_41bfd98c84e3ed86d3746ed1a8c10870

²⁸ Source: <https://www.turmerry.com/pages/wholesale-face-mask-usa-suppliers>

²⁹ Source: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132>

³⁰ The Appendix has an itemized list of the estimated economic impact.

b. Businesses and Entities Affected

16VAC25-220-50 will affect very high and high-risk businesses in Virginia, estimated at 13,522 establishments in 2019, with employment of 361,408 as of the second quarter of 2020.

c. Localities Particularly Affected

In Virginia, an estimated 8.7% of all jobs are in very high or high-risk businesses. However, in some localities, those percentages are significantly higher. Many of them are locations with a high concentration of healthcare or nursing home facilities, such as Northern City, Emporia City, and Charlottesville City.

Table 4.1 Localities with High Percentage of Very-High and High Risk Employment

Locality	Percent of Total Employment
Norton City, Virginia	26.2%
Emporia City, Virginia	24.6%
Charlottesville City, Virginia	24.5%
Petersburg City, Virginia	23.4%
Winchester City, Virginia	22.5%
Franklin City, Virginia	21.0%
Lancaster County, Virginia	20.6%
Salem City, Virginia	18.9%
Alleghany County, Virginia	17.6%
Fredericksburg City, Virginia	17.6%
Virginia State Average	8.7%

Source: JobsEQ by Chmura

d. Projected Impact on Employment

The proposed regulations will have a limited impact on the overall employment of the state. Since the estimated incremental costs are not substantial, it is unlikely that any of the affected businesses will need to reduce costs elsewhere or even employment payroll to

meet those requirements. Some large employers may need to hire additional workers to perform enhanced medical monitoring for their employees, which may increase costs to businesses, but will create jobs for the state. In addition, 16VAC25-220-50 will have some positive effects on state businesses engaging in supplying products such as face masks, sanitizers, and other PPE. It will increase opportunities for businesses supplying or installing physical barriers as well.

e. Small Businesses Impact

It is estimated that the number of small businesses impacted is 13,474, based on 2019 data. with associated employment of 266,627 as of the second quarter of 2020.

5. Impact of 16VAC25-220-60

a. Economic Impact

16VAC25-220-60 outlines the mandatory requirements for employers in Virginia with medium exposure risks. There are four sections lettered A to D. Some of those requirements are similar to those applicable to very high or high-risk businesses. Section A defines the businesses 16VAC25-220-60 should apply to and does not incur additional costs for businesses.

As the standard notes, “It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower exposure risk for purposes of application of the requirements of this standard. It is further recognized that various required job tasks prohibit an employee from being able to observe physical distancing from other persons.”

- **Section B**

Section B.1 is related to the engineering controls for businesses with medium risks. Specifically, subsection B.1 states that air-handling systems under the control of those businesses need to meet manufacturing instructions and additional operating instructions specific to the SARS-CoV-2 virus. Preexisting Virginia Occupational Safety and Health Administration (VOSH) regulations already require that employers comply with “the manufacturer’s specifications and limitations applicable to the operation, training, use, installation, inspection, testing, repair and maintenance of all machinery, vehicles, tools, materials and equipment.”³¹ It is estimated the subsection B1 will not generate incremental costs for businesses.

Subsection B.2 states that where feasible, “employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 and COVID-19 virus transmission.” The cost of a physical barrier ranges from \$50 to \$300, depending on the size of such barriers.³² The cost of physical barriers is lower if purchased directly from overseas producers, but additional shipping costs will apply.³³ In addition, this requirement is optional³³ for businesses and may not result in incremental costs if other mitigation strategies are implemented.

- **Section C**

Section C concerns administrative and work practice control of employers with medium exposure risk. Subsection C.1.a requires pre-screening or surveying of employees before the commencement of each work shift. Affected businesses will develop certain screening methods and devote staff hours to perform the screening. Guidelines from Virginia Department of Health for screening includes temperature checks and asking several screening

questions.³⁴ It is estimated that the cost of digital non-contact thermometer ranges from \$20 to \$80.³⁵ The cost is lower if purchased directly from overseas producers, but additional shipping costs will apply.³⁶ However, please note that although it is a generally accepted practice,

³¹ Source: 16VAC25-60-120 [General Industry], <https://law.lis.virginia.gov/admincode/title16/agency25/chapter60/section120/>

³² Source: <https://www.zumaoffice.com/search.aspx?keyword=physical+barriers>; <https://www.dgsretail.com/P1711/Portable-Freestanding-Sneeze-Guard-Desk-Countertops-Acrylic-W/Base-24x24H>

³³ Source: https://www.alibaba.com/showroom/plastic+shield+for+countertop.html?fsb=y&IndexArea=product_en&CatId=&SearchText=plastic+shield+for+countertop&isGalleryList=G

³⁴ Source: <https://www.vdh.virginia.gov/coronavirus/vdh-interim-guidance-for-implementing-safety-practices-for-critical-infrastructure-workers-non-healthcare-during-widespread-community-transmission-in-virginia/>

³⁵ <https://www.zumaoffice.com/search.aspx?keyword=thermometer>

³⁶ https://www.alibaba.com/showroom/thermometer.html?fsb=y&IndexArea=product_en&CatId=100009295&SearchText=thermometer&isGalleryList=G

the standard does not specifically require that employers check the temperatures of employees. Business needs to have dedicated staff to perform screenings. It is estimated that screening of each employee may take a two to five minutes.

Subsection C.1.b requires that “employers shall provide face coverings to non-employees suspected to be infected with SARS-CoV-2 virus to contain respiratory secretions until the non-employees are able to leave the site.” The cost of face coverings, such as standard disposable face coverings, is about \$0.10 piece, when purchased in bulk.³⁷

Subsection C.2.a to C.2.i states that employers shall implement flexible worksites, flexible work hours, and flexible meeting and travel options, when feasible. Those options can provide significant cost savings for businesses. For employers that can work from home, or conduct meetings remotely, businesses do not need to comply with workplace regulations. In addition, some provisions, including increasing social distances and delivering services remotely, do not generate additional costs for businesses as they are optional mitigation strategies.

Subsection C.2.j and C.2.k require that employers provide face coverings for employees who cannot maintain social distance, or in customer-facing or other personal-facing roles. There is no additional cost to businesses as similar stipulations have been in effect due to Executive Order 72 issued by Virginia Governor Northam; while some restrictions were also in place under previous executive orders, including Amended Executive Order 63.

- **Section D**

Section D is related to the personal protection equipment (PPE) in the workplace. It requires employers to assess hazardous risks, complete a written certification, and implement respiratory protection programs. Those requirements are similar to those in 16VAC25-220-40, Section B. The current regulations by Occupational Safety and Health Administration (OSHA) have required employers in general industry (excluding construction, agriculture, and maritime industries) to assess workplace hazards.³⁸ For businesses in those three industries, it is estimated that risk assessment, discussion with sub- contractors, notifying employees, and having a system to report positive COVID-19 cases may take approximately four to five staff hours.

In summary, 16VAC25-220-60 will incur limited additional costs for employers with medium exposure risk. Most of those costs are related to administrative controls, such as conducting screenings, installing physical barriers, and supplying face coverings for non-employees. However, businesses can mitigate these costs by adopting more flexible work-site and work-hours arrangements.³⁹

b. Businesses and Entities Affected

These proposed regulations will affect medium-risk businesses in Virginia, estimated at 122,753 establishments in 2019, with an employment of 2.0 million as of the second quarter of 2020.

³⁷ Source: <https://www.turmerry.com/pages/wholesale-face-mask-usa-suppliers>

³⁸ Source: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132>

³⁹ The Appendix has an itemized list of the estimated economic impact.

c. Localities Particularly Affected

In Virginia, an estimated 48.9% of all jobs are in medium-risk businesses. But in some localities, higher percentages of employees work for medium-risk businesses. As Table 5.1 shows, examples of those localities are Covington City, Greensville County, and Madison County.

Table 5.1: Top Ten Localities with Highest Percentage of Medium Risk Employment

Locality	Percent in Total Employment
Covington City, Virginia	73.0%
Greensville County, Virginia	72.8%
Madison County, Virginia	72.8%
Pulaski County, Virginia	72.0%
New Kent County, Virginia	71.8%
Dinwiddie County, Virginia	71.1%
Montgomery County, Virginia	71.0%
Henry County, Virginia	70.8%
Campbell County, Virginia	70.3%
Northampton County, Virginia	70.3%
Virginia State Average	48.9%

Source: JobsEQ by Chmura

d. Projected Impact on Employment

The proposed standard will have limited impact on the overall employment of the state. Since the estimated incremental costs are not substantial, it is unlikely that any of affected businesses will need to reduce staff size to meet those requirements. However, it will have some positive effect on state businesses engaging in supplying products such as face masks and physical barriers.

e. Small Businesses Impact

It is estimated that number of small businesses impacted was 122,243, based on 2019 establishment estimate, with associated employment of 1.6 million, as of the second quarter of 2020.

6 Impacts of 16VAC25-220-70

a. Economic Impact

16VAC25-220-70 is related to the development of a written Infectious Disease Preparedness and Response Plan. It only applies to very high and high-risk employers, as well as medium-risk employers with 11 or more employees. It is estimated that risk assessment and implementation of respiratory protection programs may take approximately 10 to 20 hours of staff time to develop. To mitigate such costs to businesses, Virginia Occupational Safety and Health Administration has provided a free online, editable WORD version of an infectious disease preparedness and response plan that can be used by employers to satisfy the requirements of 16VAC25-220-70. This template can reduce the costs for businesses significantly.⁴⁰

b. Businesses and Entities Affected

The proposed regulation will affect very high and high-risk businesses, and medium-risk businesses with 11 or more employees. It is estimated that the number of establishments in those categories was 54,960 in 2019, with an employment of 2.2 million as of the second quarter of 2020.

c. Localities Particularly Affected

In Virginia, an estimated 52.3% of all employees are in the affected business categories. Some localities have higher percentages of employees in affected businesses. As Table 6.1 shows, examples of those localities are Galax City, Emporia City, and Williamsburg City.

It is estimated that number of small businesses impacted was 54,402, based on 2019 establishment

d. Projected Impact on Employment

The proposed regulations will have no impact on the overall employment of the state. The estimated incremental costs are only staff hours, and can be accommodated by existing staff of the businesses without the need to hire additional workers.

e. Small Businesses Impacts

Colonial Heights City, Virginia	71.4%
Pulaski County, Virginia	71.2%
Montgomery County, Virginia	70.9%
Floyd County, Virginia	70.6%
Hopewell City, Virginia	70.4%
Amherst County, Virginia	70.3%
Greensville County, Virginia	52.3%
Virginia State Average	52.3%

Source: JobsEQ by Chmura

Table 6.1: Top Ten Localities with Highest Percentage of Employment in Affected Businesses

Locality	Percent in Total Employment
Galax City, Virginia	74.8%
Emporia City, Virginia	74.6%
Williamsburg City, Virginia	73.2%

estimate, with associated employment of 1.6 million as of the second quarter of 2020.

⁴⁰ Source: <https://www.doli.virginia.gov/covid-19-outreach-education-and-training/>

7. Impact of 16VAC25-220-80

a. Economic Impact

16VAC25-220-80 is related to providing employees with training on the hazards and characteristics of the SARS-CoV-2 and COVID-19 disease. The training requirement only applies to employers with employees exposed to very high, high, and medium exposure risk. For employers with lower exposure risk, they need to provide information sheets to employees exposed to such hazards.

Typically, developing a training material may take about 40 hours of staff time for training lasting one hour.⁴¹ Delivering the training and maintaining training certifications will also take some staff hours in human resources or management. To mitigate such costs to businesses, VOSH has provided the free online training materials that satisfy training materials requirements of 16VAC25-220-80. In addition, VOSH has provided a free online training certification form for employers to use.⁴² As a result, employers may not need to develop new training materials, and all the business costs are related to training delivery to each employee (about an hour) and staff time to maintain the certifications.

For businesses categorized as having lower exposure risk, preparing information sheets for employees may take a few hours. VOSH has provided a free online two-page document that satisfies the requirements.⁴³ As a result, the cost for lower-risk businesses is minimal.

b. Businesses and Entities Affected

Overall, 16VAC25-220-80 will affect all businesses in Virginia, estimated at 285,456 establishments in 2019, with an employment of 4.1 million as of the second quarter of 2020. The training requirements only apply to businesses with very high, high and medium risks. The total number of businesses establishments is estimated to be 136,275 in 2019, with 2.4 million employees as of the second quarter of 2020. The total number of businesses establishments with lower risk is estimated to be 149,211 in 2019, with 1.8 million employees as of the second quarter of 2020.

c. Localities Particularly Affected

Since 16VAC25-220-80 applies to all businesses, no locality will be particularly affected by this proposed regulatory action. However, for training requirements, some localities affected the most include Galax City, Williamsburg City, and Emporia City. For lower-risk businesses, localities with high percentages of employment

are King George County, Goochland County, and Arlington County. Those are localities with a large number of jobs in financial services, professional services, or government.

⁴¹ Source: <https://trainlikeachampion.blog/why-does-it-matter-how-long-it-takes-to-design-a-presentation/>

⁴² Source: <https://www.doli.virginia.gov/wp-content/uploads/2020/08/ETS-Full-Training-Presentation.pdf> <https://www.doli.virginia.gov/wp-content/uploads/2020/08/ETS-Abbreviated-Training-Presentation.pdf> <https://www.doli.virginia.gov/wp-content/uploads/2020/07/Infographic.pdf> and <http://www.doli.virginia.gov/wp-content/uploads/2020/07/Training-Certification.xlsx>

⁴³ Source: <https://www.doli.virginia.gov/wp-content/uploads/2020/07/Lower-Risk-Training-1.pdf>

Table 7.1 Top Ten Localities with Highest Percentage of Affected Businesses

Locality	Percent of Employment in Very High, High, and Medium-Risk Businesses	Locality	Percent of Employment in Lower-Risk Businesses
Galax City	82.0%	King George County	72.6%
Williamsburg City	80.9%	Goochland County	70.2%
Emporia City	80.7%	Arlington County	64.9%
Colonial Heights City	79.6%	Surry County	62.1%
Pulaski County	79.3%	Alexandria City	59.9%
Montgomery County	79.0%	Fairfax County	58.1%
Floyd County	78.6%	Dickenson County	51.3%
Greensville County	78.3%	Stafford County	48.6%
Amherst County	77.9%	Buchanan County	48.2%
Madison County	77.8%	Henrico County	46.9%
Virginia State Average	57.6%	Virginia State Average	42.4%

Source: JobsEQ by Chmura

d. Projected Impact on Employment

The proposed regulations will have no impact on the overall employment of the state. Since the estimated incremental costs are minimal, those efforts can be accommodated by existing staff of the businesses without the need to hire additional workers.

e. Small Businesses Impacts

It is estimated that number of small businesses impacted was 284,415, based on 2019 establishment estimate, with associated employment of 3.1 million as of the second quarter of 2020. Training requirements apply to businesses with very high, high, and medium risks. The total number of small businesses establishments in those categories is estimated to be 137,717, based on 2019 establishment estimate, with 1.8 million employees as of the second quarter of 2020. The total number of small business establishments with lower risk is estimated to be 148,498 in 2019, with 1.2 million employees as of the second quarter of 2020.

Appendix: Summary Table of Impact

Table A1: Economic Impact Summary

Standard	Description	Include in the Study	Estimated Cost
16VAC2 5-220-40	All Businesses		
A	Ensure Compliance	N/A	
B	Exposure assessment (9 items)	Overlap with current regulations, with exception of construction, agriculture and maritime industries	4-5 hours for construction, agriculture and maritime businesses
C	Develop return to work policy	Staff Hours	7-10 hours
	Not allow infected individuals to work (10-20 days)	Overlap with current regulations	
	Medical examination	Overlap with current regulations	
D	Develop social distance policies	Overlap with current regulations	
E	Common space	Overlap with current regulations	
	Clean and disinfect	Overlap with current regulations	
	Handwashing facilities and suppliers	Overlap with current regulations	
F	Wear face covering	Overlap with current regulations	
	Develop procedure during travel	Staff Hours	1-2 hours
G	Provide face covering	Overlap with current regulations	
H	Provide face covering	Overlap with current regulations	
I	Provide face covering	Overlap with current regulations	
J	Provide face shields	Overlap with current regulations, with exception of construction, agriculture and maritime industries	\$1.0-\$8.0 per unit for construction, agriculture, and maritime businesses
K	Waiver to face covering requirement	N/A	
L	Clean and disinfection	Overlap with current regulations	
M	Provide PPE	Overlap with current regulations	
16VAC2 5-220-50	Very high and high-risk businesses		
A	Definition	N/A	
B	Air handling system (B.1 and B.2)	Overlap with current regulations	
	Hospitalized patients & AIIR (B.3 and B.4)	Overlap with current regulations	
	Postmortem activities (B.5)	isolation facilities similar to AIIR	\$2,000-\$3,000 rental per month
	Install physical barriers (B.7)	Cost of physical barriers	\$50-\$300 per unit, optional
C	Screening employees for symptoms before work shift (C.1)	Cost of screening methods	\$20-80 for thermometer, plus staff hours of 2-5 minutes per employee
	Post signs (C.4)	Cost of signs	\$6.1-\$9.4 per sign
	Enhanced medical monitoring (C.5)	Cost of monitoring	\$20-80 for thermometer, \$20-\$50 for blood oximeter, one full-time staff for 800 employees
	Psychological and behavior support (C.6)	Optional requirement	
	Alcohol-based hand sanitizer (C.7)	Cost of hand sanitizer	\$5 per bottle (12-17 ounce), \$35 per gallon
	Face cover (C.8)	Cost of face covering	\$0.8-\$0.9 per unit of disposable mask

	Flexible worksite, work hours (C.9)	Provide cost savings for business	Benefit can offset costs
D	PPE	Overlap with current regulations	

Table A1: Economic Impact Summary

Standard	Description	Include in the Study	Estimated Cost
16VAC2 5-220-60	Medium-risk businesses		
A	Definition	N/A	
B	Air handling system (B.1)	Overlap with current regulations	
	Install physical barriers (B.2)	Cost of physical barriers	\$50-\$300 per unit, optional
C	Screening employees for symptoms (C.1)	Cost of screening methods	
	Face cover to non-employees (C.1)	Cost of face covering	\$0.8-\$0.9 per unit of disposable mask
	Flexible worksite, work hours (C.2)	Provide cost savings for business	Benefits can offset costs
	Face cover to employees when social distance is not feasible	Overlap with current regulations	
D	Respiratory protection program	Overlap with current regulations	
	written certification	Staff Hours	
	implement respiratory protection program	Staff Hours	
	PPE	Overlap with current regulations, with exception of construction, agriculture and maritime industries	4-5 hours for construction, agriculture and maritime businesses
16VAC2 5-220-70	Develop Preparedness and response plan	Staff Hours	10-20 hours
16VAC2 5-220-80	Training	Staff Hours	About one hour to each employee,
	Information sheet	Staff Hours	Minimal

Source: Chmura

ATTACHMENT J: DOLI ADDENDUM to January 11, 2021, Economic Impact Proposed Standard for Infectious Disease Prevention of the Sars-Cov-2 Virus That Causes Covid-19, Prepared by Chmura Economics and Analytics

DRAFT



COMMONWEALTH of VIRGINIA

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January 11, 2021

DEPARTMENT OF LABOR AND INDUSTRY (DOLI) VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) PROGRAM

DOLI ADDENDUM

To January 11, 2021, Economic Impact Proposed Standard For Infectious Disease Prevention Of The Sars-Cov-2 Virus That Causes Covid-19,⁴⁷⁰ Prepared by Chmura Economics and Analytics.

BACKGROUND

The Virginia Safety and Health Codes Board (“Board”) adopted 16 VAC 25-220, Emergency Temporary Standard (ETS), Infectious Disease Prevention: SARS-CoV-2 Virus That Causes COVID-19, with an effective date of July 27, 2020. The ETS was limited by statute to be in effect for no more than six months, and expires on January 26, 2021. Va. Code §40.1-22(6a) under which the ETS was adopted does not permit the ETS to be extended beyond 6 months.

A permanent replacement standard for the ETS is being considered by the Board, and in accordance with §40.1-22(6a):

“The Board by similar publication shall prior to the expiration of six months give notice of the time and date of, and conduct a hearing on, the adoption of a permanent standard.”

The Board published a proposed permanent standard to replace the ETS on July 27, 2020. During the adoption process for the ETS, the Board made clear that during any process to adopt a permanent replacement standard it would attempt to substantially comply with the core requirements in the APA within the six month time constraint of Va. Code §40.1-22(6a) by holding

⁴⁷⁰ It is the position of the Department based on consultation with the Attorney General that by virtue of Va. Code §40.1-22(6a), the Administrative Process Act does not apply to adoption of either an ETS or permanent replacement standard adopted under the specific procedures outlined in that statute. As noted on page 180 of the June 23, 2020 Briefing Package to the Board regarding proposed adoption of an ETS/emergency regulation, the OAG noted: The clear intent of 40.1-22(6a) and 29 USC Section 655(c) in the OSH Act – is to create an alternative path to a temporary and permanent standard outside of the rigors and processes of the APA.”

a sixty day written comment period⁴⁷¹ and a public hearing⁴⁷² along with obtaining an Economic Impact Analysis and holding a meeting to consider a final standard.⁴⁷³

Although not required by Va. Code §40.1-22(6a) DOLI contracted on behalf of the Board with Chmura Economics and Analytics (“Chmura”) to conduct an economic impact analysis of the standard that would attempt to address elements contained in Va. Code §2.2-4007.04.A.1,⁴⁷⁴ with the exception of three issues: costs associated with property value, fiscal impact on localities and potential funds to implement this standard. The purpose of this Addendum is to address those three issues.

For comparison purposes please see the EIA for VOSH’s Tree Trimming Operations Standard at:

https://townhall.virginia.gov/L/GetFile.cfm?File=92\2513\4713\EIA_DOLI_4713_v2.pdf,

and the EIA for VOSH’s Reverse Signal Procedures - General Industry - Vehicles/Equipment Not Covered by Existing Standards at:

https://townhall.virginia.gov/L/GetFile.cfm?File=92\2040\4053\EIA_DOLI_4053_v1.pdf

DEPARTMENT RESPONSE

1. The Department is not aware of the standard resulting in any additional costs related to impact of the standard on the use and value of private property, including additional costs related to the development of real estate for commercial or residential purposes. While Governor’s Executive Orders (EO) (see the most recent EO 72⁴⁷⁵) have contained restrictions on the use of and operating hours, including closings, of private businesses, the standard contains no such restrictions.
2. Since the standard would apply to all businesses, including state and local government employers, no locality will be particularly affected differently than any other local government entity by adoption of the standard. Any fiscal impact on a locality will be determined by the extent to which individual worksites contain hazards or job tasks which expose employees to risks classified as very high, high, medium or lower.

Those projected costs by risk category and cost item (e.g., cost of face coverings, physical barriers, employee training, etc.) are delineated on a per employee or per item basis in the

⁴⁷¹ The sixty day comment period was held from August 27, 2020 to September 25, 2020.

⁴⁷² The initial public hearing was held September 30, 2020.

⁴⁷³ The Board held a thirty day comment period on a draft revised proposed standard from December 10, 2020 to January 9, 2021, and a second public hearing on January 5, 2021.

⁴⁷⁴ Va. Code §2.2-4007.04.A.1: The economic impact analysis shall include but need not be limited to the projected number of businesses or other entities to which the regulation would apply; the identity of any localities and types of businesses or other entities particularly affected by the regulation; the projected number of persons and employment positions to be affected; the impact of the regulation on the use and value of private property, including additional costs related to the development of real estate for commercial or residential purposes; and the projected costs to affected businesses, localities, or entities of implementing or complying with the regulations, including the estimated fiscal impact on such localities and sources of potential funds to implement and comply with such regulation.

⁴⁷⁵ [https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-72-and-Order-of-Public-Health-Emergency-Nine-Common-Sense-Surge-Restrictions-Certain-Temporary-Restrictions-Due-to-Novel-Coronavirus-\(COVID-19\).pdf](https://www.governor.virginia.gov/media/governorvirginiagov/executive-actions/EO-72-and-Order-of-Public-Health-Emergency-Nine-Common-Sense-Surge-Restrictions-Certain-Temporary-Restrictions-Due-to-Novel-Coronavirus-(COVID-19).pdf)

Economic Impact Analysis (EIA) prepared by Chmura, and in the view of the Department would be applicable in a local government setting.

Those localities that incur costs uniquely attributable to compliance with the standard will likely use revenue they generate from their own taxes and fees. As noted in the EIA, a number of the requirements with associated costs related to the Commonwealth's response to the COVID-19 pandemic are contained in various Governor's Executive Orders, including most recently Executive Order 72. To the extent that a requirement is included in both Executive Orders and the standard, the Department does not consider the standard to impose any new cost burden on a covered locality.

In addition, many of the costs associated with dealing with workplace hazards associated with COVID-19 are the result of requirements contained in current federal OSHA or VOSH unique standards and regulations already applicable to local governments, and therefore DOLI does not consider them to be new costs associated with adoption of the standard.

Following are federal OSHA identical and state unique standards and regulations applicable in the Construction Industry, Agriculture Industry, Maritime Industry (public sector employment only as OSHA retains jurisdiction over private sector employment in Virginia), and General Industry ("General Industry" covers all employers not otherwise classified as Construction, Agriculture, or Maritime) that can be used in certain situations to address COVID-19 hazards in the workplace:

General Industry

- 1910.132, Personal Protective Equipment in General Industry (including workplace assessment)
- 1910.133, Eye and Face Protection in General Industry
- 1910.134, Respiratory Protection in General Industry
- 1910.138, Hand Protection
- 1910.141, Sanitation in General Industry (including handwashing facilities)
- 1910.1030, Bloodborne pathogens in General Industry
- 1910.1450, Occupational exposure to hazardous chemicals in laboratories in General Industry

Construction Industry

- 1926.95, Criteria for personal protective equipment in Construction
- 1926.102, Eye and Face Protection in Construction
- 1926.103, Respiratory Protection in Construction
- 16VAC25-160, Sanitation in Construction (including handwashing facilities)

Agriculture

- 16VAC25-190, Field Sanitation (including handwashing facilities) in Agriculture

Public Sector Maritime

- 1915.152, Shipyard Employment (Personal Protective Equipment)
- 1915.153, Shipyard Employment (Eye and Face Protection)

- 1915.154, Shipyard Employment (Respiratory Protection)
- 1915.157, Shipyard Employment (Hand and Body Protection)
- 1917.127, Marine Terminal Operations (Sanitation)
- 1917.92 and 1917.1(a)(2)(x), Marine Terminal Operations (Respiratory Protection, 1910.134)
- 1917.91, Marine Terminal Operations (Eye and Face Protection)
- 1917.95, Marine Terminal Operations (PPE, Other Protective Measures)
- 1918.95, Longshoring (Sanitation)
- 1918.102, Longshoring (Respiratory Protection)
- 1918.101, Longshoring (Eye and Face Protection)

Multiple Industries

- 16VAC25-220, Emergency Temporary Standard in General Industry, Construction, Agriculture and Public Sector Maritime
- 1904, Recording and Reporting Occupational Injuries and Illness in General Industry, Construction, Agriculture and Public Sector Maritime
- 1910.142, Temporary Labor Camps (including handwashing facilities) in Agriculture and General Industry
- 1910.1020, Access to employee exposure and medical records in General Industry, Construction, and Public Sector Maritime (excludes Agriculture)
- 1910.1200, Hazard Communication in General Industry, Construction, Agriculture and Public Sector Maritime
- 16VAC25-60-120 (General Industry), 16VAC25-60-130 (Construction Industry), 16VAC25-60-140 (Agriculture), and 16VAC25-60-150 (Public Sector Maritime), Manufacturer's specifications and limitations applicable to the operation, training, use, installation, inspection, testing, repair and maintenance of all machinery, vehicles, tools, materials and equipment (can be used to apply to operation and maintenance of air handling systems in accordance with manufacturer's instructions)

General Duty Clause

In addition, Va. Code §40.1-51.1.A, provides that:

A. It shall be the duty of every employer to furnish to each of his employees safe employment and a place of employment that is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees and to comply with all applicable occupational safety and health rules and regulations promulgated under this title.

Otherwise known as the “general duty clause” (the Virginia equivalent to §5(a)(1)) of the OSH Act of 1970), Va. Code §40.1-51.1.A can be used to address “serious” recognized hazards to which employees of the cited employer are exposed through reference to such things as national consensus standards, manufacturer’s requirements, requirements of the Centers for Disease Control (CDC), or an employer’s safety and health rules.

To the extent that the general duty clause could be used by the Department to address COVID-19 workplace hazards to the same extent as and in the same manner as the standard

were the standard not in effect, the Department does not consider any of the costs associated with such use of the clause to be new costs associated with adoption of the standard.

Potential Cost Centers for Localities on a Per Hour or Per Item Basis by Standard Section

16VAC25-220-40.B

Some requirements overlap with existing regulations and executive orders. Section B is related to exposure assessment, notification requirements, and employee access to exposure and medical records. The current regulations by the federal Occupation Safety and Health Administration (OSHA) have required employers in general industry (excluding construction, agriculture, and maritime industries) to assess workplace hazards. Thus, Section B will not incur additional costs for Virginia businesses except for businesses in construction, agriculture, and maritime industries. For businesses in those three industries, it is estimated that risk assessment, discussion with sub-contractors, notifying employees, and having a system to report positive COVID-19 cases may take approximately four to five hours of staff time to perform.

16VAC25-220-40.C

Section C is related to the return-to-work policies all businesses need to have regarding infected employees, or those suspected to be infected by the SARS-CoV-2 virus. The key component of Section C is that those infected or suspected to be infected are not allowed to return to work. While those stipulations may cause businesses to lose potential revenues, those requirements are already in effect under Virginia Department of Health requirements for isolation of infected employees and quarantine of people who were in close contact with an infected person. The only cost for a business is to develop policies and procedures related to employees. It is estimated that approximately seven to ten hours may be needed to develop such policies. The Virginia Department of Health provides guidelines for this, which could reduce the time needed to develop this plan.

16VAC25-220-40.F

Section F is associated with multiple employees occupying a vehicle for work purposes. Businesses are required to develop a procedure when maintaining social distance is not feasible while traveling for work, and need to provide face coverings for employees. It is estimated that approximately one to two staff hours may be needed to develop such policies. The face covering requirement results in no incremental cost for businesses, as similar stipulations have been in effect due to Executive Order 72; while some restrictions were also in place under previous executive orders, including Amended Executive Order 63.

16VAC25-220-40.J

Section J is related to the use of face shields when the use of face coverings would be “contrary to the employee's health or safety because of a medical condition.” The current OSHA regulation 1910.132 has required employers in general industry (excluding construction, agriculture, and maritime industries) to provide personal protective equipment (PPE) for their employees. Thus, Section J stipulations will not incur additional costs for

businesses except for businesses in construction, agriculture, and maritime industries. For businesses in those three industries, face shields can be acquired for a price ranging from \$1.00 to \$7.00 per piece. The cost of face shields is lower if purchased directly from overseas producers, but additional shipping costs will apply, which could be approximately half of the unit price.

16VAC25-220-50.B.5

Subsection B.5 regulates postmortem activities, “employers shall use autopsy suites or other similar isolation facilities when performing aerosol-generating procedures on the bodies of persons known or suspected to be infected with the SARS-CoV-2 virus at the time of their death.” For businesses involved in postmortem activities without such a facility, the cost of construction for a new unit can be substantial in the range of tens of thousand dollars. Rental is an option during the pandemic. It is estimated that rental rate of a cold storage facility with fan-filter unit, based on CDC recommendations, may range from \$2,000 to \$3,000 a month.

16VAC25-220-50.B.7

Subsection B.7 states that “to the extent feasible, employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 and COVID-19 virus transmission.” The cost of a physical barrier ranges from \$50 to \$300, depending on the size of such barriers. The cost of physical barriers is lower if purchased directly from overseas producers, but substantial additional shipping costs will apply. In addition, this requirement is optional for businesses and may not result in incremental costs if other mitigation strategies are implemented.

16VAC25-220-50.C.1

Subsection C.1 requires pre-screening or surveying of employees before the commencement of each work shift. Affected businesses will develop a certain screening method and devote staff hours to perform the screening. Guidelines from the Virginia Department of Health for screening include temperature checks and asking several screening questions. It is estimated that the cost of a digital non-contact thermometer ranges from \$20 to \$80. The cost is lower if purchased directly from overseas producers, but additional shipping costs will apply. However, please note that although it is a generally accepted practice, the standard does not specifically require that employers check the temperatures of employees. Businesses need to have dedicated staff to perform screening. It is estimated that screening of each employee may take two to five minutes.

16VAC25-220-50.C.4

Subsection C.4 requires employers to post signs “requesting patients and family members to immediately report signs and/or symptoms of respiratory illness on arrival at the healthcare facility and use disposable face coverings.” The cost of plastic signs ranges from \$6.10 to \$9.40, for workplace uses, depending on the size of signs.

16VAC25-220-50.C.5

Subsection C.5 requires employers to “offer enhanced medical monitoring of employees during COVID-19 outbreaks.” This section does not provide details regarding what constitutes the enhanced medical monitoring. It is assumed that the enhanced medical monitoring may involve checking temperatures and other vital signs of employees such as blood oxygen levels and asking various screening questions. The overall costs involve the purchasing of medical devices as well as assigning employees to perform monitoring. It is estimated that the cost of a digital non-contact thermometers ranges from \$20 to \$80, while cost of blood oxygen monitors range from \$20 to \$50 per unit. It is assumed that since monitoring is an ongoing process, dedicated employees are needed for businesses with a larger number of workers, such as hospitals. A study done by Vanderbilt University Medical Center shows that one full-time monitoring worker is needed for 800 employees.

16VAC25-220-50.C.8

Subsection C.8 requires that “employers shall provide face coverings to non-employees suspected to be infected with SARS-CoV-2 virus to contain respiratory secretions until the non-employees are able to leave the site.” The cost of face coverings, such as a standard disposable face covering, is about \$0.10 per piece, when purchased in bulk.

16VAC25-220-60.B.2

Subsection B.2 states that where feasible, “employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 and COVID-19 virus transmission.” The cost of a physical barrier ranges from \$50 to \$300, depending on the size of such barriers. The cost of physical barriers is lower if purchased directly from overseas producers, but additional shipping costs will apply. In addition, this requirement is optional for businesses and may not result in incremental costs if other mitigation strategies are implemented.

16VAC25-220-60.C

Section C concerns administrative and work practice control of employers with medium exposure risk. Subsection C.1.a requires pre-screening or surveying of employees before the commencement of each work shift. Affected businesses will develop certain screening methods and devote staff hours to perform the screening. Guidelines from Virginia Department of Health for screening includes temperature checks and asking several screening questions. It is estimated that the cost of digital non-contact thermometer ranges from \$20 to \$80. The cost is lower if purchased directly from overseas producers, but additional shipping costs will apply. However, please note that although it is a generally accepted practice, the standard does not specifically require that employers check the temperatures of employees. Business needs to have dedicated staff to perform screenings. It is estimated that screening of each employee may take two to five minutes.

Subsection C.1.b requires that “employers shall provide face coverings to non-employees suspected to be infected with SARS-CoV-2 virus to contain respiratory secretions until the non-employees are able to leave the site.” The cost of face coverings, such as standard disposable face coverings, is about \$0.10 piece, when purchased in bulk.

16VAC25-220-60.D

Section D is related to the personal protection equipment (PPE) in the workplace. It requires employers to assess hazardous risks, complete a written certification, and implement respiratory protection programs. Those requirements are similar to those in 16VAC25-220-40, Section B. The current regulations by Occupational Safety and Health Administration (OSHA) have required employers in general industry (excluding construction, agriculture, and maritime industries) to assess workplace hazards. For businesses in those three industries, it is estimated that risk assessment, discussion with subcontractors, notifying employees, and having a system to report positive COVID-19 cases may take approximately four to five staff hours.

16VAC25-220-70

16VAC25-220-70 is related to the development of a written Infectious Disease Preparedness and Response Plan. It only applies to very high and high-risk employers, as well as medium-risk employers with 11 or more employees. It is estimated that risk assessment and implementation of respiratory protection programs may take approximately 10 to 20 hours of staff time to develop. To mitigate such costs to businesses, Virginia Occupational Safety and Health Administration has provided a free online, editable WORD version of an infectious disease preparedness and response plan that can be used by employers to satisfy the requirements of 16VAC25-220-70. This template can reduce the costs for businesses significantly.

16VAC25-220-80

16VAC25-220-80 is related to providing employees with training on the hazards and characteristics of the SARS-CoV-2 and COVID-19 disease. The training requirement only applies to employers with employees exposed to very high, high, and medium exposure risk. For employers with lower exposure risk, they need to provide information sheets to employees exposed to such hazards.

Typically, developing a training material may take about 40 hours of staff time for training lasting one hour. Delivering the training and maintaining training certifications will also take some staff hours in human resources or management. To mitigate such costs to businesses, VOSH has provided the free online training materials that satisfy training materials requirements of 16VAC25-220-80. In addition, VOSH has provided a free online training certification form for employers to use. As a result, employers may not need to develop new training materials, and all the business costs are related to training delivery to each employee (about an hour) and staff time to maintain the certifications.

For businesses categorized as having lower exposure risk, preparing information sheets for employees may take a few hours. VOSH has provided a free online two-page document that satisfies the requirements. As a result, the cost for lower-risk businesses is minimal.

DOLI RESOURCES AVAILABLE TO LOCAL GOVERNMENT EMPLOYERS

The Department strongly encourages Virginia's local government employers to take advantage of free and confidential occupational safety and health onsite and virtual

consultation and training services to address COVID-19 compliance issues. More information about the VOSH Consultation Services can be found at:

<https://www.doli.virginia.gov/vosh-programs/consultation/>

In addition, free Outreach, Training, and Educational materials to assure compliance with COVID-19 requirements can be found at: <https://www.doli.virginia.gov/covid-19-outreach-education-and-training/>

DRAFT

**VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY
VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) PROGRAM**

DRAFT: JUNE 25, 2021

NOTE: FOOTNOTES ARE PROVIDED FOR EASY REFERENCE FOR SOURCE OR BACKGROUND INFORMATION, BUT ARE NOT PART OF THE REGULATORY TEXT

SUBJECT: PROPOSED AMENDMENTS TO THE FINAL PERMANENT STANDARD FOR INFECTIOUS DISEASE PREVENTION OF THE SARS-COV-2 VIRUS THAT CAUSES COVID-19

EXPIRATION OF COVID-19 STATE OF EMERGENCY ON JUNE 30, 2021

DRAFT

June 25, 2021

**DRAFT Proposed Amendments to Final Permanent Standard for Infectious Disease Prevention
of the SARS-CoV-2 Virus That Causes COVID-19**

As Adopted by the
Safety and Health Codes Board

on _____



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY (DOLI)

Effective Date: **To be Determined**

16VAC25-220

Chapter 220. Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus that Causes COVID-19

16VAC25-220-10. Purpose, scope, and applicability.

A. This standard is designed to establish requirements for employers to control, prevent, and mitigate the spread of SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19) to and among employees and employers.

B. This standard is adopted in accordance with subdivision 6 a of § 40.1-22 of the Code of Virginia and shall apply to every employer, employee, and place of employment in the Commonwealth of Virginia within the jurisdiction of the VOSH program as described in [16VAC25-60-20](#) and [16VAC25-60-30](#).

1. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

2. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

Commented [WJ(1): Administration Amendment, 6.24.2021. 16VAC25-220-10.b.1, 2 and 3.

C. This standard is designed to supplement and enhance existing VOSH laws, rules, regulations, and standards applicable directly or indirectly to SARS-CoV-2 virus or COVID-19 disease-

related hazards such as, but not limited to, those dealing with personal protective equipment, respiratory protective equipment, sanitation, access to employee exposure and medical records, occupational exposure to hazardous chemicals in laboratories, hazard communication, § 40.1-51.1 A of the Code of Virginia, etc. Should this standard conflict with an existing VOSH rule, regulation, or standard, the more stringent requirement from an occupational safety and health hazard prevention standpoint shall apply. Notwithstanding anything to the contrary in this standard, no enforcement action shall be brought against an employer or institution for failure to provide PPE required by this standard if such PPE is not readily available on commercially reasonable terms and the employer or institution makes a good faith effort to acquire or provide such PPE as is readily available on commercially reasonable terms. The Department of Labor and Industry shall consult with the Virginia Department of Health as to the ready availability of PPE on commercially reasonable terms and, in the event there are limited supplies of PPE, whether such supplies are being allocated to ~~high risk or very high risk~~ the appropriate workplaces.

Commented [WJ(2)]: 6.20.2021. "Very high and high risk" are terms no longer used in the FPS.

D. Reserved.

~~Application of this standard to a place of employment will be based on the exposure risk level presented by SARS-CoV-2 virus related and COVID-19 disease related hazards present or job tasks undertaken by employees at the place of employment as defined in this standard (i.e., very high, high, medium, and lower risk levels).~~

Commented [WJ(3)]: VDH recommended change, 6.18.2021. VDH and DOLI agree that with the advent of effective vaccines for COVID-19, it is appropriate to change the focus of the FPS from a risk based approach to one that focuses on whether employees and others in the workplace are fully vaccinated or not, and otherwise at risk workers.

~~1. It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower exposure risk for purposes of application of the requirements of this standard. It is further recognized that various required job tasks prohibit an employee from being able to observe physical distancing from other persons.~~

VDH comment of 6.18.2021: Limit the content of the FPS to those topics covered in the OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace. This guidance focuses protection on unvaccinated and otherwise at risk workers; encourages vaccination, and links to CDC guidance or OSHA guidance with up to date content.

~~2. Factors that shall be considered in determining exposure risk level include, but are not limited to:~~

~~a. The job tasks being undertaken, the work environment (e.g., indoors or outdoors), the known or suspected presence of the SARS-CoV-2 virus, the presence of a person known or suspected to be infected with the SARS-CoV-2 virus, the number of employees and other persons in relation to the size of the work area, the working distance between employees and other employees or persons, and the duration and frequency of employee exposure through contact inside of six feet with other employees or persons (e.g., including shift work exceeding eight hours per day); and~~

~~b. The type of hazards encountered, including exposure to respiratory droplets and potential exposure to the airborne transmission of SARS-CoV-2 virus; contact with contaminated surfaces or objects, such as tools, workstations, or break room tables, and shared spaces such as shared workstations, break rooms, locker rooms, and entrances and exits to the facility; shared work vehicles; and industries or places of employment where employer sponsored shared transportation is a common practice, such as ride share vans or shuttle vehicles, car pools, and public transportation, etc.~~

E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID-19 disease related hazards or job tasks addressed by this standard, ~~and provided that the CDC~~

~~recommendation provides equivalent or greater protection than provided by a provision of this standard, the employer's actions shall be considered in compliance with the related provisions of~~ this standard. An employer's actual compliance with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.

Commented [WJ(4): Administration amendment, 6.23.2021.

Commented [WJ(5): Administration amendment, 6.23.2021.

~~F. A public or private institution of higher education that has received certification from the State Council of Higher Education for Virginia that the institution's reopening plans are in compliance with guidance documents, whether mandatory or non-mandatory, developed by the Governor's Office in conjunction with the Virginia Department of Health shall be considered in compliance with this standard, provided the institution operates in compliance with its certified reopening plans and the certified reopening plans provide equivalent or greater levels of employee protection than this standard.~~

Commented [WJ(6): VDH comment of 6.18.2021: Although the IHE revised guidance is not published yet, IHEs will no longer be required to submit plans to SCHEV and therefore SCHEV will no longer issue "certification" of plans.

~~G. A public school division or private school that submits its plans to the Virginia Department of Education to move to Phase II and Phase III that are aligned with CDC guidance for reopening of schools that provide equivalent or greater levels of employee protection than a provision of this standard and that operate in compliance with the public school division's or private school's submitted plans shall be considered in compliance with this standard. An institution's actual compliance with recommendations contained in CDC guidelines or the Virginia Department of Education guidance, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.~~

Commented [WJ(7): As employers, public school divisions and private schools are covered by the CDC provision in 16VAC25-220-10.E.

~~HF.~~ Nothing in the standard shall be construed to require employers to conduct contact tracing of the SARS-CoV-2 virus or COVID-19 disease.

16VAC25-220-20. Effective dates.

A. Adoption process.

1. This standard shall take effect upon review by the Governor, and if no revisions are requested, filing with the Registrar of Regulations and publication in a newspaper of general circulation published in the City of Richmond, Virginia.
2. If the Governor's review results in one or more requested revisions to the standard, the Safety and Health Codes Board shall reconvene to approve, amend, or reject the requested revisions.
3. If the Safety and Health Codes Board approves the requested revisions to the standard as submitted, the standard shall take effect upon filing with the Registrar of Regulations and publication in a newspaper of general circulation published in the City of Richmond, Virginia.
4. Should the Governor fail to review the standard under subdivision A 1 of this section within 30 days of its approval by the Safety and Health Codes Board, the board will not need to reconvene to take further action, and the standard shall take effect upon filing with the Registrar of Regulations and publication in a newspaper of general circulation published in the City of Richmond, Virginia.

~~5. The Governor reviewed the standard under subdivision A 1 of this section, and the effective date is January 27, 2021.~~

~~BB. The requirements for this standard shall take effect on [DATE] except where otherwise noted.~~

~~BC. The requirements for 16VAC25-220-70 shall take effect on March 26, 2021 [30 days after the effective date of this standard].~~

~~CD. The training requirements in 16VAC25-220-80 shall take effect on March 26, 2021 [60 days after the effective date of this standard].~~

~~C. Within 14 days of the expiration of the Governor's COVID-19 State of Emergency and Commissioner of Health's COVID-19 Declaration of Public Emergency, the Safety and Health Codes Board shall notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for the standard.~~

16VAC25-220-30. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Administrative control" means any procedure that significantly limits daily exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks by control or manipulation of the work schedule or manner in which work is performed. The use of personal protective equipment is not considered a means of administrative control.

"Aerosol-generating procedure" means a medical procedure that generates aerosols that can be infectious and are of respirable size. For the purposes of this section, only the following medical procedures are considered aerosol-generating procedures: open suctioning of airways; sputum induction; cardiopulmonary resuscitation; endotracheal intubation and extubation; non-invasive ventilation (e.g., BiPAP, CPAP); bronchoscopy; manual ventilation; medical/surgical/postmortem procedures using oscillating bone saws; and dental procedures involving: ultrasonic scalers; high-speed dental handpieces; air/water syringes; air polishing; and air abrasion.

"Airborne infection isolation room" or "AIIR," means a dedicated negative pressure patient-care room, with special air handling capability, which is used to isolate persons with a suspected or confirmed airborne-transmissible infectious disease. AIIRs include both permanent rooms and temporary structures (e.g., a booth, tent or other enclosure designed to operate under negative pressure).

formerly a negative pressure isolation room, means a single occupancy patient care room used to isolate persons with a suspected or confirmed airborne infectious disease. Environmental factors are controlled in AIIRs to minimize the transmission of infectious agents that are usually transmitted from person to person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. AIIRs provide (i) negative pressure in the room so that air flows under the door gap into the room, (ii) an air flow rate of six to 12 air changes per hour (ACH) (six ACH for existing structures, 12 ACH for new construction or renovation), and (iii) direct exhaust of air from the room to the outside of the building or recirculation of air through a high efficiency particulate air (HEPA) filter before returning to circulation.

"ASTM" means American Society for Testing and Materials.

"Ambulatory care" means healthcare services performed on an outpatient basis, without admission to a hospital or other facility. It is provided in settings such as: offices of physicians and other health care professionals; hospital outpatient departments; ambulatory surgical centers; specialty clinics or centers (e.g., dialysis, infusion, medical imaging); and urgent care clinics. Ambulatory care does not include home healthcare settings for the purposes of this section.

"Asymptomatic" means a person who does not have symptoms.

"Building or facility owner" means the legal entity, including a lessee, that exercises control over management and recordkeeping functions relating to a building or facility in which activities covered by this standard take place.

Commented [WJ(8)]: 6.20.2021. New definition language added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(9)]: 6.20.2021. New definition language added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(10)]: 6.20.2021. New definition language added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

"CDC" means Centers for Disease Control and Prevention.

"Cleaning" means the removal of dirt and impurities, including germs, from surfaces using soap and water or other cleaning agents. Cleaning alone reduces germs on surfaces by removing contaminants and may also weaken or damage some of the virus particles, which decreases risk of infection from surfaces. Cleaning alone does not kill germs. But by removing the germs, cleaning decreases their number and therefore the risk of spreading infection.

"Community transmission,"¹ also called "community spread," means people have been infected with SARS-CoV-2 in an area, including some who are not sure how or where they became infected. The level of community transmission is classified by the CDC as:

1. "No to minimal" where there is evidence of isolated cases or limited community transmission, case investigations are underway, and no evidence of exposure in large communal settings;
2. "Moderate" where there is sustained community transmission with high likelihood or confirmed exposure within communal settings and potential for rapid increase in cases;
3. "Substantial, controlled" where there is large scale, controlled community transmission, including communal settings (e.g., schools, workplaces, etc.); or
4. "Substantial, uncontrolled" where there is large scale, uncontrolled community transmission, including communal settings (e.g., schools, workplaces, etc.).

"COVID-19" means Coronavirus Disease 2019, which is primarily a respiratory disease, caused by the SARS-CoV-2 virus.

"COVID-19 positive and confirmed COVID-19" refer to a person who has a confirmed positive test for, or who has been diagnosed by a licensed healthcare provider with, COVID-19.

"COVID-19 test" means a test for SARS-CoV-2 that is:

1. Cleared or approved by the U.S. Food and Drug Administration (FDA) or is authorized by an Emergency Use Authorization (EUA) from the FDA to diagnose current infection with the SARS-CoV-2 virus; and
2. Administered in accordance with the FDA clearance or approval or the FDA EUA as applicable.

"Disinfecting" means using chemicals approved for use against SARS-CoV-2 virus, for example EPA-registered disinfectants, or non-EPA-registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2 virus, to kill germs on surfaces. The process of disinfecting does not necessarily clean dirty surfaces or remove germs, but killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.

"Duration and frequency of employee exposure" means how long ("duration") and how often ("frequency") an employee is potentially exposed to the SARS-CoV-2 virus or COVID-19

¹ March 23, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/community/community-mitigation.html>

Commented [WJ(11)]: 6.20.2021. New definition language added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(12)]: Community transmission levels can be tracked on a county by county basis at:
<https://covid.cdc.gov/covid-data-tracker/#county-view>

Commented [WJ(13)]: VDH recommended change, 6.18.2021.

VDH comment of 6.18.2021: The specific definitions of levels of community transmission are never used within this document. The phrase itself is only used once on page 30. Therefore, we think the specifics (e.g. no to minimal, etc.) are unnecessary and also CDC has adopted (in some places but not all) new, quantitative indicators and thresholds. Recommend striking everything after the words "where they became infected".

Commented [WJ(14)]: 6.20.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(15)]: 6.20.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

disease. Generally, the greater the frequency or length of time of the exposure, the greater the probability is for potential infection to occur. Frequency of exposure is generally more significant for acute acting agents or situations, while duration of exposure is generally more significant for chronic acting agents or situations. An example of an acute SARS-CoV-2 virus or COVID-19 disease situation could involve a customer, patient, or other person who is not fully vaccinated not wearing a face covering or personal protective equipment or coughing or sneezing directly into the face of an employee. An example of a chronic situation could involve a job task that requires an employee who is not fully vaccinated to interact either for an extended period of time inside six feet with a smaller static group of other employees or persons or for an extended period of time inside six feet with a larger group of other employees or persons in succession but for periods of shorter duration.

"Economic feasibility" means the employer is financially able to undertake the measures necessary to comply with one or more requirements in this standard. The cost of corrective measures to be taken will not usually be considered as a factor in determining whether a violation of this standard has occurred. If an employer's level of compliance lags significantly behind that of its industry, an employer's claim of economic infeasibility will not support a VOSH decision to decline to take enforcement action.

"Elastomeric respirator" means a tight-fitting respirator with a facepiece that is made of synthetic or rubber material that permits it to be disinfected, cleaned, and reused according to manufacturer's instructions. It is equipped with a replaceable cartridge(s), canister(s), or filter(s).

"Elimination" means a method of exposure control that removes the employee completely from exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks.

"Employee" means an employee of an employer who is employed in a business of his employer. Reference to the term "employee" in this standard also includes, but is not limited to, temporary employees and other joint employment relationships, persons in supervisory or management positions with the employer, etc., in accordance with Virginia occupational safety and health laws, standards, regulations, and court rulings.

"Engineering control" means the use of substitution, isolation, ventilation, and equipment modification to reduce exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks.

~~"Exposure risk level" means the level of possibility that an employee could be exposed to the hazards associated with SARS-CoV-2 virus and the COVID-19 disease. The exposure risk level assessment should address all risks and all modes of transmission, including airborne transmission, as well as transmission by asymptomatic and presymptomatic individuals. Risk levels should be based on the risk factors present that increase risk exposure to COVID-19 and are present during the course of employment regardless of location. Hazards and job tasks have been divided into four risk exposure levels: very high, high, medium, and lower:~~

~~"Very high" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure to known or suspected sources of the SARS-CoV-2 virus (e.g.,~~

Commented [WJ(16)]: 6.20.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b). <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(17)]: VDH recommended change, 6.18.2021. VDH and DOLI agree that with the advent of effective vaccines for COVID-19, it is appropriate to change the focus of the FPS from a risk based approach to one that focuses on whether employees and others in the workplace are fully vaccinated or not, and otherwise at risk workers.

VDH comment of 6.18.2021: Limit the content of the FPS to those topics covered in the [OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace](#). This guidance focuses protection on unvaccinated and otherwise at risk workers; encourages vaccination, and links to CDC guidance or OSHA guidance with up to date content.

laboratory samples) or persons known or suspected to be infected with the SARS-CoV-2 virus, including, but not limited to, during specific medical, postmortem, or laboratory procedures:

1. Aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) performed on a patient or person known or suspected to be infected with the SARS-CoV-2 virus;
2. Collecting or handling specimens from a patient or person known or suspected to be infected with the SARS-CoV-2 virus (e.g., manipulating cultures from patients known or suspected to be infected with the SARS-CoV-2 virus); and
3. Performing an autopsy that involves aerosol-generating procedures, or collecting or handling specimens from on the body of a person known or suspected to be infected with the SARS-CoV-2 virus at the time of their death.

"High" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARS-CoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk, including, but not limited to:

1. Health care (physical and mental health) delivery and support services provided to a patient known or suspected to be infected with the SARS-CoV-2 virus, including field hospitals (e.g., doctors, nurses, cleaners, and other hospital staff who must enter patient rooms or areas);
2. Health care (physical and mental) delivery, care, and support services, wellness services, non-medical support services, physical assistance, etc., provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus involving skilled nursing services, outpatient medical services, clinical services, drug treatment programs, medical outreach services, mental health services, home health care, nursing home care, assisted living care, memory care support and services, hospice care, rehabilitation services, primary and specialty medical care, dental care, COVID-19 testing services, blood donation services, and chiropractic services;
3. First responder services provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus;
4. Medical transport services (loading, transporting, unloading, etc.) provided to patients known or suspected to be infected with the SARS-CoV-2 virus (e.g., ground or air emergency transport, staff, operators, drivers, pilots, etc.);
5. Mortuary services involved in preparing (e.g., for burial or cremation) the bodies of persons who are known or suspected to be infected with the SARS-CoV-2 virus at the time of their death; and
6. Correctional facilities, jails, detention centers, and juvenile detention centers.

"Medium" exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected

with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus. Medium exposure risk hazards or job tasks may include, but are not limited to, operations and services in:

1. Poultry, meat, and seafood processing; agricultural and hand labor; commercial transportation of passengers by air, land, and water; on-campus educational settings in schools, colleges, and universities; daycare and afterschool settings; restaurants and bars; grocery stores, convenience stores, and food banks; drug stores and pharmacies; manufacturing settings; indoor and outdoor construction settings; work performed in customer premises, such as homes or businesses; retail stores; call centers; package processing settings; veterinary settings; personal care, personal grooming, salon, and spa settings; venues for sports, entertainment, movies, theaters, and other forms of mass gatherings; homeless shelters; fitness, gym, and exercise facilities; airports, and train and bus stations; etc.; and

2. Situations not involving exposure to known or suspected sources of SARS-CoV-2: hospitals, other health care (physical and mental) delivery and support services in a non-hospital setting, wellness services, physical assistance, etc.; skilled nursing facilities; outpatient medical facilities; clinics, drug treatment programs, and medical outreach services; non-medical support services; mental health facilities; home health care, nursing homes, assisted living facilities, memory care facilities, and hospice care; rehabilitation centers, doctors' offices, dentists' offices, and chiropractors' offices; first responders services provided by police, fire, paramedic and emergency medical services providers, medical transport; contact tracers; correctional facilities, jails, detentions centers, and juvenile detention centers, etc.

"Lower" exposure risk hazards or job tasks are those not otherwise classified as very high, high, or medium exposure risk that do not require contact inside six feet with persons known to be, or suspected of being, or who may be infected with SARS-CoV-2. Employees in this category have minimal occupational contact with other employees, other persons, or the general public, such as in an office building setting, or are able to achieve minimal occupational contact with others through the implementation of engineering, administrative and work practice controls, such as, but not limited to:

1. Installation of floor to ceiling physical barriers constructed of impermeable material and not subject to unintentional displacement (e.g., such as clear plastic walls at convenience stores behind which only one employee is working at any one time);

2. Telecommuting;

3. Staggered work shifts that allow employees to maintain physical distancing from other employees, other persons, and the general public;

4. Delivering services remotely by phone, audio, video, mail, package delivery, curbside pickup or delivery, etc., that allows employees to maintain physical distancing from other employees, other persons, and the general public; and

5. Mandatory physical distancing of employees from other employees, other persons, and the general public

"Face covering" means an item made of two or more layers of washable, breathable fabric that fits snugly against the sides of the face without any gaps, completely covering the nose and mouth and fitting securely under the chin. Neck gaiters made of two or more layers of washable, breathable fabric, or folded to make two such layers are considered acceptable face coverings. Non-medical disposable masks for single use that otherwise meet the definition of "face covering" in 16VAC25-220, with the exception that they are not washable, are permissible to use as face coverings.² Face coverings shall not have exhalation valves or vents, which allow virus particles to escape, and shall not be made of material that makes it hard to breathe, such as vinyl. A face covering is not a surgical ~~/medical procedure~~ mask or respirator. A face covering is not subject to testing and approval by a state or federal government agency, so it is not considered a form of personal protective equipment or respiratory protection equipment under VOSH laws, rules, regulations, and standards. Notwithstanding any other provisions in this definition, face coverings approved as having met ASTM standards for face coverings effective against the SARS-CoV-2 virus shall be considered to be in compliance with this standard.³

"Facemask" means a surgical, medical procedure, dental, or isolation mask that is FDA-cleared, authorized by an FDA Emergency Use Authorization (EUA), or offered or distributed as described in an FDA enforcement policy. Facemasks may also be referred to as "medical procedure masks."

"Face shield" means a device, typically made of clear plastic, that:

1. is certified to ANSI/ISEA Z87.1, or
2. covers the wearer's eyes, nose, and mouth to protect from splashes, sprays, and spatter of body fluids, wraps around the sides of the wearer's face (i.e., temple-to-temple), and extends below the wearer's chin.

~~form of personal protective equipment made of transparent, impermeable materials primarily used for eye protection from droplets or splashes for the person wearing it. A face shield is not a substitute for a face covering, surgical/medical procedure mask, or respirator.~~

"Feasible" as used in this standard includes both technical and economic feasibility.

"Filtering facepiece respirator" means a negative pressure air purifying particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. Filtering facepiece respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH).

"Fully vaccinated" means a person is considered fully vaccinated for COVID-19 >2 weeks after they have received the second dose in a 2-dose series, or >2 weeks after they have received a single-dose vaccine, provided such vaccine has been FDA-approved, or authorized by an FDA Emergency Use Authorization (EUA),⁴ or authorized for emergency use by the World Health Organization (WHO).

² DOLI §40, FAQ 36; <https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

³ <https://ehsdailyadvisor.blr.com/2021/02/nonregulatory-face-mask-standard-approved-by-astm/>, and <https://www.astm.org/COVID-19/>

⁴ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>

Commented [WJ(18)]: 6.19.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b). <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(19)]: VDH recommended change, 6.18.2021: We may not want to include the manufacturer names, unless that is required, because additional products may come to market.

Commented [WJ(20)]: §40, FAQ 47

"Hand sanitizer" means an alcohol-based hand rub containing at least 60% alcohol, unless otherwise provided for in this standard.

"HIPAA" means Health Insurance Portability and Accountability Act.

~~"Known-Confirmed COVID-19 to be infected with the SARS-CoV-2 virus"~~ means a person, whether symptomatic or asymptomatic, who has tested positive for SARS-CoV-2, and the employer knew or with reasonable diligence should have known that the person has tested positive for SARS-CoV-2.

Commented [WJ(21)]: Language change from "known" to "confirmed" based on language used in federal OSHA COVID-19 ETS. 6.19.2021.

NOTE: THIS DEFINITION IS NOW OUT OF ALPHABETICAL ORDER AND WILL BE MOVED IN FINAL VERSION OF STANDARD.

"Healthcare services" mean services that are provided to individuals by professional healthcare practitioners (e.g., doctors, nurses, emergency medical personnel, oral health professionals) for the purpose of promoting, maintaining, monitoring, or restoring health. Healthcare services are delivered through various means including: hospitalization, longterm care, ambulatory care, home health and hospice care, emergency medical response, and patient transport. For the purposes of this section, healthcare services include autopsies.

Commented [WJ(22)]: 6.19.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b). <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

"Healthcare support services" mean services that facilitate the provision of healthcare services. Healthcare support services include patient intake/admission, patient food services, equipment and facility maintenance, housekeeping services, healthcare laundry services, medical waste handling services, and medical equipment cleaning/reprocessing services.

Commented [WJ(23)]: 6.19.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b). <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

~~"May be infected with SARS-CoV-2 virus" means any person not currently known or suspected to be infected with SARS-CoV-2 virus.~~

~~"Minimal occupational contact" means no or very limited, brief, and infrequent contact with employees or other persons at the place of employment. Examples include, but are not limited to, remote work (i.e., those working from home); employees with no more than brief contact with others inside six feet (e.g., passing another person in a hallway that does not allow physical distancing of six feet); health care employees providing only telemedicine services; a long distance truck driver.~~

Commented [WJ(24)]: VDH recommended change, 6.18.2021. VDH and DOLI agree that with the advent of effective vaccines for COVID-19, it is appropriate to change the focus of the FPS from a risk based approach to one that focuses on whether employees and others in the workplace are fully vaccinated or not, and otherwise at risk workers.

"Occupational exposure" means the state of being actually or potentially exposed to contact with SARS-CoV-2 virus or COVID-19 disease related hazards at the work location or while engaged in work activities at another location.

VDH comment of 6.18.2021: Limit the content of the FPS to those topics covered in the [OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace](#). This guidance focuses protection on unvaccinated and otherwise at risk workers; encourages vaccination, and links to CDC guidance or OSHA guidance with up to date content.

"Otherwise at-risk" means a person whose ability to have a full immune response to vaccination may have been affected by certain conditions, such as a prior transplant, as well as prolonged use of corticosteroids or other immune-weakening medications.⁵

"Personal protective equipment" means equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, biological, or other

⁵ <https://www.osha.gov/coronavirus/safework#appendix>
<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/underlying-conditions.html>
[https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html/#/text=immunocompromised%20state%20\(weakened%20immune%20system,have%20a%20weakened%20immune%20system](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html/#/text=immunocompromised%20state%20(weakened%20immune%20system,have%20a%20weakened%20immune%20system)

workplace hazards. Personal protective equipment for actual or potential exposure to SARS-CoV-2 or COVID-19 exposure may include, but is not limited to, gloves, safety glasses, goggles, shoes, earplugs or muffs, hard hats, respirators, surgical ~~/medical procedure~~ masks, facemask, impermeable gowns or coveralls, face shields, vests, and full body suits.

Commented [WJ(25)]: VDH recommended change, 6.18.2021.

VDH comment of 6.18.2021: The reference to "shoes, earplugs or muffs, hard hats" doesn't make sense in the context of COVID-19.

"Physical distancing" also called "social distancing" means a person keeping space between himself and other persons while conducting work-related activities inside and outside of the physical establishment by staying at least six feet from other persons. Physical separation of an employee from other employees or persons by a permanent, solid floor to ceiling wall (e.g., an office setting) constitutes one form of physical distancing from an employee or other person stationed on the other side of the wall, provided that six feet of travel distance is maintained from others around the edges or sides of the wall as well.

"Powered air-purifying respirator (PAPR)" means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Commented [WJ(26)]: 6.20.2021. New definition language added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

~~"Respirator" means a type of personal protective equipment (PPE) that is certified by NIOSH under 42 CFR Part 84 or is authorized under an Emergency Use Authorization (EUA) by the FDA. Respirators protect against airborne hazards by removing specific air contaminants from the ambient (surrounding) air or by supplying breathable air from a safe source. Common types of respirators include filtering facepiece respirators, elastomeric respirators, and PAPRs. Face coverings, facemasks, and face shields are not respirators. protective device that covers the nose and mouth or the entire face or head to guard the wearer against hazardous atmospheres. Respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH). Respirators may be (i) tight fitting, which means either a half mask that covers the mouth and nose or a full face piece that covers the face from the hairline to below the chin or (ii) loose fitting, such as hoods or helmets that cover the head completely.~~

Commented [WJ(27)]: 6.20.2021. Replacement definition language added based on OSHA COVID-19 ETS language in 1910.502(b).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

~~There are two major classes of respirators:~~

- ~~1. Air purifying, which remove contaminants from the air; and~~
- ~~2. Atmosphere supplying, which provide clean, breathable air from an uncontaminated source. As a general rule, atmosphere supplying respirators are used for more hazardous exposures.~~

"Respirator user" means an employee who in the scope of their current job may be assigned to tasks that may require the use of a respirator in accordance with this standard or required by other provisions in the VOSH and OSHA standards.

"SARS-CoV-2" means the novel virus that causes coronavirus disease 2019, or COVID-19. Coronaviruses are named for the crown-like spikes on their surfaces.

"Severely immunocompromised" means a seriously weakened immune system that lowers the body's ability to fight infection and may increase the risk of getting severely sick from SARS-CoV-2, from being on chemotherapy for cancer, being within one year out from receiving a hematopoietic stem cell or solid organ transplant, untreated HIV infection with CD4 T lymphocyte count less than 200, combined primary immunodeficiency disorder, and receipt of prednisone greater than 20mg per day for more than 14 days. The degree of immunocompromise

is determined by the treating provider, and preventive actions are tailored to each individual and situation.⁶

"Signs of COVID-19" are medical conditions that can be objectively observed and may include fever, cough, shortness of breath or trouble breathing, ~~or shortness of breath, cough,~~ vomiting, new confusion, inability to wake or stay awake, ~~bluish lips or face,~~ pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone, etc.⁷

~~"Surgical/medical procedure mask" means a mask to be worn over the wearer's nose and mouth that is fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids, and prevents the wearer from exposing others in the same fashion. A surgical/medical procedure mask protects others from the wearer's respiratory emissions. A surgical/medical procedure mask has a looser fitting face seal than a tight fitting respirator. A surgical/medical procedure mask does not provide the wearer with a reliable level of protection from inhaling smaller airborne particles. A surgical/medical procedure mask is considered a form of personal protective equipment, but is not considered respiratory protection equipment under VOSH laws, rules, regulations, and standards. Testing and approval is cleared by the U.S. Food and Drug Administration (FDA).~~

"Surgical mask" means a mask that covers the user's nose and mouth and provides a physical barrier to fluids and particulate materials. The mask meets certain fluid barrier protection standards and Class I or Class II flammability tests. Surgical masks are generally regulated by FDA as Class II devices under 21 CFR 878.4040 – Surgical apparel.

~~"Suspected to COVID-19 be infected with SARS-CoV-2 virus" means a person who has been told by a licensed healthcare provider that they are suspected to have COVID-19; or is experiencing recent loss of taste and/or smell with no other explanation; or is experiencing both fever ($\geq 100.4^{\circ}$ F) and new unexplained cough associated with shortness of breath; or has symptoms consistent with the clinical criteria in the CDC national case definition and no other explanation for symptoms exist⁸ signs or symptoms of COVID-19 but has not tested positive for SARS-CoV-2, and no alternative diagnosis has been made (e.g., tested positive for influenza).~~

"Symptomatic" means a person is experiencing signs or symptoms attributed to COVID-19. A person may become symptomatic two to 14 days after exposure to the SARS-CoV-2 virus.

"Symptoms of COVID-19" are medical conditions that are subjective to the person and not observable to others and may include chills, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea, ~~congestion or runny nose,~~ or diarrhea, etc.⁹

"Technical feasibility" means the existence of technical know-how as to materials and methods available or adaptable to specific circumstances that can be applied to one or more requirements in this standard with a reasonable possibility that employee exposure to the SARS-CoV-2 virus

Commented [WJ(28)]: Federal OSHA COVID-19 ETS definition (1910.502(b)) of "facemask" added above replaces FPS definition for "surgical/medical procedure mask". Federal OSHA COVID-19 ETS definition (1910.502(b)) for "surgical mask" also added. 6.20.2021. <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

Commented [WJ(29)]: 6.19.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(c)(1)(2)(ii)-(iv) and recommended edits by VDH, 6.23.2021. <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

OSHA uses the terms "suspected COVID-19" and "confirmed COVID-19" extensively in the OSHA COVID-19 ETS, in the same manner that the FPS has used the definitions "Suspected to be..." and "Known to be infected with the SARS-CoV-2 virus."

⁶ February 16, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html>

⁷ <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

⁸ <https://ndc.services.cdc.gov/case-definitions/coronavirus-disease-2019-2020-08-05/>

⁹ <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

and COVID-19 disease hazards will be reduced. If an employer's level of compliance lags significantly behind that of the employer's industry, allegations of technical infeasibility will not be accepted.

"USBC" means Virginia Uniform Statewide Building Code.

"Vaccine" means a biological product authorized or licensed by the FDA to prevent or provide protection against COVID-19, whether the substance is administered through a single dose or a series of doses.

"VDH" means Virginia Department of Health.

"VOSH" means Virginia Occupational Safety and Health.

"Work practice control" means a type of administrative control by which the employer modifies the manner in which the employee performs assigned work. Such modification may result in a reduction of exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks through such methods as changing work habits, improving sanitation and hygiene practices, or making other changes in the way the employee performs the job.

Commented [WJ(30)]: 6.19.2021. New definition added based on OSHA COVID-19 ETS language in 1910.502(b). <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

DRAFT

16VAC25-220-40. Mandatory requirements for all employers.

A. ~~Employers shall have a policy in place to ensure compliance with the requirements in this section to protect employees from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease. Such policy shall have a method to receive anonymous complaints of violations. An employer that enforces its policy in good faith and resolves filed complaints shall be considered in compliance with this subsection. Employers shall ensure compliance with the requirements in this section to protect employees in all exposure risk levels from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease.~~

Commented [WJ(31): Administration amendment, 6.23.2021. With revisions on 6.24.2021.

Commented [WJ(32): 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

B. Exposure assessment and determination, notification requirements, and employee access to exposure and medical records.

1. Employers shall assess their workplace for hazards and job tasks that can potentially expose employees to the SARS-CoV-2 virus or COVID-19 disease. ~~Employers shall classify each job task according to the hazards employees are potentially exposed to and ensure compliance with the applicable sections of this standard for very high, high, medium, or lower risk levels of exposure. Tasks that are similar in nature and expose employees exposed to the same hazard may be grouped for classification purposes.~~

Commented [WJ(33): 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

~~Employers may rely on an employee's representation of being fully vaccinated, as defined herein, without requiring proof of vaccination; however, nothing in this standard shall be construed to preclude an employer from requiring proof that an employee is fully vaccinated.~~

Commented [WJ(34): VDH recommended change, 6.18.2021.

Commented [WJ(35): Administration amendment 6.25.2021.

2. Employers shall inform employees of the methods of and encourage employees to self-monitor for signs and symptoms of COVID-19 if employees suspect possible exposure ~~or are experiencing signs or symptoms of illness.~~

Commented [WJ(36): VDH recommended change, 6.18.2021.

3. Serological testing, also known as antibody testing, is a test to determine if persons have been infected with SARS-CoV-2 virus. It has not been determined that persons who test positive for the presence of antibodies by serological testing are immune from infection.¹⁰

a. Serologic test results shall not be used to make decisions about returning employees to work who were previously classified as ~~known or suspected-suspected or confirmed to COVID-19 be infected with the SARS-CoV-2 virus.~~

b. Serologic test results shall not be used to make decisions concerning employees who were previously classified as ~~known or suspected or confirmed to COVID-19 be infected with the SARS-CoV-2 virus~~ about grouping, residing in, or being admitted to congregate settings, such as schools, dormitories, etc.

4. Employers shall develop and implement policies and procedures for employees to report when they are experiencing signs or symptoms consistent with COVID-19, and no alternative

¹⁰ March 17, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antibody-tests-guidelines.html>

diagnosis has been made (e.g., tested positive for influenza). Such employees shall be designated by the employer as "~~suspected to COVID-19 be infected with SARS-CoV-2 virus.~~"

5. Employers shall not permit suspected or confirmed COVID-19 employees or other persons ~~known or suspected to be infected with SARS-CoV-2 virus~~ to report to or remain at the work site or engage in work at a customer or client location until cleared for return to work (see subsection C of this section).

Nothing in this standard shall prohibit an employer from permitting a suspected or confirmed COVID-19 employee ~~known or suspected to be infected with SARS-CoV-2 virus~~ from engaging in teleworking or other form of work isolation that would not result in potentially exposing other employees to the SARS-CoV-2 virus.

6. Employers shall discuss with subcontractors and companies that provide contract or temporary employees the importance and requirement to exclude from work employees or other persons (e.g., volunteers) who are ~~known or suspected~~ or confirmed COVID-19 to be infected with the SARS-CoV-2 virus. Subcontractor, contract, or temporary employees ~~who are known or suspected~~ or confirmed COVID-19 to be infected with the SARS-CoV-2 virus shall not report to or be allowed to remain at the work site until cleared for return to work. Subcontractors shall not allow their suspected or confirmed COVID-19 employees ~~known or suspected to be infected with the SARS-CoV-2 virus~~ to report to or be allowed to remain at work or on a job site until cleared for return to work.

7. To the extent permitted by law, including HIPAA, employers shall establish a system to receive reports of positive ~~SARS-CoV-2~~ COVID-19 tests by employees, subcontractors, contract employees, and temporary employees (excluding patients hospitalized on the basis of being ~~known or suspected~~ or confirmed COVID-19 to be infected with SARS-CoV-2 virus) present at the place of employment within two days prior to symptom onset (or positive test if the employee is asymptomatic) until 10 days after onset (or positive test). Employers shall notify:

a. The employer's own employees who may have been exposed, within 24 hours of discovery of the employees' possible exposure, while keeping confidential the identity of the confirmed COVID-19 person ~~known to be infected with SARS-CoV-2 virus~~ in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;

b. In the same manner as subdivision 7 a of this subsection, other employers whose employees were present at the work site during the same time period;

c. In the same manner as subdivision 7 a of this subsection, the building or facility owner. The building or facility owner will require all employer tenants to notify the owner of the occurrence of a ~~SARS-CoV-2~~ COVID-19 positive test for any employees or residents in the building. This notification will allow the owner to take the necessary steps to sanitize the common areas of the building. In addition, the building or facility owner will notify all employer tenants in the building that one or more cases have been discovered and the floor or work area where the case was located. The identity of the individual will be kept

confidential in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;

d. The Virginia Department of Health ~~during a declaration of an emergency by the Governor pursuant to § 44-146.17 of the Code of Virginia~~. Every employer as defined by § 40.1-2 of the Code of Virginia shall report to the Virginia Department of Health (VDH) when the work site has had two or more confirmed cases of COVID-19 of its own employees present at the place of employment within a 14-day period testing positive for ~~SARS-CoV-2/COVID-19 virus~~ during that 14-day time period. Employers shall make such a report in a manner specified by VDH, including name, date of birth, and contact information of each case, within 24 hours of becoming aware of such cases. Employers shall continue to report all cases until the local health department has closed the outbreak ~~investigation~~. After the outbreak ~~investigation~~ is closed, subsequent identification of two or more confirmed cases of COVID-19 during a declared emergency shall be reported, as required by this subdivision B 7 d. The following employers are exempt from this provision because of separate outbreak reporting requirements contained in [12VAC5-90-90](#): any residential or day program, service, or facility licensed or operated by any agency of the Commonwealth, school, child care center, or summer camp; and

Commented [WJ(37)]: VDH recommended change, 6.18.2021.

Commented [WJ(38)]: VDH recommended change, 6.18.2021.

Commented [WJ(39)]: VDH recommend change 6.18.2021.

e. The Virginia Department of Labor and Industry within 24 hours of the discovery of ~~three~~ two or more of its own employees present at the place of employment within a 14-day period testing positive for ~~SARS-CoV-2 virus~~ COVID-19 during that 14-day time period. A reported positive ~~SARS-CoV-2/COVID-19~~ test does not need to be reported more than once and will not be used for the purpose of identifying more than one grouping of three or more cases, or more than one 14-day period.

Commented [WJ(40)]: VDH requested that the reporting requirement to VOSH be changed from three to two positive cases for consistency purposes.

8. Employers shall ensure employee access to the employee's own SARS-CoV-2 virus and COVID-19 disease related exposure and medical records in accordance with the standard applicable to its industry. Employers in the agriculture, public sector marine terminal, and public sector longshoring industries shall ensure employees' access to the employees' own SARS-CoV-2 virus and COVID-19 disease related exposure and medical records in accordance with [16VAC25-90-1910.1020](#), Access to Employee Exposure and Medical Records.

C. Return to work. Employers shall develop and implement policies and procedures for ~~employees known or suspected or confirmed COVID-19 employees to be infected with the SARS-CoV-2 virus~~ to return to work.

~~1. Symptomatic employees known or suspected to be infected with the SARS-CoV-2 virus are excluded from returning to work until all three of the following conditions have been met:~~

~~a. The employee is fever free (below 100.0° F) for at least 24 hours, without the use of fever reducing medications;~~

~~b. Respiratory symptoms, such as cough and shortness of breath have improved; and~~

~~c. At least 10 days have passed since symptoms first appeared.~~

~~However, a limited number of employees with severe illness may produce replication-competent virus beyond 10 days that may warrant extending duration of isolation for up to 20 days after symptom onset. Employees who are severely immunocompromised may require testing to determine when they can return to work, and the employer shall consider consultation with infection control experts. VOSH will consult with VDH when identifying severe employee illnesses that may warrant extended duration of isolation or severely immunocompromised employees required to undergo testing.~~

~~2. Employees known to be infected with SARS-CoV-2 who never develop signs or symptoms are excluded from returning to work until 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.¹¹~~

1. If the employer knows an employee is COVID-19 positive, then the employer must immediately remove that employee **from the worksite** and keep the employee removed until they meet the return to work criteria in 16VAC25-220-40 C 3.

2. If the employer knows an employee is suspected COVID-19, then the employer must immediately remove that employee **from the worksite** and either:

a. Keep the employee removed until they meet the return to work criteria in 16VAC25-220-40 C 3; or

b. Keep the employee removed and provide a COVID-19 polymerase chain reaction (PCR) test at no cost to the employee.

(1) If the test results are negative, the employee may return to work immediately.

(2) If the test results are positive, the employer must comply with 16VAC25-220-40 C 1.

(3) If the employee refuses to take the test, the employer must continue to keep the employee removed from the workplace consistent with 16VAC25-220-40 C 1. Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons.

3. The employer must make decisions regarding an employee's return to work after a COVID-19-related workplace removal in accordance with guidance from a licensed healthcare provider, **a VDH public health professional**, or CDC's "Isolation Guidance"¹² (hereby incorporated by reference); and CDC's "Return to Work Healthcare Guidance"¹³ (hereby incorporated by reference).

34. For purposes of this section, COVID-19 testing is considered a "medical examination" under § 40.1-28 of the Code of Virginia. Employers shall not require employees to pay for the

Commented [WJ(41): 6.20.2021. Language added with non-substantive modifications for consistency with OSHA COVID-19 ETS return to work provisions. 6.24.2021. Amended language added by VDH (in bold)

NOTE: OSHA's return to work provisions also address issues of employee quarantine in "close contact" situations. The FPS does not address quarantine issues as that falls within the purview of VDH.

See DOLI FAQs §40, FAQs 24-29 on isolation and quarantine issues.

<https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

¹¹ February 18, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/isolation.html>

¹² <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/isolation.html>

¹³ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>

cost of COVID-19 testing for return to work determinations. If an employer's health insurance covers the entire cost of COVID-19 testing, use of the insurance coverage would not be considered a violation of this subdivision C 3.

D. Unless otherwise provided in this standard, employers shall establish and implement policies and procedures that ensure employees that are not fully vaccinated and otherwise at-risk employees observe physical distancing while on the job and during paid breaks on the employer's property, including policies and procedures that:

1. Use verbal announcements, signage, or visual cues to promote physical distancing.
2. Decrease worksite density by limiting non-employee access to the place of employment or restrict access to only certain workplace areas to reduce the risk of exposure. An employer's compliance with occupancy limits contained in any applicable Virginia executive order or order of public health emergency will constitute compliance with the requirements in this subsection.

3. Provide that such requirements do not apply to fully vaccinated employees.

E. Access to common areas, breakrooms, or lunchrooms shall be closed or controlled. This subsection does not apply to fully vaccinated employees.

If the nature of an employer's work or the work area does not allow employees to consume meals in the employee's workspace while observing physical distancing, an employer may designate, reconfigure, and alternate usage of spaces where employees congregate, including lunch and break rooms, locker rooms, time clocks, etc., with controlled access, provided the following conditions are met:

1. At the entrance of the designated common area or room, employers shall clearly post the policy limiting the occupancy of the space and requirements for physical distancing, hand washing and hand sanitizing, and cleaning ~~and disinfecting~~ of shared surfaces for employees who are not fully vaccinated.
2. Employers shall limit occupancy of the designated common area or room so that occupants who are not fully vaccinated can maintain physical distancing from each other. Employers shall enforce the occupancy limit.
3. ~~Employees shall be required to clean and disinfect the immediate area in which they were located prior to leaving, or employers may provide for cleaning and disinfecting of the common area or room at regular intervals throughout the day and between shifts of employees using the same common area or room (i.e., where an employee or groups of employees have a designated lunch period and the common area or room can be cleaned in between occupancies). When no persons known or suspected or confirmed COVID-19 to be infected with the SARS-CoV-2 virus persons are known to have been in a space, the employer shall clean the common area, breakroom, or lunchroom once per shift.~~¹⁴

¹⁴ <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

4. Handwashing facilities, and hand sanitizer where feasible, are available to employees. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable and use and storage in hot environments can result in a hazard.

F. When multiple employees are occupying a vehicle or other form of transportation with one or more employees or other persons for work purposes, employers shall use the hierarchy of hazard controls to mitigate the hazards associated with SARS-CoV-2 and COVID-19 to prevent employee exposures in the following order (NOTE: †This subsection does not apply to fully vaccinated employees):

1. Eliminate the need for employees to share work vehicles or other transportation and arrange for alternative means for additional employees to travel to work sites.

2. Provide access to fresh air ventilation (e.g., windows). Do not recirculate cabin air.

3. When physical distancing cannot be maintained, establish procedures to maximize separation between employees as well as other persons during travel (e.g., setting occupancy limits, sitting in alternate seats, etc.).

4. When an employees must share work vehicles or other transportation with one or more employees or other persons because no other alternatives are available, employees shall be provided with respiratory protection, such as an N95 filtering face piece respirator.

5. The employer shall ensure compliance with respiratory protection and personal protective equipment standards applicable to the employer's industry (e.g., when one or more employees is accompanying a suspected or confirmed COVID-19 person known or to be infected with the SARS-CoV-2 virus in an ambulance).

56. Until adequate supplies of respiratory protection and/or personal protective equipment become readily available for non-medical and non-first responder employers and employees, employers shall provide and employees shall wear face coverings while occupying a work vehicle or other transportation with other employees or persons.

Notwithstanding anything to the contrary in this standard, the Secretary of Labor Commerce and Trade may exercise discretion in the enforcement of an employer's failure to provide PPE required by this standard, if the employer demonstrates that the employer:

- a. Is exercising due diligence to come into compliance with such requirement; and
- b. Is implementing alternative methods and measures to protect employees that are satisfactory to the Secretary of Commerce and Trade Labor after consultation with the eCommissioner of Labor and Industry and the Secretary of Health and Human Services.

7. For commercial motor vehicles or trucks, if the driver is the only person in the vehicle or truck, or the vehicle or truck is operated by a team who all live in the same household and are the only persons in the vehicle, an employer whose drivers complied with the above-

Commented [WJ(42): Effective July 1, 2021, the Department of Labor and Industry will be moved from the Secretary of Commerce and Trade to the Secretary of Labor. Va. Code § 2.2-214.2

referenced language would be considered to be in compliance with 16VAC25-220-40.F.1 through -40.F.5.¹⁵

G. Employers shall provide and require employees that are not fully vaccinated, and otherwise at-risk employees (because of a prior transplant or other medical condition), with to wear face coverings or surgical masks while indoors, unless their work task requires a respirator or other PPE. Such workers/employees shall wear a face covering or surgical mask that covers the nose and mouth to contain the wearer's respiratory droplets and help protect others and potentially themselves. Where the nature of an employee's work or the work area does not allow the employee to observe physical distancing requirements, employers shall still ensure compliance with respiratory protection and personal protective equipment standards applicable to its industry. This subsection does not apply to fully vaccinated employees.

1. The following are exceptions to the requirements for face coverings or surgical masks for employees that are not fully vaccinated:

a. When an employee is alone in a room.

b. While an employee is eating and drinking at the workplace, provided each employee is at least 6 feet away from any other person, or separated from other people by a physical barrier.

c. When employees are wearing respiratory protection in accordance with 1910.134 or this standard.

d. When it is important to see a person's mouth (e.g., communicating with an individual who is deaf or hard of hearing) and the conditions do not permit a facemask that is constructed of clear plastic (or includes a clear plastic window). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it.

e. When employees cannot wear facemasks due to a medical necessity, medical condition, or disability as defined in the Americans with Disabilities Act (42 USC 12101 et seq.), or due to a religious belief. Exceptions must be provided for a narrow subset of persons with a disability who cannot wear a facemask or cannot safely wear a facemask, because of the disability, as defined in the Americans with Disabilities Act (42 USC 12101 et seq.), including a person who cannot independently remove the facemask. The remaining portion of the subset who cannot wear a facemask may be exempted on a case-by-case basis as required by the Americans with Disabilities Act and other applicable laws. In all such situations, the employer must ensure that any such employee wears a face shield for the protection of the employee, if their condition or disability permits it. Accommodations may also need to be made for religious beliefs consistent with Title VII of the Civil Rights Act.

f. When the employer can demonstrate that the use of a facemask presents a hazard to an employee of serious injury or death (e.g., arc flash, heat stress, interfering with the safe

Commented [WJ(43)]: 6.20.2021. Language taken from OSHA's Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace. <https://www.osha.gov/coronavirus/safework>

Commented [WJ(44)]: VDH recommended change, 6.18.2021.

VDH also recommended that the issue difference between indoor and outdoor exposures be addressed: Per OSHA Guidance, "If you are working outdoors you may opt not to wear face coverings in many circumstances; however, you should be supported in safely continuing face covering use if you choose, especially if you work closely with other people."

DOLI response, 6.20.2021: The OSHA COVID-19 ETS limits face covering requirements to "when indoors and when occupying a vehicle with other people for work purposes". 1910.501(f).

<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

DOLI added language to §40.G to make clear that face coverings are required for employees that are not fully vaccinated and otherwise at-risk employees "while indoors". (NOTE: People who have received one dose of a two dose vaccine regimen are "not fully vaccinated," and early data indicates the effective rate is lowered to 33%; <https://www.businessinsider.com/delta-coronavirus-variant-strongest-threat-vaccinated-people-2021-6>).

Commented [WJ(45)]: VDH recommended change, 6.18.2021.

Commented [WJ(46)]: 6.20.2021. From OSHA COVID-19 ETS, §1910.502(f)(1). <https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

¹⁵ DOLI §40, FAQ 45

operation of equipment). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it. Any employee not wearing a facemask must remain at least 6 feet away from all other people unless the employer can demonstrate it is not feasible. The employee must resume wearing a facemask when not engaged in the activity where the facemask presents a hazard.

Note to 16VAC25-220-40 G 1 d, e and f: The employer may determine that the use of face shields, without facemasks, in certain settings is not appropriate due to other infection control concerns.

g. Where a face shield is required to comply with this paragraph or is otherwise required by the employer, the employer must ensure that face shields are cleaned at least daily and are not damaged. When an employee provides a face shield that meets the definition of that term in 16VAC25-220-30, the employer may allow the employee to use it and is not required to reimburse the employee for that face shield.

12. Until adequate supplies of respiratory protection and/or personal protective equipment become readily available for non-medical and non-first responder employers and employees, employers shall provide and employees shall wear face coverings where the nature of an employee's work or the work area does not allow the employee to observe physical distancing requirements.

232. Notwithstanding anything to the contrary in this standard, the Secretary of Commerce and Trade/Labor may exercise discretion in the enforcement of an employer's failure to provide PPE required by this standard, if the employer demonstrates that the employer:

a. Is exercising due diligence to come into compliance with such requirement; and

b. Is implementing alternative methods and measures to protect employees that are satisfactory to the Secretary of Labor after consultation with the Commissioner of Labor and Industry and the Secretary of Health and Human Services.

H. Reserved. When it is necessary for employees solely exposed to lower risk hazards or job tasks to have brief contact with others inside six feet (e.g., passing another person in a hallway that does not allow physical distancing of six feet), a face covering is required. This subsection does not apply to fully vaccinated employees.

I. When required by this standard, face coverings shall be worn over the wearer's nose and mouth and extend under the chin.

J. Reserved. Nothing in this standard shall require the use of a respirator, surgical/medical procedure mask, face mask, or face covering by any employee for whom doing so would be contrary to the employee's health or safety because of a medical condition; however, nothing in this standard shall negate an employer's obligations to comply with personal protective equipment and respiratory protection standards applicable to its industry.

Commented [WJ(47)]: Added to be consistent with language in 16VAC25-220-40.F.6 immediately above.

Commented [WJ(48)]: Effective July 1, 2021, the Department of Labor and Industry will be moved from the Secretary of Commerce and Trade to the Secretary of Labor. Va. Code § 2.2-214.2

Commented [WJ(49)]: VDH recommended change, 6.18.2021. VDH and DOLI agree that with the advent of effective vaccines for COVID-19, it is appropriate to change the focus of the FPS from a risk based approach to one that focuses on whether employees and others in the workplace are fully vaccinated or not, and otherwise at risk workers.

VDH comment of 6.18.2021: Limit the content of the FPS to those topics covered in the [OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace](#). This guidance focuses protection on unvaccinated and otherwise at risk workers; encourages vaccination, and links to CDC guidance or OSHA guidance with up to date content.

~~1. Although face shields are not considered a substitute for face coverings as a method of source control and not used as a replacement for face coverings among people without medical contraindications, face shields may provide some level of protection against contact with respiratory droplets. In situations where a face covering cannot be worn due to medical contraindications, employers shall provide and employees shall wear either:~~

~~a. A face shield that wraps around the sides of the wearer's face and extends below the chin; or~~

~~b. A hooded face shield.~~

~~2. To the extent feasible, employees wearing face shields in accordance with this subsection shall observe physical distancing requirements in this standard.~~

~~3. Face shield wearers shall wash their hands before and after removing the face shield and avoid touching their eyes, nose, and mouth when removing it.~~

~~4. Disposable face shields shall only be worn for a single use and disposed of according to manufacturer instructions.~~

~~5. Reusable face shields shall be cleaned and disinfected after each use according to manufacturer instructions.~~

~~K. Requests to the Department of Labor and Industry for religious waivers from the required use of respirators, surgical/medical procedure masks, or face coverings will be handled in accordance with the requirements of applicable federal and state law, standards, regulations and the U.S. and Virginia Constitutions, after Department of Labor and Industry consultation with the Office of the Attorney General. Reserved.~~

L. Sanitation and disinfecting.

1. In addition to the requirements contained in this standard, employers shall comply with the VOSH sanitation standard applicable to its industry.

2. ~~Reserved. Employees that interact with customers, the general public, contractors, and other persons shall be provided with and immediately use supplies to clean and disinfectant surfaces contacted during the interaction where there is the potential for exposure to the SARS-CoV-2 virus by themselves or other employees.~~

3. In addition to the requirements contained in this standard, employers shall comply with the VOSH hazard communication standard applicable to the employers' industry for cleaning and disinfecting materials and hand sanitizers.

4. Areas in the place of employment ~~where suspected or confirmed COVID-19 where employees or other persons known or suspected or confirmed COVID-19 to be infected with the SARS-CoV-2 virus~~ accessed or worked shall be cleaned and disinfected prior to allowing other employees access to the areas ~~as follows; except as otherwise provided below;~~

~~Where feasible, a period of 24 hours will be observed prior to cleaning and disinfecting.~~

Commented [WJ(50): The Department only received one inquiry under the FPS, so it is recommended that the language be deleted. An employee or employer would still have the right to contact the Department on the religious waiver issue if this language is deleted.

Commented [WJ(51): VDH recommend change, 6.18.2021.

VDH comments:

1. I think this language is confusing. Might be simpler to say something like "when exposure to the SARS-CoV-2 virus is suspected." Technically, every interaction has potential for exposure to the virus when employees are coming into contact with the public.

2. I agree. I think #2 can be stricken as it is unnecessary if the workplace is conducting routine cleaning.

Commented [WJ(52): VDH recommended change, 6.18.2021.

Commented [WJ(53): VDH recommend change, with slight modification, 6.18.2021.

a. The provisions in subdivisions 4 b, 4 c, and 4 d of this subsection do not apply to healthcare settings or for operators of facilities such as food and agricultural production or processing workplace settings, manufacturing workplace settings, or food preparation and food service areas where specific regulations or practices for cleaning and disinfection may apply.

b. If less than 24 hours have passed since the person who is sick or diagnosed with COVID-19 has been in the space, clean and disinfect the space.

c. If more than 24 hours have passed since the person who is sick or diagnosed with COVID-19 has been in the space, cleaning is enough. You may choose to also disinfect depending on certain conditions or everyday practices required by your facility.

d. If more than 3 days have passed since the person who is sick or diagnosed with COVID-19 has been in the space, no additional cleaning or disinfecting beyond regular cleaning practices is needed. This requirement shall not apply if the areas in question have been unoccupied for seven or more days.¹⁶

5. All common spaces, including bathrooms (including port-a-johns, privies, etc.), frequently touched surfaces, and doors, shall at a minimum be cleaned ~~and disinfected~~ at least once during or at the end of the shift: ~~(W~~where multiple shifts are employed, such spaces shall be cleaned and disinfected no less than once every 12 hours), except as otherwise provided below:-

a. The provision in subdivision 5 b of this subsection does not apply to healthcare settings or for operators of facilities such as food and agricultural production or processing workplace settings, manufacturing workplace settings, or food preparation and food service areas where specific regulations or practices for cleaning and disinfection may apply.

b. When no people with confirmed or suspected or confirmed COVID-19 persons are known to have been in a space, clean once a day.¹⁷

6. All shared tools, equipment, workspaces, and vehicles shall be cleaned prior and disinfected ~~prior~~ to transfer from one employee to another. This subsection does not apply when the transfer is from one fully vaccinated employee to another fully vaccinated employee.

7. Employers shall ensure that cleaning and disinfecting products are readily available to employees to accomplish the required cleaning and disinfecting. In addition, employers shall ensure use of only disinfecting chemicals and products indicated in the Environmental Protection Agency (EPA) List N for use against SARS-CoV-2, or non-EPA-registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2.

Commented [WJ(54)]: §40, FAQ 41
<https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

Commented [WJ(55)]: §40, FAQ 42
<https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

Commented [WJ(56)]: §40, FAQ 41
<https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

Commented [WJ(57)]: VDH recommend change, 6.18.2021.

¹⁶ <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

¹⁷ <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

8. Employers shall ensure that the manufacturer's instructions for use of all disinfecting chemicals and products ~~are complied with~~ (e.g., concentration, application method, contact time, PPE, etc.) are followed.

Commented [WJ(58): VDH recommend change, 6.18.2021.

9. Employees shall have easy, frequent access and permission to use soap and water, and hand sanitizer where feasible, for the duration of work. Employees assigned to a work station where job tasks require frequent interaction inside six feet with other persons shall be provided with hand sanitizer where feasible at the employees work station.

10. Mobile crews shall be provided with hand sanitizer where feasible for the duration of work at a work site or client or customer location and shall have transportation immediately available to nearby toilet facilities and handwashing facilities that meet the requirements of VOSH laws, standards, and regulations dealing with sanitation. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable, and use and storage in hot environments can result in a hazard.

11. ~~It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower as presenting potential exposure risk for purposes of application of the requirements of this standard.~~ In situations other than emergencies, employers shall ensure that protective measures are put in place to prevent cross-contamination between tasks, areas, and personnel.

Commented [WJ(59): 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

M. Unless otherwise provided in this standard, when engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection, employers shall provide personal protective equipment to their employees and ensure the equipment's proper use in accordance with VOSH laws, standards, and regulations applicable to personal protective equipment, including respiratory protection equipment.

16VAC25-220-50. Requirements for healthcare services or healthcare support services hazards or job tasks classified as very high or high exposure risk.

A. Scope and application.

1. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

2. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

4. The requirements in this section for employers with hazards or job tasks classified as very high or high exposure risk apply in addition to requirements contained in [16VAC25-220-40](#), [16VAC25-220-70](#), and [16VAC25-220-80](#).

5. Except as otherwise provided in this subsection, this section applies to all settings where any employee provides healthcare services or healthcare support services; ~~and~~.

6. This section does not apply to the following:

- a. the provision of first aid by an employee who is not a licensed healthcare provider;
- b. the dispensing of prescriptions by pharmacists in retail settings;

Commented [WJ(60)]: Administration amendment 6.25.2021.

Commented [WJ(61)]: 6.19.2021. Language added based on OSHA COVID-19 ETS language in Scope and Application, 1910.502(a).
<https://www.osha.gov/sites/default/files/covid-19-healthcare-ets-reg-text.pdf>

c. non-hospital ambulatory care settings where all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;

d. well-defined hospital ambulatory care settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;

e. home healthcare settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not present;

f. healthcare support services not performed in a healthcare setting (e.g., off-site laundry, off-site medical billing); or

g. telehealth services performed outside of a setting where direct patient care occurs.

Note to paragraphs 16VAC25-220-50 A 5 d and 5 e: VOSH does not intend to preclude the employers of employees who are unable to be vaccinated from the scope exemption in paragraphs 16VAC25-220-50 A 5 d and 5 e. Under various anti-discrimination laws, workers who cannot be vaccinated because of medical conditions, such as allergies to vaccine ingredients, or certain religious beliefs may ask for a reasonable accommodation from their employer. Accordingly, where an employer reasonably accommodates an employee who is unable to be vaccinated in a manner that does not expose the employee to COVID-19 hazards (e.g., telework, working in isolation), that employer may be within the scope exemption in paragraphs 16VAC25-220-50 A 5 d and 5 e.

7. Where a healthcare setting is embedded within a non-healthcare setting (e.g., medical clinic in a manufacturing facility, walk-in clinic in a retail setting), this section applies only to the embedded healthcare setting and not to the remainder of the physical location.

8. In well-defined areas where there is no reasonable expectation that any person with suspected or confirmed COVID-19 will be present, paragraphs (f), (h), and (i) of this section do not apply to employees who are fully vaccinated.

B. Engineering controls.

1. Employers shall ensure that appropriate air-handling systems under their control:

a. Are installed and maintained in accordance with the USBC and manufacturer's instructions in healthcare facilities and other places of employment treating, caring for, or housing ~~persons known or suspected~~ or confirmed COVID-19 persons ~~to be infected with the SARS-CoV-2 virus;~~ and

b. Where feasible and within the design parameters of the system, are utilized as follows:

(1) Increase total airflow supply to occupied spaces provided that a greater hazard is not created (e.g., airflow that is increased too much may make doors harder to open or may blow doors open);

(2) In ground transportation settings, use natural ventilation to increase outdoor air dilution of inside air in a manner that will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission to employees, and when environmental conditions and transportation safety and health requirements allow;

(3) Inspect filter housing and racks to ensure appropriate filter fit and check for ways to minimize filter bypass;

(4) Increase air filtration to as high as possible in a manner that will still enable the system to provide airflow rates as the system design requires. Ensure compliance with higher filtration values is allowed by the air handler manufacturer's installation instructions and listing;

(5) Generate clean-to-less-clean air movements by re-evaluating the positioning of supply and exhaust air diffusers and/or dampers and adjusting zone supply and exhaust flow rates to establish measurable pressure differentials;

(6) Have staff work in "clean" ventilation zones that do not include higher-risk areas such as visitor reception or exercise facilities (if open);

(7) Ensure exhaust fans in restroom facilities are functional and operating continuously when the building is occupied;

(8) If the system's design can accommodate such an adjustment and is allowed by the air handler manufacturer's installation instructions and listing, improve central air filtration to MERV-13 and seal edges of the filter to limit bypass; and

(9) Check filters to ensure they are within service life and appropriately installed.

c. Comply with USBC and applicable referenced American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards.

~~2. For employers not covered by subdivision 1 of this subsection, ensure that air handling systems where installed and under their control are appropriate to address the SARS-CoV-2 virus and COVID-19 disease related hazards and job tasks that occur at the workplace:~~

~~a. Are maintained in accordance with the manufacturer's instructions; and~~

~~b. Comply with subdivisions 1 b and 1 c of this subsection.~~

3. Hospitalized patients ~~known or suspected or confirmed to be infected with the SARS-CoV-2 virus~~ COVID-19, where feasible and available, shall be placed in airborne infection isolation room (AIIRs).

4. Employers shall use AIIRs when available for performing aerosol-generating procedures on suspected or confirmed COVID-19 patients ~~with known or suspected or confirmed to be infected with the SARS-CoV-2 virus.~~

5. For postmortem activities, employers shall use autopsy suites or other similar isolation facilities when performing aerosol-generating procedures on the bodies of persons ~~known or suspected or confirmed to be infected with the SARS-CoV-2 virus~~ COVID-19 at the time of their death.

6. Employers shall use special precautions associated with Biosafety Level 3 (BSL-3), as defined by the U.S. Department of Health and Human Services Publication No. (CDC) 21-1112 Biosafety in Microbiological and Biomedical Laboratories" (Dec. 2009), which is hereby incorporated by reference, when handling specimens from patients or persons ~~known or suspected or confirmed to be infected with the SARS-CoV-2 virus~~ COVID-19. Diagnostic laboratories that conduct routine medical testing and environmental specimen testing for COVID-19 are not required to operate at BSL-3.

7. To the extent feasible, employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission.

C. Administrative and work practice controls.

1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.

2. In health care facilities, employers shall follow existing guidelines and facility standards of practice for identifying and isolating infected persons and for protecting employees.

3. Employers shall limit non-employee access to the place of employment or restrict access to only certain workplace areas to reduce the risk of exposure. An employer's compliance with occupancy limits contained in any applicable Virginia executive order or order of public health emergency will constitute compliance with the requirements of this subdivision C 3.

4. Employers shall post signs requesting patients and family members to immediately report signs or symptoms of respiratory illness on arrival at the health care facility and use disposable face coverings.

5. Employers shall offer enhanced medical monitoring of employees during COVID-19 outbreaks.

6. To the extent feasible, an employer shall ensure that psychological and behavioral support is available to address employee stress at no cost to the employee.

7. In health care settings, employers shall provide alcohol-based hand sanitizers containing at least 60% ethanol or 70% isopropanol to employees at fixed work sites and to emergency responders and other personnel for decontamination in the field when working away from fixed work sites.

8. Employers shall provide face coverings to ~~suspected COVID-19~~ non-employees ~~suspected to be infected with SARS-CoV-2 virus~~ to contain respiratory secretions until the non-employees are able to leave the site (i.e., for medical evaluation and care or to return home).

9. Where feasible, employers shall:

- a. Implement flexible work site (e.g., telework).
- b. Implement flexible work hours (e.g., staggered shifts).
- c. Increase physical distancing between employees at the work site to six feet.
- d. Increase physical distancing between employees and other persons to six feet.
- e. Implement flexible meeting and travel options (e.g., use telephone or video conferencing instead of in person meetings; postpone non-essential travel or events; etc.).
- f. Deliver services remotely (e.g. phone, video, internet, etc.).
- g. Deliver products through curbside pick-up.

D. Personal protective equipment (PPE). ~~Employers covered by this section and not otherwise covered by the VOSH Standards for General Industry (16VAC25-90-1910.132), shall comply with the following requirements for a SARS-CoV-2 virus and COVID-19 disease related hazard assessment and personal protective equipment selection:~~

~~1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall:~~

- ~~a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment;~~
- ~~b. Communicate selection decisions to each affected employee; and~~
- ~~c. Select PPE that properly fits each affected employee.~~

~~2. Employers shall verify that the required SARS-CoV-2 virus and COVID-19 disease workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated, the person certifying that the evaluation has been performed, the date of the hazard assessment, and the document as a certification of hazard assessment.~~

~~3. Unless specifically addressed by an industry specific standard applicable to the employer and providing for PPE protections to employees from the SARS-CoV-2 virus or COVID-19 disease (e.g., 16VAC25-175-1926, 16VAC25-190-1928, 16VAC25-100-1915, 16VAC25-120-1917, or 16VAC25-130-1918), the requirements of 16VAC25-90-1910.132 (General requirements) and 16VAC25-90-1910.134 (Respiratory protection) shall apply to all employers for that purpose.~~

~~4. Unless contraindicated by a hazard assessment and equipment selection requirements in subdivision 1 of this subsection in 16VAC25-90-1910.132, employees of employers covered by~~

Commented [WJ(62)]: 6.19.2021. This language is being deleted because 16VAC25-220-50 now only applies to all settings where any employee provides healthcare services or healthcare support services. These industries are already covered by federal identical standard 1910.132, Personal Protective Equipment.

~~this section classified as very high or high exposure risk~~ shall be provided with and wear gloves, a gown, a face shield or goggles, and a respirator when in contact with or inside six feet of ~~suspected or confirmed COVID-19~~ patients or other persons ~~known to be or suspected or confirmed to be of being infected with the SARS CoV-2 virus~~ COVID-19. Gowns shall be the correct size to assure protection.

DRAFT

16VAC25-220-60. Requirements for higher-risk workplaces with mixed-vaccination status employees hazards or job tasks classified at medium exposure risk.¹⁸

A. The requirements in this section for employers with higher-risk workplaces with mixed-vaccination status employees hazards or job tasks classified at medium exposure risk apply in addition to requirements contained in [16VAC25-220-40](#), [16VAC25-70](#), and [16VAC25-80](#).

Employers shall take the additional steps in subsections B, C, and D to mitigate the spread of COVID-19 for employees who are not fully vaccinated, and otherwise at-risk employees in workplaces (which include, but are not limited to, manufacturing, meat and poultry processing, high-volume retail and grocery, transit, seafood processing, correctional facilities, jails, detention centers, and juvenile detention centers) where there is heightened risk due to the following types of factors:

1. Where employees who are not fully vaccinated or otherwise at-risk employees are working close to one another, for example, on production or assembly lines. Such workers may also be near one another at other times, such as when clocking in or out, during breaks, or in locker/changing rooms.
2. Where employees who are not fully vaccinated or otherwise at-risk workers often have prolonged closeness to coworkers (e.g., for 8-12 hours per shift).
3. Employees who are not fully vaccinated or otherwise at-risk employees who may be exposed to the infectious virus through respiratory droplets or aerosols in the air—for example, when employees who are not fully vaccinated or otherwise at-risk employees in a manufacturing or factory setting who have the virus cough or sneeze. It is also possible that exposure could occur from contact with contaminated surfaces or objects, such as tools, workstations, or break room tables. Shared spaces such as break rooms, locker rooms, and entrances/exits to the facility may contribute to their risk.
4. Other distinctive factors that may increase risk among these employees who are not fully vaccinated or otherwise at-risk employees include:
 - a. A common practice at some workplaces of sharing employer-provided transportation such as ride-share vans or shuttle vehicles; and
 - b. Communal housing, or living quarters onboard vessels with other employees who are not fully vaccinated or otherwise at-risk individuals.

Commented [WJ(63)]: VDH recommended change, 6.18.2021. VDH and DOLI agree that with the advent of effective vaccines for COVID-19, it is appropriate to change the focus of the FPS from a risk based approach to one that focuses on whether employees and others in the workplace are fully vaccinated or not, and otherwise at risk workers.

VDH and DOLI agree that the previous §60 addressing medium risk hazards should be amended to address higher-risk workplaces with mixed vaccination status, based on OSHA guidelines found in the “Appendix: Measures Appropriate for Higher-Risk Workplaces with Mixed-Vaccination Status Workers,” <https://www.osha.gov/coronavirus/safework#appendix>

VDH comment of 6.18.2021: Limit the content of the FPS to those topics covered in the [OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace](#). This guidance focuses protection on unvaccinated and otherwise at risk workers; encourages vaccination, and links to CDC guidance or OSHA guidance with up to date content.

We also recommend DOLI support and promote additional measures to protect employees in high-risk workplaces (as defined by OSHA) with mixed vaccination status workers.

Commented [WJ(64)]: Administration amendments highlighted in gray, 6.24.2021.

Commented [WJ(65)]: 6.18.2021. Correctional facilities, jails, detention centers, and juvenile detention centers coverage moved from 16VAC25-220-50 to 16VAC25-220-60, because 16VAC25-220-50 is now limited to coverage of healthcare services and healthcare support services.

¹⁸ Appendix: Measures Appropriate for Higher-Risk Workplaces with Mixed-Vaccination Status Workers, <https://www.osha.gov/coronavirus/safework#appendix>

B. Engineering controls.

1. Employers shall ensure that air-handling systems under their control:

a. Are maintained in accordance with the manufacturer's instructions; and

b. Where feasible and within the design parameters of the system, are utilized as follows:

(1) Increase total airflow supply to occupied spaces provided that a greater hazard is not created (e.g., airflow that is increased too much may make doors harder to open or may blow doors open);

(2) In ground transportation settings, use natural ventilation to increase outdoor air dilution of inside air in a manner that will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission to employees and when environmental conditions and transportation safety and health requirements allow;

(3) Inspect filter housing and racks to ensure appropriate filter fit and check for ways to minimize filter bypass;

(4) Increase air filtration to as high as possible in a manner that will still enable the system to provide airflow rates as the system design requires. Ensure compliance with higher filtration values is allowed by the air handler manufacturer's installation instructions and listing;

(5) Generate clean-to-less-clean air movements by re-evaluating the positioning of supply and exhaust air diffusers and/or dampers and adjusting zone supply and exhaust flow rates to establish measurable pressure differentials;

(6) Have staff work in "clean" ventilation zones that do not include higher-risk areas such as visitor reception or exercise facilities (if open);

(7) Ensure exhaust fans in restroom facilities are functional and operating continuously when the building is occupied;

(8) If the system's design can accommodate such an adjustment and is allowed by the air handler manufacturer's installation instructions and listing, improve central air filtration to MERV-13 and seal edges of the filter to limit bypass; and

(9) Check filters to ensure they are within service life and appropriately installed.

c. Comply with USBC and applicable referenced American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards.

2. Where feasible, employers shall ~~in~~ install physical barriers (e.g., such as clear plastic sneeze guards, etc.); for employees who are not fully vaccinated or otherwise at-risk employees, where such barriers will aid in mitigating the spread of SARS-CoV-2 virus transmission.

3. In workplaces (or well-defined work areas) with processing or assembly lines where there are employees who are not fully vaccinated or otherwise at-risk employees, working on food processing or assembly lines can result in virus exposure because these workplaces have often been designed for a number of employees to stand next to or across from each other to maximize productivity. Employers shall ensure proper spacing of employee who are not fully vaccinated or otherwise at-risk employees (or if not possible, appropriate use of barriers).

C. Administrative and work practice controls. To the extent feasible, employers shall implement the following administrative and work practice controls in all higher-risk workplaces where there are employees who are not fully vaccinated or otherwise at-risk employees:

1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.

2. Provide face coverings to suspected COVID-19 non-employees ~~suspected to be infected with SARS-CoV-2~~ to contain respiratory secretions until the non-employees are able to leave the site (i.e., for medical evaluation and care or to return home).

3. Stagger break times in these generally high population workplaces, or provide temporary break areas and restrooms to avoid groups of employees who are not fully vaccinated or otherwise at-risk employees congregating during breaks. Employees who are not fully vaccinated or otherwise at-risk employees shall maintain at least 6 feet of distance from others at all times, including on breaks. Implement flexible work site (e.g., telework).

4. Stagger employee's arrival and departure times to avoid congregations of employees who are not fully vaccinated or otherwise at-risk in parking areas, locker rooms, and near time clocks.

5. Implement flexible work hours (e.g., staggered shifts). Increase physical distancing between employees at the work site to six feet.

6. Provide visual cues (e.g., floor markings, signs) as a reminder to maintain physical distancing. Increase physical distancing between employees and other persons, including customers, to six feet (e.g., drive through physical barriers) where such barriers will aid in mitigating the spread of SARS-CoV-2 virus transmission, etc.

7. In retail workplaces (or well-defined work areas within retail) where there are employees who are not fully vaccinated there are unvaccinated or otherwise at-risk employees:

Commented [WJ(66)]: 6.19.2021. Language added based on OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace <https://www.osha.gov/coronavirus/safework>

This provision was placed here because it references an engineering control. Administration amendment, 6.24.2021.

Commented [WJ(67)]: 6.19.2021. Language added based on OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace <https://www.osha.gov/coronavirus/safework>

Administration amendment (language struck through) 6.24.2021.

Commented [WJ(68)]: See new language in 16VAC25-220-60.B.3

Commented [WJ(69)]: 6.19.2021. Language added based on OSHA Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace <https://www.osha.gov/coronavirus/safework>

Commented [WJ(70)]: See new language in 16VAC25-220-60.B.3

a. Post signage requesting face coverings for employees who are not fully vaccinated (or unknown-status) customers and other visitors.

b. Require physical distancing from other people who are not known to be fully vaccinated. If distancing is not possible, implement the use of barriers between work stations used by employees who are not fully vaccinated or otherwise at-risk employees and the locations customers will stand, with pass-through openings at the bottom, if possible.

c. Move the electronic payment terminal/credit card reader farther away from any employees who are not fully vaccinated or otherwise at-risk employees in order to increase the distance between customers and such employees, if possible.

d. Shift primary stocking activities of employees who are not fully vaccinated or otherwise at-risk employees to off-peak or after hours when possible to reduce contact between employees who are not fully vaccinated or otherwise at-risk employees and customers. Implement flexible meeting and travel options (e.g., using telephone or video conferencing instead of in-person meetings; postponing non-essential travel or events; etc.).

~~89.~~ Deliver services remotely (e.g. phone, video, internet, etc.).

~~910.~~ Deliver products through curbside pick-up or delivery.

~~10. Employers shall provide and require employees to wear face coverings who, because of job tasks, cannot feasibly practice physical distancing from another employee or other person if the hazard assessment has determined that personal protective equipment, such as respirators or surgical/medical procedure masks, was not required for the job task.~~

~~11. Employers shall provide and require employees in customer or other person facing jobs to wear face coverings.~~

D. Personal protective equipment. This subsection does not apply to fully vaccinated employees. Otherwise, employers covered by this section and not otherwise covered by the VOSH Standards for General Industry ([16VAC25-90-1910.132](#)) shall comply with the requirements of this subsection for a SARS-CoV-2 virus and COVID-19 disease related hazard assessment and personal protective equipment selection.

1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall:

a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment;

Commented [WJ(71): Language deleted because of revised 16VAC25-40.G which requires: "Employers shall provide and require employees that are not fully unvaccinated, and otherwise at-risk employees (because of a prior transplant or other medical condition), to wear face coverings or surgical masks while indoors, unless their work task requires a respirator or other PPE."

b. Communicate selection decisions to each affected employee; and

c. Select PPE that properly fits each affected employee.

2. Employers shall verify that the required SARS-CoV-2 virus and COVID-19 disease workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date of the hazard assessment; and the document as a certification of hazard assessment.

3. Unless specifically addressed by an industry specific standard applicable to the employer and providing for PPE protections to employees from the SARS-CoV-2 virus or COVID-19 disease (e.g., [16VAC25-175-1926](#), [16VAC25-190-1928](#), [16VAC25-100-1915](#), [16VAC25-120-1917](#), or [16VAC25-130-1918](#)), the requirements of [16VAC25-90-1910](#).132 (General requirements) and [16VAC25-90-1910](#).134 (Respiratory protection) shall apply to all employers for that purpose.

4. PPE ensembles for employees ~~in the medium exposure risk category~~ will vary by work task, the results of the employer's hazard assessment, and the types of exposures employees have on the job.

Commented [WJ(72)]: 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

16VAC25-220-70. Infectious disease preparedness and response plan.

A. ~~The following Employers with hazards or job tasks classified as shall develop and implement a written Infectious Disease Preparedness and Response Plan:~~

1. ~~Employers covered by 16VAC25-220-50 Very high and high shall develop and implement a written Infectious Disease Preparedness and Response Plan; and~~
2. ~~Employers covered by 16VAC25-220-60 Medium with 11 or more employees shall develop and implement a written Infectious Disease Preparedness and Response Plan. In counting the number of employees, the employer with hazards and job tasks otherwise classified as medium exposure risk may exclude fully vaccinated employees.~~

B. The plan and training requirements tied to the plan shall ~~only~~ apply to those employees:

1. ~~Covered by 16VAC25-220-50; and exposed to hazards and job tasks classified as very high, and high exposure risk, and medium covered by this section; as well as those employees exposed to hazards and job tasks classified as medium exposure risk~~
2. ~~Covered by 16VAC25-220-60, unless such employees are fully vaccinated.~~

C. Employers shall designate a person to be responsible for implementing their plan. The plan shall:

1. Identify the name or title of the person responsible for administering the plan. This person shall be knowledgeable in infection control principles and practices as the principles and practices apply to the facility, service, or operation.
2. Provide for employee involvement in development and implementation of the plan.
3. Consider and address the level of SARS-CoV-2 virus and COVID-19 disease risk associated with various places of employment, the hazards employees are exposed to at those sites, and job tasks employees perform at those sites. Such considerations shall include:
 - a. Where, how, and to what sources of the SARS-CoV-2 virus or COVID-19 disease might employees be exposed at work, including:
 - (1) The general public, customers, other employees, patients, and other persons;
 - (2) Persons ~~known or suspected or confirmed COVID-19 to be infected with the SARS-CoV-2 virus~~ or those at particularly high risk of COVID-19 infection (e.g., local, state, national, and international travelers who have visited locations with ongoing COVID-19 community transmission and health care employees who have had unprotected exposures to ~~persons known or suspected or confirmed COVID-19 person to be infected with SARS-CoV-2 virus~~);
 - (3) Situations where employees work more than one job with different employers and encounter hazards or engage in job tasks that ~~present a very high, high, or medium different levels of exposure risk involve potential exposure to sources of the SARS-CoV-2 virus or COVID-19 disease~~; and

Commented [WJ(73)]: 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

(4) Situations where employees work during higher risk activities involving potentially large numbers of people or enclosed work areas such as at large social gatherings, weddings, funerals, parties, restaurants, bars, hotels, sporting events, concerts, parades, movie theaters, rest stops, airports, bus stations, train stations, cruise ships, river boats, airplanes, etc.

b. To the extent permitted by law, including HIPAA, employees' individual risk factors for severe disease. For example, people of any age with one or more of the following conditions are at increased risk of severe illness from COVID-19: chronic kidney disease; COPD (chronic obstructive pulmonary disease); immunocompromised state (weakened immune system) from solid organ transplant; obesity (body mass index or BMI of 30 or higher); serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies; sickle cell disease; or type 2 diabetes mellitus. Also, for example, people with one or more of the following conditions might be at an increased risk for severe illness from COVID-19: asthma (moderate-to-severe); cerebrovascular disease (affects blood vessels and blood supply to the brain); cystic fibrosis; hypertension or high blood pressure; immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines; neurologic conditions, such as dementia; liver disease; pregnancy; pulmonary fibrosis (having damaged or scarred lung tissues); smoking; thalassemia (a type of blood disorder); type 1 diabetes mellitus; etc. The risk for severe illness from COVID-19 also increases with age.

c. Engineering, administrative, work practice, and personal protective equipment controls necessary to address those risks.

4. Consider and address contingency plans for situations that may arise as a result of outbreaks that impact employee safety and health, such as:

a. Increased rates of employee absenteeism (an understaffed business can be at greater risk for accidents);

b. The need for physical distancing, staggered work shifts, downsizing operations, delivering services remotely, and other exposure-reducing workplace control measures such as elimination and substitution, engineering controls, administrative and work practice controls, and personal protective equipment (e.g., respirators, surgical/medical procedure-masks, etc.);

c. Options for conducting essential operations in a safe and healthy manner with a reduced workforce; and

d. Interrupted supply chains or delayed deliveries of safety and health related products and services essential to business operations.

5. Identify infection prevention measures to be implemented:

a. Promote frequent and thorough hand washing, including by providing employees, customers, visitors, the general public, and other persons to the place of employment with

a place to wash their hands. If soap and running water are not immediately available, provide hand sanitizers.

b. Maintain regular housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment.

c. Establish policies and procedures for managing and educating visitors about the infection prevention procedures at the place of employment.

6. Provide for the prompt identification and isolation of ~~employees known or suspected or confirmed COVID-19 employees to be infected with the SARS-CoV-2 virus~~ away from work, including procedures for employees to report when they are experiencing signs or symptoms of COVID-19.

7. Address infectious disease preparedness and response with outside businesses, including, but not limited to, subcontractors who enter the place of employment, businesses that provide contract or temporary employees to the employer, and other persons accessing the place of employment to comply with the requirements of this standard and the employer's plan.

8. Identify the mandatory and non-mandatory recommendations in any CDC guidelines or Commonwealth of Virginia guidance documents the employer is complying with, if any, in lieu of a provision of this standard, as provided for in [16VAC25-220-10 E, F, and G](#).

16VAC25-220-80. Training.

A. ~~The following employers shall provide training on the hazards and characteristics of the SARS-CoV-2 virus and COVID-19 disease to employees working at the place of employment regardless of employee risk classification for those exposure risks at a place of employment with hazards or job tasks classified as:~~

~~1. Employers covered by 16VAC25-220-50 Very high and high; and~~

~~2. Employers covered by 16VAC25-220-60. Medium ~~Medium exposure risk at a place of employment shall provide training on the hazards and characteristics of the SARS-CoV-2 virus and COVID-19 disease to all employees working at the place of employment regardless of employee risk classification. Employers may provide fully vaccinated employees with written information meeting the requirements of subsection 16VAC25-220-80 F in lieu of training.~~~~

Commented [WJ(74)]: 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

~~Where applicable, The training program shall enable each employee to recognize the hazards of the SARS-CoV-2 virus and signs and symptoms of COVID-19 disease and shall train each employee in the procedures to be followed in order to minimize these hazards.~~

B. The training required under subsection A of this section shall include:

1. The requirements of this standard;
2. The mandatory and non-mandatory provisions in any applicable CDC guidelines or Commonwealth of Virginia guidance documents the employer is complying with, if any, in lieu of a provision of this standard as provided for in [16VAC25-220-10 E, F, and G](#);
3. The characteristics and methods of transmission of the SARS-CoV-2 virus;
4. The signs and symptoms of COVID-19 disease;
5. Risk factors for severe COVID-19 illness including underlying health conditions and advancing age;
6. Awareness of the ability of persons pre-symptomatically and asymptotically infected with SARS-CoV-2 to transmit the SARS-CoV-2 virus;
7. Safe and healthy work practices, including, but not limited to, physical distancing, the wearing of face coverings, disinfection procedures, disinfecting frequency, ventilation, noncontact methods of greeting, etc.;
8. Personal protective equipment (PPE):
 - a. When PPE is required;
 - b. What PPE is required;
 - c. How to properly don, doff, adjust, and wear PPE;

d. The limitations of PPE;

e. The proper care, maintenance, useful life, and disposal of PPE;

f. Strategies to extend PPE usage during periods when supplies are not available and no other options are available for protection, as long as the extended use of the PPE does not pose any increased risk of exposure. The training to extend PPE usage shall include the conditions of extended PPE use, inspection criteria of the PPE to determine whether it can or cannot be used for an extended period, and safe storage requirements for PPE used for an extended period; and

g. Heat-related illness prevention including the signs and symptoms of heat-related illness associated with the use of COVID-19 PPE and face coverings;

9. The anti-discrimination provisions in [16VAC25-220-90](#); and

10. The employer's Infectious Disease Preparedness and Response Plan, where applicable.

C. Employers covered by [16VAC25-220-50](#) shall verify compliance with [16VAC25-220-80 A](#) by preparing a written certification record for ~~those employees exposed to hazards or job tasks classified as very high, high, or medium exposure risk levels~~ trained in accordance with this section.

1. The written certification record shall contain:

a. The name or other unique identifier of the employee trained;

b. The trained employee's physical or electronic signature;

c. The date of the training; and

d. The name of the person who conducted the training, or for computer-based training, the name of the person or entity that prepared the training materials.

2. A physical or electronic signature is not necessary if other documentation of training completion can be provided (e.g., electronic certification through a training system, security precautions that enable the employer to demonstrate that training was accessed by passwords and usernames unique to each employee, etc.).

3. If an employer relies on training conducted by another employer, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training.

4. The latest training or retraining certification shall be maintained.

D. When an employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required by [16VAC25-220-80 A](#), the employer shall retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:

Commented [WJ(75)]: 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

1. Changes in the workplace, SARS-CoV-2 virus or COVID-19 disease hazards exposed to, or job tasks performed render previous training obsolete;
2. Changes are made to the employer's Infectious Disease Preparedness and Response Plan; or
3. Inadequacies in an affected employee's knowledge or use of workplace control measures indicate that the employee has not retained the requisite understanding or skill.

E. Employers ~~not covered by 16VAC25-220-50 or 16VAC25-220-60 with hazards or job tasks classified at lower risk~~ shall provide written or oral information to employees exposed to such hazards or engaged in such job tasks on the hazards and characteristics of ~~the SARS-CoV-2 virus, and the signs and~~ symptoms of COVID-19, and measures to minimize exposure. The Department of Labor and Industry shall develop an information sheet containing information on the items listed in subsection F of this section, which an employer may utilize to comply with this subsection.

Commented [WJ(76)]: 6.20.2021. "Very high, high, medium and lower risk" are terms no longer used in the FPS.

F. The information required under subsection E of this section shall include at a minimum:

1. The requirements of this standard;
2. The characteristics and methods of transmission of the SARS-CoV-2 virus;
3. The signs and symptoms of COVID-19 disease;
4. The ability of persons pre-symptomatically and asymptotically infected with SARS-CoV-2 to transmit the SARS-CoV-2 virus;
5. Safe and healthy work practices and control measures, including, but not limited to, physical distancing, the benefits of wearing face coverings, sanitation and disinfection practices; and
6. The anti-discrimination provisions of this standard in [16VAC25-220-90](#).

NO CHANGES PROPOSED TO 16VAC25-220-90

16VAC25-220-90. Discrimination against an employee for exercising rights under this standard is prohibited.

A. No person shall discharge or in any way discriminate against an employee because the employee has exercised rights under the safety and health provisions of this standard, Title 40.1 of the Code of Virginia, and implementing regulations under [16VAC25-60-110](#) for themselves or others.

B. No person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own personal protective equipment, including, but not limited to, a respirator, face shield, gown, or gloves, provided that the PPE does not create a greater hazard to the employee or create a serious hazard for other employees. In situations where face coverings are not provided by the employer, no person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own face covering that meets the requirements of this standard, provided that the face covering does not create a greater hazard to the employee or create a serious hazard for other employees. Nothing in this subsection shall be construed to prohibit an employer from establishing and enforcing legally permissible dress code or similar requirements addressing the exterior appearance of personal protective equipment or face coverings.

C. No person shall discharge or in any way discriminate against an employee who raises a reasonable concern about infection control related to the SARS-CoV-2 virus and COVID-19 disease to the employer, the employer's agent, other employees, a government agency, or to the public such as through print, online, social, or any other media.

D. Nothing in this standard shall limit an employee from refusing to do work or enter a location because of a reasonable fear of illness or death. The requirements of [16VAC25-60-110](#) contain the applicable requirements concerning discharge or discipline of an employee who has refused to complete an assigned task because of a reasonable fear of illness or death.

**VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY
VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) PROGRAM**

DRAFT: JUNE 28, 2021

NOTE: FOOTNOTES ARE PROVIDED FOR EASY REFERENCE FOR SOURCE OR BACKGROUND INFORMATION, BUT ARE NOT PART OF THE REGULATORY TEXT

SUBJECT: PROPOSED AMENDMENTS TO THE FINAL PERMANENT STANDARD FOR INFECTIOUS DISEASE PREVENTION OF THE SARS-COV-2 VIRUS THAT CAUSES COVID-19

EXPIRATION OF COVID-19 STATE OF EMERGENCY ON JUNE 30, 2021

COMBINED BOARD AMENDMENTS

June 28, 2021

**DRAFT Proposed Amendments to Final Permanent Standard for Infectious Disease Prevention
of the SARS-CoV-2 Virus That Causes COVID-19**

As Adopted by the
Safety and Health Codes Board

on _____



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY (DOLI)

Effective Date: **To be Determined**

16VAC25-220

Chapter 220. Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus that Causes COVID-19

16VAC25-220-10. Purpose, scope, and applicability.

A. This standard is designed to establish requirements for employers to control, prevent, and mitigate the spread of SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19) to and among employees and employers.

B. This standard is adopted in accordance with subdivision 6 a of § 40.1-22 of the Code of Virginia and shall apply to every employer, employee, and place of employment in the Commonwealth of Virginia within the jurisdiction of the VOSH program as described in [16VAC25-60-20](#) and [16VAC25-60-30](#).

1. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

2. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

AMENDMENT - MR

16VAC25-220-10.B.3, Purpose, scope, and applicability.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be maintained, modified, or revoked.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-

220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

C. This standard is designed to supplement and enhance existing VOSH laws, rules, regulations, and standards applicable directly or indirectly to SARS-CoV-2 virus or COVID-19 disease-related hazards such as, but not limited to, those dealing with personal protective equipment, respiratory protective equipment, sanitation, access to employee exposure and medical records, occupational exposure to hazardous chemicals in laboratories, hazard communication, § [40.1-51.1 A](#) of the Code of Virginia, etc. Should this standard conflict with an existing VOSH rule, regulation, or standard, the more stringent requirement from an occupational safety and health hazard prevention standpoint shall apply. Notwithstanding anything to the contrary in this standard, no enforcement action shall be brought against an employer or institution for failure to provide PPE required by this standard if such PPE is not readily available on commercially reasonable terms and the employer or institution makes a good faith effort to acquire or provide such PPE as is readily available on commercially reasonable terms. The Department of Labor and Industry shall consult with the Virginia Department of Health as to the ready availability of PPE on commercially reasonable terms and, in the event there are limited supplies of PPE, whether such supplies are being allocated to high risk or very high risk the appropriate workplaces.

D. Reserved. Application of this standard to a place of employment will be based on the exposure risk level presented by SARS-CoV-2 virus related and COVID-19 disease related hazards present or job tasks undertaken by employees at the place of employment as defined in this standard (i.e., very high, high, medium, and lower risk levels).

1. It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower exposure risk for purposes of application of the requirements of this standard. It is further recognized that various required job tasks prohibit an employee from being able to observe physical distancing from other persons.

2. Factors that shall be considered in determining exposure risk level include, but are not limited to:

- a. The job tasks being undertaken, the work environment (e.g., indoors or outdoors), the known or suspected presence of the SARS-CoV-2 virus, the presence of a person known or suspected to be infected with the SARS-CoV-2 virus, the number of employees and other persons in relation to the size of the work area, the working distance between employees and other employees or persons, and the duration and frequency of employee exposure through contact inside of six feet with other employees or persons (e.g., including shift work exceeding eight hours per day); and
- b. The type of hazards encountered, including exposure to respiratory droplets and potential exposure to the airborne transmission of SARS-CoV-2 virus; contact with contaminated surfaces or objects, such as tools, workstations, or break room tables, and shared spaces such as shared workstations, break rooms, locker rooms, and entrances and exits to the facility; shared work vehicles; and industries or places of employment where employer sponsored shared transportation is a common practice, such as ride-share vans or shuttle vehicles, car pools, and public transportation, etc.

E. To the extent that an employer actually complies with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 virus and COVID-19 disease related hazards or job tasks addressed by this standard, and provided that the CDC recommendation provides equivalent or greater protection than provided by a provision of this standard, the employer's actions shall be considered in compliance with the related provisions of this standard. An employer's actual compliance with a recommendation contained in CDC guidelines, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.

F. A public or private institution of higher education that has received certification from the State Council of Higher Education for Virginia that the institution's reopening plans are in compliance with guidance documents, whether mandatory or non-mandatory, developed by the Governor's Office in conjunction with the Virginia Department of Health shall be considered in compliance with this standard, provided the institution operates in compliance with its certified reopening

plans and the certified reopening plans provide equivalent or greater levels of employee protection than this standard.

G. A public school division or private school that submits its plans to the Virginia Department of Education to move to Phase II and Phase III that are aligned with CDC guidance for reopening of schools that provide equivalent or greater levels of employee protection than a provision of this standard and that operate in compliance with the public school division's or private school's submitted plans shall be considered in compliance with this standard. An institution's actual compliance with recommendations contained in CDC guidelines or the Virginia Department of Education guidance, whether mandatory or non-mandatory, to mitigate SARS-CoV-2 and COVID-19 related hazards or job tasks addressed by a provision of this standard shall be considered evidence of good faith in any enforcement proceeding related to this standard. The Commissioner of Labor and Industry shall consult with the State Health Commissioner for advice and technical aid before making a determination related to compliance with CDC guidelines.

H. Nothing in the standard shall be construed to require employers to conduct contact tracing of the SARS-CoV-2 virus or COVID-19 disease.

16VAC25-220-20. Effective dates.

A. Adoption process.

1. This standard shall take effect upon review by the Governor, and if no revisions are requested, filing with the Registrar of Regulations and publication in a newspaper of general circulation published in the City of Richmond, Virginia.
2. If the Governor's review results in one or more requested revisions to the standard, the Safety and Health Codes Board shall reconvene to approve, amend, or reject the requested revisions.
3. If the Safety and Health Codes Board approves the requested revisions to the standard as submitted, the standard shall take effect upon filing with the Registrar of Regulations and publication in a newspaper of general circulation published in the City of Richmond, Virginia.
4. Should the Governor fail to review the standard under subdivision A 1 of this section within 30 days of its approval by the Safety and Health Codes Board, the board will not need to reconvene to take further action, and the standard shall take effect upon filing with the Registrar of Regulations and publication in a newspaper of general circulation published in the City of Richmond, Virginia.

~~5. The Governor reviewed the standard under subdivision A 1 of this section, and the effective date is January 27, 2021.~~

~~B. The requirements for this standard shall take effect on [DATE] except where otherwise noted.~~

AMENDMENT - MR

~~16VAC25-220-20.C, Effective dates, [Infectious disease preparedness and response plan].~~

~~BC. The requirements for 16VAC25-220-70 shall take effect on March 26, 2021[30 days after the effective date of this standard].~~

~~BC.~~ The requirements for [16VAC25-220-70](#) shall take effect on ~~March 26, 2021~~ [30 days after the effective date of this standard].

AMENDMENT - MR

16VAC25-220-20.D, Effective dates, [Employee training].

~~CD. The training requirements in [16VAC25-220-80](#) shall take effect on March 26, 2021~~ [60 days after the effective date of this standard].

~~ED.~~ The training requirements in [16VAC25-220-80](#) shall take effect on ~~March 26, 2021~~ [60 days after the effective date of this standard].

~~C. Within 14 days of the expiration of the Governor's COVID-19 State of Emergency and Commissioner of Health's COVID-19 Declaration of Public Emergency, the Safety and Health Codes Board shall notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for the standard.~~

16VAC25-220-30. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Administrative control" means any procedure that significantly limits daily exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks by control or manipulation of the work schedule or manner in which work is performed. The use of personal protective equipment is not considered a means of administrative control.

"Aerosol-generating procedure" means a medical procedure that generates aerosols that can be infectious and are of respirable size. For the purposes of this section, only the following medical procedures are considered aerosol-generating procedures: open suctioning of airways; sputum induction; cardiopulmonary resuscitation; endotracheal intubation and extubation; non-invasive ventilation (e.g., BiPAP, CPAP); bronchoscopy; manual ventilation; medical/surgical/postmortem procedures using oscillating bone saws; and dental procedures involving: ultrasonic scalers; high-speed dental handpieces; air/water syringes; air polishing; and air abrasion.

"Airborne infection isolation room" or "AIIR," means a dedicated negative pressure patient-care room, with special air handling capability, which is used to isolate persons with a suspected or confirmed airborne-transmissible infectious disease. AIIRs include both permanent rooms and temporary structures (e.g., a booth, tent or other enclosure designed to operate under negative pressure).

formerly a negative pressure isolation room, means a single occupancy patient care room used to isolate persons with a suspected or confirmed airborne infectious disease. Environmental factors are controlled in AIIRs to minimize the transmission of infectious agents that are usually transmitted from person to person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. AIIRs provide (i) negative pressure in the room so that air flows under the door gap into the room, (ii) an air flow rate of six to 12 air changes per hour (ACH) (six ACH for existing structures, 12 ACH for new construction or renovation), and (iii) direct exhaust of air from the room to the outside of the building or recirculation of air through a high efficiency particulate air (HEPA) filter before returning to circulation.

"ASTM" means American Society for Testing and Materials.

"Ambulatory care" means healthcare services performed on an outpatient basis, without admission to a hospital or other facility. It is provided in settings such as: offices of physicians and other health care professionals; hospital outpatient departments; ambulatory surgical centers; specialty clinics or centers (e.g., dialysis, infusion, medical imaging); and urgent care clinics. Ambulatory care does not include home healthcare settings for the purposes of this section.

"Asymptomatic" means a person who does not have symptoms.

"Building or facility owner" means the legal entity, including a lessee, that exercises control over management and recordkeeping functions relating to a building or facility in which activities covered by this standard take place.

"CDC" means Centers for Disease Control and Prevention.

"Cleaning" means the removal of dirt and impurities, including germs, from surfaces using soap and water or other cleaning agents. Cleaning alone reduces germs on surfaces by removing contaminants and may also weaken or damage some of the virus particles, which decreases risk of infection from surfaces. Cleaning alone does not kill germs. But by removing the germs, cleaning decreases their number and therefore the risk of spreading infection.

"Community transmission,"¹ also called "community spread," means people have been infected with SARS-CoV-2 in an area, including some who are not sure how or where they became infected.

The level of community transmission is classified by the CDC as:

1. "No to minimal" where there is evidence of isolated cases or limited community transmission, case investigations are underway, and no evidence of exposure in large communal settings;
2. "Moderate" where there is sustained community transmission with high likelihood or confirmed exposure within communal settings and potential for rapid increase in cases;
3. "Substantial, controlled" where there is large scale, controlled community transmission, including communal settings (e.g., schools, workplaces, etc.); or

¹ March 23, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/community/community-mitigation.html>

4. "Substantial, uncontrolled" where there is large scale, uncontrolled community transmission, including communal settings (e.g., schools, workplaces, etc.).

"COVID-19" means Coronavirus Disease 2019, which is primarily a respiratory disease, caused by the SARS-CoV-2 virus.

"COVID-19 positive and confirmed COVID-19" refer to a person who has a confirmed positive test for, or who has been diagnosed by a licensed healthcare provider with COVID-19.

"COVID-19 test" means a test for SARS-CoV-2 that is:

1. Cleared or approved by the U.S. Food and Drug Administration (FDA) or is authorized by an Emergency Use Authorization (EUA) from the FDA to diagnose current infection with the SARS-CoV-2 virus; and

2. Administered in accordance with the FDA clearance or approval or the FDA EUA as applicable.

"Disinfecting" means using chemicals approved for use against SARS-CoV-2 virus, for example EPA-registered disinfectants, or non-EPA-registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2 virus, to kill germs on surfaces. The process of disinfecting does not necessarily clean dirty surfaces or remove germs, but killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.

"Duration and frequency of employee exposure" means how long ("duration") and how often ("frequency") an employee is potentially exposed to the SARS-CoV-2 virus or COVID-19 disease. Generally, the greater the frequency or length of time of the exposure, the greater the probability is for potential infection to occur. Frequency of exposure is generally more significant for acute acting agents or situations, while duration of exposure is generally more significant for chronic acting agents or situations. An example of an acute SARS-CoV-2 virus or COVID-19 disease situation could involve a customer, patient, or other person who is not fully vaccinated not wearing a face covering or personal protective equipment or coughing or sneezing

directly into the face of an employee. An example of a chronic situation could involve a job task that requires an employee **who is not fully vaccinated** to interact either for an extended period of time inside six feet with a smaller static group of other employees or persons or for an extended period of time inside six feet with a larger group of other employees or persons in succession but for periods of shorter duration.

"Economic feasibility" means the employer is financially able to undertake the measures necessary to comply with one or more requirements in this standard. The cost of corrective measures to be taken will not usually be considered as a factor in determining whether a violation of this standard has occurred. If an employer's level of compliance lags significantly behind that of its industry, an employer's claim of economic infeasibility will not support a VOSH decision to decline to take enforcement action.

"Elastomeric respirator" means a tight-fitting respirator with a facepiece that is made of synthetic or rubber material that permits it to be disinfected, cleaned, and reused according to manufacturer's instructions. It is equipped with a replaceable cartridge(s), canister(s), or filter(s).

"Elimination" means a method of exposure control that removes the employee completely from exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks.

"Employee" means an employee of an employer who is employed in a business of his employer. Reference to the term "employee" in this standard also includes, but is not limited to, temporary employees and other joint employment relationships, persons in supervisory or management positions with the employer, etc., in accordance with Virginia occupational safety and health laws, standards, regulations, and court rulings.

"Engineering control" means the use of substitution, isolation, ventilation, and equipment modification to reduce exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks.

"Exposure risk level" means the level of possibility that an employee could be exposed to the hazards associated with SARS-CoV-2 virus and the COVID-19 disease. The exposure risk level assessment should address all risks and all modes of transmission, including airborne transmission, as well as transmission by asymptomatic and presymptomatic individuals. Risk

levels should be based on the risk factors present that increase risk exposure to COVID-19 and are present during the course of employment regardless of location. Hazards and job tasks have been divided into four risk exposure levels: very high, high, medium, and lower:

"Very high" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure to known or suspected sources of the SARS-CoV-2 virus (e.g., laboratory samples) or persons known or suspected to be infected with the SARS-CoV-2 virus, including, but not limited to, during specific medical, postmortem, or laboratory procedures:

1. Aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on a patient or person known or suspected to be infected with the SARS-CoV-2 virus;
2. Collecting or handling specimens from a patient or person known or suspected to be infected with the SARS-CoV-2 virus (e.g., manipulating cultures from patients known or suspected to be infected with the SARS-CoV-2 virus); and
3. Performing an autopsy that involves aerosol-generating procedures on the body of a person known or suspected to be infected with the SARS-CoV-2 virus at the time of their death.

"High" exposure risk hazards or job tasks are those in places of employment with high potential for employee exposure inside six feet with known or suspected sources of SARS-CoV-2, or with persons known or suspected to be infected with the SARS-CoV-2 virus that are not otherwise classified as very high exposure risk, including, but not limited to:

1. Health care (physical and mental health) delivery and support services provided to a patient known or suspected to be infected with the SARS-CoV-2 virus, including field hospitals (e.g., doctors, nurses, cleaners, and other hospital staff who must enter patient rooms or areas);
2. Health care (physical and mental) delivery, care, and support services, wellness services, non-medical support services, physical assistance, etc., provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus involving skilled nursing services, outpatient medical services, clinical services, drug treatment programs,

medical outreach services, mental health services, home health care, nursing home care, assisted living care, memory care support and services, hospice care, rehabilitation services, primary and specialty medical care, dental care, COVID-19 testing services, blood donation services, and chiropractic services;

3. First responder services provided to a patient, resident, or other person known or suspected to be infected with the SARS-CoV-2 virus;

4. Medical transport services (loading, transporting, unloading, etc.) provided to patients known or suspected to be infected with the SARS-CoV-2 virus (e.g., ground or air emergency transport, staff, operators, drivers, pilots, etc.);

5. Mortuary services involved in preparing (e.g., for burial or cremation) the bodies of persons who are known or suspected to be infected with the SARS-CoV-2 virus at the time of their death; and

6. Correctional facilities, jails, detention centers, and juvenile detention centers.

"Medium" exposure risk hazards or job tasks are those not otherwise classified as very high or high exposure risk in places of employment that require more than minimal occupational contact inside six feet with other employees, other persons, or the general public who may be infected with SARS-CoV-2, but who are not known or suspected to be infected with the SARS-CoV-2 virus. Medium exposure risk hazards or job tasks may include, but are not limited to, operations and services in:

1. Poultry, meat, and seafood processing; agricultural and hand labor; commercial transportation of passengers by air, land, and water; on campus educational settings in schools, colleges, and universities; daycare and afterschool settings; restaurants and bars; grocery stores, convenience stores, and food banks; drug stores and pharmacies; manufacturing settings; indoor and outdoor construction settings; work performed in customer premises, such as homes or businesses; retail stores; call centers; package processing settings; veterinary settings; personal care, personal grooming, salon, and spa settings; venues for sports, entertainment, movies, theaters, and other forms of mass gatherings; homeless shelters; fitness, gym, and exercise facilities; airports, and train and bus stations; etc.; and

2. Situations not involving exposure to known or suspected sources of SARS-CoV-2; hospitals, other health care (physical and mental) delivery and support services in a non-hospital setting, wellness services, physical assistance, etc.; skilled nursing facilities; outpatient medical facilities; clinics, drug treatment programs, and medical outreach services; non-medical support services; mental health facilities; home health care, nursing homes, assisted living facilities, memory care facilities, and hospice care; rehabilitation centers; doctors' offices, dentists' offices, and chiropractors' offices; first responders services provided by police, fire, paramedic and emergency medical services providers, medical transport; contact tracers; correctional facilities, jails, detentions centers, and juvenile detention centers, etc.

"Lower" exposure risk hazards or job tasks are those not otherwise classified as very high, high, or medium exposure risk that do not require contact inside six feet with persons known to be, or suspected of being, or who may be infected with SARS-CoV-2. Employees in this category have minimal occupational contact with other employees, other persons, or the general public, such as in an office building setting, or are able to achieve minimal occupational contact with others through the implementation of engineering, administrative and work practice controls, such as, but not limited to:

1. Installation of floor to ceiling physical barriers constructed of impermeable material and not subject to unintentional displacement (e.g., such as clear plastic walls at convenience stores behind which only one employee is working at any one time);

2. Telecommuting;

3. Staggered work shifts that allow employees to maintain physical distancing from other employees, other persons, and the general public;

4. Delivering services remotely by phone, audio, video, mail, package delivery, curbside pickup or delivery, etc., that allows employees to maintain physical distancing from other employees, other persons, and the general public; and

5. Mandatory physical distancing of employees from other employees, other persons, and the general public.

Employee use of face coverings for contact inside six feet of coworkers, customers, or other persons is not an acceptable administrative or work practice control to achieve minimal occupational contact.

"Face covering" means an item made of two or more layers of washable, breathable fabric that fits snugly against the sides of the face without any gaps, completely covering the nose and mouth and fitting securely under the chin. Neck gaiters made of two or more layers of washable, breathable fabric, or folded to make two such layers are considered acceptable face coverings.

Non-medical disposable masks for single use that otherwise meet the definition of "face covering" in 16VAC25-220, with the exception that they are not washable, are permissible to use as face coverings.² Face coverings shall not have exhalation valves or vents, which allow virus particles to escape, and shall not be made of material that makes it hard to breathe, such as vinyl. A face covering is not a surgical /medical procedure mask or respirator. A face covering is not subject to testing and approval by a state or federal government agency, so it is not considered a form of personal protective equipment or respiratory protection equipment under VOSH laws, rules, regulations, and standards. Notwithstanding any other provisions in this definition, face coverings approved as having met ASTM standards for face coverings effective against the SARS-CoV-2 virus shall be considered to be in compliance with this standard.³

"Facemask" means a surgical, medical procedure, dental, or isolation mask that is FDA-cleared, authorized by an FDA Emergency Use Authorization (EUA), or offered or distributed as described in an FDA enforcement policy. Facemasks may also be referred to as "medical procedure masks."

"Face shield" means a device, typically made of clear plastic, that:

1. is certified to ANSI/ISEA Z87.1, or
2. covers the wearer's eyes, nose, and mouth to protect from splashes, sprays, and spatter of body fluids, wraps around the sides of the wearer's face (i.e., temple-to-temple), and extends below the wearer's chin.

² DOLI §40, FAQ 36; <https://www.doli.virginia.gov/final-covid-19-standard-frequently-asked-questions/>

³ <https://ehsdailyadvisor.blr.com/2021/02/nonregulatory-face-mask-standard-approved-by-astm/>, and <https://www.astm.org/COVID-19/>

form of personal protective equipment made of transparent, impermeable materials primarily used for eye protection from droplets or splashes for the person wearing it. A face shield is not a substitute for a face covering, surgical/medical procedure mask, or respirator.

"Feasible" as used in this standard includes both technical and economic feasibility.

"Filtering facepiece respirator" means a negative pressure air purifying particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. Filtering facepiece respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH).

"Fully vaccinated" means a person is considered fully vaccinated for COVID-19 ≥ 2 weeks after they have received the second dose in a 2-dose series, or ≥ 2 weeks after they have received a single-dose vaccine, provided such vaccine has been FDA-approved, or authorized by an FDA Emergency Use Authorization (EUA),⁴ or authorized for emergency use by the World Health Organization (WHO).

"Hand sanitizer" means an alcohol-based hand rub containing at least 60% alcohol, unless otherwise provided for in this standard.

"HIPAA" means Health Insurance Portability and Accountability Act.

"~~Known Confirmed COVID-19~~to be infected with the SARS-CoV-2 virus" means a person, whether symptomatic or asymptomatic, who has tested positive for SARS-CoV-2, and the employer knew or with reasonable diligence should have known that the person has tested positive for SARS-CoV-2.

"Healthcare services" mean services that are provided to individuals by professional healthcare practitioners (e.g., doctors, nurses, emergency medical personnel, oral health professionals) for the purpose of promoting, maintaining, monitoring, or restoring health. Healthcare services are delivered through various means including: hospitalization, longterm care, ambulatory care, home health and hospice care, emergency medical response, and patient transport. For the purposes of this section, healthcare services include autopsies.

⁴ <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>

"Healthcare support services" mean services that facilitate the provision of healthcare services. Healthcare support services include patient intake/admission, patient food services, equipment and facility maintenance, housekeeping services, healthcare laundry services, medical waste handling services, and medical equipment cleaning/reprocessing services.

"May be infected with SARS-CoV-2 virus" means any person not currently known or suspected to be infected with SARS-CoV-2 virus.

"Minimal occupational contact" means no or very limited, brief, and infrequent contact with employees or other persons at the place of employment. Examples include, but are not limited to, remote work (i.e., those working from home); employees with no more than brief contact with others inside six feet (e.g., passing another person in a hallway that does not allow physical distancing of six feet); health care employees providing only telemedicine services; a long distance truck driver.

"Occupational exposure" means the state of being actually or potentially exposed to contact with SARS-CoV-2 virus or COVID-19 disease related hazards at the work location or while engaged in work activities at another location.

"Otherwise at-risk" means a person whose ability to have a full immune response to vaccination may have been affected by certain conditions, such as a prior transplant, as well as prolonged use of corticosteroids or other immune-weakening medications.⁵

"Personal protective equipment" means equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, biological, or other workplace hazards. Personal protective equipment for actual or potential exposure to SARS-CoV-2 or COVID-19 exposure may include, but is not limited to, gloves, safety glasses, goggles,

⁵ <https://www.osha.gov/coronavirus/safework#appendix>
<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/underlying-conditions.html>
[https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#/~/text=Immunocompromised%20state%20\(weakened%20immune%20system,have%20a%20weakened%20immune%20system](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#/~/text=Immunocompromised%20state%20(weakened%20immune%20system,have%20a%20weakened%20immune%20system)

shoes, earplugs or muffs, hard hats, respirators, surgical /medical procedure masks, facemask, impermeable gowns or coveralls, face shields, vests, and full body suits.

"Physical distancing" also called "social distancing" means a person keeping space between himself and other persons while conducting work-related activities inside and outside of the physical establishment by staying at least six feet from other persons. Physical separation of an employee from other employees or persons by a permanent, solid floor to ceiling wall (e.g., an office setting) constitutes one form of physical distancing from an employee or other person stationed on the other side of the wall, provided that six feet of travel distance is maintained from others around the edges or sides of the wall as well.

"Powered air-purifying respirator (PAPR)" means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

"Respirator" means a type of personal protective equipment (PPE) that is certified by NIOSH under 42 CFR Part 84 or is authorized under an Emergency Use Authorization (EUA) by the FDA. Respirators protect against airborne hazards by removing specific air contaminants from the ambient (surrounding) air or by supplying breathable air from a safe source. Common types of respirators include filtering facepiece respirators, elastomeric respirators, and PAPRs. Face coverings, facemasks, and face shields are not respirators.

protective device that covers the nose and mouth or the entire face or head to guard the wearer against hazardous atmospheres. Respirators are certified for use by the National Institute for Occupational Safety and Health (NIOSH). Respirators may be (i) tight fitting, which means either a half mask that covers the mouth and nose or a full face piece that covers the face from the hairline to below the chin or (ii) loose-fitting, such as hoods or helmets that cover the head completely.

There are two major classes of respirators:

1. Air purifying, which remove contaminants from the air; and

2. Atmosphere supplying, which provide clean, breathable air from an uncontaminated source.

As a general rule, atmosphere supplying respirators are used for more hazardous exposures.

"Respirator user" means an employee who in the scope of their current job may be assigned to tasks that may require the use of a respirator in accordance with this standard or required by other provisions in the VOSH and OSHA standards.

"SARS-CoV-2" means the novel virus that causes coronavirus disease 2019, or COVID-19. Coronaviruses are named for the crown-like spikes on their surfaces.

"Severely immunocompromised" means a seriously weakened immune system that lowers the body's ability to fight infection and may increase the risk of getting severely sick from SARS-CoV-2, from being on chemotherapy for cancer, being within one year out from receiving a hematopoietic stem cell or solid organ transplant, untreated HIV infection with CD4 T lymphocyte count less than 200, combined primary immunodeficiency disorder, and receipt of prednisone greater than 20mg per day for more than 14 days. The degree of immunocompromise is determined by the treating provider, and preventive actions are tailored to each individual and situation.⁶

"Signs of COVID-19" are medical conditions that can be objectively observed and may include fever, cough, shortness of breath or trouble breathing or shortness of breath, cough, vomiting, new confusion, inability to wake or stay awake, bluish lips or face, pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone, etc.⁷

"Surgical/medical procedure mask" means a mask to be worn over the wearer's nose and mouth that is fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids, and prevents the wearer from exposing others in the same fashion. A surgical/medical procedure mask protects others from the wearer's respiratory emissions. A surgical/medical procedure mask has a looser fitting face seal than a tight fitting respirator. A surgical/medical procedure mask does not provide the wearer with a reliable level of protection from inhaling smaller airborne particles. A surgical/medical procedure mask is considered a form of personal protective equipment, but is not considered respiratory protection.

⁶ February 16, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html>

⁷ <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

equipment under VOSH laws, rules, regulations, and standards. Testing and approval is cleared by the U.S. Food and Drug Administration (FDA).

"Surgical mask" means a mask that covers the user's nose and mouth and provides a physical barrier to fluids and particulate materials. The mask meets certain fluid barrier protection standards and Class I or Class II flammability tests. Surgical masks are generally regulated by FDA as Class II devices under 21 CFR 878.4040 – Surgical apparel.

"Suspected to ~~COVID-19~~ be infected with SARS-CoV-2 virus" means a person who has been told by a licensed healthcare provider that they are suspected to have COVID-19; or is experiencing recent loss of taste and/or smell with no other explanation; or is experiencing both fever ($\geq 100.4^{\circ}$ F) and new unexplained cough associated with shortness of breath; or has symptoms consistent with the clinical criteria in the CDC national case definition and no other explanation for symptoms exist. ~~signs or symptoms of COVID-19 but has not tested positive for SARS-CoV-2, and no alternative diagnosis has been made (e.g., tested positive for influenza).~~

"Symptomatic" means a person is experiencing signs or symptoms attributed to COVID-19. A person may become symptomatic two to 14 days after exposure to the SARS-CoV-2 virus.

"Symptoms of COVID-19" are medical conditions that are subjective to the person and not observable to others and may include chills, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea, congestion or runny nose, or diarrhea, etc.⁸

"Technical feasibility" means the existence of technical know-how as to materials and methods available or adaptable to specific circumstances that can be applied to one or more requirements in this standard with a reasonable possibility that employee exposure to the SARS-CoV-2 virus and COVID-19 disease hazards will be reduced. If an employer's level of compliance lags significantly behind that of the employer's industry, allegations of technical infeasibility will not be accepted.

"USBC" means Virginia Uniform Statewide Building Code.

⁸ <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

"Vaccine" means a biological product authorized or licensed by the FDA to prevent or provide protection against COVID-19, whether the substance is administered through a single dose or a series of doses.

"VDH" means Virginia Department of Health.

"VOSH" means Virginia Occupational Safety and Health.

"Work practice control" means a type of administrative control by which the employer modifies the manner in which the employee performs assigned work. Such modification may result in a reduction of exposure to SARS-CoV-2 virus and COVID-19 disease related workplace hazards and job tasks through such methods as changing work habits, improving sanitation and hygiene practices, or making other changes in the way the employee performs the job.

DRAFT

16VAC25-220-40. Mandatory requirements for all employers.

A. Employers shall have a policy in place to ensure compliance with the requirements in this section to protect employees from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease. Such policy shall have a method to receive anonymous complaints of violations. An employer that enforces its policy in good faith and resolves filed complaints shall be considered in compliance with this subsection.

Employers shall ensure compliance with the requirements in this section to protect employees in all exposure risk levels from workplace exposure to the SARS-CoV-2 virus that causes the COVID-19 disease.

B. Exposure assessment and determination, notification requirements, and employee access to exposure and medical records.

1. Employers shall assess their workplace for hazards and job tasks that can potentially expose employees to the SARS-CoV-2 virus or COVID-19 disease. Employers shall classify each job task according to the hazards employees are potentially exposed to and ensure compliance with the applicable sections of this standard for very high, high, medium, or lower risk levels of exposure. Tasks that are similar in nature and expose employees exposed to the same hazard may be grouped for classification purposes.

Employers may rely on an employee's representation of being fully vaccinated, as defined herein, without requiring proof of vaccination; however, nothing in this standard shall be construed to preclude an employer from requiring proof that an employee is fully vaccinated.

2. Employers shall inform employees of the methods of and encourage employees to self-monitor for signs and symptoms of COVID-19 if employees suspect possible exposure or are experiencing signs or symptoms of illness.

3. Serological testing, also known as antibody testing, is a test to determine if persons have been infected with SARS-CoV-2 virus. It has not been determined that persons who test positive for the presence of antibodies by serological testing are immune from infection.⁹

a. Serologic test results shall not be used to make decisions about returning employees to work who were previously classified as ~~known or suspected~~ suspected or confirmed ~~to be infected with the SARS-CoV-2 virus.~~

b. Serologic test results shall not be used to make decisions concerning employees who were previously classified as ~~known or~~ suspected or confirmed ~~to be infected with the SARS-CoV-2 virus~~ about grouping, residing in, or being admitted to congregate settings, such as schools, dormitories, etc.

4. Employers shall develop and implement policies and procedures for employees to report when they are experiencing signs or symptoms consistent with COVID-19, and no alternative diagnosis has been made (e.g., tested positive for influenza). Such employees shall be designated by the employer as ~~"suspected to~~ COVID-19, ~~be infected with SARS-CoV-2 virus."~~

5. Employers shall not permit suspected or confirmed COVID-19 employees or other persons ~~known or suspected to be infected with SARS-CoV-2 virus~~ to report to or remain at the work site or engage in work at a customer or client location until cleared for return to work (see subsection C of this section).

Nothing in this standard shall prohibit an employer from permitting an suspected or confirmed COVID-19 employee ~~known or~~ suspected ~~to be infected with SARS-CoV-2 virus~~ from engaging in teleworking or other form of work isolation that would not result in potentially exposing other employees to the SARS-CoV-2 virus.

6. Employers shall discuss with subcontractors and companies that provide contract or temporary employees the importance and requirement to exclude from work employees or other persons (e.g., volunteers) who are ~~known or~~ suspected or confirmed COVID-19 ~~to be infected with the SARS-CoV-2 virus~~. Subcontractor, contract, or temporary employees who are ~~known or~~ suspected or confirmed COVID-19 ~~to be infected with the SARS-CoV-2 virus~~ shall not report to or be allowed to remain at the work site until cleared for return to work.

⁹ March 17, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antibody-tests-guidelines.html>

Subcontractors shall not allow their ~~suspected or confirmed COVID-19~~ employees ~~known or suspected to be infected with the SARS-CoV-2 virus~~ to report to or be allowed to remain at work or on a job site until cleared for return to work.

7. To the extent permitted by law, including HIPAA, employers shall establish a system to receive reports of positive ~~SARS-CoV-2/COVID-19~~ tests by employees, subcontractors, contract employees, and temporary employees (excluding patients hospitalized on the basis of being ~~known or suspected or confirmed COVID-19 to be infected with SARS-CoV-2 virus~~) present at the place of employment within two days prior to symptom onset (or positive test if the employee is asymptomatic) until 10 days after onset (or positive test). Employers shall notify:

- a. The employer's own employees who may have been exposed, within 24 hours of discovery of the employees' possible exposure, while keeping confidential the identity of the ~~confirmed COVID-19~~ person ~~known to be infected with SARS-CoV-2 virus~~ in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;
- b. In the same manner as subdivision 7 a of this subsection, other employers whose employees were present at the work site during the same time period;
- c. In the same manner as subdivision 7 a of this subsection, the building or facility owner. The building or facility owner will require all employer tenants to notify the owner of the occurrence of a ~~SARS-CoV-2/COVID-19~~ positive test for any employees or residents in the building. This notification will allow the owner to take the necessary steps to sanitize the common areas of the building. In addition, the building or facility owner will notify all employer tenants in the building that one or more cases have been discovered and the floor or work area where the case was located. The identity of the individual will be kept confidential in accordance with the requirements of the Americans with Disabilities Act (ADA) and other applicable federal and Virginia laws and regulations;
- d. The Virginia Department of Health ~~during a declaration of an emergency by the Governor pursuant to § 44-146.17 of the Code of Virginia~~. Every employer as defined by § 40.1-2 of the Code of Virginia shall report to the Virginia Department of Health (VDH)

when the work site has had two or more confirmed cases of COVID-19 of its own employees present at the place of employment within a 14-day period testing positive for ~~SARS-CoV-2~~COVID-19virus during that 14-day time period. Employers shall make such a report in a manner specified by VDH, including name, date of birth, and contact information of each case, within 24 hours of becoming aware of such cases. Employers shall continue to report all cases until the local health department has closed the outbreak investigation. After the outbreak investigation is closed, subsequent identification of two or more confirmed cases of COVID-19 during a declared emergency shall be reported, as required by this subdivision B 7 d. The following employers are exempt from this provision because of separate outbreak reporting requirements contained in [12VAC5-90-90](#): any residential or day program, service, or facility licensed or operated by any agency of the Commonwealth, school, child care center, or summer camp; and

e. The Virginia Department of Labor and Industry within 24 hours of the discovery of ~~three~~ two or more of its own employees present at the place of employment within a 14-day period testing positive for ~~SARS-CoV-2 virus~~COVID-19 during that 14-day time period. A reported positive ~~SARS-CoV-2 virus~~COVID-19 test does not need to be reported more than once and will not be used for the purpose of identifying more than one grouping of three or more cases, or more than one 14-day period.

8. Employers shall ensure employee access to the employee's own SARS-CoV-2 virus and COVID-19 disease related exposure and medical records in accordance with the standard applicable to its industry. Employers in the agriculture, public sector marine terminal, and public sector longshoring industries shall ensure employees' access to the employees' own SARS-CoV-2 virus and COVID-19 disease related exposure and medical records in accordance with [16VAC25-90-1910.1020](#), Access to Employee Exposure and Medical Records.

C. Return to work. Employers shall develop and implement policies and procedures for ~~employees known or suspected~~ or confirmed COVID-19 employees ~~to be infected with the SARS-CoV-2 virus~~ to return to work.

1. Symptomatic employees known or suspected to be infected with the SARS-CoV-2 virus are excluded from returning to work until all three of the following conditions have been met:

- a. The employee is fever free (below 100.0° F) for at least 24 hours, without the use of fever-reducing medications;
- b. Respiratory symptoms, such as cough and shortness of breath have improved; and
- c. At least 10 days have passed since symptoms first appeared.

However, a limited number of employees with severe illness may produce replication-competent virus beyond 10 days that may warrant extending duration of isolation for up to 20 days after symptom onset. Employees who are severely immunocompromised may require testing to determine when they can return to work, and the employer shall consider consultation with infection control experts. VOSH will consult with VDH when identifying severe employee illnesses that may warrant extended duration of isolation or severely immunocompromised employees required to undergo testing.

2. Employees known to be infected with SARS-CoV-2 who never develop signs or symptoms are excluded from returning to work until 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.

1. If the employer knows an employee is COVID-19 positive, then the employer must immediately remove that employee **from the worksite** and keep the employee removed until they meet the return to work criteria in 16VAC25-220-40 C 3.

2. If the employer knows an employee is suspected COVID-19, then the employer must immediately remove that employee **from the worksite** and either:

a. Keep the employee removed until they meet the return to work criteria in 16VAC25-220-40 C 3; or

b. Keep the employee removed and provide a COVID-19 polymerase chain reaction (PCR) test at no cost to the employee.

(1) If the test results are negative, the employee may return to work immediately.

(2) If the test results are positive, the employer must comply with 16VAC25-220-40 C 1.

(3) If the employee refuses to take the test, the employer must continue to keep the employee removed from the workplace consistent with 16VAC25-220-40 C 1. Absent undue hardship, employers must make reasonable accommodations for employees who cannot take the test for religious or disability-related medical reasons.

3. The employer must make decisions regarding an employee's return to work after a COVID-19-related workplace removal in accordance with guidance from a licensed healthcare provider, a VDH public health professional, or CDC's "Isolation Guidance"¹⁰ (hereby incorporated by reference); and CDC's "Return to Work Healthcare Guidance"¹¹ (hereby incorporated by reference).

34. For purposes of this section, COVID-19 testing is considered a "medical examination" under § [40.1-28](#) of the Code of Virginia. Employers shall not require employees to pay for the cost of COVID-19 testing for return to work determinations. If an employer's health insurance covers the entire cost of COVID-19 testing, use of the insurance coverage would not be considered a violation of this subdivision C 3.

D. Unless otherwise provided in this standard, employers shall establish and implement policies and procedures that ensure employees that are not fully vaccinated and otherwise at-risk employees observe physical distancing while on the job and during paid breaks on the employer's property, including policies and procedures that:

1. Use verbal announcements, signage, or visual cues to promote physical distancing.
2. Decrease worksite density by limiting non-employee access to the place of employment or restrict access to only certain workplace areas to reduce the risk of exposure. An employer's compliance with occupancy limits contained in any applicable Virginia executive order or order of public health emergency will constitute compliance with the requirements in this subsection.

3. Provide that such requirements do not apply to fully vaccinated employees.

¹⁰ <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/isolation.html>

¹¹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>

E. Access to common areas, breakrooms, or lunchrooms shall be closed or controlled. This subsection does not apply to fully vaccinated employees.

If the nature of an employer's work or the work area does not allow employees to consume meals in the employee's workspace while observing physical distancing, an employer may designate, reconfigure, and alternate usage of spaces where employees congregate, including lunch and break rooms, locker rooms, time clocks, etc., with controlled access, provided the following conditions are met:

1. At the entrance of the designated common area or room, employers shall clearly post the policy limiting the occupancy of the space and requirements for physical distancing, hand washing and hand sanitizing, and cleaning and disinfecting of shared surfaces for employees who are not fully vaccinated.
2. Employers shall limit occupancy of the designated common area or room so that occupants who are not fully vaccinated can maintain physical distancing from each other. Employers shall enforce the occupancy limit.
3. Employees shall be required to clean and disinfect the immediate area in which they were located prior to leaving, or employers may provide for cleaning and disinfecting of the common area or room at regular intervals throughout the day and between shifts of employees using the same common area or room (i.e., where an employee or groups of employees have a designated lunch period and the common area or room can be cleaned in between occupancies). When no suspected or confirmed COVID-19 persons are known to have been in a space, the employer shall clean the common area, breakroom, or lunchroom once per shift.¹²
4. Handwashing facilities, and hand sanitizer where feasible, are available to employees. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable and use and storage in hot environments can result in a hazard.

F. When multiple employees are occupying a vehicle or other form of transportation with one or more employees or other persons for work purposes, employers shall use the hierarchy of hazard controls to mitigate the hazards associated with SARS-CoV-2 and COVID-19 to prevent

¹² <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

employee exposures in the following order (NOTE: This subsection does not apply to fully vaccinated employees):

1. Eliminate the need for employees to share work vehicles or other transportation and arrange for alternative means for additional employees to travel to work sites.
2. Provide access to fresh air ventilation (e.g., windows). Do not recirculate cabin air.
3. When physical distancing cannot be maintained, establish procedures to maximize separation between employees as well as other persons during travel (e.g., setting occupancy limits, sitting in alternate seats, etc.).
4. When an employees must share work vehicles or other transportation with one or more employees or other persons because no other alternatives are available, employees shall be provided with respiratory protection, such as an N95 filtering face piece respirator.
5. The employer shall ensure compliance with respiratory protection and personal protective equipment standards applicable to the employer's industry (e.g., when one or more employees is accompanying a suspected or confirmed COVID-19 person in an ambulance).
56. Until adequate supplies of respiratory protection and/or personal protective equipment become readily available for non-medical and non-first responder employers and employees, employers shall provide and employees shall wear face coverings while occupying a work vehicle or other transportation with other employees or persons.

Notwithstanding anything to the contrary in this standard, the Secretary of Labor Commerce and Trade may exercise discretion in the enforcement of an employer's failure to provide PPE required by this standard, if the employer demonstrates that the employer:

- a. Is exercising due diligence to come into compliance with such requirement; and
- b. Is implementing alternative methods and measures to protect employees that are satisfactory to the Secretary of Commerce and Trade Labor after consultation with the eCommissioner of Labor and Industry and the Secretary of Health and Human Services.

7. For commercial motor vehicles or trucks, if the driver is the only person in the vehicle or truck, or the vehicle or truck is operated by a team who all live in the same household and are the only persons in the vehicle, an employer whose drivers complied with the above-referenced language would be considered to be in compliance with 16VAC25-220-40.F.1 through -40.F.5.¹³

G. Employers shall provide and require employees that are not fully vaccinated, and otherwise at-risk employees (because of a prior transplant or other medical condition), to wear face coverings or surgical masks while indoors, unless their work task requires a respirator or other PPE. Such employees shall wear a face covering or surgical mask that covers the nose and mouth to contain the wearer's respiratory droplets and help protect others and potentially themselves. Where the nature of an employee's work or the work area does not allow the employee to observe physical distancing requirements, employers shall ensure compliance with respiratory protection and personal protective equipment standards applicable to its industry. This subsection does not apply to fully vaccinated employees.

1. The following are exceptions to the requirements for face coverings or surgical masks for employees that are not fully vaccinated:

a. When an employee is alone in a room.

b. While an employee is eating and drinking at the workplace, provided each employee is at least 6 feet away from any other person, or separated from other people by a physical barrier.

c. When employees are wearing respiratory protection in accordance with 1910.134 or this standard.

d. When it is important to see a person's mouth (e.g., communicating with an individual who is deaf or hard of hearing) and the conditions do not permit a facemask that is constructed of clear plastic (or includes a clear plastic window). In such situations, the

¹³ DOLI §40, FAQ 45

employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it.

e. When employees cannot wear facemasks due to a medical necessity, medical condition, or disability as defined in the Americans with Disabilities Act (42 USC 12101 et seq.), or due to a religious belief. Exceptions must be provided for a narrow subset of persons with a disability who cannot wear a facemask or cannot safely wear a facemask, because of the disability, as defined in the Americans with Disabilities Act (42 USC 12101 et seq.), including a person who cannot independently remove the facemask. The remaining portion of the subset who cannot wear a facemask may be exempted on a case-by-case basis as required by the Americans with Disabilities Act and other applicable laws. In all such situations, the employer must ensure that any such employee wears a face shield for the protection of the employee, if their condition or disability permits it. Accommodations may also need to be made for religious beliefs consistent with Title VII of the Civil Rights Act.

f. When the employer can demonstrate that the use of a facemask presents a hazard to an employee of serious injury or death (e.g., arc flash, heat stress, interfering with the safe operation of equipment). In such situations, the employer must ensure that each employee wears an alternative to protect the employee, such as a face shield, if the conditions permit it. Any employee not wearing a facemask must remain at least 6 feet away from all other people unless the employer can demonstrate it is not feasible. The employee must resume wearing a facemask when not engaged in the activity where the facemask presents a hazard.

Note to 16VAC25-220-40 G 1 d, e and f: The employer may determine that the use of face shields, without facemasks, in certain settings is not appropriate due to other infection control concerns.

g. Where a face shield is required to comply with this paragraph or is otherwise required by the employer, the employer must ensure that face shields are cleaned at least daily and are not damaged. When an employee provides a face shield that meets the definition of that term in 16VAC25-220-30, the employer may allow the employee to use it and is not required to reimburse the employee for that face shield.² Notwithstanding anything to the contrary in this

standard, the Secretary of Labor may exercise discretion in the enforcement of an employer's failure to provide PPE required by this standard, if the employer demonstrates that the employer:

a. Is exercising due diligence to come into compliance with such requirement; and

b. Is implementing alternative methods and measures to protect employees that are satisfactory to the Secretary of Labor after consultation with the Commissioner of Labor and Industry and the Secretary of Health and Human Services.

H. Reserved. When it is necessary for employees solely exposed to lower risk hazards or job tasks to have brief contact with others inside six feet (e.g., passing another person in a hallway that does not allow physical distancing of six feet), a face covering is required.

I. When required by this standard, face coverings shall be worn over the wearer's nose and mouth and extend under the chin.

J. Reserved. Nothing in this standard shall require the use of a respirator, surgical/medical procedure mask, or face covering by any employee for whom doing so would be contrary to the employee's health or safety because of a medical condition; however, nothing in this standard shall negate an employer's obligations to comply with personal protective equipment and respiratory protection standards applicable to its industry.

1. Although face shields are not considered a substitute for face coverings as a method of source control and not used as a replacement for face coverings among people without medical contraindications, face shields may provide some level of protection against contact with respiratory droplets. In situations where a face covering cannot be worn due to medical contraindications, employers shall provide and employees shall wear either:

a. A face shield that wraps around the sides of the wearer's face and extends below the chin; or

b. A hooded face shield.

2. To the extent feasible, employees wearing face shields in accordance with this subsection shall observe physical distancing requirements in this standard.

3. Face shield wearers shall wash their hands before and after removing the face shield and avoid touching their eyes, nose, and mouth when removing it.

4. Disposable face shields shall only be worn for a single use and disposed of according to manufacturer instructions.

5. Reusable face shields shall be cleaned and disinfected after each use according to manufacturer instructions.

K. Requests to the Department of Labor and Industry for religious waivers from the required use of respirators, surgical/medical procedure masks, or face coverings will be handled in accordance with the requirements of applicable federal and state law, standards, regulations and the U.S. and Virginia Constitutions, after Department of Labor and Industry consultation with the Office of the Attorney General. Reserved.

L. Sanitation and disinfecting.

1. In addition to the requirements contained in this standard, employers shall comply with the VOSH sanitation standard applicable to its industry.

2. Reserved. Employees that interact with customers, the general public, contractors, and other persons shall be provided with and immediately use supplies to clean and disinfectant surfaces contacted during the interaction where there is the potential for exposure to the SARS-CoV-2 virus by themselves or other employees.

3. In addition to the requirements contained in this standard, employers shall comply with the VOSH hazard communication standard applicable to the employers' industry for cleaning and disinfecting materials and hand sanitizers.

4. Areas in the place of employment where suspected or confirmed COVID-19 where employees or other persons known or suspected to be infected with the SARS-CoV-2 virus accessed or worked shall be cleaned and disinfected prior to allowing other employees access to the areas as follows: Where feasible, a period of 24 hours will be observed prior to cleaning and disinfecting.

a. The provisions in subdivisions 4 b, 4 c, and 4 d of this subsection do not apply to healthcare settings or for operators of facilities such as food and agricultural production or processing workplace settings, manufacturing workplace settings, or food preparation and food service areas where specific regulations or practices for cleaning and disinfection may apply.

b. If less than 24 hours have passed since the person who is sick or diagnosed with COVID-19 has been in the space, clean and disinfect the space.

c. If more than 24 hours have passed since the person who is sick or diagnosed with COVID-19 has been in the space, cleaning is enough. You may choose to also disinfect depending on certain conditions or everyday practices required by your facility.

d. If more than 3 days have passed since the person who is sick or diagnosed with COVID-19 has been in the space, no additional cleaning or disinfecting beyond regular cleaning practices is needed. This requirement shall not apply if the areas in question have been unoccupied for seven or more days.¹⁴

5. All common spaces, including bathrooms (including port-a-johns, privies, etc.), frequently touched surfaces, and doors, shall at a minimum be cleaned and disinfected at least once during or at the end of the shift; ~~(W~~where multiple shifts are employed, such spaces shall be cleaned and disinfected no less than once every 12 hours), except as otherwise provided below:-

a. The provision in subdivision 5 b of this subsection does not apply to healthcare settings or for operators of facilities such as food and agricultural production or processing workplace settings, manufacturing workplace settings, or food preparation and food service areas where specific regulations or practices for cleaning and disinfection may apply.

b. When no suspected or confirmed COVID-19 persons are known to have been in a space, clean once a day.¹⁵

¹⁴ <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

¹⁵ <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

6. All shared tools, equipment, workspaces, and vehicles shall be cleaned ~~prior and disinfected~~ ~~prior~~ to transfer from one employee to another. This subsection does not apply when the transfer is from one fully vaccinated employee to another fully vaccinated employee.

7. Employers shall ensure that cleaning and disinfecting products are readily available to employees to accomplish the required cleaning and disinfecting. In addition, employers shall ensure use of only disinfecting chemicals and products indicated in the Environmental Protection Agency (EPA) List N for use against SARS-CoV-2, or non-EPA-registered disinfectants that otherwise meet the EPA criteria for use against SARS-CoV-2.

8. Employers shall ensure that the manufacturer's instructions for use of all disinfecting chemicals and products ~~are complied with~~ (e.g., concentration, application method, contact time, PPE, etc.) are followed.

9. Employees shall have easy, frequent access and permission to use soap and water, and hand sanitizer where feasible, for the duration of work. Employees assigned to a work station where job tasks require frequent interaction inside six feet with other persons shall be provided with hand sanitizer where feasible at the employees work station.

10. Mobile crews shall be provided with hand sanitizer where feasible for the duration of work at a work site or client or customer location and shall have transportation immediately available to nearby toilet facilities and handwashing facilities that meet the requirements of VOSH laws, standards, and regulations dealing with sanitation. Hand sanitizers required for use to protect against SARS-CoV-2 are flammable, and use and storage in hot environments can result in a hazard.

11. It is recognized that various hazards or job tasks at the same place of employment can be designated as very high, high, medium, or lower as presenting potential exposure risk for purposes of application of the requirements of this standard. In situations other than emergencies, employers shall ensure that protective measures are put in place to prevent cross-contamination between tasks, areas, and personnel.

M. Unless otherwise provided in this standard, when engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection, employers shall

provide personal protective equipment to their employees and ensure the equipment's proper use in accordance with VOSH laws, standards, and regulations applicable to personal protective equipment, including respiratory protection equipment.

DRAFT

16VAC25-220-50. Requirements for healthcare services or healthcare support services hazards or job tasks classified as very high or high exposure risk.

A. Scope and application.

1. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board and take effect, application of Virginia's 16VAC-25-220, except for 16VAC-25-220-40 B.7.d and e, and 16VAC25-220-90, to such covered employers and employees subject to the standard shall be suspended while the federal COVID-19 Emergency Temporary Standard remains in effect.

2. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed or invalidated by a state or federal court, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required.

AMENDMENT - MR

16VAC25-220-50.A.3, Requirements for healthcare services or healthcare support services.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular,

special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be maintained, modified, or revoked.

3. Should the federal COVID-19 Emergency Temporary Standard, 1910.502, et seq., applicable to all settings where any employee provides healthcare services or healthcare support services, be adopted by the Virginia Safety and Health Codes Board but later be stayed by federal OSHA, or otherwise revoked, repealed, declared unenforceable, or permitted to expire, the provisions of Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, including 16VAC25-220-50, shall immediately apply to such employers and employees in its place with no further action of the Board required. In addition, the Virginia Safety and Health Codes Board shall within 30 days notice a regular, special, or emergency meeting/conduct a regular, special, or emergency meeting to determine whether there is a continued need for Virginia's 16VAC25-220, Final Permanent Standard for Infectious Disease Prevention of the SARS-CoV-2 Virus That Causes COVID-19, or whether it should be revoked.

4. The requirements in this section for employers ~~with hazards or job tasks classified as very high or high exposure risk~~ apply in addition to requirements contained in [16VAC25-220-40](#), [16VAC25-220-70](#), and [16VAC25-220-80](#).

5. Except as otherwise provided in this subsection, this section applies to all settings where any employee provides healthcare services or healthcare support services.

6. This section does not apply to the following:

a. the provision of first aid by an employee who is not a licensed healthcare provider;

b. the dispensing of prescriptions by pharmacists in retail settings;

c. non-hospital ambulatory care settings where all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;

d. well-defined hospital ambulatory care settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not permitted to enter those settings;

e. home healthcare settings where all employees are fully vaccinated and all non-employees are screened prior to entry and people with suspected or confirmed COVID-19 are not present;

f. healthcare support services not performed in a healthcare setting (e.g., off-site laundry, off-site medical billing); or

g. telehealth services performed outside of a setting where direct patient care occurs.

Note to paragraphs 16VAC25-220-50 A 5 d and 5 e: VOSH does not intend to preclude the employers of employees who are unable to be vaccinated from the scope exemption in paragraphs 16VAC25-220-50 A 5 d and 5 e. Under various anti-discrimination laws, workers who cannot be vaccinated because of medical conditions, such as allergies to vaccine ingredients, or certain religious beliefs may ask for a reasonable accommodation from their employer. Accordingly, where an employer reasonably accommodates an employee who is unable to be vaccinated in a manner that does not expose the employee to COVID-19 hazards (e.g., telework, working in isolation), that employer may be within the scope exemption in paragraphs 16VAC25-220-50 A 5 d and 5 e.

7. Where a healthcare setting is embedded within a non-healthcare setting (e.g., medical clinic in a manufacturing facility, walk-in clinic in a retail setting), this section applies only to the embedded healthcare setting and not to the remainder of the physical location.

8. In well-defined areas where there is no reasonable expectation that any person with suspected or confirmed COVID-19 will be present, paragraphs (f), (h), and (i) of this section do not apply to employees who are fully vaccinated.

B. Engineering controls.

1. Employers shall ensure that appropriate air-handling systems under their control:

a. Are installed and maintained in accordance with the USBC and manufacturer's instructions in healthcare facilities and other places of employment treating, caring for, or housing persons known or suspected or confirmed COVID-19 persons to be infected with

the SARS-CoV-2 virus; and b. Where feasible and within the design parameters of the system, are utilized as follows:

- (1) Increase total airflow supply to occupied spaces provided that a greater hazard is not created (e.g., airflow that is increased too much may make doors harder to open or may blow doors open);
- (2) In ground transportation settings, use natural ventilation to increase outdoor air dilution of inside air in a manner that will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission to employees, and when environmental conditions and transportation safety and health requirements allow;
- (3) Inspect filter housing and racks to ensure appropriate filter fit and check for ways to minimize filter bypass;
- (4) Increase air filtration to as high as possible in a manner that will still enable the system to provide airflow rates as the system design requires. Ensure compliance with higher filtration values is allowed by the air handler manufacturer's installation instructions and listing;
- (5) Generate clean-to-less-clean air movements by re-evaluating the positioning of supply and exhaust air diffusers and/or dampers and adjusting zone supply and exhaust flow rates to establish measurable pressure differentials;
- (6) Have staff work in "clean" ventilation zones that do not include higher-risk areas such as visitor reception or exercise facilities (if open);
- (7) Ensure exhaust fans in restroom facilities are functional and operating continuously when the building is occupied;
- (8) If the system's design can accommodate such an adjustment and is allowed by the air handler manufacturer's installation instructions and listing, improve central air filtration to MERV-13 and seal edges of the filter to limit bypass; and
- (9) Check filters to ensure they are within service life and appropriately installed.

c. Comply with USBC and applicable referenced American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards.

~~2. For employers not covered by subdivision 1 of this subsection, ensure that air handling systems where installed and under their control are appropriate to address the SARS-CoV-2 virus and COVID-19 disease related hazards and job tasks that occur at the workplace:~~

~~a. Are maintained in accordance with the manufacturer's instructions; and~~

~~b. Comply with subdivisions 1 b and 1 c of this subsection.~~

3. Hospitalized patients ~~known or suspected~~ or confirmed to be infected with the SARS-CoV-2 virus COVID-19, where feasible and available, shall be placed in airborne infection isolation room (AIIRs).

4. Employers shall use AIIRs when available for performing aerosol-generating procedures on suspected or confirmed COVID-19 patients ~~with known or suspected to be infected with the SARS-CoV-2 virus.~~

5. For postmortem activities, employers shall use autopsy suites or other similar isolation facilities when performing aerosol-generating procedures on the bodies of persons ~~known or suspected~~ or confirmed to be infected with the SARS-CoV-2 virus COVID-19 at the time of their death.

6. Employers shall use special precautions associated with Biosafety Level 3 (BSL-3), as defined by the U.S. Department of Health and Human Services Publication No. (CDC) 21-1112 Biosafety in Microbiological and Biomedical Laboratories" (Dec. 2009), which is hereby incorporated by reference, when handling specimens from patients or persons ~~known or suspected~~ or confirmed to be infected with the SARS-CoV-2 virus COVID-19. Diagnostic laboratories that conduct routine medical testing and environmental specimen testing for COVID-19 are not required to operate at BSL-3.

7. To the extent feasible, employers shall install physical barriers, (e.g., clear plastic sneeze guards, etc.), where such barriers will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission.

C. Administrative and work practice controls.

1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.
2. In health care facilities, employers shall follow existing guidelines and facility standards of practice for identifying and isolating infected persons and for protecting employees.
3. Employers shall limit non-employee access to the place of employment or restrict access to only certain workplace areas to reduce the risk of exposure. An employer's compliance with occupancy limits contained in any applicable Virginia executive order or order of public health emergency will constitute compliance with the requirements of this subdivision C 3.
4. Employers shall post signs requesting patients and family members to immediately report signs or symptoms of respiratory illness on arrival at the health care facility and use disposable face coverings.
5. Employers shall offer enhanced medical monitoring of employees during COVID-19 outbreaks.
6. To the extent feasible, an employer shall ensure that psychological and behavioral support is available to address employee stress at no cost to the employee.
7. In health care settings, employers shall provide alcohol-based hand sanitizers containing at least 60% ethanol or 70% isopropanol to employees at fixed work sites and to emergency responders and other personnel for decontamination in the field when working away from fixed work sites.
8. Employers shall provide face coverings to suspected COVID-19 non-employees suspected to be infected with SARS-CoV-2 virus to contain respiratory secretions until the non-employees are able to leave the site (i.e., for medical evaluation and care or to return home).
9. Where feasible, employers shall:
 - a. Implement flexible work site (e.g., telework).
 - b. Implement flexible work hours (e.g., staggered shifts).

- c. Increase physical distancing between employees at the work site to six feet.
- d. Increase physical distancing between employees and other persons to six feet.
- e. Implement flexible meeting and travel options (e.g., use telephone or video conferencing instead of in person meetings,; postpone non-essential travel or events,; etc.).
- f. Deliver services remotely (e.g. phone, video, internet, etc.).
- g. Deliver products through curbside pick-up.

D. Personal protective equipment (PPE). Employers covered by this section and not otherwise covered by the VOSH Standards for General Industry ([16VAC25-90-1910.132](#)), shall comply with the following requirements for a SARS-CoV-2 virus and COVID-19 disease-related hazard assessment and personal protective equipment selection:

1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall:

a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment;

b. Communicate selection decisions to each affected employee; and

c. Select PPE that properly fits each affected employee.

2. Employers shall verify that the required SARS-CoV-2 virus and COVID-19 disease workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated, the person certifying that the evaluation has been performed, the date of the hazard assessment, and the document as a certification of hazard assessment.

3. Unless specifically addressed by an industry specific standard applicable to the employer and providing for PPE protections to employees from the SARS-CoV-2 virus or COVID-19 disease (e.g., [16VAC25-175-1926](#), [16VAC25-190-1928](#), [16VAC25-100-1915](#), [16VAC25-120-1917](#), or [16VAC25-130-1918](#)), the requirements of [16VAC25-90-1910.132](#) (General requirements)

and ~~16VAC25-90-1910.134~~ (Respiratory protection) shall apply to all employers for that purpose.

4. Unless contraindicated by a hazard assessment and equipment selection requirements in ~~subdivision 1 of this subsection in 16VAC25-90-1910.132~~, employees ~~of employers covered by this section~~ ~~classified as very high or high exposure risk~~ shall be provided with and wear gloves, a gown, a face shield or goggles, and a respirator when in contact with or inside six feet of ~~suspected or confirmed COVID-19~~ patients or other persons ~~known to be or suspected of being infected with SARS-CoV-2~~. Gowns shall be the correct size to assure protection.

AMENDMENT - TP

16VAC25-220-50.D, Requirements for healthcare services or healthcare support services. [NEW D.2]

2. In addition, hazard assessment and equipment section requirements may determine that respirators or other PPE are necessary in other circumstances to reduce exposure. When respirators are required, 16VAC25-90-1910.134 shall apply to all employees for that purpose.

TP REASONING: The Department's changes removed references to 1910.134. Employers may need to provide respirators in other circumstances other than close contact as the virus spreads through airborne transmission. This should be clear for employers and clear that the respiratory protection standard applies.

AMENDMENT - MR

16VAC25-220-60, Requirements for higher-risk workplaces.

16VAC25-220-60. Requirements for higher-risk workplaces ~~with mixed-vaccination status employees~~ hazards or job tasks classified at medium exposure risk.

16VAC25-220-60. Requirements for higher-risk workplaces with mixed-vaccination status employees hazards or job tasks classified at medium exposure risk.¹⁶

A. The requirements in this section for employers with higher-risk workplaces with mixed-vaccination status employees hazards or job tasks classified as medium exposure risk apply in addition to requirements contained in [16VAC25-220-40](#), [16VAC25-70](#), and [16VAC25-80](#). Employers shall take the additional steps in subsections B, C, and D to mitigate the spread of COVID-19 for employees who are not fully vaccinated, and otherwise at-risk employees in workplaces (which include, but are not limited to, manufacturing, meat and poultry processing, high-volume retail and grocery, transit, seafood processing, correctional facilities, jails, detention centers, and juvenile detention centers) where there is heightened risk due to the following types of factors:

1. Where employees who are not fully vaccinated or otherwise at-risk employees are working close to one another, for example, on production or assembly lines. Such workers may also be near one another at other times, such as when clocking in or out, during breaks, or in locker/changing rooms.

¹⁶ Appendix: Measures Appropriate for Higher-Risk Workplaces with Mixed-Vaccination Status Workers, <https://www.osha.gov/coronavirus/safework#appendix>

AMENDMENT - TP

16VAC25-220-60.A.2, Requirements for higher-risk workplaces.

2. Where employees who are not fully vaccinated or otherwise at-risk workers often have prolonged closeness to coworkers (e.g., for 8-12 hours per shift), or potential frequent contact with members of the public who may not be fully vaccinated.

2. Where employees who are not fully vaccinated or otherwise at-risk workers often have prolonged closeness to coworkers (e.g., for 8-12 hours per shift).

AMENDMENT - TP

16VAC25-220-60.A.3 [NEW A.3], Requirements for higher-risk workplaces.

3. Where employees who are not fully vaccinated or otherwise at-risk workers work in enclosed indoor spaces with inadequate ventilation where other co-workers or members of the public are present.

TP Reasoning: This clarifies that workers who aren't fully vaccinated or otherwise at high risk when they work in indoor, poorly ventilated spaces. These environments are where we have seen countless workplaces outbreaks and where the virus rapidly spreads.

AMENDMENT - TP

16VAC25-220-60.A.3, Requirements for higher-risk workplaces. [RENUMBER AND AMEND A.4]

3 4. Employees who are not fully vaccinated or otherwise at-risk employees who may be exposed to the infectious virus through respiratory droplets or aerosols in the air—for example, when employees who are not fully vaccinated or otherwise at-risk employees in a manufacturing or factory setting who have the virus cough or sneeze. It is also possible that exposure could occur from contact with contaminated surfaces or objects, such as tools, workstations, or break room tables. Shared spaces such as break rooms, locker rooms, and entrances/exits to the facility may contribute to their risk.

TP Reasoning: The other addition makes it clear that it's the presence of infected individuals and not only when they cough or sneeze. This virus spreads through airborne transmission.

3. Employees who are not fully vaccinated or otherwise at-risk employees who may be exposed to the infectious virus through respiratory droplets or aerosols in the air—for example, when employees who are not fully vaccinated or otherwise at-risk employees in a manufacturing or factory setting who have the virus cough or sneeze. It is also possible that exposure could occur from contact with contaminated surfaces or objects, such as tools, workstations, or break room tables. Shared spaces such as break rooms, locker rooms, and entrances/exits to the facility may contribute to their risk.

4. Other distinctive factors that may increase risk among these employees who are not fully vaccinated or otherwise at-risk employees include:

a. A common practice at some workplaces of sharing employer-provided transportation such as ride-share vans or shuttle vehicles; and

b. Communal housing, or living quarters onboard vessels with other employees who are not fully vaccinated or otherwise at-risk individuals.

B. Engineering controls.

1. Employers shall ensure that air-handling systems under their control:

- a. Are maintained in accordance with the manufacturer's instructions; and
- b. Where feasible and within the design parameters of the system, are utilized as follows:
 - (1) Increase total airflow supply to occupied spaces provided that a greater hazard is not created (e.g., airflow that is increased too much may make doors harder to open or may blow doors open);
 - (2) In ground transportation settings, use natural ventilation to increase outdoor air dilution of inside air in a manner that will aid in mitigating the spread of SARS-CoV-2 virus and COVID-19 disease transmission to employees and when environmental conditions and transportation safety and health requirements allow;
 - (3) Inspect filter housing and racks to ensure appropriate filter fit and check for ways to minimize filter bypass;
 - (4) Increase air filtration to as high as possible in a manner that will still enable the system to provide airflow rates as the system design requires. Ensure compliance with higher filtration values is allowed by the air handler manufacturer's installation instructions and listing;
 - (5) Generate clean-to-less-clean air movements by re-evaluating the positioning of supply and exhaust air diffusers and/or dampers and adjusting zone supply and exhaust flow rates to establish measurable pressure differentials;
 - (6) Have staff work in "clean" ventilation zones that do not include higher-risk areas such as visitor reception or exercise facilities (if open);
 - (7) Ensure exhaust fans in restroom facilities are functional and operating continuously when the building is occupied;
 - (8) If the system's design can accommodate such an adjustment and is allowed by the air handler manufacturer's installation instructions and listing, improve central air filtration to MERV-13 and seal edges of the filter to limit bypass; and
 - (9) Check filters to ensure they are within service life and appropriately installed.

c. Comply with USBC and applicable referenced American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards.

2. Where feasible, employers shall install physical barriers (e.g., such as clear plastic sneeze guards, etc.); for employees who are not fully vaccinated or otherwise at-risk employees, where such barriers will aid in mitigating the spread of SARS-CoV-2 virus transmission.

3. In workplaces (or well-defined work areas) with processing or assembly lines where there are employees who are not fully vaccinated or otherwise at-risk employees, working on food processing or assembly lines can result in virus exposure because these workplaces have often been designed for a number of employees to stand next to or across from each other to maximize productivity. Employers shall ensure proper spacing of employee who are not fully vaccinated or otherwise at-risk employees (or if not possible, appropriate use of barriers).

C. Administrative and work practice controls. To the extent feasible, employers shall implement the following administrative and work practice controls in all higher-risk workplaces where there are employees who are not fully vaccinated or otherwise at-risk employees:

1. Prior to the commencement of each work shift, prescreening or surveying shall be required to verify each covered employee does not have signs or symptoms of COVID-19.

2. Provide face coverings to suspected COVID-19 non-employees suspected to be infected with SARS-CoV-2 to contain respiratory secretions until the non-employees are able to leave the site (i.e., for medical evaluation and care or to return home).

3. Stagger break times or provide temporary break areas and restrooms to avoid groups of employees who are not fully vaccinated or otherwise at-risk employees congregating during breaks. Employees who are not fully vaccinated or otherwise at-risk employees shall maintain at least 6 feet of distance from others at all times, including on breaks. Implement flexible work site (e.g., telework).

4. Stagger employee's arrival and departure times to avoid congregations of employees who are not fully vaccinated or otherwise at-risk in parking areas, locker rooms, and near time clocks.

5. Implement flexible work hours (e.g., staggered shifts). Increase physical distancing between employees at the work site to six feet.

6. Provide visual cues (e.g., floor markings, signs) as a reminder to maintain physical distancing. Increase physical distancing between employees and other persons, including customers, to six feet (e.g., drive-through physical barriers) where such barriers will aid in mitigating the spread of SARS-CoV-2 virus transmission, etc.

7. In retail workplaces (or well-defined work areas within retail) where there are employees who are not fully vaccinated or otherwise at-risk employees:

a. Post signage requesting face coverings for employees who are not fully vaccinated (or unknown-status) customers and other visitors.

b. Require physical distancing from other people who are not known to be fully vaccinated. If distancing is not possible, implement the use of barriers between work stations used by employees who are not fully vaccinated or otherwise at-risk employees and the locations customers will stand, with pass-through openings at the bottom, if possible.

c. Move the electronic payment terminal/credit card reader farther away from any employees who are not fully vaccinated or otherwise at-risk employees in order to increase the distance between customers and such employees, if possible.

d. Shift primary stocking activities of employees who are not fully vaccinated or otherwise at-risk employees to off-peak or after hours when possible to reduce contact between employees who are not fully vaccinated or otherwise at-risk employees and customers. Implement flexible meeting and travel options (e.g., using telephone or video conferencing instead of in person meetings; postponing non-essential travel or events; etc.).

89. Deliver services remotely (e.g. phone, video, internet, etc.).

910. Deliver products through curbside pick-up or delivery.

10. Employers shall provide and require employees to wear face coverings who, because of job tasks, cannot feasibly practice physical distancing from another employee or other person if the hazard assessment has determined that personal protective equipment, such as respirators or surgical/medical procedure masks, was not required for the job task.

11. Employers shall provide and require employees in customer or other person facing jobs to wear face coverings.

D. Personal protective equipment. This subsection does not apply to fully vaccinated employees.

Otherwise, eEmployers covered by this section and not otherwise covered by the VOSH

Standards for General Industry ([16VAC25-90-1910.132](#)) shall comply with the requirements of

this subsection for a SARS-CoV-2 virus and COVID-19 disease related hazard assessment and personal protective equipment selection.

1. Employers shall assess the workplace to determine if SARS-CoV-2 virus or COVID-19 disease hazards or job tasks are present or are likely to be present that necessitate the use of personal protective equipment (PPE). Employers shall provide for employee and employee representative involvement in the assessment process. If such hazards or job tasks are present or likely to be present, employers shall:

- a. Except as otherwise required in the standard, select and have each affected employee use the types of PPE that will protect the affected employee from the SARS-CoV-2 virus or COVID-19 disease hazards identified in the hazard assessment;
- b. Communicate selection decisions to each affected employee; and
- c. Select PPE that properly fits each affected employee.

2. Employers shall verify that the required SARS-CoV-2 virus and COVID-19 disease workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date of the hazard assessment; and the document as a certification of hazard assessment.

3. Unless specifically addressed by an industry specific standard applicable to the employer and providing for PPE protections to employees from the SARS-CoV-2 virus or COVID-19 disease (e.g., [16VAC25-175-1926](#), [16VAC25-190-1928](#), [16VAC25-100-1915](#), [16VAC25-120-1917](#), or [16VAC25-130-1918](#)), the requirements of [16VAC25-90-1910](#).¹³² (General requirements) and [16VAC25-90-1910](#).¹³⁴ (Respiratory protection) shall apply to all employers for that purpose.

4. PPE ensembles for employees ~~in the medium exposure risk category~~ will vary by work task, the results of the employer's hazard assessment, and the types of exposures employees have on the job.

16VAC25-220-70. Infectious disease preparedness and response plan.

A. The following employers with hazards or job tasks classified as shall develop and implement a written Infectious Disease Preparedness and Response Plan:

1. Employers covered by 16VAC25-220-50 Very high and high shall develop and implement a written Infectious Disease Preparedness and Response Plan; and
2. Employers covered by 16VAC25-220-60 Medium with 11 or more employees shall develop and implement a written Infectious Disease Preparedness and Response Plan. In counting the number of employees, the employer may exclude fully vaccinated employees.

B. The plan and training requirements tied to the plan shall ~~only~~ apply to those employees:

1. Covered by 16VAC25-220-50; and classified as very high, high, and medium covered by this section.
2. Covered by 16VAC25-220-60, unless such employees are fully vaccinated.

C. Employers shall designate a person to be responsible for implementing their plan. The plan shall:

1. Identify the name or title of the person responsible for administering the plan. This person shall be knowledgeable in infection control principles and practices as the principles and practices apply to the facility, service, or operation.
2. Provide for employee involvement in development and implementation of the plan.
3. Consider and address the level of SARS-CoV-2 virus and COVID-19 disease risk associated with various places of employment, the hazards employees are exposed to at those sites, and job tasks employees perform at those sites. Such considerations shall include:
 - a. Where, how, and to what sources of the SARS-CoV-2 virus or COVID-19 disease might employees be exposed at work, including:
 - (1) The general public, customers, other employees, patients, and other persons;

(2) Persons ~~known or~~ suspected ~~or confirmed COVID-19 to be infected with the SARS-CoV-2 virus~~ or those at particularly high risk of COVID-19 infection (e.g., local, state, national, and international travelers who have visited locations with ongoing COVID-19 community transmission and health care employees who have had unprotected exposures to ~~persons known or~~ suspected ~~or confirmed COVID-19 persons to be~~ ~~infected with SARS-CoV-2 virus~~);

(3) Situations where employees work more than one job with different employers and encounter hazards or engage in job tasks that ~~present a very high, high, or medium level of exposure risk~~ ~~involve potential exposure to sources of the SARS-CoV-2 virus or COVID-19 disease~~; and

(4) Situations where employees work during higher risk activities involving potentially large numbers of people or enclosed work areas such as at large social gatherings, weddings, funerals, parties, restaurants, bars, hotels, sporting events, concerts, parades, movie theaters, rest stops, airports, bus stations, train stations, cruise ships, river boats, airplanes, etc.

b. To the extent permitted by law, including HIPAA, employees' individual risk factors for severe disease. For example, people of any age with one or more of the following conditions are at increased risk of severe illness from COVID-19: chronic kidney disease; COPD (chronic obstructive pulmonary disease); immunocompromised state (weakened immune system) from solid organ transplant; obesity (body mass index or BMI of 30 or higher); serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies; sickle cell disease; or type 2 diabetes mellitus. Also, for example, people with one or more of the following conditions might be at an increased risk for severe illness from COVID-19: asthma (moderate-to-severe); cerebrovascular disease (affects blood vessels and blood supply to the brain); cystic fibrosis; hypertension or high blood pressure; immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines; neurologic conditions, such as dementia; liver disease; pregnancy; pulmonary fibrosis (having damaged or scarred lung tissues); smoking;

thalassemia (a type of blood disorder); type 1 diabetes mellitus; etc. The risk for severe illness from COVID-19 also increases with age.

c. Engineering, administrative, work practice, and personal protective equipment controls necessary to address those risks.

4. Consider and address contingency plans for situations that may arise as a result of outbreaks that impact employee safety and health, such as:

a. Increased rates of employee absenteeism (an understaffed business can be at greater risk for accidents);

b. The need for physical distancing, staggered work shifts, downsizing operations, delivering services remotely, and other exposure-reducing workplace control measures such as elimination and substitution, engineering controls, administrative and work practice controls, and personal protective equipment (e.g., respirators, surgical medical procedure masks, etc.);

c. Options for conducting essential operations in a safe and healthy manner with a reduced workforce; and

d. Interrupted supply chains or delayed deliveries of safety and health related products and services essential to business operations.

5. Identify infection prevention measures to be implemented:

a. Promote frequent and thorough hand washing, including by providing employees, customers, visitors, the general public, and other persons to the place of employment with a place to wash their hands. If soap and running water are not immediately available, provide hand sanitizers.

b. Maintain regular housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment.

c. Establish policies and procedures for managing and educating visitors about the infection prevention procedures at the place of employment.

6. Provide for the prompt identification and isolation of ~~employees known or~~ suspected ~~or~~ ~~confirmed COVID-19 employees to be infected with the SARS-CoV-2 virus~~ away from work, including procedures for employees to report when they are experiencing signs or symptoms of COVID-19.

7. Address infectious disease preparedness and response with outside businesses, including, but not limited to, subcontractors who enter the place of employment, businesses that provide contract or temporary employees to the employer, and other persons accessing the place of employment to comply with the requirements of this standard and the employer's plan.

8. Identify the mandatory and non-mandatory recommendations in any CDC guidelines or Commonwealth of Virginia guidance documents the employer is complying with, if any, in lieu of a provision of this standard, as provided for in [16VAC25-220-10](#) ~~E, F, and G.~~

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16VAC25-220-80. Training.

A. ~~The following E~~ employers shall provide training on the hazards and characteristics of the SARS-CoV-2 virus and COVID-19 disease to employees working at the place of employment ~~with hazards or job tasks classified as:~~

1. ~~Employers covered by 16VAC25-220-50 very high, high,; and or~~

2. ~~Employers covered by 16VAC25-220-60. medium exposure risk at a place of employment shall provide training on the hazards and characteristics of the SARS-CoV-2 virus and COVID-19 disease to all employees working at the place of employment regardless of employee risk classification. Employers may provide fully vaccinated employees with written information meeting the requirements of subsection 16VAC25-220-80 F in lieu of training.~~

~~Where applicable, T~~ the training program shall enable each employee to recognize the hazards of the SARS-CoV-2 virus and signs and symptoms of COVID-19 disease and shall train each employee in the procedures to be followed in order to minimize these hazards.

B. The training required under subsection A of this section shall include:

1. The requirements of this standard;
2. The mandatory and non-mandatory provisions in any applicable CDC guidelines or Commonwealth of Virginia guidance documents the employer is complying with, if any, in lieu of a provision of this standard as provided for in [16VAC25-220-10 E, F, and G](#);
3. The characteristics and methods of transmission of the SARS-CoV-2 virus;
4. The signs and symptoms of COVID-19 disease;
5. Risk factors for severe COVID-19 illness including underlying health conditions and advancing age;
6. Awareness of the ability of persons pre-symptomatically and asymptotically infected with SARS-CoV-2 to transmit the SARS-CoV-2 virus;

7. Safe and healthy work practices, including, but not limited to, physical distancing, the wearing of face coverings, disinfection procedures, disinfecting frequency, ventilation, noncontact methods of greeting, etc.;

8. Personal protective equipment (PPE):

a. When PPE is required;

b. What PPE is required;

c. How to properly don, doff, adjust, and wear PPE;

d. The limitations of PPE;

e. The proper care, maintenance, useful life, and disposal of PPE;

f. Strategies to extend PPE usage during periods when supplies are not available and no other options are available for protection, as long as the extended use of the PPE does not pose any increased risk of exposure. The training to extend PPE usage shall include the conditions of extended PPE use, inspection criteria of the PPE to determine whether it can or cannot be used for an extended period, and safe storage requirements for PPE used for an extended period; and

g. Heat-related illness prevention including the signs and symptoms of heat-related illness associated with the use of COVID-19 PPE and face coverings;

9. The anti-discrimination provisions in [16VAC25-220-90](#); and

10. The employer's Infectious Disease Preparedness and Response Plan, where applicable.

C. Employers covered by [16VAC25-220-50](#) shall verify compliance with [16VAC25-220-80](#) A by preparing a written certification record for ~~those~~ employees ~~exposed to hazards or job tasks classified as very high, high, or medium exposure risk levels~~ trained in accordance with this section.

1. The written certification record shall contain:

a. The name or other unique identifier of the employee trained;

b. The trained employee's physical or electronic signature;

c. The date of the training; and

d. The name of the person who conducted the training, or for computer-based training, the name of the person or entity that prepared the training materials.

2. A physical or electronic signature is not necessary if other documentation of training completion can be provided (e.g., electronic certification through a training system, security precautions that enable the employer to demonstrate that training was accessed by passwords and usernames unique to each employee, etc.).

3. If an employer relies on training conducted by another employer, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training.

4. The latest training or retraining certification shall be maintained.

D. When an employer has reason to believe that any affected employee who has already been trained does not have the understanding and skill required by [16VAC25-220-80](#) A, the employer shall retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:

1. Changes in the workplace, SARS-CoV-2 virus or COVID-19 disease hazards exposed to, or job tasks performed render previous training obsolete;

2. Changes are made to the employer's Infectious Disease Preparedness and Response Plan; or

3. Inadequacies in an affected employee's knowledge or use of workplace control measures indicate that the employee has not retained the requisite understanding or skill.

E. Employers not covered by 16VAC25-220-50 or 16VAC25-220-60 with hazards or job tasks classified at lower risk shall provide written or oral information to employees exposed to such hazards or engaged in such job tasks on the hazards and characteristics of the SARS-CoV-2 virus, and the signs and symptoms of COVID-19, and measures to minimize exposure. The Department of Labor and Industry shall develop an information sheet containing information on

the items listed in subsection F of this section, which an employer may utilize to comply with this subsection.

F. The information required under subsection E of this section shall include at a minimum:

1. The requirements of this standard;
2. The characteristics and methods of transmission of the SARS-CoV-2 virus;
3. The signs and symptoms of COVID-19 disease;
4. The ability of persons pre-symptomatically and asymptotically infected with SARS-CoV-2 to transmit the SARS-CoV-2 virus;
5. Safe and healthy work practices and control measures, including, but not limited to, physical distancing, the benefits of wearing face coverings, sanitation and disinfection practices; and
6. The anti-discrimination provisions of this standard in [16VAC25-220-90](#).

NO CHANGES PROPOSED TO 16VAC25-220-90

16VAC25-220-90. Discrimination against an employee for exercising rights under this standard is prohibited.

A. No person shall discharge or in any way discriminate against an employee because the employee has exercised rights under the safety and health provisions of this standard, Title 40.1 of the Code of Virginia, and implementing regulations under [16VAC25-60-110](#) for themselves or others.

B. No person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own personal protective equipment, including, but not limited to, a respirator, face shield, gown, or gloves, provided that the PPE does not create a greater hazard to the employee or create a serious hazard for other employees. In situations where face coverings are not provided by the employer, no person shall discharge or in any way discriminate against an employee who voluntarily provides and wears the employee's own face covering that meets the requirements of this standard, provided that the face covering does not create a greater hazard to the employee or create a serious hazard for other employees. Nothing in this subsection shall be construed to prohibit an employer from establishing and enforcing legally permissible dress code or similar requirements addressing the exterior appearance of personal protective equipment or face coverings.

C. No person shall discharge or in any way discriminate against an employee who raises a reasonable concern about infection control related to the SARS-CoV-2 virus and COVID-19 disease to the employer, the employer's agent, other employees, a government agency, or to the public such as through print, online, social, or any other media.

D. Nothing in this standard shall limit an employee from refusing to do work or enter a location because of a reasonable fear of illness or death. The requirements of [16VAC25-60-110](#) contain the applicable requirements concerning discharge or discipline of an employee who has refused to complete an assigned task because of a reasonable fear of illness or death.

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