

**VIRGINIA BOARD OF NURSING
RMA CURRICULUM COMMITTEE MEETING
Thursday, July 8, 2021
Department of Health Professions – Perimeter Center
9960 Mayland Drive, Conference Center 201 – Board Room 1
Henrico, Virginia 23233**

**COMMITTEE
MEMBERS:**

Felisa A. Smith, RN, MSA, MSN/Ed., CNE, Chair
Dixie L. McElfresh, LPN
Margaret Joan Friedenber, Citizen Member

**COMMUNITY
MEMBERS:**

April Payne, VHAC, Virginia Center for Assisted Living
Dana Parsons, Leading Age of Virginia
Vonnie Adams, Administrator, Williamsburg Landing
Rhonda Whitmer, Virginia Department of Social Services, Licensing
Inspector
Karen Mittura – Germanna Community College, Medication Aide
Education Program
Krystal Lotts, Wellness Concepts
Teresa Mason, Fresh Start, Medication Aide Education Program
Jennifer Perez, A & J Total Care Enterprises, Medication Aide Education
Program
Dawn Ellis, OmniCare/CVS

STAFF:

Jacquelyn Wilmoth, MSN, RN, Nursing Education Program Manager
Christine Smith, MSN, RN, Nurse Aide/RMA Education Program Manager
Beth Yates, Nursing and Nurse Aide Education Coordinator

10 am	Welcome and Introductions
10:15 am	Public Comment
10:30 am	Discussion Items Review of suggestions submitted and discussion
11:50 am	Plan for next Meeting/Adjourn

Our mission is to ensure safe and competent patient care by licensing health professionals, enforcing standards of practice, and providing information to health care practitioners and the public.

Prepared by: Jacquelyn Wilmoth

Updates:

Abbreviation List

Normal range for BP and BG

Commonly used medication list

Change in Chapter 1 Regulations of the VDSS from (22VAC 40 -72-630) to (22 VAC 40-73-640)

Adding drugs that have been developed over the last 5 years to the glossary could help with recognition of drug usage

Update the prescription label with the current regulations (ex. Brand/Generic, Dx)

Additions:

Compresses

Non-insulin injectable meds (Victoza and Trulicity)—regulatory barriers?

Admission tests for the program would this self-eliminate those with a limited commitment (comment from Chris: this would be prescriptive and should be undertaken by individual programs but I still wanted to add it as a suggestion for additions in the event we need to address it again in the upcoming meeting)

Would a comprehensive test upon completion help those that might need to study more before taking the exam be beneficial

Adding drugs that have been developed over the last 5 years to the glossary could help with recognition of drug usage.

Would a comprehensive test upon completion help those that might need to study more before taking the exam be beneficial (Board response: this is a curriculum delivery method and not regulated by the board; programs have the authority to determine teaching/review modalities)

The need for more in depth technical assistants. This document could help with possible Q and A which could break down possible barriers for those being taught as well as those doing the teaching

Propose more information on storage guidelines e.g. dating/expiration.

Add matching quizzes (10-questions) to each chapter (ex. brand/generic, medication/diagnosis, abbreviations)

**Department for Aging and Rehabilitative Services
Adult Protective Services Division
8004 Franklin Farms Drive
Richmond, VA 23229
Telephone: 804-726-1904**

ACKNOWLEDGEMENT OF MANDATED REPORTER STATUS

(This is an optional form for employers of mandated reporters to document that their employees have been notified of their mandated reporter status. An acknowledgement form developed by the employer is also acceptable. If this form is used, page one should be retained by the employer. Page two listing indicators of adult abuse, neglect and exploitation should be retained by the employee.)

I, _____, understand that when I am employed as a
(Employee Name)

(Type of Employment)

I am a mandated reporter pursuant to § 63.2-1606 of the Code of Virginia. This means that I am required to report or cause a report to be made to Virginia Adult Protective Services (APS) either by calling the APS Hotline or the appropriate local department of social services whenever I have reason to suspect that an adult age 60 or over or an incapacitated adult age 18 and over and who is known to me in my professional or official capacity may be abused, neglected, or exploited. I understand that I must follow the reporting protocol, if any, of my employer, but my employer may not prohibit me from reporting directly to APS.

I understand that if I suspect a death of an adult age 60 or over or an incapacitated adult age 18 and over occurred due to abuse or neglect, I must report the death to the medical examiner and the law enforcement agency in the locality in which the death occurred.

I understand that I am immune from civil or criminal liability on account of any reports, information, testimony and records I release if the report is made in good faith and without malicious intent. My identity will be held confidential unless I authorize the disclosure or disclosure is ordered by the court.

I understand that if I fail to make a required report of suspected adult abuse, neglect, or exploitation, immediately upon suspicion, I may be subject to a civil money penalty imposed by the Commissioner of the Department for Aging and Rehabilitative Services. If I am a law-enforcement officer, I understand the money penalty does not apply to me but that I will be referred to the court system for non-reporting of suspected adult abuse, neglect, or exploitation. If I am licensed, certified, or regulated by a health regulatory board, I may also be subject to administrative action or criminal investigation by the appropriate licensing, regulatory, or legal authority.

I understand that there is no charge when calling the Hotline number (1-888-83-ADULT or 1-888-832-3858) and that the Hotline operates 24-hours per day, 7 days per week, 365 days per year.

I affirm that I have read this statement and have knowledge and understanding of the reporting requirements, which apply to me pursuant to § 63.2-1606 of the Code of Virginia.

Signature of Applicant/Employee

Date

Indicators of Adult Abuse, Neglect or Exploitation

ABUSE

- Multiple/severe bruises, welts
- Bilateral bruises on upper arms
- Clustered bruises on trunk
- Bruises which resemble an object
- Old and new bruises
- Signs of bone fractures
- Broken bones, open wounds, skull fracture
- Striking, shoving, beating, kicking, scratching

- Internal injuries
- Sprains, dislocation, lacerations, cuts, punctures
- Black eyes
- Bed sores
- Untreated injuries
- Broken glasses/frames
- Untreated medical condition
- Burns, scalding
- Restrained, tied to bed, tied to chair, locked in, isolated
- Overmedicated

- Verbal assaults, threats, intimidation
- Prolonged interval between injury and treatment
- Fear of caregiver
- Individual is prohibited from being alone with visitors
- Individual has recent or sudden changes in behavior
- Unexplained fear
- Unwarranted suspicion

SEXUAL ABUSE

- Genital or urinary irritation, injury, infection or scarring
- Presence of a sexually transmitted disease
- Frequent, unexplained physical illness

- Intense fear reaction to an individual or to people in general
- Mistrust of others
- Nightmares, night terrors, sleep disturbance
- Direct or coded disclosure of sexual abuse

- Disturbed peer interactions
- Depression or blunted affect
- Poor self-esteem
- Self-destructive activity or suicidal ideation

NEGLECT

- Untreated medical condition
- Untreated mental health problem(s)
- Bedsores
- Medication not taken as prescribed
- Malnourished
- Dehydrated
- Dirt, fleas, lice on person

- Fecal/urine smell
- Animal infested living quarters
- Insect infested living quarters
- Non-functioning toilet
- No heat, running water, electricity
- Homelessness
- Lacks needed supervision
- Lack of food or inadequate food
- Uneaten food over period of time

- Accumulated newspaper/debris
- Unpaid bills
- Inappropriate or inadequate clothing
- Needs but does not have glasses, hearing aid, dentures, prosthetic device
- Hazardous living conditions
- Soiled bedding/furniture
- House too hot or cold

FINANCIAL EXPLOITATION

- Unexplained disappearance of funds, valuables, or personal belongings
- Adult child is financially dependent upon the older person or the older person is dependent on caregiver
- Misuse of money or property by another person
- Transfer of property or savings

- Excessive payment for care and/or services
- Individual unaware of the amount of his or her income
- Depleted bank account
- Sudden appearance of previously uninvolved relatives/friends
- Change in payee, power of attorney or will
- Caregiver is overly frugal
- Unexplained cash flow

- Unusual household composition
- Chronic failure to pay bills
- Individual is kept isolated
- Signatures on check that do not resemble the individual's signature
- Individual doesn't know what happened to money
- Checks no longer come to house
- Individual reports signing papers and doesn't know what was signed

The Indicators of Adult Abuse, Neglect and Exploitation (page 2 of this form) should be retained by the mandated reporter. Suspicions of abuse, neglect or exploitation should be reported to the 24-hour, toll-free APS hotline at 1-888-832-3858 or to the local department of social services.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF SOCIAL SERVICES

DATE: June 26, 2020

TO: Assisted Living Facilities

FROM: Tara Ragland, Director
Division of Licensing Programs

SUBJECT: 2020 Legislative Implementation

The purpose of this memo is to inform you of legislation that passed in the 2020 Virginia General Assembly session that affects assisted living facilities. This legislation becomes effective July 1, 2020.

Senate Bill 686

SB 686 requires the Board of Social Services to amend 22VAC40-73-450 governing assisted living facility individualized service plans to require (i) that individualized service plans be reviewed and updated (a) at least once every 12 months or (b) sooner if modifications to the plan are needed due to a significant change in the resident's condition and (ii) that any deviation from the individualized service plan be documented in writing or electronically, include a description of the circumstances warranting deviation and the date such deviation will occur, certify that notice of such deviation was provided to the resident or his legal representative, be included in the resident's file, and in the case of deviations that are made due to a significant change in the resident's condition, be signed by an authorized representative of the assisted living facility and the resident or his legal representative.

Notice, including an effective date, will be sent out once this requirement is updated in the assisted living facility regulation.

Senate Bill 185

SB 185 allows nursing home, assisted living facility, hospice program, and hospice facility employees and staff members who are authorized to possess, distribute, or administer medications to residents to store, dispense, or administer cannabidiol oil (CBD) or THC-A oil to a resident who has been issued a valid written certification for such medication.

Patient registration from the Virginia Department of Health Professions (VDHP) is required to possess CBD or THC-A oil, in addition to having a valid written certification from a board registered practitioner. The registration can be issued to a legal guardian in the case of an adult who is incapacitated. SB 185 allows employees and staff members to be the registered agent for such an individual. Information about the online registration process at VDHP can be found at:

<https://www.dhp.virginia.gov/pharmacy/PharmaceuticalProcessing/Patients.htm>

Senate Bill 355

SB 355 directs the Board of Social Services to convene a work group to make recommendations regarding adoption of regulations for audio-visual recording of residents in assisted living facilities. The work group shall report its recommendations to the Board and the General Assembly by December 1, 2020.

Please contact your licensing inspector if you have any questions.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF SOCIAL SERVICES

DATE: June 15, 2021
TO: Assisted Living Facilities
FROM: Tara Ragland,
Director Division of Licensing Programs
SUBJECT: 2021 Legislative Information

The purpose of this memo is to inform you of the legislation that passed in the 2021 Special Session I of the General Assembly that affects Assisted Living Facilities in the Commonwealth. This legislation becomes effective July 1, 2021, unless otherwise stated.

Senate Bill 1356

SB 1356 requires DSS to update ALF regulations with the following:

Add a requirement that during a declared public health emergency related to a communicable disease of public health threat, assisted living facilities establish a protocol to receive visits from a rabbi, priest, minister, or clergyman of any religious denomination or sect consistent with guidance from the Centers for Disease Control and Prevention and the Centers for Medicare and Medicaid Services and subject to compliance with any executive order, order of public health, Department guidance, or any other applicable federal or state guidance having the effect of limiting visitation. Such protocol may restrict the frequency and duration of visits and may require visits to be conducted virtually using interactive or audiovisual technology. Further, it may require the person visiting a resident to comply with all reasonable requirements of the assisted living facility, adopted to protect the health and safety of the person, residents, and staff of the assisted living facility.

Notice and an effective date for the revised regulations will be given when these requirements are updated in the *Standards for Licensed Assisted Living Facilities*.

House Bill 1988

HB 1988 amends §§54.1-3408.3, 54.1-3442.5, 54.1-3442.6 and 54.1-3442.7 of the Code of Virginia as it relates to the use of cannabis oil for treatment by residents of an assisted living facility (ALF) and participants of an adult day care center (ADCC). The bill also designates patients in other caregiver facilities for certification for use of cannabis oil for treatment. Regulatory action by the Department of Social Services is not required. The information below is informative only.

An employee or contractor of an ALF or ADCC who is licensed or registered by a health regulatory board and who is authorized to possess, distribute, or administer medications, may accept delivery of cannabis oil from a pharmaceutical processor or cannabis dispensing facility on behalf of a resident or participant. Such employee or contractor may assist in the administration of the cannabis oil to the resident or participant as necessary.

Please contact your licensing inspector if you have any questions.

Page 1-add exploitation as a key term

Page 2, add wound care icon from page 8 to reflect #1 letter C-Working within her/his scope of practice.

Page 2, #6, (add) performs her/his job according to facility policy, Board of Nursing and Department of Social Services.

Page 4, change Resident's Bill of Rights to Rights and Responsibilities of Residents of ALFs

<https://www.dss.virginia.gov> › acknowledge_mr
(add within chapter 1)

Page 6, Regulations of the Virginia Department of Social Services- Omit regulation number and add regulations to each applicable category.

1. The medication management plan and reference materials- 22 VAC 40-73-640A
2. Medication, diet and treatment orders- 22 VAC 40-73-650A
3. New orders for medications after hospital admission- 22 VAC 40-73-650F
4. Physician's orders- 22 VAC 40-73-650 A and B
5. Physician's oral orders- 22 VAC 40-73-650C
6. Medication storage- 22 VAC 40-73-660
7. Client self-administration- 22 VAC 40-73-660B
8. Administration of medication- 22 VAC 40-73-660A
9. Continuing education of medication aides- 22 VAC 40-680D
10. Adverse drug reactions- 22 VAC 40-73-680J
11. Documentation of medication administration- 22 VAC 40-73-680I
12. Disposal of medications- (included in medication management plan) 22 VAC 40-73-640 #11
13. The use of PRN medications- 22 VAC 40-73-680K-M
14. The use of "stat boxes"- 22 VAC 40-73-680N
15. Drug Regimen Review (Change to Medication Review)-22 VAC 40-73-690
16. Oxygen Therapy- 22 VAC 40-73-700
17. (Add) Restraints- 22 VAC 40-73-710

Page 7- B #3 May not make an assessment- RMAs take vital signs, should "observe and report" be added?

Recommend adding instructions or information as it relates to pulse oximetry- (need for discussion) interpretation by others that it's not within the scope of practice of the RMA. As inspectors, we are seeing more residents with pulse ox orders, especially those who are receiving hospice services.

<https://www.healthline.com/health/pulse-oximetry>

http://downloads.lww.com/wolterskluwer_vitalstream_com/sample-content/9780781788786_Craven/samples/mod09/topic1a/text.html

Page 7-B #6- should the exception of Narcan be added?

Page 7-B #7- eliminate other sub q injections for treatment of diabetes if they are going to be added to the revised curriculum

Page 7- B #8- add nasogastric tube as reflected in the Regulations Governing Medication Aides on page 10, B #4

Page 8- C #3- With VA meds, if the other half is thrown away, the resident normally gets a 90 day supply and If medications are cut in half, the supply runs out in 45 days.

Page 11-Introduction- 3rd bullet references student workbook (?)

Page 11- Objective 1.2- (add regarding right to refuse) documentation and notification to physician regarding refusals.

Page 12- Objective 1.4 (add) review an example medication management plan

Page 13- recommend adding definition of exploitation

Pages 16-19- replace with current resident rights and responsibilities

https://www.dss.virginia.gov/files/division/licensing/alf/Intro_page/current_providers/forms/032-05-0021-08-eng.pdf

Page 27- Job Description- Responsibilities: add to letter B, Document all medications not administered and reason.

Page 30-#3 b2- recommend to add goggles to examples of PPE

Page 30-#3 b5 <https://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>

Page 32- C #3- omit

Page 32- <https://www.vdh.virginia.gov/hair/infection-prevention/standard-precautions/hand-hygiene/>

Page 34 F #2- recommend adding tissues, toileting items

Page 37 #3- recommend to add within 24-48 hours

Page 37 #6- suggest to remove

Page 37- F #10- (add) ex: increased falls

Page 37- F (add) constipation not relieved by approved OTC medications within 3 days

Page 37 H- recommend to add increase in falls as an example

Page 40- #4c- change to Intellectual Disability

Page 41- C #2- rephrase to Follow the plan of action regarding communication techniques that are effective for each client that are indicated on the ISP (Individualized Service Plan)

Page 41- D #1- recommend adding exit seeking

Page 42- D #2- combine d and e to: Ask yes or no questions, example: would you like some coffee rather than what would you like to drink. Avoid asking questions and limiting choices sounds too rigid.

Page 42 D #2- (add) be patient and offer reassurance ; repeat what was said to clarify; treat the client with dignity and respect

Page 42 E (add) Approach from the front; be patient and offer reassurance, repeat what was said to clarify; treat the client with dignity and respect.

Page 46- add Temporal A degree lower

Page 46 b- recommend to change normal range to 60-100 beats per minute

<https://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure/all-about-heart-rate-pulse>

Page 54- When to wash your hands- (add) after eating

Page 59- #6- Crush medications- last sentence recommend to read: the goal must always be to assist the residents with their medications, not to “trick” them into taking the medications.

Page 63- Add to abbreviations: gtt.-drop; lot-lotion; susp.-suspension

Page 66- Add Coreg (carvedilol)

Page 67- b. Respiratory drugs ; add Ipratropium (atrovent); Ipratropium bromide and albuterol (combivent) add increased heart rate as side effect.

Page 69- add as example for endocrine medication- Metformin (glucophage)

Page 70- add bruising as side effect and add as examples for anticoagulants: Xarelto (rivaroxaban); Pradaxa (dabigatran); Eliquis (apixaban)

Page 71- add weakness as side effect for Antihyperlipdemics

https://www.medicinenet.com/statins/article.htm#what_are_statins_and_how_do_they_work

Page 72- Examples of Antibiotics: add Cipro (ciprofloxacin) and Keflex (cephalexin)

Page 73- Hypnotics, add dry mouth and confusion as side effects

https://www.medicinenet.com/hypnotics_drug_class_side_effects/article.htm#hypnotic_side_effects

Page 73 add under observe and report: the dose is based on how much of the drug is in your blood and how you respond to treatment. This means that the dose differs for everyone who takes it. Blood samples are taken regularly to make sure that the dose is neither too high nor too low.

<https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/mood-stabilizing-medication>

Page 74- Add confusion as side effect for anti-anxiety drugs; add Buspar (Buspirone)

<https://www.rxlist.com/buspar-drug/patient-images-side-effects.htm#info>

Page 74-Antidepressants; add Cymbalta (duloxetine) and Effexor (venlafaxine) as examples. Add dry mouth and hypoglycemia as side effects.

<https://www.medicalnewstoday.com/articles/248320#types>

Page 75- Antimanic agents: add under observe and report: <https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/mood-stabilizing-medication>

Page 76-add to examples of antipsychotic agents: Abilify (aripiprazole), Clozaril (clozapine), Seroquel (quetiapine) and add increased falls as side effect

<https://www.webmd.com/bipolar-disorder/guide/antipsychotic-medication>

Page 78- Examples- remove Pradoxal and add Aleve (naproxen) and Fentanyl (duragesic) patch

Page 79- Dispensing classifications- add Fentanyl and Morphine as schedule II examples.

Page 83- Dosage form- recommend to remove aspirin can be taken rectally

Page 84-B #1- change to: Prevent disease

Page 84-B #2- change to: eliminate and control infections

Page 84-B Purpose of medications: #5 change to: Maintain normal function (e.g.- antidepressants, mood stabilizers)

Page 85- C #2-a. recommend changing to: Side effects, also known as adverse events, are unwanted or unexpected events or reactions to a drug.

Page 85- #2 below undesired effect: space between words drug and may

Page 85-#2 a- recommend changing to: Side effects can happen at any time. They can occur when you first take a medicine, with changes in dosage, or if you stop taking the medicine suddenly or too soon. If you begin to take other prescriptions or non-prescription products, interactions among the medicines may cause side effects as well.

c. add observe for confusion or any change in behavior

Page 92- Teaching Activities indicate to utilize note taking outline-is that to be eliminated?

Page 95- lot.-lotion; susp.-suspension; gtt-drop

Page 118-move to section for instructor keys

Page 120- A #2- recommend changing to: know the medication packaging system

Page 121 #3b- add-physician's order needed to place medication in food.
Ex- May crush appropriate medication and place in applesauce or pudding

#3c- change to: Other specific required foods

Page 122- #13 Hand sanitizer if you do not have direct contact with resident? Open for discussion

Page 123 #18- eliminate document in nursing notes

NOTE: (add) Consult with physician regarding swallowing issues if not already addressed; obtain order to crush appropriate medications and place in _____ per physician to assist with medication administration.

Page 124- add liquid filled capsules

Page 128- B #4-remove if ears are infected and bleeding

#10- remove s after pull

Page 133 #8- change to 1 inch

#10 change time to 10-15 minutes

<https://ctocrx.com/how-to-use-vaginal-suppositories/>

Page 135 #9-remove "to the second knuckle" and change to approximately 1 inch

<https://www.cfspharmacy.pharmacy/blog/post/how-to-use-rectal-suppository>

Page 136 NOTE: change to: The administration of **any rectal product** requires additional knowledge, skills and clinical practice that are not addressed in this curriculum.

Page 142 #4- remove if there is body fluid contact

Page 148- C #2 change to Orange

#3 (orange tip down)

#4 change to blue

#5 Orange

Add: Blue to the sky, orange to the thigh

www.epipen.com

#7 change to 3 seconds and add, count slowly 1, 2, 3- Delete window on the auto injector will show red and add, the orange tip will extend to cover the needle. Change to: After you receive your injection, the viewing window on the barrel of your EpiPen® Auto-Injector, which is clear prior to delivery, will appear obscured or shaded.

<https://www.epipen.ca/faq>

Page 149 #10 remove Screw the cap of the storage tube back on completely: A used EpiPen® and its extended needle cover will not fit into the carrier tube.

<https://www.epipen.ca/faq>

Page 149- D. #1 change to orange

#2 change to blue

www.epipen.com

Page 150 Objective 4.1-4.2- Provide student with note taking outline (?)

****All Skills Competency Checklists to reflect changes made in each performance objective****

Page 175- Fresh Supplies; 3rd bullet: Other **specific** required foods

Page 177- A #2 add-Oral orders are to be signed within 14 days

Page 177- B-add: Record of when medication is discontinued or changed
Record of medication allergies

Page 180- B #8-Virginia regulation requires that the order must be signed within 14 days.
22 VAC 40-73-650C #2- DSS Standards for Assisted Living Facilities

Page 180- C #1b-omit and replace with: Physician or other prescriber's orders, both written and oral, for administration of all prescription and over the counter medications and dietary supplements shall include the name of the resident, the date of the order, the name of the drug, route, dosage, strength, how often medication is to be give, and **identify the diagnosis, condition, or specific indications for administering each drug.**

Add a diagnosis in examples used for routine and single dose

22 VAC 40-73-650B- DSS Standards for Assisted Living Facilities

Page 182-1a- change to reflect electronic medication administration records
b. add diagnosis, condition, or specific indications for administering each drug

Page 182- F#3- Discuss

Page 185- D#3- Discuss reasonable amount of time; possibly give examples:
Follow-up within 30 minutes when administering anxiety medication
Follow-up within one hour when administering pain medication.

Page 185- E #1c-add: document time and method of physician notification

Page 199- B #2b-delete Exception. This is not in current DSS regulations

c- When in use, the storage are shall have adequate illumination in order to read container labels

d-add: it is permissible to store dietary supplements and foods and liquids used for medication administration in a refrigerator that is dedicated to medication storage if the refrigerator is in a locked storage area.

add: The storage area shall not be located in the kitchen or bathroom, but in an area free from dampness or abnormal temperatures unless the medication requires refrigeration.

F. #2 remove OTC drugs may be floor stocked and administered pursuant to HCP order.

Page 201- Note: remove wording "Any floor stocked"

Page 202-Introduction: remove procedures for drug renewal should be included in the facility medication management plan and replace with: Methods to ensure that each resident's prescription medications and any over-the-counter drugs and supplements ordered for the resident are filled and refilled in a timely manner to avoid missed dosages shall be included in the facility's medication management plan. 22 VAC 40-73-640A #4

Page 203- Note: add the Medication Administration Record is a legal document

Page 204- Incoming and outgoing medication forms (?)

Page 205- C #1 add: follow facility medication management plan
22 VAC 40-73-640A #11

Page 206- Teaching Activities indicate note taking outline (?)

Page 209- B #2- ***reflect changes per DSS regulations***

Page 210- F: reflect any changes made

Page 214- omit-not in current curriculum

Page 223 #1 e- delete tranquilizer, warfarin and add: Antipsychotics, Narcotics, Insulin, Anticoagulants and antibiotics.

<https://www.todaygeriatricmedicine.com/archive/1115p8.shtml>

Page 225-1b add examples: Lexapro (Escitalopram) and Celexa (Citalopram)

<https://www.healthline.com/health/depression/selective-serotonin-reuptake-inhibitors-ssris#side-effects>

Page 226- 2b add examples Cymbalta (duloxetine) and Pristiq (desvenlafaxine)

<https://www.drugs.com/drug-class/ssri-antidepressants.html>

Page 235- D #1e- add Clozaril (Clozapin)

<https://www.mayocliniclabs.com/test-catalog/Clinical+and+Interpretive/42366>

Page 241- Teaching Activities: Provide students with note taking outline (?)

Page 244- Delete BUN add Creatinine (add to Glossary)

<https://www.mayoclinic.org/tests-procedures/creatinine-test/about/pac-20384646>

Page 247- #5b- change from BUN to Creatinine clearance

FYI

Bill Title: Public elementary and secondary schools; administration of undesignated stock albuterol inhalers.

Spectrum: Partisan Bill (Democrat 16-0)

Status: (Engrossed - Dead) 2021-02-05 - Continued to 2021 Sp. Sess. 1 In Education and Health (15-Y 0-N) [HB2019 Details](#)

Download: [Virginia-2021-HB2019-Prefiled.html](#)

M. Medication aides registered by the Board of Nursing pursuant to Article 7 (§54.1-3941 et seq.) of Chapter 30 may administer drugs that would otherwise be self-administered to residents of any assisted living facility licensed by the Department of Social Services. A registered medication aide shall administer drugs pursuant

to this section in accordance with the prescriber's instructions pertaining to dosage, frequency, and manner of administration; in accordance with regulations promulgated by the Board of Pharmacy relating to security and recordkeeping; in accordance with the assisted living facility's Medication Management Plan; and in accordance with such other regulations governing their practice promulgated by the Board of Nursing.
<https://legiscan.com/VA/text/HB2019/id/2237076>

Narcan administration: see attached standing VDH order that includes instructions for intranasal

<http://www.vdh.virginia.gov/content/uploads/sites/3/2019/09/Naloxone-FAQs-August-2019-Final.pdf>

Cannabis Oil: (add to chapter 7?) Herbal Preparations

HB 1988 amends §§54.1-3408.3, 54.1-3442.5, 54.1-3442.6 and 54.1-3442.7 of the Code of Virginia as it relates to the use of cannabis oil for treatment by residents of an assisted living facility (ALF) and participants of an adult day care center (ADCC). The bill also designates patients in other caregiver facilities for certification for use of cannabis oil for treatment. Regulatory action by the Department of Social Services is not required. The information below is informative only.

An employee or contractor of an ALF or ADCC who is licensed or registered by a health regulatory board and who is authorized to possess, distribute, or administer medications, may accept delivery of cannabis oil from a pharmaceutical processor or cannabis dispensing facility on behalf of a resident or participant. Such employee or contractor may assist in the administration of the cannabis oil to the resident or participant as necessary. (DSS memo attached)

<https://go.drugbank.com/drugs/DB09061>

SB 185 allows nursing home, assisted living facility, hospice program, and hospice facility employees and staff members who are authorized to possess, distribute, or administer medications to residents to store, dispense, or administer cannabidiol oil (CBD) or THC-A oil to a resident who has been issued a valid written certification for such medication.

Patient registration from the Virginia Department of Health Professions (VDHP) is required to possess CBD or THC-A oil, in addition to having a valid written certification from a board registered practitioner. The registration can be issued to a legal guardian in the case of an adult who is incapacitated. SB 185 allows employees and staff members to be the registered agent for such an individual. Information about the online registration process at VDHP can be found at:

<https://www.dhp.virginia.gov/pharmacy/PharmaceuticalProcessing/Patients.htm>

2020 DSS Memo attached

Medical Benefits

People take CBD products to help with everything from arthritis and Crohn's disease to diabetes and multiple sclerosis. Some say it helps with anxiety, insomnia, and chronic pain. So far, there's little evidence that CBD helps with any of these.

The FDA has approved one CBD-based drug. Epidiolex is a treatment for several severe forms of rare childhood epilepsy.

CBD is a hot topic for researchers. The National Institutes of Health clinical trials database shows more than 160 trials involving CBD that are either active or recruiting.

As part of medical marijuana, THC helps ease things like:

- Multiple sclerosis pain
- Nerve pain
- Parkinson's disease tremors
- Nausea
- Glaucoma

Side effects from CBD can include:

- Nausea
- Diarrhea
- Upset stomach
- Tiredness
- Lightheadedness
- Crankiness
- Low blood pressure
- Drowsiness

<https://www.webmd.com/pain-management/cbd-thc-difference>

****Discussion of administration per physician's order****

Chapter 8:

Page 267- C (add)

Sulfonylureas (SFUs)

How they work: Sulfonylureas continuously stimulate the release of insulin from the pancreas. However, there are significant risks of hypoglycemia and weight gain from taking sulfonylureas and there is concern that they may overwork the pancreas, thereby quickening the progression of type 2 diabetes.

Who Uses Them: Sulfonylureas are used by people with type 2 diabetes, especially those that need further glucose lowering beyond what metformin can provide.

Approved Drugs:

Glipizide

Gliclazide

Glibenclamide

Glimepiride

<https://diatribe.org/sulfonylureas>

Page 269 #3 Add newer Type 2 medications

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are injectable medications that treat type 2 diabetes.

Similar to insulin, they're injected under the skin. GLP-1 RAs are most commonly used jointly with other antidiabetes treatments.

Currently, there are several GLP-1 RAs on the market that differ by dosing schedule and duration of action. They include:

exenatide (Byetta)

exenatide — extended release (Bydureon)

dulaglutide (Trulicity)

semaglutide (Ozempic) — also available in tablet form (Rybelsus)

liraglutide (Victoza)

lixisenatide (Adlyxin)

Pramlintide (Symlin) is another injectable drug approved for treatment of type 2 diabetes. It's used in conjunction with mealtime insulin shots. Though less commonly used, it works similarly to GLP-1 RAs.

<https://www.healthline.com/health/type-2-diabetes/ask-the-expert-injectables-for-type-2-diabetes>

- Page 272-B (add)
- Illness, particularly if associated with vomiting, nausea, and diarrhea.
- Other medical conditions, including some liver and kidney illnesses, eating disorders, and certain hormone deficiencies.
- Sulfonylureas stimulate insulin release from the pancreas, even if your glucose levels are in range – this can lead to low blood sugar.

<https://diatribe.org/low-blood-sugar-hypoglycemia-101>

Page 273- c #2 (add) instructions for glucagon

<https://www.diabetes.org/healthy-living/medication-treatments/glucagon-other-emergency-glucose-products>

<https://uspl.lilly.com/glucagon/glucagon.html#ug>

Page 273- c#2 Treatment- Change to: Call 911 for backup assistance.

Page 274- A #3 change to 8 hours

Page 274- B #1- Blood glucose meter that is labeled with resident's name. Do not use another resident's glucometer.

Page 274- C ****do not obtain blood glucose reading at mealtimes in dining area****

#10- change to: Read and record test results in the Medication Administration Record

#11- Add- properly dispose of gloves and perform proper hand hygiene if not administering insulin

Add as a note: **Use a different finger every time you test**

Using the same finger can lead to calluses and difficulty in getting an adequate drop of blood.

<https://www.ceceliahealth.com/tips-to-prevent-sore-fingertips-from-blood-glucose-testing/>

Page 277- Introduction- change to: Most people with Type 1 diabetes take insulin by subcutaneous injection.

Page 277-A #2 delete "however it should be dedicated to a single individual." Refer to #3b and page 298 for rationale

Page 278- B #5- add: rotate injection sites.

Add as note: The abdomen is a common site for insulin injections that many people with diabetes choose. It is easy to access and often less painful than other sites due to protection by fat, greater surface area, and less muscle. Ensure you are two inches away from navel when administering insulin in the abdomen.

<https://www.medicalnewstoday.com/articles/316618#insulin-absorption>

Page 278 B #8 and page 279 C 2 n: change to “lift and hold two inches of skin”. Pinching suggests tightly which causes bruising.

Page 280- E #1f: (add)

Prime the insulin pen. Priming means removing air bubbles from the needle, and ensures that the needle is open and working. The pen must be primed before each injection.

To prime the insulin pen, turn the dosage knob to the 2 units indicator. With the pen pointing upward, push the knob all the way. At least one drop of insulin should appear. You may need to repeat this step until a drop appears

Select the dose of insulin that has been prescribed by turning the dosage knob.

Check that the dose is correct. Set the pen down without letting the needle touch anything.

Insert the needle with a quick motion into the skin at a 90-degree angle. The needle should go all the way into your skin.

h. change to: Slowly push the knob of the pen all the way in to deliver full dose. Remember to hold the pen at the site for 6-10 seconds, and then pull the needle out

<https://my.clevelandclinic.org/health/treatments/17923-insulin-pen-injections>

Page 281- Objective 8.1- includes note taking outline (?)

**RIGHTS AND RESPONSIBILITIES OF
RESIDENTS OF ASSISTED LIVING FACILITIES**

§ 63.2-1808. Rights and responsibilities of residents of assisted living facilities; certification of licensure.

- A. Any resident of an assisted living facility has the rights and responsibilities enumerated in this section. The operator or administrator of an assisted living facility shall establish written policies and procedures to ensure that, at the minimum, each person who becomes a resident of the assisted living facility:
1. Is fully informed, prior to or at the time of admission and during the resident's stay, of his rights and of all rules and expectations governing the resident's conduct, responsibilities, and the terms of the admission agreement; evidence of this shall be the resident's written acknowledgment of having been so informed, which shall be filed in his record;
 2. Is fully informed, prior to or at the time of admission and during the resident's stay, of services available in the facility and of any related charges; this shall be reflected by the resident's signature on a current resident's agreement retained in the resident's file;
 3. Unless a committee or conservator has been appointed, is free to manage his personal finances and funds regardless of source; is entitled to access to personal account statements reflecting financial transactions made on his behalf by the facility; and is given at least a quarterly accounting of financial transactions made on his behalf when a written delegation of responsibility to manage his financial affairs is made to the facility for any period of time in conformance with state law;
 4. Is afforded confidential treatment of his personal affairs and records and may approve or refuse their release to any individual outside the facility except as otherwise provided in law and except in case of his transfer to another care-giving facility;
 5. Is transferred or discharged only when provided with a statement of reasons, or for nonpayment for his stay, and is given reasonable advance notice; upon notice of discharge or upon giving reasonable advance notice of his desire to move, shall be afforded reasonable assistance to ensure an orderly transfer or discharge; such actions shall be documented in his record;

6. In the event a medical condition should arise while he is residing in the facility, is afforded the opportunity to participate in the planning of his program of care and medical treatment at the facility and the right to refuse treatment;
7. Is not required to perform services for the facility except as voluntarily contracted pursuant to a voluntary agreement for services that states the terms of consideration or remuneration and is documented in writing and retained in his record;
8. Is free to select health care services from reasonably available resources;
9. Is free to refuse to participate in human subject experimentation or to be party to research in which his identity may be ascertained;
10. Is free from mental, emotional, physical, sexual, and economic abuse or exploitation; is free from forced isolation, threats or other degrading or demeaning acts against him; and his known needs are not neglected or ignored by personnel of the facility;
11. Is treated with courtesy, respect, and consideration as a person of worth, sensitivity, and dignity;
12. Is encouraged, and informed of appropriate means as necessary, throughout the period of stay to exercise his rights as a resident and as a citizen; to this end, he is free to voice grievances and recommend changes in policies and services, free of coercion, discrimination, threats or reprisal;
13. Is permitted to retain and use his personal clothing and possessions as space permits unless to do so would infringe upon rights of other residents;
14. Is encouraged to function at his highest mental, emotional, physical and social potential;
15. Is free of physical or mechanical restraint except in the following situations and with appropriate safeguards:
 - a. As necessary for the facility to respond to unmanageable behavior in an emergency situation, which threatens the immediate safety of the resident or others;
 - b. As medically necessary, as authorized in writing by a physician, to provide physical support to a weakened resident;

16. Is free of prescription drugs except where medically necessary, specifically prescribed, and supervised by the attending physician, physician assistant, or nurse practitioner;
17. Is accorded respect for ordinary privacy in every aspect of daily living, including but not limited to the following:
 - a. In the care of his personal needs except as assistance may be needed;
 - b. In any medical examination or health-related consultations the resident may have at the facility;
 - c. In communications, in writing or by telephone;
 - d. During visitations with other persons;
 - e. In the resident's room or portion thereof; residents shall be permitted to have guests or other residents in their rooms unless to do so would infringe upon the rights of other residents; staff may not enter a resident's room without making their presence known except in an emergency or in accordance with safety oversight requirements included in regulations of the Board;
 - f. In visits with his spouse; if both are residents of the facility they are permitted but not required to share a room unless otherwise provided in the residents' agreements;
18. Is permitted to meet with and participate in activities of social, religious, and community groups at his discretion unless medically contraindicated as documented by his physician, physician assistant, or nurse practitioner in his medical record;
19. Is fully informed, as evidenced by the written acknowledgment of the resident or his legal representative, prior to or at the time of admission and during his stay, that he should exercise whatever due diligence he deems necessary with respect to information on any sex offenders registered pursuant to Chapter 9 (§ 9.1-900 et seq.) of Title 9.1, including how to obtain such information. Upon request, the assisted living facility shall assist the resident, prospective resident, or the legal representative of the resident or prospective resident in accessing this information and provide the resident, prospective resident, or the legal representative of the resident or prospective resident with printed copies of the requested information; and
20. Is informed, in writing and upon request, of whether the assisted living facility maintains the minimum liability coverage, as established by the Board pursuant to subdivision A 10 of § 63.2-1805.

- B. If the resident is unable to fully understand and exercise the rights and responsibilities contained in this section, the facility shall require that a responsible individual, of the resident's choice when possible, designated in writing in the resident's record, be made aware of each item in this section and the decisions that affect the resident or relate to specific items in this section; a resident shall be assumed capable of understanding and exercising these rights unless a physician determines otherwise and documents the reasons for such determination in the resident's record.
- C. The rights and responsibilities of residents shall be printed in at least 12-point type and posted conspicuously in a public place in all assisted living facilities. The facility shall also post the name and telephone number of the regional licensing supervisor of the Department, the Adult Protective Services' toll-free telephone number, as well as the toll-free telephone number for the Virginia Long-Term Care Ombudsman Program, any sub-state ombudsman program serving the area, and the toll-free number of the Commonwealth's designated protection and advocacy system.
- D. The facility shall make its policies and procedures for implementing this section available and accessible to residents, relatives, agencies, and the general public.
- E. The provisions of this section shall not be construed to restrict or abridge any right that any resident has under law.
- F. Each facility shall provide appropriate staff training to implement each resident's rights included in this section.
- G. The Board shall adopt regulations as necessary to carry out the full intent of this section.
- H. It shall be the responsibility of the Commissioner to ensure that the provisions of this section are observed and implemented by assisted living facilities as a condition to the issuance, renewal, or continuation of the license required by this article.

History.

(1984, c. 677, § 63.1-182.1; 1989, c. 271; 1990, c. 458; 1992, c. 356; 1993, cc. 957, 993; 1997, c. 801; 2000, c. 177; 2002, cc. 45, 572, 747; 2004, c. 855; 2006, c. 396; 2007, cc. 120, 163; 2013, cc. 320, 571.)

In Case of Questions or Concerns, You May Call:

**Regional Licensing Administrator,
Virginia Department of Social Services:** _____

Telephone Number: _____

**Toll-Free Telephone Number for Adult Protective Services: 1-888-832-3858
(1-888-83ADULT)**

**Toll-Free Telephone Number for Virginia Long-Term Care Ombudsman
Program: 1-800-552-3402**

Local/Sub-State Ombudsman Program: _____

Telephone Number: _____

**Toll-Free Telephone Number for the disAbility Law Center of Virginia:
1-800-552-3962**

Non-Insulin Injectable Medications	
Drug Brand Name(s) (Generic)	Storage Recommendations
Injectable Products	For additional information or for products not specifically mentioned elsewhere refer to the manufacturer's recommendations. Discard any product that becomes discolored and/or contains particulate matter.
Multiple-Dose Vials for Injection (not specifically mentioned elsewhere)	Date when opened and discard unused portion after 28 days or in accordance with manufacturer's recommendations. If being used for more than one resident, keep in a centralized medication area (e.g., medication room or cart). Discard immediately if it enters an immediate treatment area (e.g., resident room).
Aranesp Injection (darbepoetin alfa)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Protect from light. Do not freeze or shake. Discard unused portion.
Ativan Injection (lorazepam)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Protect from light.
Bacteriostatic Normal Saline or Water for Injection Multiple-Dose Vials	Store at 68° to 77°F (20° to 25°C). Date when opened and discard after 28 days .
Bydureon Injection (exenatide extended release)	Prior to first use, store in the refrigerator at 36° to 46°F (2° to 8°C). Date when opened or when removed from the refrigerator and store for up to 28 days at temperatures not exceeding 77°F (25°C). Protect from light. Do not freeze.
Copaxone Injection or Glatopa Injection (glatiramer)	Store in the refrigerator at 36° to 46°F (2° to 8°C). If refrigeration is not possible, this product may be stored at room temperature at 59° to 86°F (15° to 30°C) for up to 1 month . Protect from light. Do not freeze.
Epogen Injection (epoetin alfa) Procrit Injection (epoetin alfa) Retacrit Injection (epoetin alfa-epbx)	Store in the refrigerator at 36° to 46°F (2° to 8°C). For multi-dose vials, date when opened, and discard after 21 days . Protect from light. Do not freeze or shake.
Evenity Injection (romosozumab-aqqg)	Store in the refrigerator at 36° to 46°F (2° to 8°C) in the original carton. If refrigeration is not possible, this product may be stored at room temperature up to 77°F (25°C) for up to 30 days . Protect from light. Do not freeze or shake.
Extavia Injection (interferon beta-1b)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted for up to 3 months until reconstituted. If not used immediately after reconstitution, store at 36° to 46°F (2° to 8°C) and discard after 3 hours . Do not freeze.
Forteo Injection (teriparatide)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Date when opened and discard after 28 days . Do not freeze. Protect from light (e.g., recap the delivery device when not in use).
GlucaGen Injection (glucagon [rDNA origin])	Store at 68° to 77°F (20° to 25°C) for up to 24 months prior to reconstitution. Protect from light. After reconstitution, use immediately and discard unused portion.
Gvoke Injection (glucagon)	Store at 59° to 86°F (15° to 30°C) in the original sealed foil pouch. Discard unused portion immediately after initial use.
Influenza Vaccine	Store in the refrigerator at 36° to 46°F (2° to 8°C). Do not freeze. Protect from light. Opened multi-dose vials (except Afluria Quadrivalent) may be used until the expiration date printed on the package unless visibly contaminated. Date vials of Afluria Quadrivalent when opened and discard after 28 days .
Ozempic Injection (semaglutide)	Prior to first use, store in the refrigerator at 36° to 46°F (2° to 8°C). Date when opened or when removed from the refrigerator and store for up to 56 days either at 59° to 86°F (15° to 30°C) or at 36° to 46°F (2° to 8°C). Keep pen cap on when not in use. Protect from excessive heat and sunlight. Do not freeze.
Pneumovax 23 Injection (pneumococcal vaccine polyvalent)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Do not freeze. Discard after manufacturer's expiration date.
Prevnar 13 Injection (pneumococcal 13-valent conjugate vaccine)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Do not freeze. Discard after manufacturer's expiration date. Discard after 4 days if left outside of the refrigerator at temperatures up to 77°F (25°C).

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Non-Insulin Injectable Medications	
Drug Brand Name(s) (Generic)	Storage Recommendations
Prolia Injection (denosumab)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Do not freeze or shake. Protect from direct light and heat. May be allowed to reach room temperature, not to exceed 77°F (25°C), prior to administration. Once removed from the refrigerator, use or discard within 14 days .
Risperdal Consta Injection (risperidone)	Store in the refrigerator at 36° to 46°F (2° to 8°C). If refrigeration is not possible, this product may be stored at temperatures not exceeding 77°F (25°C) for no more than 7 days . Do not store suspension after reconstitution. Protect from light.
Shingrix Injection (zoster vaccine recombinant, adjuvanted)	Store unopened vaccine and adjuvant suspension vials in the refrigerator at 36° to 46°F (2° to 8°C). After reconstitution, vaccine may be stored in the refrigerator at 36° to 46°F (2° to 8°C) for up to 6 hours . Do not freeze. Protect from light.
Soliqua Injection (insulin glargine/lixisenatide)	Store in the refrigerator at 36° to 46°F (2° to 8°C) prior to first use. Do not freeze. Protect from light (e.g., replace pen cap after each use). Date when removed from refrigerator prior to first use and discard after 28 days . After first use, store at room temperature below 77°F (25°C).
Trulicity Injection (dulaglutide)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Do not freeze. Individual single-dose pens may be stored at room temperature, up to 86°F (30°C) for no more than 14 days . Protect from light.
Tymlosa Injection (abaloparatide)	Store in the refrigerator at 36° to 46°F (2° to 8°C) prior to first use. Do not freeze. Date after first use and store at 68° to 77°F (20° to 25°C). Discard 30 days after first use.
Tuberculin Tests: Aptsol Injection; Tubersol Injection	Store in the refrigerator at 36° to 46°F (2° to 8°C). Protect from light. Do not freeze. Date when opened and discard unused portion after 30 days .
Victoza Injection (liraglutide)	Prior to first use, store in the refrigerator at 36° to 46°F (2° to 8°C). Date when opened or when removed from the refrigerator and store for up to 30 days either at 59° to 86°F (15° to 30°C) or at 36° to 46°F (2° to 8°C). Keep pen cap on when not in use. Protect from excessive heat and sunlight. Do not freeze.
Xultophy Injection (insulin degludec/liraglutide)	Prior to first use, store in the refrigerator at 36° to 46°F (2° to 8°C). Date when opened or when removed from the refrigerator and store for up to 21 days either at 59° to 86°F (15° to 30°C) or at 36° to 46°F (2° to 8°C). Keep pen cap on when not in use. Protect from excessive heat and sunlight. Do not freeze.

a. Tables are not all-inclusive

For additional information please refer to individual prescribing information available at <https://dailymed.nlm.nih.gov/dailymed/>

Oral, Enteral, Ophthalmic, Otic, and Topical Medications

Drug Brand Name(s) (Generic)	Storage Recommendations
Oral Solids, Oral or Enteral Liquids in Original Bottles, Otic Products and Topical Preparations (not specifically mentioned elsewhere)	Refer to manufacturer's recommendations.
Ophthalmic Products (not specifically mentioned elsewhere)	Date when opened and discard unused portion after 28 days or in accordance with manufacturer's recommendations or facility policy. Storage in an upright position may be warranted – refer to manufacturer's recommendations.
Aggrenox Capsules (aspirin/dipyridamole ER)	Store in the original unit-of-use container at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. If dispensing in the original container is not possible, storage in a USP tight container may be allowed, but remaining capsules should be discarded after 60 days . Protect from moisture.
Ativan Concentrate Oral Solution (lorazepam) <i>Note: Brand no longer available</i>	Store original dropper bottle in the refrigerator at 36° to 46°F (2° to 8°C). If kept in the refrigerator, date when opened and discard 90 days after opening. If refrigeration is not possible, manufacturer data on file supports storage at room temperature up to 77°F (25°C) for 30 days .
CellCept Oral Suspension (mycophenolate mofetil)	Store at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Storage in a refrigerator at 36° to 46°F (2° to 8°C) is acceptable. Do not freeze. Date when reconstituted and discard after 60 days .
Firvanq Oral Solution (vancomycin)	Store at 36° to 46°F (2° to 8°C). Discard 14 days after reconstitution or if it appears hazy or contains particulate matter. Do not freeze. Protect from light.
Irrigation Solutions (e.g., sterile water, sterile sodium chloride)	Discard unused portion immediately after initial use.
Lasix Oral Solution (furosemide) <i>Note: Brand no longer available</i>	Store at 68° to 77°F (20° to 25°C). Excursions of 59° to 86°F (15° to 30°C) are permitted by certain manufacturers (refer to individual prescribing information as necessary). Protect from light. Date when opened and discard after 90 days .
Marinol Capsules (dronabinol)	Store in the refrigerator at 36° to 46°F (2° to 8°C). Do not freeze.
Morphine Sulfate Concentrate Oral Solution	Store at 68° to 77°F (20° to 25°C). Excursions of 59° to 86°F (15° to 30°C) are permitted by certain manufacturers (refer to individual prescribing information as necessary). Protect from light and moisture. Discard after manufacturer's expiration date unless otherwise indicated (i.e., if poured into a different bottle by the pharmacy, discard after 1 year or manufacturer's expiration date if sooner).
Nitroglycerin Sublingual Tablets	Store at 68° to 77°F (20° to 25°C) in the original bottle. Keep tightly closed to prevent exposure to air, heat or moisture. Discard unused medication after product expiration date.
Oxycodone Concentrate Oral Solution	Store at 68° to 77°F (20° to 25°C). Excursions of 59° to 86°F (15° to 30°C) are permitted by certain manufacturers (refer to individual prescribing information as necessary). Protect from light and moisture.
Pradaxa Capsules (dabigatran)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Protect from moisture. Must store in original manufacturer bottle or in manufacturer blister packaging. When dispensed in original bottle, date when opened and discard after 4 months . When dispensed in blister packaging, discard after manufacturer's expiration date.
Pred Forte Ophthalmic Solution (prednisolone)	Store at room temperature up to 77°F (25°C) in an upright position.
Rhopressa Ophthalmic Solution (netarsudil)	Store in the refrigerator at 36° to 46°F (2° to 8°C) until ready to use. Date when opened. If kept in the refrigerator, discard after manufacturer's expiration date. If refrigeration is not possible, store at 36° to 77°F (2° to 25°C) and discard after 6 weeks .

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Oral, Enteral, Ophthalmic, Otic, and Topical Medications	
Drug Brand Name(s) (Generic)	Storage Recommendations
Timoptic-XE Ophthalmic Solution (timolol)	Store at 59° to 77°F (15° to 25°C) in an upright position. Protect from light.
Veltassa (patiomer)	Store in the refrigerator at 36° to 46°F (2° to 8°C). If stored at room temperature 73° to 81°F (23 to 27°C), discard after 3 months .
Vimpat Oral Solution (lacosamide)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date when opened and discard after 7 weeks .
Xalatan Ophthalmic Solution (latanoprost)	Store in the refrigerator at 36° to 46°F (2° to 8°C) until ready to use. Date when opened and discard after 6 weeks . Store at room temperature up to 77°F (25°C) after opening. Protect from light.

a. Tables are not all-inclusive

For additional information please refer to individual prescribing information available at <https://dailymed.nlm.nih.gov/dailyinfo/>

Inhaled Medications	
Drug Brand Name(s) (Generic)	Storage Recommendations
Orally or Nasally Inhaled Preparations (not specifically mentioned elsewhere)	Refer to manufacturer's recommendations.
Advair Diskus (fluticasone/salmeterol)	Store at 68° to 77°F (20° to 25°C) in a dry place with excursions from 59° to 86°F (15° to 30°C) permitted. Date the Diskus when removed from the foil pouch and discard 1 month after removal from foil pouch or when the dose counter reads " 0 ", whichever comes first.
Advair HFA Inhalation Aerosol (fluticasone/salmeterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Store the inhaler with the mouthpiece down. Discard when the dose counter reads " 000 ".
Afrezza Inhalation Powder (insulin recombinant human)	Store unopened drug in foil pouch in the refrigerator at 36° to 46°F (2° to 8°C). If refrigeration is not possible, unopened product may be stored at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted for up to 10 days . Unopened blister cards and strips stored outside of the foil pouch, but in the refrigerator, must be used within 1 month . Date blister cards when foil pouch is opened and date inhaler when first used. Opened blister strips stored at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) is permitted for up to 3 days . Inhaler device may be stored at 36° to 77°F (2° to 25°C), but must be kept in a clean, dry place with mouthpiece cover on between doses. The inhaler device must be discarded 15 days after first use. Do not put a blister card or strip back into the refrigerator after being stored at room temperature.
AirDuo Respiclick or Digihaler (fluticasone/salmeterol)	Store at 59° to 77°F (15° to 25°C) with excursions up to 86°F (30°C) permitted. Date after opening the foil pouch and discard after 30 days or when the dose counter reads " 0 ", whichever comes first. Keep the cover closed when not in use and protect from moisture.
Alvesco Inhalation Aerosol (ciclesonide)	Store at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard when the dose counter reads " 0 ".
Anoro Ellipta Inhalation Powder (umeclidinium/vilanterol)	Store in a dry place away from direct heat or sunlight at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date the inhaler when removed from the foil pouch and discard 6 weeks after opening foil tray or when the dose counter reads " 0 ", whichever comes first.
Arnaulty Ellipta Inhalation Powder (fluticasone)	Store in a dry place away from direct heat or sunlight at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Prior to use, store in the moisture-protective foil tray. Date product when foil tray is opened and discard after 6 weeks or when the dose counter reads " 0 ", whichever comes first.
Asmanex HFA Inhalation Aerosol (mometasone)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard when the dose counter reads " 0 ".
Asmanex Twisthaler Inhalation Powder (mometasone)	Store at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date the inhaler when the foil pouch is opened and discard after 45 days or when dose counter reads " 00 ", whichever comes first. Replace the cap after each inhalation to protect the inhaler from moisture.
Atrovent Inhalation Solution (ipratropium) <i>Note: Brand no longer available</i>	Store unused solution in foil pouch at 59° to 86°F (15° to 30°C) until ready to use. Protect from light.
Atrovent HFA Inhalation Aerosol (ipratropium)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard when the dose counter reads " 0 ".
Baqsimi Nasal Powder (glucagon)	Store at room temperature, up to 86°F (30°C) in the shrink-wrapped tube until ready to use.
Beverpi Aerosphere (formoterol/glycopyrrolate)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date when removed from the foil pouch and discard after 3 months (120 inhalation canister) or 3 weeks (28 inhalation canister) or when the dose counter reads " 0 ", whichever comes first.

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Inhaled Medications

Drug Brand Name(s) (Generic)	Storage Recommendations
Breo Ellipta Inhalation Powder (fluticasone/vilanterol)	Store in a dry place away from direct heat or sunlight at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date when opening the foil tray and discard after 6 weeks or when the dose counter reads " 0 ", whichever comes first.
Breztri Aerosphere Inhalation Aerosol (budesonide/ glycopyrrolate/ formoterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date when removed from the foil pouch and discard after 3 months (120 inhalation canister) or 3 weeks (28 inhalation canister) or when the dose counter reads " 0 ", whichever comes first.
Brovana Inhalation Solution (arformoterol)	Store product in sealed foil pouch in the refrigerator at 36° to 46°F (2° to 8°C). Protect from light. Opened or unopened pouches may be stored at 68° to 77°F (20° to 25°C) for no more than 6 weeks . An opened unit dose vial should be used right away. Unused unit dose vials should be returned to and stored in pouch.
Calcitonin salmon Nasal Spray	Store unopened bottle in the refrigerator at 36° to 46°F (2° to 8°C). Date when opened and store at 68° to 77°F (20° to 25°C) in an upright position. Discard the open 2 mL product after 14 doses or 30 days , whichever comes first. Discard the open 3.7 mL product after 30 doses or 35 days , whichever comes first.
Combivent RespiMat Inhalation Spray (ipratropium/albuterol)	Store at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. After initial assembly, the inhaler should be discarded after 3 months or when the locking mechanism is engaged (e.g., dose counter reads " 0 "), whichever comes first.
Duaklir Pressair Inhalation Powder (aclidinium/formoterol)	Store in a dry place at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date when first opening the pouch and discard after 2 months or when the counter reads " 0 ", whichever comes first. Do not store on a vibrating surface.
Dulera Inhalation Aerosol (mometasone/formoterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard when dose counter reads " 0 ". For the 60-Inhalation inhaler only, after priming, store the inhaler with the mouthpiece down or in a horizontal position.
DuoNeb Solution for Nebulization (ipratropium/albuterol) <i>Note: Brand no longer available</i>	Store unused solution in foil pouch at 36° to 77°F (2° to 25°C) until ready to use. Protect from light. Refer to specific manufacturer information as some products must remain stored in the foil pouch at all times and some may be stored outside of the pouch for up to 14 days .
Flovent Diskus (fluticasone)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Protect from direct heat or sunlight. Date the Diskus when removed from the foil pouch and discard 6 weeks (for 50 mcg strength) or 2 months (for 100 mcg or 250 mcg strengths) after removal from foil pouch or when dose counter reads " 0 ", whichever comes first.
Flovent HFA Inhalation Aerosol (fluticasone)	Store at 68° to 77°F (20° to 25°C) with excursions of 59° to 86°F (15° to 30°C) permitted. Store the inhaler with the mouthpiece down. Discard when the dose counter reads " 000 ".
Inbrilja Inhalation Powder (levodopa)	Store in a dry place between 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Capsules should only be removed from the blister immediately before use. Do not store capsules in the inhaler.
Incruse Ellipta Inhalation Powder (umeclidinium)	Store in a dry place away from direct heat or sunlight at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Date when foil tray is opened and discard after 6 weeks or when the counter reads " 0 ", whichever comes first.
Lonhala Magnair Inhalation Solution (glycopyrrolate)	Store product in foil pouch at 68° to 77°F (20° to 25°C). Only remove vials immediately before use. Date when foil pouch is opened and discard after 7 days .
Perforomist Inhalation Solution (formoterol)	Store vials in foil pouch in the refrigerator at 36° to 46°F (2° to 8°C) until manufacturer's expiration date or store at room temperature, 68°F to 77°F (20°C to 25°C) and discard after 3 months .
ProAir Digihaler or ProAir RespiClick (albuterol)	Store at 59° to 77°F (15° to 25°C). Date when foil pouch is opened and discard after 13 months or when the dose counter reads " 0 ", whichever comes first. Keep the cover closed when not in use and avoid exposure to extreme heat, cold, or humidity.

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Inhaled Medications	
Drug Brand Name(s) (Generic)	Storage Recommendations
ProAir HFA Inhalation Aerosol (albuterol)	Store at 59° to 77°F (15° to 25°C). Discard when the dose counter reads "0". Protect from direct sunlight.
Proventil HFA Inhalation Aerosol (albuterol)	Store at 59° to 77°F (15° to 25°C) with the mouthpiece down. Discard when the dose counter reads "0".
Proventil or Ventolin Inhalation Solution (albuterol) <i>Note: Brand no longer available</i>	Refer to manufacturer's recommendations for storage of opened product. Store unused solution in pouch between 36° to 77°F (2° to 25°C), until ready to use. Protect from light.
Pulmicort Flexhaler (budesonide)	Store at 68° to 77°F (20° to 25°C) in a dry place. Keep cover tightly in place when not in use. Discard when dose counter reads "0".
Pulmicort Respules Inhalation Suspension (budesonide)	Store ampules in the foil envelope and in an upright position at 68° to 77°F (20° to 25°C). Date once the foil envelope is opened and discard after 2 weeks . Protect from light. Any opened ampules must be used promptly.
QVAR RediHaler (beclomethasone)	Store at 68° to 77°F (20° to 25°C) with excursions permitted from 59°F to 86°F (15°C to 30°C). Discard when the dose counter reads "0".
Seebri Neohaler Inhalation Powder (glycopyrrolate)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Protect from moisture. Capsules should only be removed from the blister immediately before use. Discard any capsules exposed to air that are not intended for immediate use. Do not store capsules in Neohaler.
Serevent Diskus (salmeterol)	Store at 68° to 77°F (20° to 25°C) with excursions permitted from 59°F to 86°F (15°C to 30°C). Date after opening the foil pouch and discard after 6 weeks or when the dose counter reads "0", whichever comes first. Protect from moisture, direct heat, or sunlight.
Spiriva HandiHaler (tiotropium)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Always keep capsules stored in the blister and only remove immediately before use. Do not store capsules in the HandiHaler device.
Spiriva Respimat Inhalation Spray (tiotropium)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard 3 months after first use or when the locking mechanism is engaged (indicating all actuations have been used), whichever comes first.
Stiolto Respimat Inhalation Spray (tiotropium/olodaterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard 3 months after first use or when the locking mechanism is engaged (indicating all actuations have been used), whichever comes first.
Striverdi Respimat Inhalation Spray (olodaterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Discard 3 months after first use or when the locking mechanism is engaged (indicating all actuations have been used), whichever comes first.
Symbicort Inhalation Aerosol (budesonide/formoterol)	Store at 68° to 77°F (20° to 25°C) with the mouthpiece down. Date after opening the foil pouch and discard after 3 months or when the dose counter reads "0", whichever comes first.
Trelegy Ellipta (fluticasone/umeclidinium/vilanterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Keep dry and away from direct heat or sunlight. Date when the foil tray is opened and discard after 6 weeks or when the dose counter reads "0", whichever comes first.
Tudorza Pressair Inhalation Powder (aclidinium)	Store in a dry place at 77°F (25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Do not store the inhaler on a vibrating surface. Date when first opening the pouch and discard after 45 days or when the dose counter reads "0", whichever comes first.
Ventolin HFA Inhalation Aerosol (albuterol)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Store the inhaler with the mouthpiece down and discard when the dose counter reads "000", whichever comes first.

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Inhaled Medications	
Drug Brand Name(s) (Generic)	Storage Recommendations
Wixela Inhub (fluticasone/salmeterol)	Store at 68° to 77°F (20° to 25°C) in a dry place away from direct heat and sunlight. Date when removed from the foil pouch and discard 1 month after removal from foil pouch or when the dose counter reads "0", whichever comes first.
Xopenex HFA Inhaler (levalbuterol)	Store at 68° to 77°F (20° to 25°C) with the mouthpiece down and away from direct sunlight. Discard when the dose counter reads "0".
Xopenex Inhalation Solution (levalbuterol)	Store vials in foil pouch at 68° to 77°F (20° to 25°C). Protect from light and excessive heat. Date after opening foil pouch and discard after 2 weeks . Vials removed from the pouch should be used within 1 week . Individually wrapped 1.25 mg/0.5 mL vials must be used immediately or be discarded.
Yupelri Inhalation Solution (revefenacin)	Store at 68° to 77°F (20° to 25°C) with excursions from 59° to 86°F (15° to 30°C) permitted. Protect from sunlight. Remove vials from the foil pouch immediately before use.

a. Tables are not all-inclusive

For additional information please refer to individual prescribing information available at <https://www.accessdata.fda.gov/drugsatfda/drugs/infopage.cfm?dndid=20170101&id=20170101>

Vials	Unopened		Opened	
	Refrigerated (36° F to 46° F)	Room Temperature (59° F to 86° F)	Refrigerated (36° F to 46° F)	Room Temperature (59° F to 86° F)
Admelog	Until expiration date	28 days	28 days	28 days
Apidra	Until expiration date	28 days	28 days	28 days (up to 77°F)
Fiasp	Until expiration date	28 days	28 days	28 days
Humalog	Until expiration date	28 days	28 days	28 days
Humalog Mix (75/25 or 50/50)	Until expiration date	28 days	28 days	28 days
Humulin (R U-100, N, 70/30)	Until expiration date	31 days	31 days	31 days
Humulin R U-500^d	Until expiration date	40 days	40 days	40 days
Insulin Aspart	Until expiration date	28 days	28 days	28 days
Insulin Aspart Protamine/ Insulin Aspart	Until expiration date	28 days	28 days	28 days
Insulin Lispro	Until expiration date	28 days	28 days	28 days
Lantus	Until expiration date	28 days	28 days	28 days
Levemir	Until expiration date	42 days	42 days	42 days
Lyumjev	Until expiration date	28 days	28 days	28 days
Novolin (R, N, 70/30)	Until expiration date	42 days (up to 77°F)	Do not refrigerate after opening	42 days (up to 77°F)
Novolog	Until expiration date	28 days	28 days	28 days
Novolog Mix 70/30	Until expiration date	28 days	28 days	28 days
Semglee	Until expiration date	28 days	28 days	28 days
Tresiba	Until expiration date	56 days	56 days	56 days

Cartridges/Pens (Do NOT refrigerate once in-use)	Unopened		Opened
	Refrigerated (36° F to 46° F)	Room Temperature (59° F to 86° F)	Room Temperature (59° F to 86° F)
Admelog pen	Until expiration date	28 days	28 days
Apidra pen	Until expiration date	28 days	28 days (up to 77°F)
Basaglar pen	Until expiration date	28 days	28 days
Fiasp[®] cartridge or pen	Until expiration date	28 days	28 days
Humalog U-100 cartridge or pen	Until expiration date	28 days	28 days
Humalog U-200 pen	Until expiration date	28 days	28 days
Humalog Mix 50/50 pen	Until expiration date	10 days	10 days
Humalog Mix 75/25 pen	Until expiration date	10 days	10 days
Humulin N pen	Until expiration date	14 days	14 days
Humulin 70/30 pen	Until expiration date	10 days	10 days
Humulin R U-500 pen	Until expiration date	28 days	28 days
Insulin Aspart cartridge or pen	Until expiration date	28 days	28 days
Insulin Aspart Protamine/ Insulin Aspart 70/30 pen	Until expiration date	14 days	14 days
Insulin Lispro pen	Until expiration date	28 days	28 days
Insulin Lispro Protamine/ Insulin Lispro 75/25 pen	Until expiration date	10 days	10 days

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Cartridges/Pens (Do NOT refrigerate once in-use)	Unopened		Opened
	Refrigerated (36 °F to 46 °F)	Room Temperature (59 °F to 86 °F)	Room Temperature (59 °F to 86 °F)
Lantus pen	Until expiration date	28 days	28 days
Levemir pen	Until expiration date	42 days	42 days
Lyumjev U-100 cartridge or pen	Until expiration date	28 days	28 days
Lyumjev U-200 pen	Until expiration date	28 days	28 days
Novolin (R, N, 70/30) pen	Until expiration date	28 days	28 days
Novolog cartridge or pen	Until expiration date	28 days	28 days
Novolog Mix 70/30 pen	Until expiration date	14 days	14 days
Samglee pen	Until expiration date	28 days	28 days
Toujeo U-300 pen	Until expiration date	56 days	56 days
Toujeo Max U-300 pen	Until expiration date	56 days	56 days
Tresiba U-100 pen	Until expiration date	56 days	56 days ^e
Tresiba U-200 pen	Until expiration date	56 days	56 days ^e

- a. Tables are not all-inclusive
- b. Do not use any insulin products that have been frozen. Protect from light.
- c. Does not include combination insulin/GLP-1 products
- d. Use only with U-500 insulin syringes
- e. In-use Fiasp FlexTouch pens and Tresiba FlexTouch pens may be refrigerated or stored at room temperature. Storage at room temperature may reduce injection site discomfort.

For additional information please refer to individual prescribing information available at <https://dailyincd.nlm.nih.gov/dailymed/>

GENERAL GUIDANCE

- Safe and secure storage includes abiding by proper temperature controls as well as maintaining appropriate light and humidity exposure.
- Products with an expiration date sooner than other guidance will be considered expired after that date.
- Temperature ranges are general definitions, but users should adhere to ranges specified in FDA-approved prescribing information.
- Unless otherwise noted by the manufacturer, standards of practice, or facility policy (whichever is more stringent), all multi-dose containers will be considered to be expired on the date on the actual container as indicated by the manufacturer unless there is suspected or obvious product contamination.
- According to CDC guidelines, refrigerators and freezers used in storing vaccines should have their temperatures monitored at least twice daily unless a temperature monitoring device that records maximum and minimum temperatures is used. Refrigerator units with a freezer compartment inside the refrigerator (dormitory-style) are not recommended.
- All internal and external products should be stored physically separate from one another.
- Controlled substances may have additional storage, security and disposal requirements not addressed in this document.
- Properly handle and dispose of any expired or unused product in accordance with facility policy or local, state, and federal regulations.

STORAGE-RELATED TERMINOLOGY

- **Adulteration:** Conditions by which a product may be contaminated or prepared, packed, or stored in a manner that does not conform to current good manufacturing standards
- **Beyond use date:** the date, often applied during repackaging or compounding, beyond which a dispensed medication should not be administered
- **Controlled storage conditions:** Maintaining the storage conditions of products in regard to proper humidity, temperature, and light
- **Expiration or expiry date:** The date up to which a product is expected to remain usable, if stored correctly. According to the United States Pharmacopeia (USP), expiration dates expressed in the terms of only the month and year can be used until the last day of the stated month and year unless otherwise specified (i.e., an expressed expiration date of 11/2021 should be interpreted as November 30, 2021).
- **External:** Medications intended for application to the skin (e.g., transdermal patch, creams, lotions, ointments)
- **Internal:** Medications intended for ophthalmic, oral, or otic administration, instillation into any orifice, injection, or oral inhalation

United States Pharmacopeial Convention (USP) TEMPERATURE RANGES

Freezer	-13°F to 14°F (-25°C to -10°C)
Cold	Any temperature not exceeding 46°F (8°C)
Refrigerated	Any temperature between 36°F to 46°F (2°C to 8°C)
Cool	Any temperature between 46°F to 59°F (8°C to 15°C)
Controlled Room Temperature	Any temperature between 68°F to 77°F (20°C to 25°C) but may include excursions between 59°F to 86°F (15°C to 30°C) for limited periods of time
Room Temperature	The temperature prevailing in a working environment [e.g., between 59°F to 86°F (15°C to 30°C)].
Warm	Any temperature between 86°F and 104°F (30°C to 40°C)
Temperature excursion	Minimal period of time at which a product is outside of its recommended or labeled storage temperature

a. Tables are not all-inclusive

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