Revision of the Midwifery Formulary
Virginia Board of Medicine
Monday, August 25, 2025, 10:00 a.m.
9960 Mayland Drive, Suite 200, Board Room 4
Henrico, VA 23233

Call to Order

Blanton Marchese called the meeting to order at 10:00 a.m.

Roll Call

Members Present:

- Blanton Marchese – Chair & Past President of the Virginia Board of Medicine
- Rebecca Banks, LM - Chair of the Advisory Board on Midwifery
- Story Jones, LM *(arrived at 10:15 a.m.)* - Member of the Advisory Board on Midwifery
- Jordan Hylton, DO - Associate Professor of OB-GYN at VCU School of Medicine
- Kim Pekin, LM – Virginia Midwives Alliance
- Jennifer Green, LM – Member of the Advisory Board on Midwifery
- Ildiko Baugus, LM – Member of the Advisory Board on Midwifery
- Christian Chisolm, MD – Professor of Fetal-Maternal Medicine at the University of Virginia School of Medicine

Staff Present:

- William L. Harp, MD – Executive Director, Board of Medicine
- Kathleen LaMotte – Board Administrator, Board of Medicine
- Jennifer Deschenes, JD – Deputy Executive Director for Discipline
- Erin Barrett, JD – Director, DHP Legislative and Regulatory Affairs
- Michael Sobowale, LLM – Deputy Executive Director for Licensure

Emergency Egress Instructions:
Mr. Marchese reviewed the emergency egress procedures.

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Approval of Minutes – July 20, 2023

Correction noted: Dr. Hylton's credentials should read "DO" not "MD."
Motion: Dr. Chisolm moved to approve the minutes as amended.
Second: Jennifer Green
Motion passed.

Adoption of Agenda

The agenda was adopted without changes.

Public Comment on Agenda Items

No public comment was received.

New Business

Code of Virginia § 54.1-2957.9 – Practice of Midwifery

Mr. Marchese provided background on the Board's statutory authority and the alignment that the formulary follows with the North American Registry of Midwives Job Analysis. The formulary was originally written in 2023 and is being revisited for updating.

Review of Current Midwifery Formulary

- The current formulary has been well-received by midwives.
- National medication shortages have impacted access, particularly for non-hospital providers.
- The Board reviewed proposed revisions and additions (see Appendix A).

2024 NARM Job Analysis

- Kim Pekin discussed the NARM process and its relevance to certification and formulary updates.
- Emphasis was placed on the needs of rural midwives and the importance of emergency medications.

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- A webinar is being developed to provide clinical updates on medication use, storage, informed consent, and AIM bundles.
- Erin Barrett noted that to make the webinar training mandatory would require regulatory changes.

Discussion of Specific Medications and Protocols

General Updates

- The statement on medication storage was revised to emphasize administration according to best practices.
- A new recommendation was added for licensed midwives to discuss available medications with each patient.

New Medications Added

- Tranexamic Acid (TXA) – for postpartum hemorrhage; both IV and oral dosing included.
- Carboprost (Prostaglandin F2 alpha) – for postpartum hemorrhage; IM administration.
- Terbutaline – to temporarily reduce uterine contractions during emergency transport.
- Sterile Water – for intradermal injections for labor pain relief.
- Dicloxacillin, Clindamycin, Cephalexin (Keflex) – for treatment of mastitis.
- Magnesium Sulfate – for seizure prevention; both IM and IV routes included with guidance on calcium gluconate as an antidote.
- Nitrous Oxide – for analgesia; self-administered per manufacturer guidelines.
- Zofran (Ondansetron) – anti-nausea; sublingual and IV options listed.
- Meyer's Cocktail – IV vitamin therapy for nausea and nutrient replenishment.
- Phenergan (Promethazine) – anti-nausea; suppository form.
- Iron Infusions – for anemia; to be administered per best practices.
- Vaccinations – including Tdap, MMR, HBV, HBIG, influenza, and COVID; per FDA-approved guidelines.

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- Opioid Reversal Agent (e.g., Naloxone) – for suspected opioid overdose; intranasal administration.

Neonatal Section Updates

- Vitamin K1 – now includes both IM and oral options.
- Clarified dosing and administration for neonatal oxygen and epinephrine.

Next Steps

- The revised formulary will be presented to the full Board of Medicine on **October 30, 2025**.
- Public comment will be accepted at that meeting.

Announcements

- Members were reminded to submit per diem and travel vouchers for reimbursement.

Adjournment

The meeting adjourned at **11:45 a.m.**

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~~Adopted: August 4, 2023~~
Revised: October 30, 2025

Virginia Board of Medicine
Formulary and Best Practices
Midwifery Administration of Drugs

Medication listed in this document should be stored as directed by the manufacturer and administered according to best practices. ~~should not be administered to any person after the expiration date listed.~~

The Board recommends that a licensed midwife discuss with each patient the medications that the midwife may provide.

	Drug	Indication	Dose/Route of Administration	Duration of Treatment
Maternal	Rh(D) immune globulin (Rhig) (RhoGAM/WinRho/Rhophylac)	Prevention of isoimmunization	300 mcg IM	After SAB, third trimester, and within 72 hours postpartum.
	Lidocaine HCl (1% or 2%)	Local anesthetic for suturing	Maximum 50 mL (1%) Maximum 15 mL (2%) Administered percutaneously	Completion of repair
	Medical Oxygen	Maternal hemorrhage or fetal distress	4-15 L/min by mask or bag/mask as needed to keep SpO2>93% or for fetal distress	Until maternal/fetal stabilization is achieved or transfer to the hospital is complete.
	Oxytocin (Pitocin)	Postpartum uterine atony	10 units IM per dose, 20-40 units in 500-1000 mL IV NS or LR	PRN during immediate postpartum care
	Misoprostol (Cyotec)	Postpartum hemorrhage	Prevention • Buccal or sublingual 200-400 mcg single dose immediately after delivery • Oral: 600 mcg single dose after delivery Treatment • Oral or rectal 600 to 1000 mcg single dose	PRN during immediate postpartum care

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			• Sublingual 800 mcg single dose	
	Methylergonovine Maleate (Methergine)	Postpartum hemorrhage	0.2 mg IM or PO	Single dose IM or every six hours PO, may repeat 3 times. Contraindicated in hypertension and Raynaud's Disease.
	Tranexamic acid (TXA)	Postpartum hemorrhage	1 gram via IV 1300 mg orally	10 minutes
	Prostaglandin F2 alpha (carboprost)	Postpartum hemorrhage	250 mcg IM	Q 15-90 minutes (max 2 mg); avoid in asthma
	Terbutaline	Decrease or stop uterine contractions	0.25 mg subcutaneous	Once. If no significant decrease in contractions within 15-30 minutes, second dose of 0.25 mg may be administered.
	IV Fluids: ➢ Normal Saline (0.9%) ➢ Ringers Lactate ➢ Ringers Lactate with 5% Dextrose	Dehydration, exhaustion, volume replacement	1000 mL or 500 mL bolus as needed for dehydration, maternal exhaustion, inability to tolerate PO hydration and/or food, postpartum hemorrhage	Antepartum, intrapartum, and postpartum, as indicated.
	Sterile water	For intradermal injections for pain relief	1 mL sterile water per injection site; 4 injection sites using a 1 mL tuberculin syringe	May be repeated during labor
	Penicillin G (Pfizerpen) (Recommended)	GBS prophylaxis	5 million units IV in>=100 mL LR, NS, or D5LR initial dose, then 2.5 million units IV in>=100 mL LR, NS, or D5LR every 4 hours until birth	Throughout labor until birth of baby
	Ampicillin Sodium (Alternative)	GBS prophylaxis	2 grams IV in>=100 mL NS or D5LR initial dose, then 1 gram	Until birth of baby

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			IV in NS >=100 mL every 4 hours until birth	
	Cefazolin Sodium (Ancef) (Alternative if allergic to PCN, high risk for anaphylaxis, and GBS is susceptible)	GBS prophylaxis	2 grams initial dose IV in>=100 mL LR, NS, or D5LR, then 1 gram IV in>=100 mL LR, NS, or D5LR every 8 hours	Until birth of baby
	Clindamycin Phosphate (Cleocin) (Alternative if allergic to PCN, high risk for anaphylaxis, and GBS is susceptible)	GBS prophylaxis	900 mg IV in>=100 mL LR, NS, or D5LR every 8 hours	Until birth of baby
	Dicloxacillin (Recommended)	Treatment of mastitis	500 QID	7 – 10 days
	Clindamycin (Alternative)	Treatment of mastitis	300 mg QID	7 – 10 days
	Cephalexin/Keflex (Alternative)	Treatment of mastitis	500 mg QID	7 – 10 days
	Epinephrine HCl 1:1000	Allergic reaction	0.3 mL IM	Every 20 minutes or until emergency medical services arrive. Administer the first dose then immediately request emergency services.
	Magnesium sulfate	Prevention of maternal seizures pending transport	10 grams IM, 5 grams in each buttock (preferred) 4 grams IV (alternative) If choosing IV, must have calcium gluconate available for IV administration at 1 gram over 5 – 10 minutes.	Once Over 30 minutes

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	Nitrous oxide	Analgesic	Self-administered by patient per manufacturer of delivery system's guidelines	Per manufacturer of delivery system's guidelines
	Zofran/ondansetron (preferred during labor)	Anti-nausea	Sublingual 4 mg Sublingual 8 mg IV 4 mg	Every 4 hours Every 8 hours Once
	Meyer's cocktail (IV fluids including IV thiamine and IV multivitamin)	Anti-nausea	IV over 20-60 minutes; IV therapy provided slowly	Once
	Phenergan	Anti-nausea	12.5 mg or 25 mg suppository	Once
	Iron infusions	Anemia	Pursuant to best practices	Pursuant to best practices
	Vaccination against infectious diseases (including, but not limited to, Tdap, MMR, HBV, HBIG, influenza, and COVID)	Prevention against infectious diseases	Per FDA-approved manufacturer recommendations	Per manufacturer directions
	Opioid reversal agent	Suspected opioid overdose: unresponsive patient (not following commands but has a pulse) AND hypoventilating (respiratory rate of 8 or below and/or presence of gasping or agonal respirations) OR apneic	4mg/0.1mL nasal spray single spray intranasally into one nostril. If no response after initial treatment, give additional dose in opposite nostril.	Additional doses may be administered every 2-3 minutes until emergency medical services arrives.

Neonate	**Drug**	**Indication**	**Dose/Route of Administration**	**Duration of Treatment**
	Vitamin K1 (Phytonadione/Phylloquinone)	Prevention of vitamin K deficiency bleeding	1 mg IM Oral	Once, soon after birth

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		(hemorrhagic disease of the newborn)		According to manufacturer directions
	Erythromycin ophthalmic ointment (0.5%)	Prevention of ophthalmia neonatorum	1 cm strip ophthalmic administration inside each eyelid	Once, soon after birth
	Medical Oxygen	Neonatal resuscitation	2-8 L/min mask, bag and mask, and/or laryngeal mask airway as needed to keep SpO2 within NRP guidelines	Until neonatal stabilization is achieved or transfer to the hospital is complete
	Epinephrine HCl 1:10,000	Neonatal resuscitation	0.01 mg/kg umbilical vein catheter or intraosseous injection (0.1 ml/kg of 1:10,000 concentration)	Every 20 minutes or until emergency medical services arrive. Administer the first dose then immediately request emergency services.

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