DAY 14 · 2026 NCLEX-RN PHARM SERIES

OB, Postpartum, Newborn & Pediatric Medications

The high-alert maternal-child drugs that account for a disproportionate share of NGN clinical-judgment items. Mastery here means recognizing the line between expected effect and emergency — fast.

CARDS	NGN ITEMS	NCJMM	CLIENT NEED	DIFFICULTY
17 drugs	5 unfolding	6-step case	Pharm & Parenteral · Phys. Adapt.	Application+ / NGN

§ 01 The *Flashcards*

Tap any card to flip and reveal the NGN clinical-judgment cue, priority NCLEX question, rationale, and test-taking strategy.

NURSING ACTION

Always run on pump as secondary, piggybacked at port closest to the IV site; continuous EFM; titrate per protocol; document strip every 15 min in active labor.

PATIENT TEACHING

Expect stronger, more regular contractions; report pelvic pressure, sudden severe abdominal pain, or "popping" sensation immediately.

NGN CLINICAL-JUDGMENT CUE

Contractions every 90 sec lasting 110 sec with late decels and FHR baseline 110→90 bpm — this is tachysystole with non-reassuring FHR. Stop the drip.

Priority Question

A client receiving oxytocin for labor augmentation has 7 contractions in 10 min, each lasting 95 sec, with recurrent late decelerations. Which action is the priority?

- A. Slow the infusion to 1 mU/min
- B. Position client supine
- **C. Stop the oxytocin infusion**
- D. Administer terbutaline IM

Answer: C

Rationale: Tachysystole + late decels = stop the drug immediately. Slowing isn't enough when fetal compromise is evident. Supine worsens uteroplacental flow. Terbutaline comes after stopping oxytocin if relaxation is still needed.

Test-Taking Tip: When a medication is causing the harm, the first action is almost always *STOP the drug*, not treat the symptom.

NURSING ACTION

Always on pump as secondary line; q1h: VS, DTRs, RR, UO; q4–6h: Mg level; padded side rails; quiet environment; calcium gluconate at bedside.

PATIENT TEACHING

Expect feeling warm/flushed; report difficulty breathing, blurred vision, dizziness; baby may be sleepy at birth.

NGN CLINICAL-JUDGMENT CUE

RR 10, DTRs absent, UO 20 mL/hr, "I feel weak" — toxicity. Stop infusion, give calcium gluconate, prepare for support.

Priority Question

A client with severe preeclampsia is on magnesium sulfate. Findings: RR 10, patellar reflexes absent, UO 25 mL/hr last hour. What is the nurse's FIRST action?

- A. Notify the provider
- **B. Discontinue the magnesium infusion**
- C. Administer calcium gluconate
- D. Increase IV fluids

Answer: B

Rationale: Mag toxicity is unfolding. STOP the offending drug first, then antidote, then notify. Order: stop → assess airway → calcium gluconate → notify.

Test-Taking Tip: Memorize the toxicity ladder — DTRs go FIRST. Loss of patellar reflex is the earliest warning.

NURSING ACTION

Verify patent IV; push over 3+ min via filter when policy requires; continuous ECG; assess injection site after each dose; double-check if patient on digoxin.

PATIENT TEACHING

Tell us immediately if you feel chest pounding, dizzy, hot, or your IV site burns or stings.

NGN CLINICAL-JUDGMENT CUE

Mag patient post-calcium-gluconate: **HR drops 88 → 48, BP 88/52**. Push too fast. Stop, assess, atropine if needed.

Priority Question

A nurse prepares calcium gluconate for a client with mag toxicity. Which assessment finding requires the nurse to clarify before administration?

- A. K+ 4.2 mEq/L
- B. RR 11
- **C. Client takes digoxin daily**
- D. BP 142/88

Answer: C

Rationale: Calcium potentiates digoxin and can trigger fatal arrhythmia. Mag toxicity still needs reversal, but the nurse must alert the provider and prepare for closer monitoring or alternative.

Test-Taking Tip: Calcium + digoxin = danger. Lock this pair in memory — it appears in cardiac AND OB items.

NURSING ACTION

SQ route preferred for acute use (0.25 mg); continuous EFM; q15min VS during peak; monitor glucose & K+ if >1 dose; auscultate lungs.

PATIENT TEACHING

Expect feeling jittery, fast heart rate — this means it's working. Report chest pain or shortness of breath.

NGN CLINICAL-JUDGMENT CUE

Maternal HR 138, "my chest feels tight," fine crackles bilateral bases — pulmonary edema. Stop drug, sit upright, O_2, notify provider.

Priority Question

The nurse plans to give terbutaline SQ for tachysystole. Which finding requires the nurse to hold the dose and notify the provider?

- A. FHR 155 bpm
- **B. Maternal HR 128 bpm**
- C. BP 110/68
- D. Fingerstick glucose 105 mg/dL

Answer: B

Rationale: HR >120 is the standard hold parameter; terbutaline will push it higher. FHR 155 is normal. BP and glucose are within limits.

Test-Taking Tip: Whenever you see a β_2-agonist, look at the HR first. β_2 "selectivity" is never perfect at high doses.

NURSING ACTION

Check BP before every dose; have alternative uterotonics ready (oxytocin, carboprost) if BP elevated; assess fundus and lochia q15 min after dose.

PATIENT TEACHING

Expect strong, painful cramping (sign drug is working); report severe headache, chest pain, vision changes immediately.

NGN CLINICAL-JUDGMENT CUE

Order received for methylergonovine; BP now 156/94, HA 8/10 — DO NOT GIVE. Notify provider, request alternative.

Priority Question

Postpartum client with uterine atony and boggy fundus is prescribed methylergonovine 0.2 mg IM. Vitals: BP 148/92, HR 92, "mild HA." What does the nurse do?

- A. Administer; HA is expected
- B. Give half the dose
- **C. Hold the dose and contact the provider**
- D. Give IV instead of IM

Answer: C

Rationale: BP 148/92 with HA is a red flag for stroke risk with ergot. Half-dose still vasoconstricts; IV is worse. The nurse must HOLD and request a safer alternative like carboprost (if no asthma) or additional oxytocin.

Test-Taking Tip: Methergine + HTN = NEVER. Make this a non-negotiable rule.

NURSING ACTION

Always pre-medicate with diphenoxylate/loperamide + ondansetron; keep call bell within reach (bathroom emergency); assess fundus and bleeding q15 min.

PATIENT TEACHING

Expect strong cramping and severe diarrhea — these are not bleeding warning signs. Report wheezing or trouble breathing immediately.

NGN CLINICAL-JUDGMENT CUE

Post-carboprost: SpO_2 89%, audible wheezing, accessory muscle use — bronchospasm. O_2, albuterol nebs, prepare epinephrine, call provider.

Priority Question

A nurse reviews orders for carboprost for a postpartum client with continuing hemorrhage. Which information from the chart is MOST important to communicate before administration?

- A. G3P3
- B. Hgb 8.4 g/dL
- **C. History of moderate persistent asthma**
- D. Penicillin allergy

Answer: C

Rationale: Asthma is a contraindication to carboprost — can trigger life-threatening bronchospasm. The other findings are relevant but not immediate barriers to the drug.

Test-Taking Tip: The "two big NOs" of PPH uterotonics: *Methergine + HTN, Carboprost + asthma.*

NURSING ACTION

Continuous EFM after induction dose; client lies down 30 min after vaginal placement; reassess cervix & FHR q30 min; have terbutaline available.

PATIENT TEACHING

Pregnancy patients on misoprostol for ulcers: strict birth-control counseling — drug causes miscarriage; women of childbearing potential need negative pregnancy test.

NGN CLINICAL-JUDGMENT CUE

Post-induction dose: contractions every 90 sec, FHR variable decels, mom reports "tearing" pain — possible rupture. Stop, prep for emergency C/S.

Priority Question

A nurse identifies a medication error: vaginal misoprostol for cervical ripening was ordered for a client at 39 weeks with a prior low-transverse C/S. The BEST action is to:

- A. Administer half the dose
- B. Give and monitor closely
- **C. Hold the medication and contact provider**
- D. Document and proceed

Answer: C

Rationale: Prior C/S = contraindicated for prostaglandin induction due to uterine rupture risk. Even prior low-transverse is risky with misoprostol specifically. The nurse advocates and clarifies.

Test-Taking Tip: Misoprostol indications change the rules — always ask "what is this for?" before reasoning about safety.

NURSING ACTION

IM ventrogluteal or vastus lateralis (large dose volume); ensure 2nd dose given 24 hr later; coordinate insulin sliding scale for diabetic patients.

PATIENT TEACHING

This shot helps your baby's lungs work better if born early. Two shots, 24 hours apart. You may feel hot, can't sleep, and have higher blood sugar — these are temporary.

NGN CLINICAL-JUDGMENT CUE

Day 2 betamethasone, gestational diabetic, fasting BG 198 mg/dL — expected hyperglycemia response. Notify provider for insulin adjustment; do not skip 2nd dose.

Priority Question

A client at 30 weeks gestation in preterm labor received betamethasone 12 mg IM at 0800. When should the nurse anticipate the second dose and peak fetal benefit?

- A. 2nd dose in 12 hr; benefit at 18 hr
- **B. 2nd dose in 24 hr; peak benefit 24 hr after 2nd dose**
- C. 2nd dose in 48 hr; benefit immediately
- D. 2nd dose in 6 hr; benefit at 12 hr

Answer: B

Rationale: Standard: 12 mg IM × 2 doses 24 hr apart; full pulmonary maturation effect peaks ~24 hr after the SECOND dose (i.e., ~48 hr from 1st dose), lasting roughly 7 days.

Test-Taking Tip: Remember "24 + 24" — 24 hr between doses, 24 hr to peak after dose two.

NURSING ACTION

Cross-check blood type results before administration; assess for prior reactions; document lot number per blood-product policy.

PATIENT TEACHING

This shot doesn't protect THIS pregnancy — it protects your FUTURE pregnancies. You'll need it again with the next baby if that baby is also Rh-positive.

NGN CLINICAL-JUDGMENT CUE

Rh− mom, baby born 4 days ago, Rh+ — RhoGAM not yet given — must give within 72 hr; outside window the chance for protection drops sharply.

Priority Question

Which client should NOT receive Rho(D) immune globulin?

- A. Rh− woman at 28 wk gestation, antibody screen negative
- B. Rh− woman 12 hr postpartum, baby Rh+
- **C. Rh− woman with positive indirect Coombs (anti-D antibodies present)**
- D. Rh− woman after spontaneous abortion at 10 wk

Answer: C

Rationale: Already sensitized — RhoGAM won't help and isn't indicated. The other three are textbook indications.

Test-Taking Tip: RhoGAM = *prevention only*. Once antibodies have formed, the train has left.

NURSING ACTION

Use 25G ⅝-inch needle; vastus lateralis only; combine with first feeding for pain control or with sucrose/skin-to-skin; document site and infant ID.

PATIENT (PARENT) TEACHING

Without this shot, your baby has a 1-in-60 to 1-in-250 risk of dangerous bleeding — including in the brain — over the first months. Oral dosing exists but is less reliable.

NGN CLINICAL-JUDGMENT CUE

Parents refuse vitamin K; baby develops easy bruising at 6 weeks and bleeding from circumcision site — investigate VKDB; needs immediate IV K + workup.

Priority Question

The nurse prepares to administer vitamin K to a newborn. Which site is correct?

- A. Deltoid
- B. Dorsogluteal
- **C. Vastus lateralis**
- D. Ventrogluteal

Answer: C

Rationale: Vastus lateralis is the only appropriate IM site in newborns & infants <12 mo — adequate muscle mass, away from sciatic nerve and major vessels.

Test-Taking Tip: Newborn IM = vastus lateralis. Until walking, no glutes. Memorize.

NURSING ACTION

Don clean gloves; gently retract lower lid; squeeze 1 cm ribbon inner→outer; do not touch tube to eye; document time, eye, parent education.

CULTURAL CONSIDERATION

Some parents refuse (no maternal STI risk); follow facility/state policy — many states allow refusal with documentation, others mandate.

NGN CLINICAL-JUDGMENT CUE

Newborn at 36 hr with purulent eye discharge, swollen lids, fever — possible gonococcal ophthalmia; needs immediate culture and IV antibiotics, not just ointment.

Priority Question

The nurse plans erythromycin ophthalmic for a newborn. Which technique is correct?

- A. Apply to upper lid, outer to inner canthus
- **B. Apply thin ribbon to lower conjunctival sac, inner to outer canthus**
- C. Touch tube tip to eye for accurate dosing
- D. Wipe off after 30 sec to prevent irritation

Answer: B

Rationale: Inner-to-outer prevents pushing pathogens into the nasolacrimal duct. Lower sac because that's where ophthalmic preparations are deposited. Never touch tube to eye (contamination). Don't wipe off (reduces efficacy).

Test-Taking Tip: "Inner to outer" applies to *any* eye technique — assessment, cleaning, drops, ointment.

NURSING ACTION

Always weigh; double-check syringe vs. dropper concentrations; teach parents to mark "given" times on package; alternate with ibuprofen ONLY under provider guidance.

PATIENT (PARENT) TEACHING

Use the dosing device that came with the bottle — kitchen spoons under-dose or overdose. Don't combine with cold/flu products containing acetaminophen.

NGN CLINICAL-JUDGMENT CUE

3-yr-old, parent reports "I gave Tylenol every 3 hr × 4 doses for fever, plus DayQuil" — possible cumulative overdose. Calculate total dose in mg/kg, check acetaminophen level, alert provider for possible NAC.

Priority Question

A 4-year-old (16 kg) is prescribed acetaminophen 15 mg/kg PO q6h. The available concentration is 160 mg/5 mL. How many mL per dose?

- A. 5 mL
- B. 6.5 mL
- **C. 7.5 mL**
- D. 10 mL

Answer: C

Rationale: 16 kg × 15 mg/kg = 240 mg. 240 mg ÷ 160 mg/5 mL = 7.5 mL.

Test-Taking Tip: Pediatric calc = weight × dose ÷ concentration. Show work; always re-verify with a peer for high-alert meds.

NURSING ACTION

Weigh; verify age and hydration; give with food; assess for GI complaints, decreased UO; avoid in varicella (skin-infection risk with NSAIDs).

PATIENT (PARENT) TEACHING

Give with food or milk. Don't use if your child is dehydrated, has stomach pain, or is throwing up blood/dark stools. Never combine with aspirin.

NGN CLINICAL-JUDGMENT CUE

2-yr-old with gastroenteritis, vomiting × 2 days, UO 1 wet diaper in 8 hr, parent gave ibuprofen for fever — at risk for AKI. Stop NSAID, hydrate, monitor renal function.

Priority Question

The parent of a 4-month-old (5.5 kg) asks if they can give ibuprofen for teething pain. The nurse's BEST response is:

- A. "Use 5 mg/kg every 6 hours."
- B. "Give half a dose to be safe."
- **C. "Ibuprofen isn't recommended under 6 months — let's review acetaminophen dosing."**
- D. "Use rectal ibuprofen for infants."

Answer: C

Rationale: Renal immaturity makes ibuprofen unsafe <6 mo. Acetaminophen is the appropriate alternative. There is no "infant ibuprofen" labeled for this age range.

Test-Taking Tip: Age cutoffs matter: acetaminophen okay from birth; ibuprofen ≥6 months; aspirin avoided in all children with viral illness.

NURSING ACTION

Don't hesitate — anaphylaxis is one decision: GIVE. Activate EMS. Position supine with legs raised (sitting up only if respiratory distress dominant); O_2; large-bore IV; second-line IV fluids, H1+H2 blockers, steroids.

PATIENT / FAMILY TEACHING

Always carry TWO auto-injectors. Train caregivers, teachers, daycare. Check expiration; replace yearly. Use even if "not sure" — better to dose unnecessarily than to delay.

NGN CLINICAL-JUDGMENT CUE

5-yr-old (22 kg) at school cafeteria — peanut exposure, hives, stridor, lip swelling, "tongue feels big" — DON'T wait for hypotension. Give EpiPen Jr (0.15 mg) immediately, call 911.

Priority Question

A 7-year-old (28 kg) is having anaphylaxis after a bee sting. The school nurse should:

- A. Wait for BP to drop below 90 systolic
- **B. Administer EpiPen Jr (0.15 mg) IM in the lateral thigh**
- C. Administer adult EpiPen (0.3 mg) IM
- D. Give diphenhydramine PO first

Answer: B

Rationale: At 28 kg (under 30 kg), EpiPen Jr is correct. Don't wait for hypotension — give at first signs of multi-system involvement. Antihistamines are adjuncts, never substitutes.

Test-Taking Tip: Weight crosses 30 kg = switch to adult EpiPen. Memorize the line.

NURSING ACTION

Pre-warm vial to room temp (do not shake); RT & RN at bedside; document tolerance, response (SpO_2 trend), and ventilator adjustments post-dose.

FAMILY TEACHING

This is a temporary medicine that coats the inside of your baby's lungs so they can stay open. We may need to adjust the ventilator quickly after — that's a good sign.

NGN CLINICAL-JUDGMENT CUE

Post-surfactant: SpO_2 rises 78→97% in 5 min; PIP unchanged — quickly de-escalate vent settings to prevent over-distension and pneumothorax.

Priority Question

An RN suctions a preterm newborn's ETT 10 min after surfactant administration. What is the priority concern?

- A. Hypothermia
- **B. Removal of surfactant before it has coated alveoli**
- C. Skin breakdown
- D. Misplaced ETT

Answer: B

Rationale: Avoid suctioning for at least 1–2 hours post-dose so the medication can spread and adhere. Suctioning too early removes the drug.

Test-Taking Tip: Suction BEFORE surfactant, not after.

NURSING ACTION

Start with PPV per NRP; verify maternal opioid timing; review chart for chronic opioid use BEFORE drawing up naloxone; reassess respiratory effort.

FAMILY TEACHING

Explain reversal will be brief — duration of naloxone is shorter than most opioids, so respiratory depression may return. Newborn will be monitored for several hours.

NGN CLINICAL-JUDGMENT CUE

Apgar 4 at 1 min; mother received fentanyl 4 min before delivery; mother also on daily methadone for OUD — DO NOT give naloxone. PPV, warmth, continue stimulation; can precipitate neonatal seizures.

Priority Question

A newborn has poor respiratory effort after birth. Mother is on chronic methadone. What is the nurse's BEST action?

- A. Administer naloxone IV immediately
- **B. Initiate positive-pressure ventilation per NRP**
- C. Give naloxone IM and PPV
- D. Wait 5 min and reassess

Answer: B

Rationale: PPV is first-line for any newborn with poor respiratory effort. Naloxone is contraindicated in opioid-dependent infants — would precipitate withdrawal seizures.

Test-Taking Tip: Always remember the NRP "MR. SOPA" troubleshooting — ventilation fixes most things, not antagonists.

NURSING ACTION

Verify maternal HBsAg status; cluster with vitamin K (different syringe/site); document lot # & VIS provided; observe for reactions; coordinate HBIG if indicated.

PARENT TEACHING

This shot protects your baby from a virus that can cause serious liver disease later. Babies need three total doses to be fully protected.

NGN CLINICAL-JUDGMENT CUE

Mother HBsAg+, baby born at 0245, no HBIG yet at 1030 — must give HBIG within 12 hr (deadline 1445). Coordinate with provider urgently.

Priority Question

A newborn is born to an HBsAg-positive mother. Which order should the nurse implement first?

- A. Hep B vaccine at 1 month
- **B. Hep B vaccine + HBIG within 12 hours of birth**
- C. Erythromycin eye ointment only
- D. Defer vaccine; recheck maternal status

Answer: B

Rationale: HBsAg+ mom triggers urgent post-exposure prophylaxis: vaccine for active immunity + HBIG for immediate passive antibodies, both within 12 hr, at separate sites.

Test-Taking Tip: Maternal hepatitis B status drives the newborn's first-day plan — verify before any post-natal teaching.

§ 02 Five *Must-Not-Miss* Safety Rules

If you take nothing else from Day 14, take these. They appear in some form on virtually every OB or peds NCLEX item.

01

Methergine + Hypertension = NEVER

Check BP **before every dose** of methylergonovine. Hold for BP >140/90 or any preeclampsia history. Ergot vasoconstriction in an already hypertensive patient can cause stroke or MI. Ask for an alternative uterotonic.

02

Carboprost + Asthma = NEVER

Screen every PPH patient for asthma **before** drawing up carboprost. Prostaglandins trigger life-threatening bronchospasm. Pre-medicate everyone with an antidiarrheal & antiemetic — diarrhea is nearly universal.

03

Mag Toxicity Ladder: DTRs Drop FIRST

Loss of patellar reflex is the **earliest** sign of magnesium toxicity — before RR drops, before urine output falls. Always assess DTRs every hour. Calcium gluconate stays at the bedside; mag is on a pump as a secondary line.

04

Oxytocin Tachysystole: STOP First

Tachysystole (>5 contractions/10 min) with non-reassuring FHR → **STOP the infusion** before anything else. Left-lateral, O_2 10 L NRB, IV fluid bolus, notify provider. Terbutaline is a rescue, not a first move.

05

Newborn IM = Vastus Lateralis Only

Vitamin K, Hep B vaccine, HBIG — all into the **vastus lateralis**, never the gluteus until the child is walking (≥12 months). Use a 25G ⅝-inch needle. Inner-to-outer technique for the eye ointment immediately after.

§ 03 Five Dose *Calculations*

Pediatric and OB calculations carry the highest error risk. Show work. Verify with a peer for high-alert meds. Click reveal after attempting each one.

01

A child weighing **22 kg** is prescribed acetaminophen 15 mg/kg PO q6h. Available: 160 mg / 5 mL. How many **mL** should the nurse administer per dose?

REVEAL ANSWER

```
22 kg × 15 mg/kg = 330 mg per dose 330 mg ÷ 160 mg × 5 mL = 10.31 mL ≈ 10.3 mL
```

Final: 10.3 mL PO q6h. Verify against max daily dose: 4 doses × 330 mg = 1320 mg/day; max (75 mg/kg/day) = 1650 mg — within range. ✓

02

Magnesium sulfate **4 g loading dose** ordered over 20 minutes. Available: 40 g in 1000 mL. Infusion pump in mL/hr — what rate?

REVEAL ANSWER

```
Concentration: 40 g / 1000 mL = 0.04 g/mL Volume needed: 4 g ÷ 0.04 g/mL = 100 mL Rate over 20 min: 100 mL × (60 min / 20 min) = 300 mL/hr
```

Final: 300 mL/hr × 20 min loading bolus. Then drop to maintenance (commonly 2 g/hr = 50 mL/hr) per protocol. Pump = secondary line, IV port closest to insertion. ✓

03

Oxytocin infusion: **30 units in 500 mL** NS. Order: start at 2 milliunits/min, titrate by 2 mU/min q15min. What pump rate (mL/hr) delivers the starting dose?

REVEAL ANSWER

```
Concentration: 30 units / 500 mL = 30,000 mU / 500 mL = 60 mU/mL Rate: 2 mU/min ÷ 60 mU/mL = 0.0333 mL/min × 60 min/hr = 2 mL/hr
```

Final: 2 mL/hr. (A quick check: at 60 mU/mL, every 1 mL/hr = 1 mU/min, so 2 mU/min = 2 mL/hr.) ✓

04

A newborn weighs **3.2 kg**. Naloxone 0.1 mg/kg ordered for opioid-induced respiratory depression (after PPV failed). Available: 0.4 mg/mL. How many **mL**?

REVEAL ANSWER

```
3.2 kg × 0.1 mg/kg = 0.32 mg 0.32 mg ÷ 0.4 mg/mL = 0.8 mL
```

Final: 0.8 mL IV/IM/ETT. Pearl: confirm maternal opioid use is *acute*, not chronic dependence — naloxone is contraindicated in opioid-dependent newborns. ✓

05

A 9-year-old (**32 kg**) presents with anaphylaxis. The school nurse has an EpiPen Jr (0.15 mg) and an EpiPen (0.3 mg). Which device is correct, and what is the next priority action?

REVEAL ANSWER

```
Weight cutoff: ≥30 kg = adult EpiPen (0.3 mg) This child = 32 kg → use adult EpiPen 0.3 mg
```

Final: Give adult EpiPen 0.3 mg IM into anterolateral thigh, hold 3 sec, call 911. Position supine with legs raised; reassess in 5 min — give second dose if no improvement. ✓

§ 04

Five *NGN-Style* Items

Mixed formats: matrix grid, SATA, prioritization, bow-tie, cloze drop-down. Click "Show rationale" after attempting each.

ITEM 1 · MATRIX GRID (ANTICIPATED VS. ADVERSE VS. HOLD)

A 28-year-old G2P1 at 32 weeks with severe preeclampsia is receiving magnesium sulfate 2 g/hr IV. At hour 6 the nurse documents: BP 142/88, HR 78, RR 11, patellar DTRs 1+, UO 28 mL/hr over the last hour, Mg level 7.8 mEq/L.

Classify each finding as anticipated, adverse / requires intervention, or warrants holding the medication.

FINDING	ANTICIPATED	ADVERSE · INTERVENE	HOLD THE DRUG
BP 142/88	✓		
RR 11			✓
DTRs 1+		✓	
UO 28 mL/hr			✓
Mg level 7.8 mEq/L			✓

SHOW RATIONALE

RATIONALE

Therapeutic Mg is 4–7 mEq/L; 7.8 is at toxicity threshold. **RR <12, UO <30 mL/hr, and Mg >7** are all standard hold parameters. DTRs of 1+ are diminished and a red flag (intervene by reassessing frequently and notifying provider). BP 142/88 is expected in severe preeclampsia and treated separately. Next steps: hold infusion, draw stat Mg, calcium gluconate at bedside, notify provider.

ITEM 2 · SELECT ALL THAT APPLY

A nurse is preparing to administer carboprost (Hemabate) 0.25 mg IM to a postpartum client with continued uterine atony despite oxytocin.

Which findings or interventions are appropriate before administration? Select all that apply.

- Verify the client does not have a history of asthma ✓
- Pre-medicate with an antidiarrheal and antiemetic ✓
- Verify BP is below 140/90 (this is the rule for methylergonovine)
- Assess lung sounds and SpO_2 baseline ✓
- Ensure emergency airway equipment is readily available ✓
- Administer the drug IV push for fastest onset

SHOW RATIONALE

RATIONALE

Correct: Asthma is the major contraindication for carboprost (bronchospasm). Diarrhea, N/V, and fever are near-universal — pre-medicate. Lung sounds at baseline give a comparison point. Anaphylaxis/bronchospasm rescue should be ready. **Incorrect:** The BP cutoff applies to methylergonovine, not carboprost. Carboprost is IM only (or intramyometrial by provider) — never routine IV.

ITEM 3 · ORDERED RESPONSE (PRIORITIZATION)

Oxytocin is infusing for labor induction. The strip suddenly shows 7 contractions in 10 min with recurrent late decelerations and the FHR baseline drops from 145 to 90 bpm.

Place the nurse's actions in priority order (1 = first, 6 = last).

ORDER	ACTION
1	Stop the oxytocin infusion
2	Reposition the client to left lateral
3	Administer O_2 10 L/min via non-rebreather
4	Increase the maintenance IV fluids (bolus LR)
5	Notify the provider
6	Prepare terbutaline 0.25 mg SQ for uterine relaxation if no improvement

SHOW RATIONALE

RATIONALE

STOP THE DRUG is always first when the medication is causing the harm. Then intrauterine resuscitation: reposition (left lateral improves uteroplacental flow), oxygen (saturates maternal blood for fetal transfer), IV bolus (BP/perfusion support). Then notify the provider with a SBAR. Terbutaline is the rescue if uterine relaxation has not occurred — last unless the provider orders it sooner.

ITEM 4 · BOW-TIE (CAUSE → CONDITION → ACTIONS)

A G3P3 client is 30 minutes postpartum with a boggy fundus deviated to the right, saturating one peripad in 10 minutes. BP 92/56, HR 124, fundal massage performed without effect.

LIKELY CAUSES

- Uterine atony with full bladder
- Retained placenta (uncommon at 30 min)
- Cervical laceration (steady stream, firm fundus — not this picture)
- Coagulopathy (would suspect later)

Highest-priority Condition:
Postpartum Hemorrhage from Uterine Atony

PRIORITY ACTIONS

- Empty the bladder (cath if needed)
- IV oxytocin titration / second-line uterotonic
- Bimanual fundal massage
- Methylergonovine — check BP first; here BP is low so OK if no other contraindication
- Carboprost — only if no asthma
- Type & screen, large-bore IV access ×2

SHOW RATIONALE

RATIONALE

The boggy, deviated fundus + tachycardia + hypotension = atony from a full bladder displacing the uterus and preventing contraction. Sequence: bladder out, uterotonics in. Methergine is appropriate here because BP is low (would be contraindicated in HTN). Carboprost is the next escalation if no asthma. Cervical/vaginal laceration would present with a *firm* fundus and steady bleeding — different picture, different fix.

ITEM 5 · CLOZE (DROP-DOWN)

A 5-year-old (20 kg) presents to the school clinic with hives, lip swelling, audible wheeze, and SpO_2 91% on room air after eating a peanut butter cracker.

Complete the prioritized plan by selecting the correct option for each blank.

The nurse will **[A. administer epinephrine 0.15 mg IM in the anterolateral thigh]** immediately, because the dose for this child is **[B. EpiPen Jr (under 30 kg)]**. The next priority is **[C. activate EMS / call 911]**, and the nurse will be alert for **[D. a biphasic reaction within 24 hours]** requiring ER evaluation.

BLANK	OPTIONS	CORRECT
A	diphenhydramine PO · albuterol nebs · **epinephrine 0.15 mg IM** · steroids IV	✓
B	adult EpiPen 0.3 mg · **EpiPen Jr (under 30 kg)** · 0.5 mg IM · pediatric IV vial only	✓
C	begin chest compressions · **activate EMS / call 911** · give second epi immediately · place NG tube	✓
D	delayed allergic dermatitis · **biphasic reaction within 24 hr** · serum sickness day 7 · permanent hearing loss	✓

SHOW RATIONALE

RATIONALE

Anaphylaxis is a one-step decision: **give epi, give epi now**. At 20 kg the child is under 30 kg, so EpiPen Jr (0.15 mg). Antihistamines and steroids are adjuncts that don't reverse airway edema or hypotension fast enough. Biphasic reactions can recur up to 24 hr after initial resolution — even after a "good" response in the ED, the child needs observation.

§ 05

NCJMM *Case Study*

A six-step unfolding clinical-judgment exercise. Map each cue, plan each action, evaluate each outcome.

Setting: *Labor & Delivery, 2200 hours. A 26-year-old G2P1 at 38+4 weeks is admitted for induction of labor for gestational hypertension. Cervix is 2 cm/50%/-2. Oxytocin is started at 1 mU/min after a uterine activity assessment shows fewer than 3 contractions in 10 min and FHR Category I.*

Current orders include: *Oxytocin titration q15–30 min by 1–2 mU/min, max 20 mU/min. Magnesium sulfate 4 g loading dose followed by 2 g/hr maintenance for seizure prophylaxis (BP 156/98 on admission). VS q1h, EFM continuous, neuro checks & DTRs q2h, strict I&O, foley.*

At 0300, the nurse documents: oxytocin at 12 mU/min; magnesium at 2 g/hr (running 5 hr); BP 148/92, HR 76, RR 12, SpO_2 96%; UO 25 mL over the last hour; DTRs 1+ patellar; FHR baseline 145 with moderate variability, 6 contractions in 10 minutes, two recurrent late decelerations; client reports a "tight, crampy" feeling and "warm flushing"; lab Mg returns at 7.6 mEq/L.

1

RECOGNIZE CUES

What is relevant in this picture?

Concerning: RR 12 (lower limit), DTRs 1+, UO 25 mL/hr, Mg 7.6 mEq/L (above therapeutic 4–7), 6 contractions/10 min (tachysystole), two recurrent late decelerations, BP 148/92.

Reassuring: FHR baseline 145 with moderate variability, SpO_2 96%, client awake/aware.

Background context that matters: She is on TWO high-alert infusions simultaneously — oxytocin (causing tachysystole) AND magnesium (toxicity emerging).

2

ANALYZE CUES

How do the cues fit together?

Two converging emergencies. **First:** Oxytocin tachysystole with non-reassuring FHR (late decels = uteroplacental insufficiency). **Second:** Magnesium sulfate toxicity emerging — Mg level above therapeutic, diminished DTRs, low-normal RR, oliguria, warm/flushed sensation. The two are independent but compounding: fetal hypoxia and maternal respiratory depression in the same hour.

3

PRIORITIZE HYPOTHESES

What is most urgent, most likely, highest risk?

Hypothesis 1 (highest priority): Oxytocin-induced tachysystole with fetal compromise. Risk: fetal hypoxia, brain injury, rupture. Acts in seconds.

Hypothesis 2 (closely tied): Early magnesium sulfate toxicity. Risk: respiratory and cardiac depression. Acts in minutes if missed.

Hypothesis 3: Worsening preeclampsia / impending eclampsia — BP rising, but seizure not yet evident.

4

GENERATE SOLUTIONS

What interventions match each hypothesis?

For tachysystole: Stop oxytocin → left lateral position → O_2 10 L NRB → IV fluid bolus → notify provider → terbutaline SQ if no improvement.

For mag toxicity: Hold magnesium infusion → calcium gluconate 1 g IV slow at bedside ready → stat repeat Mg level → assess airway, prepare for support.

For preeclampsia: Continue close BP monitoring, prepare labetalol/hydralazine per orders, seizure precautions, monitor for HELLP labs.

5

TAKE ACTION

Implement in priority order:

1. *Stop the oxytocin infusion* (drug causing harm = first).
2. *Hold the magnesium infusion* — toxicity threshold crossed.
3. Position client left lateral; apply O_2 10 L NRB.
4. Bolus IV fluids (LR) per protocol.
5. Call provider with SBAR; calcium gluconate 1 g IV slow available, prepare to give if RR drops further or per order.
6. Stat Mg level redraw; continuous EFM; assess for vaginal bleeding, abdominal tearing pain.
7. Document precisely: time of each intervention, FHR response, maternal VS, fluid totals.

6

EVALUATE OUTCOMES

Expected vs. observed

Expected: Contraction frequency returns to ≤5/10 min within 10–20 min; FHR baseline stable with resolution of late decels; maternal RR ≥14, DTRs return to 2+ within 30–60 min of holding mag; repeat Mg level trending down (recheck in 2–4 hr); UO ≥30 mL/hr resumes.

If not resolving: Anticipate terbutaline for persistent tachysystole, calcium gluconate for worsening mag toxicity, possible emergent delivery (operative vaginal or C/S) for ongoing non-reassuring FHR. Re-assess preeclampsia trajectory: HELLP labs, neurologic status, headache, RUQ pain.

§ 06 *Red-Flag* Findings

When you see these, stop the drug or escalate immediately. No further data gathering — act.

Oxytocin ⚠

More than 5 contractions in 10 min OR contractions >90 sec OR late/recurrent variable decelerations with reduced variability.

→ STOP INFUSION, LEFT LATERAL, O_2 10 L, BOLUS, NOTIFY

Magnesium Sulfate ⚠

RR <12 · DTRs absent · UO <30 mL/hr · Mg level >7 · slurred speech · decreased LOC.

→ STOP DRIP, CALCIUM GLUCONATE 1 G IV, SUPPORT AIRWAY, NOTIFY

Methylergonovine ⚠

BP >140/90 · history of HTN/preeclampsia · severe headache, chest pain, vision changes after dose.

→ DO NOT GIVE / HOLD FURTHER DOSES, ALTERNATIVE UTEROTONIC

Carboprost ⚠

Any wheezing, dyspnea, chest tightness, drop in SpO_2 after IM dose.

→ STOP, O_2, ALBUTEROL, EPINEPHRINE, RRT

Terbutaline ⚠

Maternal HR >120 · chest pain · crackles / SpO_2 drop · FHR >180 sustained.

→ HOLD DOSE, CARDIAC MONITOR, NOTIFY PROVIDER

Pediatric Ibuprofen ⚠

Vomiting, dehydration, oliguria, suspected viral illness, GI bleeding signs.

→ STOP NSAID, SWITCH TO ACETAMINOPHEN, HYDRATE

Pediatric Acetaminophen ⚠

Cumulative dose >75 mg/kg/day · jaundice · RUQ pain · combined OTC use → suspect overdose.

→ ACETAMINOPHEN LEVEL (4 HR POST-INGEST), NAC PER PROVIDER

EpiPen (Pediatric) ⚠

Hesitation. ANY airway involvement (lip swelling, stridor, wheezing) + exposure history = anaphylaxis until proven otherwise.

→ GIVE EPI IM THIGH IMMEDIATELY, 911, OBSERVE 24 HR

§ 07 Look-Alike, *Sound-Alike*

Three high-stakes comparisons NCLEX loves to test. Read these out loud.

Magnesium Sulfate vs. Oxytocin

	Magnesium Sulfate	*Oxytocin (Pitocin)*
PURPOSE	Seizure prevention (preeclampsia); fetal neuroprotection; short-term tocolytic.	Induction / augmentation of labor; postpartum hemorrhage treatment.
EFFECT ON UTERUS	**Relaxes** uterus.	**Contracts** uterus.
KEY MONITORING	RR, DTRs, UO, LOC, Mg level (4–7 mEq/L).	Contraction frequency & duration, FHR, BP, fluid balance.
TOXICITY / ADVERSE	RR <12, ↓DTRs, oliguria, respiratory arrest.	Tachysystole, fetal hypoxia, uterine rupture, water intoxication.
ANTIDOTE / ACTION	**Calcium gluconate** 1 g IV slow.	STOP infusion; supportive only.
MEMORY HOOK	"Mag *chills* mom & baby."	"Pit *pumps* the uterus."

Methylergonovine vs. Carboprost

	Methylergonovine (Methergine)	*Carboprost (Hemabate)*
CLASS	Ergot alkaloid.	Prostaglandin $F_2\alpha$.
USE	PPH from atony — 2nd line after oxytocin.	PPH from atony — when methergine ineffective/contraindicated.
CRITICAL CONTRAINDICATION	**HYPERTENSION** (any) — stroke/MI risk.	**ASTHMA** — bronchospasm risk.
COMMON SIDE EFFECTS	Cramping, ↑BP, HA, N/V.	Diarrhea (universal), N/V, fever, chills.
ROUTE	IM (or PO); not routine IV.	IM (or intramyometrial by MD).
PRE-MED	Check BP every time.	Anti-diarrheal + antiemetic; verify no asthma.
MEMORY HOOK	"Methergine = make sure BP isn't high."	"Hemabate = hold if huffing/puffing."

Pediatric Acetaminophen vs. Ibuprofen

	Acetaminophen (Tylenol)	*Ibuprofen (Motrin)*
MECHANISM	Central COX inhibition; antipyretic, analgesic.	Peripheral & central COX-1/2 inhibition; adds anti-inflammatory.
MINIMUM AGE	Birth onward (use w/ provider OK in neonates).	≥ 6 months only.
DOSE	10–15 mg/kg/dose q4–6h; max 75 mg/kg/day.	5–10 mg/kg/dose q6–8h; max 40 mg/kg/day.
TOXICITY	**Hepatic** — overdose, OTC stacking.	**Renal / GI** — bleed, ulcer, AKI in dehydration.
ANTIDOTE	N-acetylcysteine (NAC).	Supportive — no specific antidote.
AVOID	Liver disease, alcohol exposure, multi-product use.	Dehydration, viral illness (chickenpox/flu), bleeding disorder, <6 mo.

	Acetaminophen (Tylenol)	*Ibuprofen (Motrin)*
MEMORY HOOK	"*A*cetaminophen → *A*nti-pyretic. Liver."	"*I*buprofen → *I*nflammation. Kidneys + Gut."

§ 08

Day 14 *Summary*

A single-page snapshot of everything covered. Print or screenshot for your clipboard before the exam.

STANDALONE ONE-PAGE REFERENCE

OB · Postpartum · Newborn · *Peds Meds*

High-alert lookup, written in the order you'll actually use it on shift.

Uterotonics

1ST **Oxytocin** — induction & PPH; watch tachysystole & FHR; STOP & resuscitate.

2ND **Methylergonovine** — PPH; NO if HTN. Check BP every dose.

3RD **Carboprost** — PPH; NO if asthma. Premedicate for diarrhea.

ALT **Misoprostol** — PPH off-label / ripening; rupture risk if prior C/S.

Preeclampsia & Tocolysis

Magnesium sulfate — seizure prevention; therapeutic 4–7 mEq/L; toxicity ladder: ↓DTRs → RR<12 → arrest.

Calcium gluconate — antidote at bedside; slow IV push; watch dig interaction.

Terbutaline — short-term tocolysis; hold HR>120; black box for prolonged use.

Betamethasone — 24–34 wk; 2 doses 24 hr apart; expect maternal hyperglycemia.

Newborn First Hour

Vitamin K 0.5–1 mg IM vastus lateralis; prevents VKDB.

Erythromycin 0.5% ointment — thin ribbon inner→outer canthus; don't wipe.

Hep B vaccine within 24 hr; HBIG within 12 hr if mom HBsAg+.

Surfactant — preterm RDS; suction BEFORE not after; rapid vent wean.

Naloxone — PPV first; don't give if chronic maternal opioid use.

RhoGAM Rules

Mom Rh-NEG + Baby Rh-POS = GIVE.

Mom already sensitized (antibody screen +) = DO NOT give — won't help.

Mom Rh-NEG: 28 wk routine, within 72 hr postpartum, after miscarriage/CVS/amnio/trauma.

IM dose; protects FUTURE pregnancies.

Peds Dosing Quick-Hits

Acetaminophen 10–15 mg/kg q4–6h; max 75 mg/kg/day. Antidote: NAC.

Ibuprofen 5–10 mg/kg q6–8h; ≥6 months; max 40 mg/kg/day.

EpiPen Jr 0.15 mg (15–30 kg); **EpiPen** 0.3 mg (≥30 kg).

Always weigh in kg; show work; double-check with peer.

Two Forbidden Pairings

⛔ **Methergine + HTN** → stroke risk.

⛔ **Carboprost + Asthma** → bronchospasm.

⛔ **Calcium gluconate + Digoxin** → arrhythmia.

⛔ **Ibuprofen < 6 months** → renal & bleeding risk.

⛔ **Naloxone + opioid-dependent newborn** → withdrawal seizures.

The Day-14 Mantra

When a drug causes the harm, **STOP THE DRUG** first — then resuscitate, then notify. In OB it's oxytocin and magnesium; in peds it's the wrong dose, the wrong age, or the wrong route. Weight in kilograms. IM in the vastus lateralis. Eye ointment inner-to-outer. Two epinephrine auto-injectors on hand. Methergine never with HTN. Carboprost never with asthma. Calcium gluconate within arm's reach of every mag drip. The rest is just remembering which face matches which name.

Day 14 of 14+ · NCLEX-RN Pharm Series · 2026 Test Plan Aligned

For educational study use · Always verify medication orders against current institutional protocols