NGN NCLEX 2026 · VISUAL REFERENCE

Chorioamnionitis & Neonatal Sepsis

Intrapartum infection, vertical transmission, and the high-yield response cascade — mother & newborn.

SYSTEM
MATERNAL-NEWBORN · INFECTIOUS DISEASE

CLINICAL CLUSTER
REPRODUCTIVE · NEONATAL CARE

COGNITIVE FOCUS
RECOGNIZE · PRIORITIZE · ACT

SOURCE DISCLOSURE · This topic was not included in Diane's uploaded project notes. Content has been drawn from standard NGN NCLEX 2026 references — Saunders Comprehensive Review, ATI Maternal-Newborn, Lippincott NCLEX-RN — and aligned to current ACOG (Obstetric Care Consensus #712) and AAP/CDC GBS prevention guidelines.

1 Definition & Why It Matters

OVERVIEW · CORE CONCEPTS

CHORIOAMNIONITIS

An **intra-amniotic infection** of the chorion, amnion, and amniotic fluid — usually from **ascending vaginal flora** after rupture of membranes. The #1 cause of maternal fever in labor.

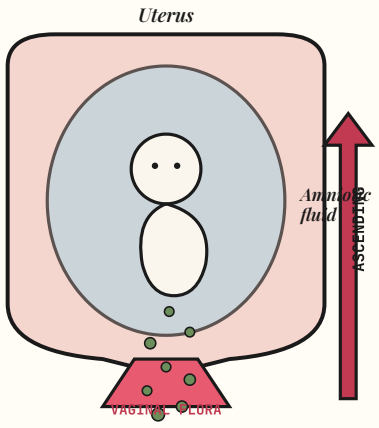
NEONATAL SEPSIS

Bloodstream infection in the neonate. **Early-onset (EOS): ≤72 hours** — usually vertical/intrapartum. **Late-onset (LOS): >72 hours–28 days** — usually nosocomial or community-acquired.

WHY IT MATTERS

Chorioamnionitis is the strongest predictor of EOS. Untreated → maternal sepsis, postpartum endometritis, neonatal pneumonia, meningitis, long-term neurodevelopmental injury, and death.

Ascending Infection Route

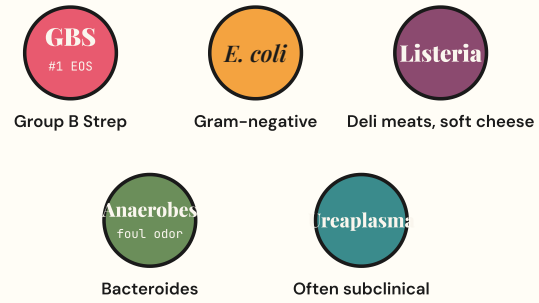


2 Pathophysiology

MECHANISM · CASCADE

1. **PROM / prolonged ROM** → loss of mucus plug, loss of amniotic barrier
2. **Ascending bacteria** from vagina/cervix migrate upward
3. Bacteria **colonize membranes** & amniotic fluid (GBS, E. coli, Listeria, anaerobes, Ureaplasma)
4. **Fetal inflammatory response** → fetal tachycardia, cytokine release
5. Fetus **inhales/swallows infected fluid** → neonatal pneumonia, bacteremia, meningitis
6. **Maternal systemic inflammation** → fever, tachycardia, ± septic shock

Key Pathogens at a Glance



KEY RISK FACTORS

- PROM / PPROM, prolonged ROM **>18 hrs**
- GBS+ without intrapartum prophylaxis
- Prolonged labor · multiple vaginal exams
- Internal fetal monitoring
- Nulliparity · maternal STIs / BV
- Meconium-stained amniotic fluid

3 Signs & Symptoms

MATERNAL · NEONATAL · RED FLAGS

👩 Maternal Presentation

EARLY / MILD

- Maternal fever **≥100.4°F (38°C)** — the cardinal sign
- Maternal tachycardia **>100 bpm**
- Uterine tenderness on palpation
- Mild WBC elevation

LATE / SEVERE

- **Fetal tachycardia >160 bpm** — earliest fetal sign
- Foul-smelling or purulent amniotic fluid
- Hypotension, mottling → septic shock
- Leukocytosis >15,000; left shift
- Tachypnea, altered mental status

👶 Neonatal Presentation (EOS)

SUBTLE / EARLY

- **Temperature instability** — HYPOthermia more common than fever
- Poor feeding · weak suck
- Lethargy, irritability, hypotonia
- Jaundice within 24 hrs of birth
- Hypoglycemia

LATE / SEVERE

- **Respiratory distress**: grunting, retractions, nasal flaring, apnea
- Cyanosis, mottling, prolonged cap refill
- **Bulging fontanelle, seizures** → meningitis
- Petechiae, purpura, DIC
- Shock: hypotension, weak pulses, oliguria

4 Priority Nursing Interventions

ABCS · SAFETY · NCLEX PRIORITIZATION

A — Airway (neonate priority)

- **Assess** patency, suction PRN, position with shoulder roll
- **Prepare** resuscitation equipment *before* delivery — bag-mask, CPAP, intubation

B — Breathing

- **Monitor** RR, SpO_2, work of breathing (grunting, retractions, flaring, apnea)
- **Administer** O_2 to keep SpO_2 90–95% preterm / 95% term; anticipate CPAP or mechanical ventilation
- **Anticipate** surfactant in preterm with RDS

C — Circulation

- **Monitor** HR, BP, perfusion, cap refill, urine output
- **Establish** IV access; isotonic fluid boluses 10 mL/kg for neonatal shock
- **Anticipate** vasopressors for refractory hypotension

M — Maternal-Specific Care

- **Obtain** blood cultures, urinalysis, CBC ×1 *before* antibiotics — do NOT delay antibiotics waiting on results
- **Administer** broad-spectrum IV antibiotics promptly (ampicillin + gentamicin ± clindamycin)
- **Continuous** FHR monitoring; assess contractions, fluid color/odor
- **Acetaminophen** for fever (avoid aspirin)
- **Expedite vaginal delivery**; C-section ONLY for usual obstetric indications
- **Notify** NICU early so neonatal team is at delivery

N — Neonatal-Specific Care

- **Place** in radiant warmer or isolette — *neutral thermal environment is critical*
- **Full sepsis workup:** blood culture, CBC w/ diff, CRP, blood glucose, LP if indicated, CXR, urine culture (LOS)
- **Empiric antibiotics** within 1 hr of recognition (ampicillin + gentamicin)
- **Monitor** glucose, temperature, weight; strict I&O
- **Cluster care** to minimize stress; minimize handling
- **Promote** bonding when stable; encourage breast milk (immunoprotective)

5 Pharmacology

ANTIBIOTICS · ADJUNCTS · NURSING PEARLS

DRUG	MECHANISM	KEY SIDE EFFECTS	NURSING CONSIDERATIONS
Ampicillin AMINOPENICILLIN · B-LACTAM	Inhibits cell wall synthesis; covers **GBS, Listeria, E. coli**	Rash, diarrhea, hypersensitivity, anaphylaxis, C. diff	Assess penicillin allergy; monitor for anaphylaxis 30 min post-dose; complete full course
Gentamicin AMINOGLYCOSIDE	Inhibits protein synthesis (30S ribosome); broad gram-negative coverage	**Nephrotoxicity, ototoxicity** (irreversible hearing loss); neuromuscular blockade	Monitor peak/trough levels, BUN/creatinine; obtain baseline + follow-up hearing screen; weight-based dosing
Clindamycin LINCOSAMIDE	Adds anaerobic coverage; often added post-cesarean	C. diff colitis (black-box), diarrhea, rash	Hold and report severe diarrhea or bloody stools; ensure adequate hydration
Penicillin G B-LACTAM · GBS PROPHYLAXIS	**First-line intrapartum GBS prophylaxis** ≥4 hrs before delivery	Anaphylaxis (rare), rash	Confirm GBS status at 35–37 wks; document time of administration; cefazolin/clindamycin if PCN-allergic
Acetaminophen ANTIPYRETIC / ANALGESIC	Inhibits central prostaglandin synthesis; reduces maternal fever	Hepatotoxicity in overdose	Max 3–4 g/day; **avoid aspirin/NSAIDs** in pregnancy and neonates
Surfactant PULMONARY SURFACTANT (BERACTANT, PORACTANT)	Reduces alveolar surface tension; used for preterm with RDS	Transient bradycardia, desaturation during instillation, ETT obstruction	Administered via ETT; monitor SpO_2, HR; position changes to distribute; warm to room temp

6 NCLEX Test Traps

WRONG VS RIGHT · PRIORITY PITFALLS

✕ TRAP	→	✓ RIGHT
"Wait for blood culture results before starting antibiotics."	→	Obtain cultures FIRST, then start broad-spectrum antibiotics within 1 hr. Never delay treatment for lab results in suspected sepsis.
"Neonatal sepsis always presents with fever."	→	Neonates more often show **HYPOthermia** or temperature instability. Any subtle change — poor feeding, lethargy, "just not right" — is a red flag.
"Chorioamnionitis = immediate cesarean section."	→	**Expedite vaginal delivery** when possible. C-section is reserved for standard obstetric indications (non-reassuring FHR, failure to progress, malpresentation).
"Jaundice in the first 24 hours is normal newborn physiology."	→	Jaundice **within 24 hrs is ALWAYS pathologic** — think sepsis, hemolytic disease, or ABO/Rh incompatibility. Notify provider.
"Stop antibiotics once the mother is afebrile."	→	Complete the full prescribed course. Neonate **must also be evaluated and treated** regardless of maternal improvement.
Confusing EOS and LOS — "if it's neonatal sepsis it's from the mother."	→	**EOS (≤72 hr)** = vertical transmission, GBS/E. coli. **LOS (>72 hr–28 d)** = nosocomial/community (Staph, gram-negatives). Different sources, different workups.
"Apply skin-to-skin immediately — bonding is the priority."	→	**Stabilize first.** A symptomatic neonate needs the warmer, sepsis workup, and antibiotics. Bonding is encouraged once stable.

7 Patient & Family Education

PREVENTION · RECOGNITION · FOLLOW-UP

GBS Screening

Universal vaginal-rectal swab at **35–37 weeks**. Antibiotics during labor if positive.

Report ROM Promptly

Call provider immediately if water breaks — even if not in labor. Note time, color, odor.

Hand Hygiene

Single most effective infection-prevention step before handling baby. Limit visitors with illness.

Newborn Danger Signs

Poor feeding, lethargy, temperature changes, fast/labored breathing, color changes — call provider.

Complete Antibiotics

Finish full prescribed course even if mother and baby appear well. Don't skip doses.

Encourage Breastfeeding

Provides passive immunity and IgA. Safe with most antibiotics; verify with pharmacist.

Hearing Screen

Essential after gentamicin exposure — confirm before discharge and at follow-up visits.

Developmental Follow-Up

Schedule pediatric well-baby visits. Neonatal sepsis raises risk of long-term neurodevelopmental issues.

8 Memory Boosters

MNEMONICS · PATTERN RECOGNITION

CHORIO

- **C** Contractions / Cervical change
- **H** High fever ≥100.4°F
- **O** Odorous (foul) amniotic fluid
- **R** Rapid HR (maternal & fetal)
- **I** Increased WBC
- **O** Onset after PROM

TEMPS

Neonatal sepsis — "TEMPS out of whack"

- **T** Temperature instability (esp. hypothermia)
- **E** Eating poorly · weak suck
- **M** Mottled skin · poor perfusion
- **P** Pallor · Petechiae
- **S** Subtle changes (lethargy, irritability)

TORCH

Congenital infections — vertical transmission

- **T** Toxoplasmosis
- **O** Other (syphilis, HIV, VZV, parvovirus)
- **R** Rubella
- **C** CMV (cytomegalovirus)
- **H** Herpes simplex

"AMP-up the GENT"

First-line empiric coverage

- **AMP** Ampicillin → GBS, Listeria, E. coli
- **GENT** Gentamicin → gram-negative synergy
- **+CLINDA** if post-C-section or anaerobes suspected
- **Quick Math** EOS = ≤72 hr · LOS = >72 hr to 28 d

9 NCJMM Clinical Judgment Scenario

SIX-STEP WALKTHROUGH · NEXT GEN NCLEX

SCENARIO

A **32-year-old G2P1 at 39 weeks gestation** presents to L&D in active labor. Rupture of membranes occurred **22 hours ago** at home. Vital signs: **T 101.2°F (38.4°C), HR 118, RR 22, BP 110/68, SpO_2 98%.** Fetal heart rate baseline **175 bpm with minimal variability**. Amniotic fluid is **foul-smelling and cloudy**. GBS status is unknown. The client reports chills and uterine tenderness on palpation.

1 RECOGNIZE CUES — What stands out?

- Maternal fever **101.2°F** + maternal tachycardia **118**
- **Fetal tachycardia 175** with minimal variability
- **Prolonged ROM 22 hrs** (cutoff is >18 hrs)
- **Foul-smelling amniotic fluid**
- Uterine tenderness, chills
- **Unknown GBS status** — no intrapartum prophylaxis given

2 ANALYZE CUES — What do the cues mean together?

- The cluster of **maternal fever + maternal & fetal tachycardia + foul fluid + prolonged ROM** meets clinical criteria for chorioamnionitis (intra-amniotic infection)
- Fetal tachycardia + minimal variability = **fetal inflammatory response** and at-risk fetus
- Unknown GBS + prolonged ROM compounds **risk for early-onset neonatal sepsis**
- Without intervention, mother is at risk for septic shock; neonate at risk for pneumonia, meningitis, death

3 PRIORITIZE HYPOTHESES — What's the leading problem?

- **#1 (highest priority):** Acute chorioamnionitis with fetal involvement — threatens both mother and fetus NOW
- **#2:** Risk for early-onset neonatal sepsis upon delivery
- **#3:** Risk for maternal septic shock if untreated
- **#4:** Risk for postpartum endometritis
- *Less likely:* dehydration-induced fever, viral illness — but presentation is too specific to dismiss as anything other than infection

4 GENERATE SOLUTIONS — What interventions are appropriate?

- Obtain blood, urine, and amniotic fluid cultures *before* antibiotics (do not delay antibiotics)
- Initiate broad-spectrum IV antibiotics: **ampicillin 2 g IV + gentamicin**
- Continuous external FHR & contraction monitoring
- Antipyretic — acetaminophen 650 mg PO/PR
- IV fluid bolus (LR or NS) to support maternal perfusion
- Reposition to left lateral; O_2 via non-rebreather if non-reassuring tracing
- Notify NICU team and OB provider; prepare for expedited vaginal delivery
- Educate client and partner on plan

5
TAKE ACTION

What does the nurse do NOW (in order)?

- ① Draw cultures (maternal blood, urine) **FIRST**
- ② Administer **ampicillin 2 g IV + gentamicin** within 1 hour of recognition
- ③ Give **acetaminophen 650 mg** per provider order
- ④ Start **IV LR bolus 500 mL**; maintain at 125 mL/hr
- ⑤ Position **left lateral**; apply O_2 **10 L/min via non-rebreather**
- ⑥ Continuous EFM; document interventions and FHR response
- ⑦ **Call NICU** to attend delivery; alert neonatal team to sepsis risk
- ⑧ Expedite vaginal delivery — assist provider as labor progresses

6
EVALUATE OUTCOMES

What tells us it's working?

- ✓ Maternal temperature trending **below 100.4°F** within 1–2 hours
- ✓ Maternal HR returning **<100 bpm**; BP stable
- ✓ FHR returning to **110–160 bpm** with moderate variability
- ✓ Amniotic fluid odor diminishing
- ✓ Neonate delivered, vigorous or stabilized quickly — APGARs improving
- ✓ Full neonatal sepsis workup initiated within 1 hr of birth; empiric antibiotics given
- ✓ NICU admission for observation/treatment per protocol
- ✗ **Worsening** = persistent fever, hypotension, non-reassuring FHR, neonatal distress at birth → escalate (rapid response, possible operative delivery, NICU resuscitation)

End of Visual Reference — Pair with the flashcard deck for spaced repetition mastery.

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