CLINICALJUDGE™ · NGN NCLEX 2026 · PEDIATRIC/INFECTIOUS DISEASE SERIES

PEDIATRIC INFECTIOUS DISEASES

9-DISEASE MASTER REFERENCE CARD · EXANTHEM & BEYOND

AIRBORNE | DROPLET | REPORTABLE | ISOLATION | VACCINES | NCLEX TRAPS | COMPLICATIONS | NGN BOW-TIE

Topic Pediatric & Infectious Diseases
Exam NGN NCLEX 2026 · RN Level
Diseases 9 Core Pathogens
Format 13-Section Design System

LEGEND: Critical/Alert · Pathophysiology · Safe/Expected · Complications · NCLEX Trap · Medications · Patient Education

03 PATHOPHYSIOLOGY FLOW & DISEASE OVERVIEW

EXANTHEM SUBITUM (ROSEOLA INFANTUM) 01

AGENT	HHV-6 (Human Herpesvirus-6), rarely HHV-7
AGE	6 months – 2 years (peak 6–15 mo)
INCUBATION	9–10 days (5–15 days)
ROUTE	Respiratory secretions / saliva
PRODROME	HIGH fever 103–105°F × 3–5 days (child appears well)
RASH	Appears AFTER fever breaks → rose-pink macular/maculopapular, trunk first → neck/face/extremities; fades in 1–2 days

Rash AFTER fever breaks

ISOLATION	Standard
RX	Supportive · antipyretics
VACCINE	❌ None
KEY COMPLICATION	Febrile seizures (most common)

ERYTHEMA INFECTIOSUM (FIFTH DISEASE) 02

AGENT	Parvovirus B19
AGE	School-age 5–15 years
INCUBATION	4–14 days
ROUTE	Respiratory droplets; blood/blood products
PRODROME	Low-grade fever, mild URI sx
RASH	**Stage 1:** "Slapped cheek" facial erythema **Stage 2:** Lacy reticular rash trunk/extremities **Stage 3:** Fades & recurs with heat/stress

Slapped Cheek → Lacy Rash

CONTAGIOUS	BEFORE rash; NOT contagious once rash appears
ISOLATION	Droplet (immunocomp.)
RX	Supportive; IVIG (immunocompromised)
VACCINE	❌ None
KEY COMPLICATION	Aplastic crisis (sickle cell) · Hydrops fetalis

RUBELLA (GERMAN MEASLES) 03

AGENT	Rubella virus (Togavirus, RNA)
AGE	Any unvaccinated; teratogenic in pregnancy
INCUBATION	14–21 days
ROUTE	Respiratory droplets; direct contact
PRODROME	Low-grade fever, malaise, posterior auricular/suboccipital lymphadenopathy
RASH	Maculopapular · face → trunk → extremities · fades in 3 days

Cephalocaudal · "3-day measles"

ISOLATION	Droplet + Contact
RX	Supportive; no antivirals
VACCINE	✅ MMR × 2 doses
KEY COMPLICATION	CRS: cataracts, PDA, deafness, "blueberry muffin" spots

MUMPS 04

AGENT	Paramyxovirus (Rubulavirus, RNA)
AGE	School-age; unvaccinated adolescents/adults
INCUBATION	16–18 days (range 12–25 days)
ROUTE	Respiratory droplets; saliva/direct contact
PRODROME	Fever, headache, malaise, earache (preauricular pain)
CLASSIC SIGN	Parotid gland swelling (parotitis) — unilateral OR bilateral

NO rash — Parotitis is classic

CONTAGIOUS	2 days before → 9 days after parotid swelling
ISOLATION	Droplet × 9 days after parotid onset
RX	Supportive; NSAIDs for pain/swelling
VACCINE	✅ MMR × 2 doses
KEY COMPLICATION	Orchitis (post-puberty males → infertility) · Aseptic meningitis · Sensorineural hearing loss

MEASLES (RUBEOLA) 05

AGENT	Morbillivirus (Paramyxovirus, RNA) — most contagious
AGE	Any unvaccinated; infants <12 mo if maternal immunity waned
INCUBATION	10–14 days
ROUTE	⚠ AIRBORNE — most contagious VPD known
PRODROME	3 C's: **Cough + Coryza + Conjunctivitis** · High fever
PATHOGNOMONIC	Koplik spots (white/blue spots on buccal mucosa) — appear 1–2 days BEFORE rash
RASH	Maculopapular · hairline/behind ears → face → cephalocaudal · lasts 7 days

Koplik Spots → Cephalocaudal Rash

CONTAGIOUS	4 days BEFORE → 4 days AFTER rash onset
ISOLATION	AIRBORNE × 4 days after rash
RX	Vitamin A supplementation · supportive
VACCINE	✅ MMR × 2 doses
KEY COMPLICATION	Pneumonia (leading cause of death) · SSPE (years later) · Encephalitis

PERTUSSIS (WHOOPING COUGH) 06

AGENT	Bordetella pertussis (gram-neg. coccobacillus)
AGE	All ages; MOST SEVERE in infants <1 year
INCUBATION	7–10 days
ROUTE	Respiratory droplets; direct contact
3 STAGES	**Catarrhal** (1–2 wk): Mild URI, low fever, MOST CONTAGIOUS **Paroxysmal** (2–6 wk): Severe paroxysmal cough → inspiratory "whoop" + post-tussive vomiting/cyanosis **Convalescent** (wk–mo): Gradual recovery

No rash — 3-Stage Cough

ISOLATION	Droplet × 5 days ABX or 21 days sx
RX	Azithromycin 1st line (or erythromycin, clarithromycin, TMP-SMX)
VACCINE	✅ DTaP (children) · Tdap (adults/preg 27–36 wk)
KEY COMPLICATION	Apnea (infants — may lack "whoop") · Pneumonia · Encephalopathy · Subconjunctival hemorrhage

SCARLET FEVER 07

AGENT	Group A Streptococcus (erythrogenic toxin) — BACTERIAL
AGE	5–15 years; school-age
INCUBATION	2–5 days
ROUTE	Respiratory droplets; direct contact
PRODROME	Sudden HIGH fever, exudative pharyngitis, headache, abdominal pain, vomiting
RASH	Sandpaper-like papular rash; diffuse erythema neck/groin/axilla; **Pastia's lines** (skin fold creases); circumoral pallor (perioral sparing)
ORAL	Strawberry tongue (white coat → bright red) · pharyngeal exudate
DESQUAMATION	Peeling skin after rash fades (hands/feet)

Sandpaper Rash + Strawberry Tongue

ISOLATION	Droplet × 24 hrs after antibiotics
RX	Penicillin 10 days (1st line) · Amoxicillin · Azithromycin (PCN allergy)
VACCINE	❌ None
KEY COMPLICATION	Rheumatic fever → rheumatic heart disease · PSGN · Peritonsillar abscess

INFECTIOUS MONONUCLEOSIS (MONO) 08

AGENT	Epstein-Barr Virus (EBV) — herpesvirus
AGE	Adolescents/young adults ("kissing disease")
INCUBATION	30–50 days
ROUTE	Saliva (kissing); blood; organ transplant
CLASSIC TRIAD	Fever + Exudative Pharyngitis + Posterior Cervical Lymphadenopathy
ALSO SEEN	Splenomegaly (50%) · hepatomegaly · palatal petechiae · malaise/fatigue
RASH	Maculopapular rash if given amoxicillin/ampicillin (≈100%) — NOT PCN allergy

Amoxicillin Rash ≠ PCN Allergy

ISOLATION	Standard Precautions
RX	Supportive · steroids (severe) · NO contact sports 3–4 wk
VACCINE	❌ None
KEY COMPLICATION	Splenic rupture (most serious — avoid abdominal palpation!) · Airway obstruction

VARICELLA (CHICKENPOX) 09

AGENT	Varicella-Zoster Virus (VZV) — herpesvirus, DNA
AGE	Any unvaccinated; most common childhood rash
INCUBATION	14–21 days
ROUTE	⚠ AIRBORNE + Direct contact with lesions + Droplets
PRODROME	Low-grade fever, malaise 1–2 days before rash
RASH	Pruritic vesicular "dew drops on rose petals" → crops at ALL stages simultaneously (macule→papule→vesicle→pustule→crust) · trunk first → centrifugal spread
CONTAGIOUS	1–2 days before rash until ALL lesions crusted over

Dew Drops on Rose Petals — All Stages Simultaneously

ISOLATION	AIRBORNE + Contact · until all lesions crusted
RX	Supportive (children) · Acyclovir (high-risk) · NO aspirin (Reye syndrome)
VACCINE	✅ Varivax × 2 doses
KEY COMPLICATION	Bacterial superinfection (most common) · Pneumonia (adults) · Reye syndrome (aspirin) · Shingles (reactivation)

04 EXPECTED VS. CRITICAL SIGNS & SYMPTOMS · SPLIT PANEL

01 · ROSEOLA (EXANTHEM SUBITUM)

✓ EXPECTED (SAFE)
- High fever 103–105°F × 3–5 days
- Child appears surprisingly well during fever
- Rose-pink rash appears as fever breaks
- Rash fades in 1–2 days
- Mild irritability, mild lymphadenopathy

⚠ CRITICAL (REPORT)
- Febrile seizure — position safely, O_2, time seizure
- Rash that does NOT fade with pressure (petechial)
- Altered LOC, bulging fontanelle (encephalitis)
- Prolonged fever (>5 days) without rash
- Signs of dehydration in infant

02 · FIFTH DISEASE (ERYTHEMA INFECTIOSUM)

✓ EXPECTED (SAFE)
- Mild low-grade fever & URI symptoms
- Bright red "slapped cheek" facial rash
- Lacy reticular rash on trunk/extremities
- Rash worsens with sun, heat, or exercise
- Child NOT contagious once rash visible

⚠ CRITICAL (REPORT)
- Aplastic crisis: pallor, fatigue, tachycardia (sickle cell patients)
- Hydrops fetalis: maternal infection in 1st/2nd trimester
- Severe anemia, hemoglobin drop
- Immunocompromised: chronic anemia, persistent viremia
- Joint pain (arthropathy in adults)

03 · RUBELLA (GERMAN MEASLES)

✓ EXPECTED (SAFE)
- Low-grade fever, mild URI
- Posterior auricular & suboccipital lymphadenopathy
- Maculopapular rash face → trunk → extremities
- Rash fades in 3 days
- Arthralgia in adolescents/adults

⚠ CRITICAL (REPORT)
- Pregnant patient exposed: congenital rubella syndrome risk
- 1st trimester: cataracts, PDA, deafness, IUGR
- "Blueberry muffin" spots (congenital — purpuric lesions)
- Thrombocytopenic purpura
- Encephalitis, meningitis

04 · MUMPS

✓ EXPECTED (SAFE)
- Fever, headache, malaise
- Preauricular pain; earache
- Parotid gland swelling (unilateral or bilateral)
- Pain with eating/chewing
- Swelling peaks 1–3 days, resolves in ~1 week

⚠ CRITICAL (REPORT)
- Orchitis: testicular pain, swelling, tenderness (post-pubertal males)
- Meningeal signs: stiff neck, photophobia (aseptic meningitis)
- Sudden hearing loss (sensorineural — permanent)
- Epigastric pain, elevated lipase (pancreatitis)
- Oophoritis: lower abdominal pain (females)

05 · MEASLES (RUBEOLA)

✓ EXPECTED (SAFE)
- 3 C's: Cough, Coryza, Conjunctivitis (photophobia)
- High fever (may spike to 104°F when rash appears)
- Koplik spots on buccal mucosa (before rash)
- Maculopapular rash cephalocaudal spread
- Rash fades in same order it appeared

⚠ CRITICAL (REPORT)
- Respiratory distress, pneumonia (leading cause of death)
- Altered LOC, seizures (encephalitis)
- Stridor (croup complication)
- SSPE: personality change, dementia (years later)
- Otitis media: otalgia, hearing loss

06 · PERTUSSIS (WHOOPING COUGH)

✓ EXPECTED (SAFE)
- Catarrhal: runny nose, low fever (most contagious stage)
- Paroxysmal: severe coughing fits with inspiratory "whoop"
- Post-tussive vomiting
- WBC markedly elevated with lymphocytosis
- Subconjunctival hemorrhage (from cough pressure)

⚠ CRITICAL (REPORT)
- Apnea/cyanosis in infants (may NOT have "whoop")
- O_2 saturation <90%, respiratory distress
- Secondary pneumonia: fever, RR ↑, crackles
- Encephalopathy: seizures, LOC changes
- Rib fractures (from severe paroxysmal cough)

07 · SCARLET FEVER

✓ EXPECTED (SAFE)
- Sudden high fever, severe sore throat
- Sandpaper-texture rash (papular erythema)
- Strawberry tongue (white coat → red)

⚠ CRITICAL (REPORT)
- Rheumatic fever: 2–4 wk after strep → carditis, joint pain, chorea
- New murmur, chest pain, SOB (rheumatic carditis)

08 · INFECTIOUS MONONUCLEOSIS

✓ EXPECTED (SAFE)
- Fever, sore throat, posterior cervical lymphadenopathy (triad)
- Significant fatigue and malaise
- Splenomegaly (may be palpable)

⚠ CRITICAL (REPORT)
- Sudden left upper quadrant pain: splenic rupture emergency
- Stridor, drooling, inability to swallow (airway obstruction)

09 · VARICELLA (CHICKENPOX)

✓ EXPECTED (SAFE)
- Low-grade fever 1–2 days before rash
- Intensely pruritic vesicular "dew drops on rose petals"
- Lesions in ALL stages simultaneously

⚠ CRITICAL (REPORT)
- Bacterial superinfection: red, warm, purulent lesions, cellulitis
- Pneumonia (especially adults/immunocomp.): dyspnea, chest

- Pastia's lines in skin folds
- Skin desquamation as rash resolves

- Hematuria, edema, HTN (PSGN)
- Peritonsillar abscess: unilateral swelling, uvula deviation, trismus
- Severe allergic reaction to penicillin

- Palatal petechiae
- Elevated LFTs, atypical lymphocytes

- Hemolytic anemia: pallor, jaundice, dark urine
- Neurological: Guillain-Barré, encephalitis, meningitis
- Thrombocytopenia: petechiae, easy bruising

- Trunk first → centrifugal spread
- Mucous membrane lesions may occur

pain
- Cerebellar ataxia: ataxic gait, dysmetria
- Reye syndrome (aspirin given): vomiting, LOC changes, LFTs ↑↑
- Congenital varicella: limb hypoplasia, eye defects, skin scarring

05 LAB VALUES & DIAGNOSTIC FINDINGS · NCLEX SIGNIFICANCE

DISEASE	KEY LAB/DIAGNOSTIC FINDING	NORMAL VALUE	EXPECTED RESULT	NCLEX SIGNIFICANCE
Roseola (HHV-6)	WBC differential	WBC 5–10K; lymph 20–40%	Lymphocytosis during fever phase	Clinical diagnosis — labs rarely ordered; febrile seizure risk with rapid temp rise
Fifth Disease (Parvo B19)	Reticulocyte count; Hgb; Parvovirus B19 IgM/IgG	Retic 0.5–1.5%; Hgb 12–17 g/dL	Retic ↓↓ (aplastic crisis) · Hgb ↓ · B19 IgM (+)	Aplastic crisis: sudden Hgb drop in sickle cell pts — PRIORITY. Maternal IgG (–) = susceptible (no prior immunity)
Rubella	Rubella IgM/IgG serology; Platelet count	Platelets 150–400K	Rubella IgM (+) = acute · IgG (+) = immune/past · Platelets ↓ (CRS)	Check rubella immunity in ALL pregnant women. CRS: LOW platelets → "blueberry muffin" = dermal hematopoiesis
Mumps	Serum amylase; Lipase; Mumps IgM	Amylase 25–130 U/L; Lipase 7–58 U/L	Amylase ↑ (parotitis/pancreatitis) · Lipase ↑ (pancreatitis)	Elevated amylase alone can be parotitis OR pancreatitis — check lipase to differentiate. Mumps IgM confirms diagnosis
Measles (Rubeola)	Measles IgM; Nasopharyngeal PCR; Vitamin A level	—	Measles IgM (+) 3+ days after rash onset · PCR confirms	Vitamin A supplementation per WHO — especially malnourished/developing countries. REPORTABLE disease — notify public health immediately
Pertussis	WBC with differential; Nasopharyngeal culture/PCR	WBC 5–10K; lymph 20–40%	WBC markedly ↑↑ (20,000–50,000+) · LYMPHOCYTOSIS (hallmark)	WBC 20–50K with absolute lymphocytosis is HALLMARK of pertussis — distinguishes from bacterial infection. PCR most sensitive test
Scarlet Fever	Rapid strep test (RADT); Throat culture; ASO titer	ASO <200 Todd units; RADT (-)	RADT (+) · Throat culture GAS (+) · ASO ↑ (post-strep)	Throat culture is GOLD STANDARD if RADT negative but suspicion high. ASO titer elevated = post-strep sequela risk (rheumatic fever, PSGN)
Infectious Mono (EBV)	Monospot (heterophile Ab); CBC with differential; LFTs; EBV IgM/IgG	WBC 5–10K; Atypical lymph <5%; AST/ALT <40 U/L	Monospot (+) · Atypical lymphocytes ↑↑ (Downey cells) · LFTs ↑ · Thrombocytopenia · Heterophile Ab (+)	Monospot FALSE NEGATIVE early in disease — use EBV-specific Ab. Atypical lymphocytes on smear are classic. Thrombocytopenia → bleeding precautions
Varicella (VZV)	Clinical diagnosis; VZV IgM/IgG; Tzanck smear; DFA/PCR	—	Tzanck smear: multinucleated giant cells (not VZV-specific) · VZV IgM (+)	Mainly clinical diagnosis. Check varicella immunity in pregnant women — VZV IgG (–) = non-immune, high risk. VarIg (varicella immune globulin) for post-exposure prophylaxis in high-risk

05B ISOLATION PRECAUTIONS & RETURN-TO-SCHOOL QUICK REFERENCE

DISEASE	ISOLATION TYPE	DURATION OF ISOLATION	RETURN TO SCHOOL/DAYCARE	PPE REQUIRED
Roseola	Standard	None required	When fever-free × 24 hrs	Hand hygiene
Fifth Disease	Standard (Standard when rash visible)	None once rash appears	May return once rash appears (no longer contagious)	Hand hygiene · Droplet for immunocompromised
Rubella	Droplet + Contact	7 days after rash onset; Congenital: throughout infancy	7 days after rash onset	Surgical mask · Gloves · Gown
Mumps	Droplet	9 days after onset of parotid swelling	9 days after parotid swelling begins	Surgical mask · Hand hygiene
Measles	AIRBORNE	4 days AFTER rash onset; Immunocomp: entire illness	4 days after rash onset	N95 respirator · Private room · Negative pressure room
Pertussis	Droplet	5 days after starting antibiotics OR 21 days from symptom onset	5 days after antibiotics initiated	Surgical mask · Hand hygiene
Scarlet Fever	Droplet	24 hours after antibiotic therapy initiated & afebrile	24 hrs after starting antibiotics if afebrile	Surgical mask · Hand hygiene · Gloves
Mono (EBV)	Standard	None specific (saliva precautions)	When afebrile & able to participate; avoid contact sports 3–4 wk	Hand hygiene
Varicella	AIRBORNE + Contact	Until ALL lesions crusted over (< new lesions for 24 hrs)	ALL lesions must be dried/crusted — no open lesions	N95 respirator · Gloves · Gown · Negative pressure room

06 PRIORITY NURSING LADDER · AIRWAY → SAFETY → COMFORT

1 AIRWAY & BREATHING
Pertussis: monitor O_2 sat, suction prn, O_2 for cyanosis; ready for apnea in infants.
Measles: monitor for stridor (croup), respiratory distress.
Mono: assess for airway swelling/obstruction from lymph nodes.
Varicella: pneumonia risk in adults — SpO_2, RR monitoring.

2 NEUROLOGICAL / SEIZURE
Roseola: highest febrile seizure risk — seizure precautions, padded rails, time seizure, O_2.
Measles & Mumps: assess for encephalitis signs (altered LOC, stiff neck, photophobia).
Pertussis: monitor for encephalopathy.
Varicella: cerebellar ataxia — assess gait, coordination.

3 ISOLATION COMPLIANCE
Measles & Varicella: AIRBORNE (N95, negative pressure room) — implement BEFORE patient arrives.
Pertussis, Mumps, Rubella, Scarlet Fever: Droplet precautions.
Educate family and visitors re: precaution requirements.
Cohorting unvaccinated exposed individuals.

4 MEDICATION SAFETY
Scarlet Fever: ensure FULL penicillin course completed (prevent rheumatic fever).
Pertussis: azithromycin — check for drug interactions.
Varicella: acyclovir for high-risk; NEVER give aspirin (Reye syndrome).
Mono: avoid amoxicillin/ampicillin; steroids for severe cases.

5 COMFORT & EDUCATION
Varicella: antihistamines (Benadryl), calamine, trim nails to prevent scratching.
Mumps: NSAIDs, warm/cold packs for parotid pain.
Mono: adequate rest, avoid sports; soft foods if sore throat severe.
All: fever management, hydration, age-appropriate nutrition.

07 IF → THEN CLINICAL DECISION RULES

IF Infant with high fever × 3–5 days AND rash appears AS FEVER BREAKS
THEN Suspect Roseola (HHV-6). Maintain standard precautions. Institute seizure precautions. Do NOT give aspirin. Parent teaching: rash = fever resolving = reassuring sign.

IF Child with sickle cell disease develops sudden pallor, fatigue & is diagnosed with Fifth Disease
THEN Assess for aplastic crisis IMMEDIATELY. Monitor CBC, reticulocyte count, Hgb. Prepare for possible transfusion. Notify HCP stat. Aplastic crisis = life-threatening in hemolytic anemia conditions.

IF Child with suspected measles is admitted to the unit
THEN Implement AIRBORNE precautions immediately (N95 + negative pressure room). Place BEFORE patient arrives. Report to public health department. Administer Vitamin A per order. Identify all exposed contacts.

IF Teen with mono suddenly develops severe left upper quadrant/abdominal pain
THEN PRIORITY: Suspect splenic rupture — medical EMERGENCY. Do NOT palpate spleen. Notify HCP stat. Prepare for surgical intervention. Place large-bore IV, obtain CBC/type & screen, monitor BP/HR for signs of hemorrhagic shock.

IF Infant <6 months with pertussis in paroxysmal stage has coughing episode ending in apnea & cyanosis
THEN Position infant — ensure airway patent. Apply O_2, suction gently. Notify HCP immediately. Infants rarely "whoop" — apnea IS their pertussis. Monitor continuously. Anticipate ICU transfer for severe apnea episodes.

IF Child with Scarlet Fever's parent says "the rash is gone, can we stop the penicillin?"
THEN Educate: MUST complete the full 10-day antibiotic course even if symptoms resolve. Stopping early → risk of rheumatic fever → permanent heart damage. Schedule follow-up and reinforce adherence. This is highest-priority teaching.

IF Child with varicella is prescribed aspirin by parent for fever management
THEN STOP — aspirin contraindicated in varicella. Risk of Reye syndrome (hepatic encephalopathy). Use acetaminophen or ibuprofen instead. Educate family — this is a HIGH-PRIORITY safety intervention. Document teaching.

IF Post-pubertal male with mumps reports testicular pain and swelling
THEN Diagnose orchitis. Provide scrotal support, ice packs, NSAIDs for pain. Monitor for bilateral involvement (infertility risk). Counseling re: potential fertility impact. Maintain droplet precautions throughout. Emotional support essential.

08 ⚠ 8-TRAP NCLEX PITFALL GRID · CLASSIC EXAM TRICKS

1 ROSEOLA RASH TIMING
TRAP: "Rash appears WITH the fever." TRUTH: In Roseola, the rash appears AFTER the fever breaks. The high fever (3–5 days) is the first sign; the rose-pink rash is the LAST sign — and a reassuring one. Parent should be relieved, not alarmed, when rash appears.

2 FIFTH DISEASE CONTAGION
TRAP: "Child with slapped cheek rash should stay home." TRUTH: Child is NO LONGER CONTAGIOUS once the rash appears. Contagious BEFORE rash develops. However, still isolate from immunocompromised patients, pregnant women, and patients with hemolytic anemia (aplastic crisis risk).

3 MEASLES PRECAUTIONS
TRAP: "Use Droplet precautions for measles." TRUTH: Measles requires AIRBORNE precautions (N95 respirator + negative pressure room) — the virus remains suspended in air for up to 2 hours after infected person leaves the room. It is the MOST contagious vaccine-preventable disease known.

4 MONO AMOXICILLIN RASH
TRAP: "Child got a rash after amoxicillin — document penicillin allergy." TRUTH: The maculopapular rash with amoxicillin/ampicillin in EBV mono is NOT a drug allergy — it is a disease-drug interaction. Do NOT label as PCN allergic. However, avoid amoxicillin in any undiagnosed pharyngitis until mono is ruled out.

5 SCARLET FEVER ANTIBIOTICS

6 INFANT PERTUSSIS "WHOOP"

7 VARICELLA — NO ASPIRIN

8 MONO — NO CONTACT SPORTS

TRAP: "Stop penicillin when the rash clears." TRUTH: FULL 10-day course of penicillin is MANDATORY to prevent rheumatic fever → rheumatic heart disease. The rash clearing is NOT the endpoint of treatment. Streptococcal infection must be fully eradicated. This is THE most high-yield point for Scarlet Fever on NCLEX.

TRAP: "If there's no 'whoop,' it's not pertussis." TRUTH: Infants <6 months may present with APNEA and CYANOSIS instead of the classic inspiratory whoop. The "whoop" requires sufficient airway muscle development. Pertussis in infants is a medical emergency and most deadly in this age group.

TRAP: "Give aspirin for fever with varicella." TRUTH: Aspirin is ABSOLUTELY CONTRAINDICATED with varicella (and influenza) in children — risk of Reye syndrome (hepatic encephalopathy, coma, death). Use acetaminophen or ibuprofen. Also: AIRBORNE + Contact precautions until ALL lesions are crusted — not just the majority.

TRAP: "Student with resolved fever can return to sports." TRUTH: Splenomegaly persists even after fever resolves. Contact sports are PROHIBITED for 3–4 weeks (or until spleen normalized by imaging) due to splenic rupture risk — potentially fatal. ALSO: NEVER vigorously palpate the spleen in suspected mono patients. Monospot may be FALSE NEGATIVE early in illness.

09 NCLEX PATTERNS GRID · HIGH-YIELD TEST STRATEGIES

Pathognomonic Signs — Always Test These First

Koplik spots → Measles (before rash, on buccal mucosa)
Pastia's lines → Scarlet Fever (skin fold creases)
Slapped cheek → Fifth Disease (Stage 1)
Parotid swelling → Mumps
Posterior auricular lymph nodes → Rubella
Strawberry tongue → Scarlet Fever
NGN: These are the #1 recognized cues in clinical judgment questions

Vaccine-Preventable vs Non-Vaccine-Preventable

MMR covers: Measles, Mumps, Rubella
DTaP/Tdap covers: Pertussis (+ diphtheria, tetanus)
Varivax covers: Varicella
NO vaccine: Roseola, Fifth Disease, Mono, Scarlet Fever
Tdap in pregnancy (27–36 wk) protects newborn via maternal antibody transfer

Airborne vs Droplet — Critical Distinction

AIRBORNE (N95 + Neg. Pressure):
→ Measles · Varicella (+ Contact) · TB · COVID (some settings)
DROPLET (surgical mask, 3–6 ft):
→ Mumps · Rubella · Pertussis · Scarlet Fever · Fifth Disease (if immunocomp.)
Mnemonics: "MVP" = Measles, Varicella (TB) for AIRBORNE

Bacterial vs Viral — Treatment Implication

BACTERIAL (antibiotics needed):
→ Scarlet Fever (GAS) · Pertussis (B. pertussis)
VIRAL (supportive ± antivirals):
→ All others: Roseola, Fifth, Rubella, Mumps, Measles, Mono, Varicella
Varicella: Acyclovir for HIGH-RISK (immunocomp., adults, neonates, pregnant)
Never antibiotics for viral infections

Pregnancy & Fetal Risk — Priority Population

HIGH RISK TO FETUS:
Rubella 1st trimester → CRS (cataracts, PDA, deafness)
Parvovirus B19 → Hydrops fetalis
Varicella → Congenital varicella syndrome
Screen ALL pregnant women: Rubella & Varicella immunity
MMR contraindicated in pregnancy (live vaccine)
VarIg for non-immune pregnant women exposed to VZV

NGN Clinical Judgment: Recognize → Analyze → Act

Recognize cues: Koplik spots, slapped cheek, parotid swelling, whoop, sandpaper rash, dew-drop vesicles
Analyze: Who is high-risk? (immunocomp., pregnant, sickle cell, infants <6 mo)
Prioritize hypothesis: Airborne disease → isolation FIRST
Take action: Notify HCP, implement isolation, administer ordered meds
Evaluate: Rash resolution, fever clearance, no new complications

10 NGN BOW-TIE CLINICAL JUDGMENT FRAMEWORK · HIGH-RISK INFECTIOUS DISEASE CLIENT

⚠ POTENTIAL CONDITIONS (HYPOTHESES)

UNRECOGNIZED / MISIDENTIFIED

- Measles misdiagnosed as rubella (both have cephalocaudal rash)
- Mumps parotitis confused with lymphadenopathy
- Mono pharyngitis treated with amoxicillin → rash misread as PCN allergy
- Infant pertussis presenting as apnea only (no whoop)
- Aplastic crisis in sickle cell patient with Fifth Disease

CLIENT CONDITION

PEDIATRIC CLIENT WITH FEVER & RASH OR RESPIRATORY SYMPTOMS

Age 6 mo – 18 yrs · Unknown vaccination status · High-risk contact exposure

PRIORITY QUESTION

Is this airborne? Does this child need immediate isolation? Are there life-threatening complications evolving?

✅ PARAMETERS TO MONITOR

ONGOING ASSESSMENT

- Temperature trend: resolution = expected (Roseola), persistence = complication
- O_2 saturation and respiratory rate: pertussis, measles, varicella pneumonia
- Neurological status: altered LOC → encephalitis/febrile seizure
- Rash progression: is it crusting over? (VZV — determines isolation duration)
- CBC: WBC lymphocytosis (pertussis), Hgb (aplastic crisis), atypical lymphocytes (mono)

ACTIONS TO TAKE

PRIORITY NURSING ACTIONS

- Implement CORRECT isolation BEFORE other actions (Measles/VZV = Airborne)
- Assess airway and breathing: pertussis apnea, mono airway obstruction
- Notify HCP and public health for REPORTABLE diseases (measles, rubella, mumps, pertussis, varicella)
- Complete medication reconciliation: NO aspirin (VZV), NO amoxicillin (mono), FULL course antibiotics (scarlet fever)
- Seizure precautions: Roseola (highest febrile seizure risk)

EXPECTED OUTCOMES

GOALS OF CARE

- Correct isolation in place — no nosocomial transmission to staff or other patients
- Fever resolves within expected disease timeline
- Child/family verbalize return-to-school criteria correctly
- Vaccine-preventable disease: immunization status updated post-recovery where applicable
- Complications identified early and reported; no progression to critical status

11 PATIENT & FAMILY EDUCATION CHECKLIST

ROSEOLA & FIFTH DISEASE

- ☑ Roseola: rash appearing as fever breaks is REASSURING, not alarming
- ☑ Fifth Disease: child is NO LONGER contagious once rash is visible — can return to school
- ☑ Fifth Disease rash may worsen with sun, heat, or exercise — will recur and resolve
- ☑ Pregnant contacts and sickle cell patients must be notified of exposure
- ☑ Febrile seizures in Roseola: do NOT restrain; time it; lay on side; call 911 if >5 min
- ☑ Use acetaminophen or ibuprofen — NEVER aspirin in children

RUBELLA, MUMPS & MEASLES

- ☑ MMR vaccine: 2 doses required for full protection
- ☑ MMR is CONTRAINDICATED in pregnancy; delay pregnancy 1 month after MMR
- ☑ Rubella: avoid contact with pregnant women; most dangerous in 1st trimester
- ☑ Mumps: scrotal support and ice packs for orchitis; discuss fertility concerns
- ☑ Measles: administer Vitamin A as ordered; report to public health department
- ☑ Measles/Mumps/Rubella are all REPORTABLE diseases — public health notification required

PERTUSSIS EDUCATION

- ☑ Infants: position upright during and after feeds; monitor closely for apnea
- ☑ Complete the full antibiotic course (azithromycin) — reduces contagious period
- ☑ Isolate from others for 5 days after starting antibiotics
- ☑ DTaP series for children; Tdap booster for adults; Tdap in pregnancy (27–36 wk)
- ☑ "Cocooning": vaccinate all household members before newborn arrives
- ☑ Post-tussive vomiting: small frequent feedings; upright position

SCARLET FEVER EDUCATION

- ☑ MUST complete FULL 10-day antibiotic course — stopping early can cause rheumatic fever
- ☑ Skin peeling (desquamation) is NORMAL — do not peel or scratch
- ☑ Can return to school 24 hours after antibiotics started and fever-free
- ☑ Report: joint pain, chest pain, shortness of breath (rheumatic fever signs)
- ☑ Report: decreased urine, swelling, dark urine (PSGN signs — 1–3 wk after)
- ☑ Wash all utensils/surfaces; do not share cups, toothbrushes

INFECTIOUS MONO EDUCATION

- ☑ NO contact sports, heavy lifting, or vigorous activity for 3–4 weeks (splenic rupture risk)
- ☑ Do NOT palpate or examine abdomen vigorously (spleen rupture risk)
- ☑ Avoid sharing drinks, utensils, kissing — virus shed in saliva for months
- ☑ Fatigue may last weeks to months — plan for adequate rest and academic accommodations
- ☑ Report immediately: sudden left-sided belly pain (possible splenic rupture — 911)
- ☑ Rash after amoxicillin is NOT a penicillin allergy — do NOT document as allergy

VARICELLA EDUCATION

- ☑ NEVER give aspirin to children with chickenpox — risk of Reye syndrome (fatal)
- ☑ Child can return to school ONLY when ALL lesions are dried and crusted over
- ☑ Trim fingernails short, use mittens in toddlers to prevent scratching and secondary infection
- ☑ Calamine lotion, oatmeal baths, diphenhydramine for itch relief
- ☑ Varivax: 2 doses (12–15 mo and 4–6 yr); NOT given during pregnancy
- ☑ Virus can reactivate later as shingles (herpes zoster) — vaccine available (Shingrix) for adults 50+

12 VACCINE SCHEDULE QUICK REFERENCE · NCLEX IMMUNIZATION FACTS

MMR (MEASLES, MUMPS, RUBELLA)

SCHEDULE	Dose 1: 12–15 months · Dose 2: 4–6 years
TYPE	Live attenuated virus
CONTRAINDICATIONS	Pregnancy · Severe immunocompromise · Anaphylaxis to neomycin
POST-EXPOSURE	MMR within 72 hours OR IVIG within 6 days of measles exposure
NCLEX TRAP	Delay pregnancy ≥1 month after MMR vaccination

DTAP / TDAP (PERTUSSIS-CONTAINING)

DTAP SCHEDULE	2, 4, 6, 15–18 mo, 4–6 yr (5 doses)
TDAP BOOSTER	Age 11–12 yr, then every 10 yr as Td
PREGNANCY	Tdap every pregnancy at 27–36 weeks (cocooning strategy)
POST-EXPOSURE	Prophylactic azithromycin for household contacts
NCLEX TRAP	DTaP = children; Tdap = adults; NOT interchangeable

VARIVAX (VARICELLA)

SCHEDULE	Dose 1: 12–15 months · Dose 2: 4–6 years
TYPE	Live attenuated VZV
CONTRAINDICATIONS	Pregnancy · Severe immunocompromise · Active untreated TB
POST-EXPOSURE PEP	Varivax within 3–5 days OR VarIg (VariZIG) for high-risk within 10 days
NCLEX TRAP	VarIg for pregnant non-immune women — vaccine contraindicated in pregnancy