CLINICALJUDGE™ · NGN NCLEX SERIES

REPORTABLE DISEASES

Community Health & Public Safety · Mandatory Reporting & Nurse's Role

NGN READY

Category: Community Health
Sub-topic: Epidemiology
Level: RN Entry-Level
Revised: 2026

🔴 Immediately Reportable | 🟠 Report Within 24 hrs | 🔵 Report Within 7 Days | 💊 Bioterrorism Agents | 🧬 STI / Bloodborne | 📋 Mandatory = Nurse Reports

COLOR KEY: Critical / Immediate Action | Pathophysiology | Safe/Expected Finding | Complication Alert | NCLEX Trap/Pitfall | Medications/Labs | Patient Education

① PATHOPHYSIOLOGY FLOW · WHY DISEASES ARE REPORTED

Pathogen Enters Host
Bacteria, virus, parasite, or prion causes communicable or notifiable illness in an individual

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Clinician/Nurse Suspects or Confirms
History, clinical presentation, lab results trigger mandatory reporting obligation

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Mandatory Report to Local Health Dept.
Report submitted; timeline dictated by urgency (immediate, 24hr, 7 days)

Local → State → CDC Chain
Local health department notifies state; state notifies CDC via NNDSS (National Notifiable Diseases Surveillance System)

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Investigation & Contact Tracing
Public health identifies contacts, source of exposure, outbreak potential

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Containment & Community Protection
Quarantine, prophylaxis, vaccination campaigns prevent spread

NURSE'S LEGAL OBLIGATION

- ✅ Reporting is **MANDATORY** — not optional
- ✅ Nurse may report **independently** (does NOT need physician order)
- ✅ HIPAA does **NOT** prevent reporting — public health exception applies
- ✅ Report suspected *and* confirmed cases
- ✅ First priority: LOCAL health department
- ✅ Failure to report = legal liability for facility & nurse

② MASTER DISEASE LIST BY REPORTING URGENCY

IMMEDIATELY REPORTABLE · CALL HEALTH DEPARTMENT WITHIN HOURS

Disease / Agent	Category	Key Clinical Findings (NCLEX)	Isolation Type	Transmission
Anthrax Bioterrorism	Category A	Inhalation: mediastinal widening on CXR, hemorrhagic meningitis; cutaneous: black eschar	Standard (cutaneous); Airborne (inhalation)	Bacillus anthracis spores
Botulism	Foodborne/Wound	Descending symmetric flaccid paralysis, diplopia, dysarthria, NO fever	Standard	Clostridium toxin / honey (infant)
Cholera	GI	"Rice-water" stools, profound dehydration, electrolyte imbalance	Contact	Contaminated water/food
Plague Bioterrorism	Category A	Bubonic: painful lymphadenopathy (buboes); Pneumonic: severe pneumonia, hemoptysis	Droplet (pneumonic); Standard (bubonic)	Yersinia pestis / fleas/rats
Smallpox Bioterrorism	Category A — ERADICATED	Synchronous rash (centrifugal, all stages same), fever precedes rash, umbilicated lesions	Airborne + Contact	Variola virus / droplets/contact
Tularemia Bioterrorism	Category A	Ulcer at bite site, regional lymphadenopathy, sudden high fever, pneumonia	Standard	Francisella tularensis / ticks/rabbits
Viral Hemorrhagic Fevers (Ebola, Marburg) Bioterrorism	Category A	Hemorrhaging (mucosal, IV sites), high fever, multi-organ failure, DIC	Contact + Airborne (PPE protocol)	Body fluids / zoonotic
Meningococcal Disease	Bacterial Meningitis	Petechial/purpuric rash, Brudzinski/Kernig signs, nuchal rigidity, rapid deterioration	Droplet (until 24hr on abx)	Neisseria meningitidis / droplets
Rabies (suspected)	Zoonotic	Hydrophobia, aerophobia, encephalitis; animal exposure must be reported immediately	Standard (human-to-human rare)	Animal bite / saliva

REPORT WITHIN 24 HOURS — HIGH PRIORITY INFECTIOUS DISEASES

Disease / Agent	Category	Key Clinical Findings (NCLEX)	Isolation Type	Transmission Route
Measles (Rubeola)	Vaccine-Preventable	Koplik spots (pathognomonic), 3 C's: Cough, Coryza, Conjunctivitis; maculopapular rash head→toe	Airborne	Paramyxovirus / airborne
Pertussis (Whooping Cough)	Vaccine-Preventable	Paroxysmal cough → inspiratory whoop → post-tussive vomiting; most dangerous in infants	Droplet	Bordetella pertussis / droplets
Typhoid Fever	GI / Foodborne	Rose spots (trunk), relative bradycardia, "stair-step" fever, constipation → diarrhea	Contact (fecal-oral)	Salmonella typhi / fecal-oral
Haemophilus influenzae (invasive, type b)	Bacterial Invasive	Epiglottitis (tripod position, drooling, stridor), meningitis, bacteremia	Droplet	H. influenzae / droplets
Legionellosis	Atypical Pneumonia	Severe pneumonia, hyponatremia, diarrhea, no person-to-person spread; water system source	Standard	Contaminated water aerosols / cooling towers
Novel Influenza (H5N1, H1N1)	Pandemic Risk	Severe respiratory illness, rapid deterioration; any unusual influenza strain	Airborne + Contact	Animal/human influenza / droplets

🔵 REPORT WITHIN 7 DAYS — NOTIFIABLE CONDITIONS

Disease	Category	Key NCLEX Points
HIV Infection	STI/Bloodborne	CD4 <200 = AIDS; opportunistic infections; ART initiation
Hepatitis A	Hepatitis	Fecal-oral; jaundice; self-limiting; vaccine-preventable
Hepatitis B	Bloodborne	HBsAg = infectious; HBsAb = immune; vertical transmission risk
Hepatitis C	Bloodborne	IVDU #1 risk; most asymptomatic initially; leading cause of liver transplant
Gonorrhea	STI	Purulent discharge; ophthalmia neonatorum risk; dual antibiotic therapy
Syphilis	STI	Primary: painless chancre; Secondary: maculopapular rash palms/soles; Tertiary: CNS/cardiac
Chlamydia	STI	Most common reportable STI; often asymptomatic; PID risk in females
Tuberculosis (TB)	Airborne/Respiratory	LTBI vs. Active TB; Airborne isolation (negative pressure); RIPE therapy
Salmonellosis	Foodborne/GI	Raw eggs/poultry; fever, cramping, bloody diarrhea; no abx unless systemic
E. coli O157:H7	Foodborne/HUS Risk	Undercooked beef; bloody diarrhea; risk of HUS (hemolytic uremic syndrome) in children
Shigellosis	GI	Fecal-oral; bloody diarrhea, high fever; contact precautions; hand hygiene critical
Lyme Disease	Vector-borne	Erythema migrans (bull's-eye rash); tick removal; Bell's palsy; Doxycycline
Varicella (Chickenpox)	Vaccine-Preventable	All-stages-at-once rash (centripetal); Airborne + Contact; no aspirin (Reye's)
West Nile Virus	Arboviral	Mosquito-borne; encephalitis/meningitis in severe cases; no specific treatment
Rocky Mountain Spotted Fever	Rickettsial	Rash starts wrists/ankles → trunk; tick-borne; Doxycycline is DOC; don't delay
Lead Poisoning	Environmental	BLL ≥5 mcg/dL in children is reportable; pica, encephalopathy, anemia; chelation if severe

③ EXPECTED VS. CRITICAL FINDINGS SPLIT PANEL

✅ EXPECTED — REPORTABLE BUT MANAGEABLE

- ✔ Patient with syphilis: painless chancre on exam → report & begin penicillin
- ✔ TB: positive PPD/IGRA with no symptoms → LTBI, not immediately reportable in all states, treat with INH
- ✔ Chickenpox in healthy child: progressive pruritic vesicles → report, airborne + contact isolation
- ✔ Salmonella: self-limiting GI illness with oral rehydration → report, no routine antibiotics
- ✔ Lyme disease: bull's-eye rash within 30 days of tick bite → report, oral doxycycline
- ✔ Gonorrhea: purulent urethral discharge → report, dual-therapy (ceftriaxone + azithromycin)
- ✔ Lead level 5–9 mcg/dL in child: report, environmental assessment, retest in 3 months
- ✔ Hepatitis B: acute HBsAg positive → report, monitor LFTs, supportive care

🚨 CRITICAL — EMERGENCY REPORT + IMMEDIATE ACTION

- 🚨 Suspected anthrax: mediastinal widening on CXR + flu-like illness → IMMEDIATE report + ciprofloxacin + isolation
- 🚨 Meningococcal meningitis: petechial rash + nuchal rigidity → IMMEDIATE report, droplet isolation, IV ceftriaxone STAT
- 🚨 Hemorrhagic fever (Ebola): unexplained bleeding + travel history → IMMEDIATE report, full PPE (PAPR), CDC notification
- 🚨 Infant botulism: descending flaccid paralysis in infant fed honey → IMMEDIATE report, antitoxin, NO aminoglycosides
- 🚨 Pertussis in neonate: apnea + paroxysmal cough → IMMEDIATE report, erythromycin, droplet isolation
- 🚨 Lead level ≥45 mcg/dL: encephalopathy symptoms → IMMEDIATE report, hospitalize, IV chelation (DMSA/BAL)
- 🚨 Novel influenza cluster: multiple patients with severe respiratory failure → IMMEDIATE report to CDC, pandemic protocol
- 🚨 Active TB with hemoptysis + respiratory distress → IMMEDIATE airborne isolation, negative-pressure room, STAT consult

④ KEY LABS & DIAGNOSTIC VALUES WITH NCLEX SIGNIFICANCE

Test / Lab	Disease Association	Critical Value	NCLEX Significance
CD4 Count	HIV/AIDS	<200 cells/µL	*CD4 <200 = AIDS diagnosis; initiate PCP prophylaxis (TMP-SMX); begin ART regardless of CD4 count*
PPD (Mantoux)	Tuberculosis	≥10mm induration	*≥5mm positive in HIV+ or immunocompromised; ≥15mm in low-risk individuals; BCG vaccine causes false positive*
HBsAg	Hepatitis B	Positive	*HBsAg = actively infected & contagious; HBsAb = immune (vaccinated or recovered); HBcAb IgM = acute infection*
Blood Lead Level	Lead Poisoning	≥5 mcg/dL (children)	*No safe level; ≥45 mcg/dL = chelation therapy (DMSA); basophilic stippling on peripheral smear is classic finding*
Rapid Strep / Culture	Group A Strep	Positive throat culture	*Report invasive Group A Strep only; treat with penicillin to prevent rheumatic fever*
RPR / VDRL / FTA-ABS	Syphilis	Positive titer	*RPR/VDRL = screening (false positives); FTA-ABS = confirmatory test; Jarisch-Herxheimer reaction after penicillin is expected, not allergy*
AFB Smear / Culture	Tuberculosis	Positive sputum AFB	*3 negative AFB smears = can discontinue airborne isolation; INH causes peripheral neuropathy → give pyridoxine (B6)*
Stool Culture / O&P	GI Infections	Pathogen identified	*E. coli O157:H7: do NOT give antidiarrheal or antibiotics (increases HUS risk); contact precautions & hand hygiene*
Lumbar Puncture (CSF)	Meningitis (all types)	Bacterial: ↑WBC, ↑protein, ↓glucose	*Position: lateral recumbent (fetal); monitor for post-LP headache; maintain flat 1-4 hrs; watch for herniation signs before LP*

⑤ PRIORITY NURSING ACTIONS — REPORTING LADDER

1 Assess & Recognize Clinical Indicators
Identify S&S of notifiable disease; review travel history, exposure history, lab results, vaccination status

2 Implement Appropriate Isolation IMMEDIATELY
Before confirmation — isolate based on suspected transmission route; do not wait for culture results to isolate

3 Notify Provider & Confirm Reporting Obligation
Consult facility infection control officer; verify which diseases are reportable in your state; report independently if needed

4 Submit Mandatory Report to Local Health Department
Phone (immediate/urgent) or secure online portal (routine); document time, person notified, case details in medical record

5 Initiate Treatment per Protocol
Administer prescribed antibiotic/antiviral; post-exposure prophylaxis (PEP) for contacts; antitoxin if indicated (botulism, rabies)

6 Contact Tracing Cooperation
Assist public health with identifying contacts; STI partner notification is health dept. responsibility, not nurse's; support patient confidentiality

7 Patient & Community Education
Teach transmission prevention, safe sex practices, hand hygiene, food safety, vaccination catch-up; address stigma sensitively

⑥ IF → THEN CLINICAL DECISION RULES

Patient has fever + hemorrhagic rash + recent travel to West Africa	→ IMMEDIATELY implement full PPE, place in private room, contact CDC & local health dept. Report as possible viral hemorrhagic fever	Child presents with petechial rash + fever + stiff neck + altered LOC	→ Droplet isolation STAT; IV ceftriaxone within 1 hour; lumbar puncture; IMMEDIATE report — suspected meningococcal meningitis
Patient has active TB; 3 AFB smears are now negative	→ Discontinue airborne isolation; patient may transfer to regular room or discharge; continue RIPE therapy; follow-up monthly	Parent asks why their child's positive TB test was reported without their consent	→ Explain: HIPAA public health exception — mandatory reporting protects the community; report is confidential & required by law
New HIV diagnosis confirmed; patient worried about insurance discrimination	→ Report to health dept. (name-based reporting in most states); GINA/ACA protects against discrimination; refer to social work & HIV case manager	Infant fed honey has 3 days of poor feeding, weak cry, constipation, floppy tone	→ Infant botulism → IMMEDIATE report; administer BabyBIG (botulism immune globulin); NO aminoglycosides (worsen paralysis)
Child with known lead exposure has BLL of 50 mcg/dL + seizures	→ IMMEDIATE report; hospitalize; IV BAL (dimercaprol) + EDTA chelation; remove from source; report housing to environmental health	Nurse is bitten by a wild bat in the community and reports to ED	→ IMMEDIATE report suspected rabies exposure; rabies PEP (HRIG + vaccine series); capture/test bat if possible; wound irrigation critical

⑦ 8-TRAP NCLEX PITFALL GRID — DON'T FALL FOR THESE!

T1 **"Wait for physician order before reporting"** — WRONG. Nurses have an independent legal duty to report. No order needed. Failure to report is a crime.

T2 **"HIPAA prevents reporting to health department"** — WRONG. Public health surveillance is an explicit HIPAA exception. Report without patient consent if required by law.

T3 **"Botulism: give aminoglycosides for GI decontamination"** — WRONG. Aminoglycosides worsen neuromuscular blockade and can precipitate respiratory arrest.

T4 **"E. coli O157:H7: give antibiotics to clear infection"** — WRONG. Antibiotics increase Shiga toxin release → ↑ HUS risk. Also avoid antidiarrheals (loperamide).

T5 **"Varicella: aspirin for fever control"** — WRONG. Aspirin in viral illness → Reye's syndrome. Use acetaminophen or ibuprofen only.

T6 **"Jarisch-Herxheimer reaction after penicillin = allergy"** — WRONG. This is an expected fever/chills reaction 2–8 hrs after first syphilis dose. Continue therapy, manage symptoms.

T7 **"LTBI (positive PPD, no symptoms) requires airborne isolation"** — WRONG. Only active pulmonary TB requires airborne isolation. LTBI is not contagious.

T8 **"Nurse is responsible for notifying STI partners"** — WRONG. Partner notification is the responsibility of the local PUBLIC HEALTH DEPARTMENT, not the bedside nurse.

⑧ NCLEX PATTERNS — HIGH-YIELD TESTING THEMES

🔴 Isolation Selection Questions

- Measles, TB, Smallpox, Varicella → **Airborne** (negative pressure)
- Meningitis (bacterial), Pertussis, Influenza, Mumps → **Droplet**
- C. diff, MRSA, Wound infections, E. coli → **Contact**
- Varicella & Ebola → **Airborne + Contact**

🔵 Who Reports & Where Pattern

- **First always:** Local/county health department
- Local → State → CDC (NNDSS) chain
- Nurse reports independently; no MD order needed
- Bioterrorism agents → also notify law enforcement & FBI

💊 Drug-Disease High-Yield Pairs

- TB: RIPE (Rifampin, INH, Pyrazinamide, Ethambutol) + B6
- Syphilis: Penicillin G IM (only safe in pregnancy)
- RMSF + Lyme: Doxycycline (DOC for both)
- Anthrax: Ciprofloxacin or Doxycycline + antitoxin

Rash Recognition Pattern

- Measles: red maculopapular, head → toes + Koplik spots
- Varicella: all stages simultaneously (centripetal — trunk first)
- Syphilis 2°: maculopapular rash on **palms & soles**
- RMSF: wrists/ankles → trunk (centripetal, opposite of measles)
- Meningococcemia: non-blanching petechiae/purpura

Vaccine-Preventable Disease Priorities

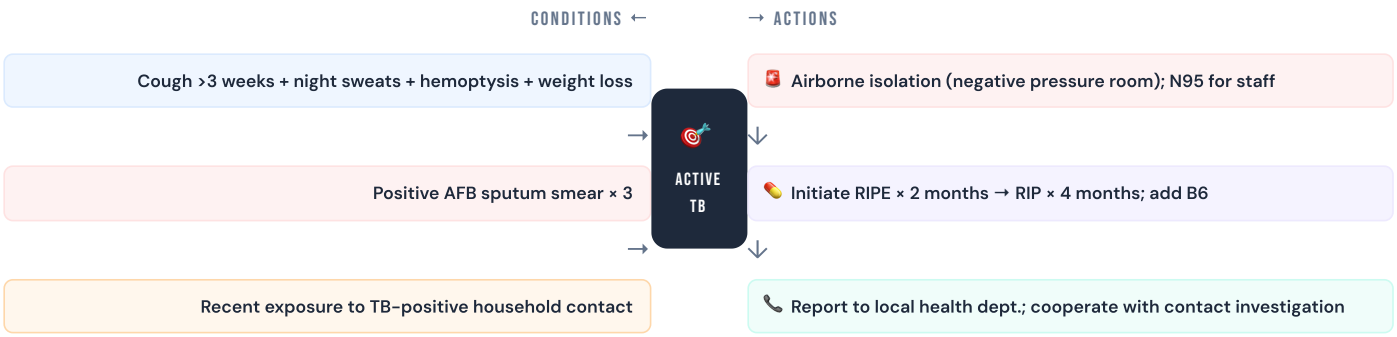
- MMR: Measles, Mumps, Rubella — live vaccine, avoid in pregnancy/immunocompromised
- Varicella: live vaccine; 2 doses needed for protection
- Tdap: protects against pertussis — give to pregnant women (28–36 wks) and newborn contacts
- Hep B: birth dose critical; 3-dose series; infant born to HBsAg+ mom → HBIG + vaccine within 12 hrs

STI Reporting Nuances

- Chlamydia = MOST COMMONLY reported STI in the US
- All STIs reportable: gonorrhea, syphilis, chlamydia, HIV, Hep B & C
- Gonorrhea: treat empirically without culture due to resistance; dual therapy
- HIV: name-based reporting in most US states (not anonymous)

⑨ NGN BOW-TIE CLINICAL JUDGMENT SUMMARY

CLINICAL SCENARIO: ACTIVE TB + POSITIVE REPORT SCENARIO



RECOGNIZE CUES
AFB smear +, constitutional S&S, positive IGRA/PPD, abnormal CXR (cavitation, upper lobe infiltrate)

ANALYZE
Active TB requires isolation, multi-drug therapy & mandatory reporting — LTBI does NOT require isolation

PRIORITIZE
1) Airborne isolation 2) Notify charge RN 3) Report to health dept. 4) RIPE therapy 5) DOT (directly observed therapy)

EVALUATE
3 negative AFB smears → discontinue isolation. Monitor for drug side effects (hepatotoxicity, optic neuritis, hyperuricemia)

⑩ PATIENT EDUCATION CHECKLIST

PREVENTION & TRANSMISSION

- ☑ Handwashing is the SINGLE MOST EFFECTIVE prevention for most GI & respiratory reportable diseases
- ☑ Vaccines: stay current with MMR, Tdap, Varicella, Hepatitis B, Meningococcal, and yearly influenza
- ☑ Food safety: cook meats thoroughly, avoid raw eggs, refrigerate foods properly — prevents Salmonella, E. coli, Listeria
- ☑ Mosquito and tick protection: DEET, long sleeves, tick checks — prevents Lyme, West Nile, RMSF
- ☑ Safe sex practices: condoms reduce — but do not eliminate — transmission of HIV, gonorrhea, chlamydia, syphilis
- ☑ Never share needles, razors, or personal items that contact blood — Hepatitis B, C & HIV prevention
- ☑ Do NOT give honey to infants under 12 months — botulism risk

MEDICATION ADHERENCE & FOLLOW-UP

- ☑ TB: complete ALL 6–9 months of RIPE therapy even if feeling better — stopping early causes drug resistance
- ☑ HIV: ART must be taken daily at the same time — missed doses cause viral resistance and treatment failure
- ☑ Syphilis: penicillin injection — expect mild flu-like symptoms within hours (Jarisch-Herxheimer) — not a reaction, continue treatment
- ☑ Lyme disease: complete full antibiotic course; some patients develop Post-Treatment Lyme Syndrome — this is real
- ☑ Reporting is done to protect family and community — it does NOT mean patient loses rights or is punished
- ☑ Sexual partners will be notified by the health department confidentially — patient's name is NOT disclosed to partners
- ☑ Return to ED/clinic if: symptoms worsen, new symptoms develop, or if treatment is not tolerated

⑪ BIOTERRORISM RAPID REFERENCE — CDC CATEGORY A AGENTS

ANTHRAX

- *Bacillus anthracis*
- ⚠ Inhalation: most lethal
- Widened mediastinum on CXR
- Ciprofloxacin/Doxycycline
- Antitoxin available
- IMMEDIATE report

BOTULISM

- *C. botulinum* toxin
- ⚠ Descending flaccid paralysis
- No fever; diplopia first sign
- Antitoxin; supportive
- NO aminoglycosides
- IMMEDIATE report

PLAGUE

- *Yersinia pestis*
- ⚠ Bubonic → Septicemic → Pneumonic
- Painful buboes; rapid onset
- Streptomycin/Gentamicin
- Droplet (pneumonic)
- IMMEDIATE + law enforcement

SMALLPOX

- Variola virus (eradicated)
- ⚠ Synchronous rash — all stages equal
- Fever precedes rash (unlike varicella)
- Vaccinia immune globulin
- Airborne + Contact
- IMMEDIATE → CDC + FBI

BIOTERRORISM RESPONSE MNEMONIC — "START": **S**egregate patients | **T**reat immediately (do not wait for confirmation) | **A**lert authorities (local health dept + law enforcement + FBI) | **R**eport all suspected cases | **T**riage for decontamination if chemical exposure suspected

CLINICALJUDGE™

NGN NCLEX Infographic Series · Community Health & Epidemiology Module
Reportable Diseases: Mandatory Reporting, Isolation, Clinical Decision-Making
Content is for educational purposes. Verify with current CDC & state health department guidelines.

PDF EXPORT INSTRUCTIONS

Chrome/Edge → File → Print → Save as PDF
Scale: 65–70% | Layout: Portrait or Landscape
✅ Enable "Background graphics" for full color
Margins: Minimum | Paper: US Letter or A4