NGN NCLEX 2026 · REPRODUCTIVE / INFECTIOUS DISEASE

Gonorrhea.

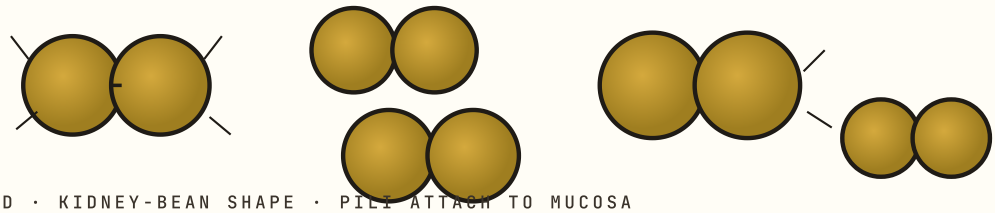
A reportable, treatable, but often silent bacterial STI — the "drip" that can cascade into PID, infertility, and disseminated infection if missed.

BACTERIAL STI | REPORTABLE | CO-INFECTS W/ CHLAMYDIA | CDC 2021 GUIDELINES | DUAL THERAPY

1 SECTION ONE Definition & Overview

- **Gonorrhea** is a sexually transmitted infection caused by *Neisseria gonorrhoeae* — a **gram-negative diplococcus** (think: paired coffee beans).
- **2nd most reported notifiable STI** in the U.S. (behind chlamydia). **~50% co-infection rate with chlamydia** — always treat for both.
- **Transmission:** vaginal, anal, oral sex; mother→newborn at delivery. Infects mucous membranes: urethra, cervix, rectum, pharynx, conjunctiva.
- **Why it matters:** often asymptomatic in women → silent ascending infection → **PID, infertility, ectopic pregnancy, chronic pelvic pain**. Disseminated gonococcal infection (DGI) is life-threatening.
- **Reportable** to public health in all 50 states. Treat ALL sexual partners from the past **60 days**.

Neisseria gonorrhoeae — Gram-negative diplococci



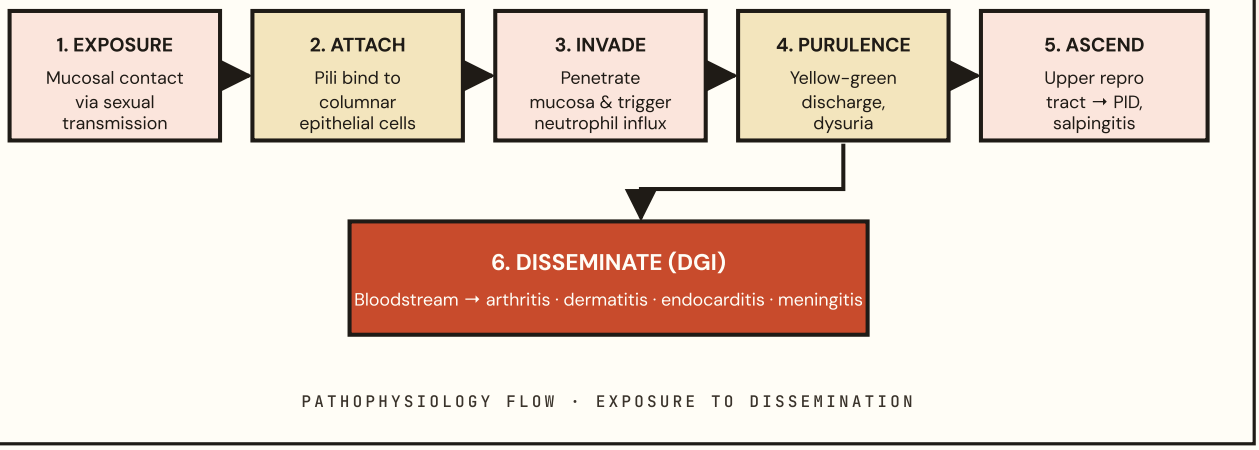
PAIRED · KIDNEY-BEAN SHAPE · PILI ATTACH TO MUCOSA

MICROSCOPY VIEW · PAIRED COCCI

SECTION TWO

2 Pathophysiology

The bug attaches, invades, inflames, ascends, and (if untreated) disseminates.



PATHOPHYSIOLOGY FLOW · EXPOSURE TO DISSEMINATION

Pearl: Why women are often silent carriers

The endocervix is lined with columnar epithelium — gonococci colonize there easily without producing dramatic symptoms. Meanwhile, the squamous cells of the male urethra react sharply → men usually present with *dysuria + drip*. This is why **routine screening** matters in sexually active women under 25.

SECTION THREE

3 Signs & Symptoms

Women (often silent)

- ~50% **asymptomatic**
- Yellow-green vaginal discharge
- Dysuria, urinary frequency
- Intermenstrual bleeding / spotting
- Dyspareunia (painful intercourse)
- Lower abdominal / pelvic pain

Men (usually symptomatic)

- Purulent urethral discharge ("drip")
- Dysuria — burning urination
- Urinary frequency, urgency
- Testicular/scrotal pain → **epididymitis**
- Symptoms in 2–7 days

Extragenital sites

- **Rectal:** anal pruritus, mucopurulent discharge, tenesmus
- **Pharyngeal:** usually asymptomatic; mild sore throat
- **Conjunctival:** purulent eye discharge, photophobia

RED FLAG

Disseminated & Severe Complications — Act Immediately

- **Disseminated Gonococcal Infection (DGI):** fever, migratory polyarthritis, tenosynovitis, pustular skin lesions on extremities (classic triad).
- **PID:** severe pelvic pain, fever >38°C, cervical motion tenderness ("chandelier sign"), adnexal tenderness → infertility risk.
- **Ophthalmia neonatorum:** bilateral purulent conjunctivitis in newborn within **2–5 days of birth** → corneal scarring & blindness if untreated.
- **Septic arthritis:** hot, swollen, red joint — often knee — emergency.
- **Fitz-Hugh-Curtis syndrome:** perihepatitis (RUQ pain) from PID extension.

SECTION FOUR

4 Priority Nursing Interventions

Assessment / Diagnostics

- **Obtain cultures BEFORE antibiotics** (cervix, urethra, rectum, pharynx as indicated).
- **NAAT (nucleic acid amplification test)** = gold standard; urine or swab.
- Test for **co-infections:** chlamydia, HIV, syphilis, hepatitis B & C, trichomoniasis.
- Assess sexual history: partners in last **60 days**, last sexual contact.
- Pregnancy test in women of childbearing age.

Treatment / Safety

- **Administer dual therapy** per CDC: Ceftriaxone IM + Doxycycline PO (if chlamydia not excluded).
- Witness/document IM administration; monitor 15 min post for anaphylaxis.
- **Mandatory reporting** to public health — confidential but legally required.
- Initiate **partner notification & treatment** (Expedited Partner Therapy where legal).
- Newborn prophylaxis: **erythromycin 0.5% ophthalmic ointment** within 1 hour of birth.
- Pain management for PID; hospitalize if severe, pregnant, abscess, or oral therapy fails.

NCLEX Prioritization — Order of Actions

1. **Airway/Circulation FIRST** if signs of anaphylaxis or septic shock from DGI.
2. Obtain cultures *before* giving antibiotics (preserves diagnostic accuracy).
3. Administer prescribed dual antibiotics.
4. Initiate partner tracing & mandatory reporting.
5. Educate on abstinence, follow-up, and prevention.

SECTION FIVE

5 Pharmacology

Ceftriaxone (Rocephin)

3RD-GEN CEPHALOSPORIN

DOSE / ROUTE
500 mg IM × 1 dose (1 g if >150 kg). Single-dose treatment.

MECHANISM
Inhibits bacterial cell wall synthesis → bacterial lysis.

SIDE EFFECTS
Injection site pain, rash, diarrhea, hypersensitivity, rarely anaphylaxis.

NURSING CONSIDERATIONS
Screen for PCN allergy (cross-reactivity ~5–10%). Reconstitute with 1% lidocaine for IM comfort. Z-track deep IM; monitor 15 min after.

Doxycycline

TETRACYCLINE · CHLAMYDIA CO-TX

DOSE / ROUTE
100 mg PO BID × 7 days (when chlamydia not excluded).

MECHANISM
Inhibits bacterial protein synthesis (30S ribosome).

SIDE EFFECTS
Photosensitivity, GI upset, esophagitis, tooth discoloration (children <8).

NURSING CONSIDERATIONS
CONTRAINDICATED in pregnancy & children <8. Take with full glass of water, sit upright 30 min. Avoid sun, dairy, antacids, iron within 2 h.

Azithromycin

MACROLIDE · ALT. IN PREGNANCY

DOSE / ROUTE
1 g PO × 1 dose (alternative when doxycycline contraindicated).

MECHANISM
Inhibits protein synthesis (50S ribosome).

SIDE EFFECTS
GI upset, QT prolongation, rare hepatotoxicity.

NURSING CONSIDERATIONS
Safer in pregnancy. Check for QT-prolonging meds. Take with or without food.

Erythromycin 0.5% Ophthalmic Ointment

NEWBORN PROPHYLAXIS

DOSE / ROUTE
Thin ribbon to lower conjunctival sac of each eye, within 1 hour of birth.

MECHANISM
Prevents *ophthalmia neonatorum* from gonorrhea/chlamydia exposure during delivery.

SIDE EFFECTS
Transient blurred vision, mild chemical conjunctivitis.

NURSING CONSIDERATIONS
Mandatory by law in most states regardless of maternal status. Inner → outer canthus. Do not wipe

off.

SCENARIO	FIRST-LINE	IF ALLERGIC / SPECIAL
Uncomplicated gonorrhea (cervix/urethra/rectum)	Ceftriaxone 500 mg IM × 1 + Doxycycline 100 mg PO BID × 7 d	Severe PCN allergy → Gentamicin 240 mg IM + Azithromycin 2 g PO
Pharyngeal gonorrhea	Ceftriaxone 500 mg IM × 1 (test of cure in 7–14 d)	Requires culture-confirmed cure
Pregnancy	Ceftriaxone IM + Azithromycin PO (avoid doxycycline)	No tetracyclines or fluoroquinolones
Disseminated GC (DGI)	Ceftriaxone 1 g IV/IM q24h × 7+ days; hospitalize	ID consult; consider arthroscopy
Newborn prophylaxis	Erythromycin 0.5% ophthalmic ointment within 1 h of birth	Mandatory in most states

SECTION SIX

6 NCLEX Test Traps ⚠

✗ WRONG THINKING	→	✓ RIGHT ACTION
Treat only the patient — they'll tell their partners.	→	**Treat ALL partners** from past 60 days. Partner notification is a nursing/public-health responsibility, not optional.
Continue ceftriaxone IM daily until symptoms resolve.	→	Ceftriaxone is a **SINGLE-DOSE** 500 mg IM injection for uncomplicated gonorrhea. Don't repeat.
Treat only for gonorrhea; chlamydia can be ruled in later.	→	Treat **presumptively for chlamydia** unless excluded by NAAT — 50% co-infection rate. Add doxycycline.
"I can promise complete confidentiality."	→	Gonorrhea is **mandatory reporting** to public health. Be honest: care is confidential within the team, but reportable by law.
Resume sex once symptoms resolve.	→	**Abstain for 7 days AFTER treatment** AND until all partners have completed treatment. Both conditions must be met.
Give doxycycline to the pregnant patient.	→	Doxycycline is **contraindicated in pregnancy** (fetal tooth/bone effects). Use **azithromycin** instead.
Start antibiotics immediately — cultures can wait.	→	**Obtain cultures FIRST** (when feasible). Antibiotics before cultures = false-negative diagnostics & surveillance loss.

SECTION SEVEN

7 Patient & Family Education

Treatment Adherence

- **Complete all medications** as prescribed, even if symptoms resolve.
- For oral doxycycline: take with a **full glass of water**, remain upright 30 minutes, avoid dairy/antacids/iron within 2 hours.
- Symptoms should improve within **48–72 hours**; if not, return to clinic.
- **Test of cure** at 7–14 days for pharyngeal infection or if symptoms persist.
- Retest at **3 months** regardless of partner treatment status.

Sexual Health & Prevention

- **Abstain from sex × 7 days** after single-dose therapy AND until all partners are treated.
- Notify **ALL sexual partners** from the past 60 days.
- Use **condoms consistently and correctly** with every act.
- Annual STI screening if sexually active <25 years or with risk factors.
- Limit number of partners; mutual monogamy with tested partner reduces risk.

Warning Signs to Report

- Worsening or persistent discharge after treatment
- Fever, severe pelvic or abdominal pain
- Joint pain, rash, or hot/swollen joint (DGI)
- Right upper quadrant pain (Fitz-Hugh-Curtis)
- Painful intercourse, abnormal bleeding

Pregnancy & Newborn

- Untreated gonorrhea → preterm birth, PROM, chorioamnionitis.
- Newborns exposed at delivery → **ophthalmia neonatorum**; can cause blindness.
- Newborn receives erythromycin eye ointment within 1 hour of birth.
- Screen at first prenatal visit; retest in 3rd trimester if at risk.

SECTION EIGHT

8 Memory Boosters & Mnemonics

GC together

GONORRHEA + CHLAMYDIA

"GC" goes together — **always test & treat for both**. ~50% co-infection. Ceftriaxone covers G; doxycycline covers C.

Ceftri-AXE-one

FIRST-LINE DRUG

Ceftri-**AXE**-one *axes* the gonococcus. One IM shot. 500 mg. Done.

DRIP

CLASSIC MALE PRESENTATION

Discharge (purulent) · **R**edness · **I**nflammation · **P**ain (dysuria). The classic male "drip" of gonorrhea.

DGI Triad

DISSEMINATED INFECTION

Dermatitis (pustules) · **G**oo joints (arthritis/tenosynovitis) · **I**ndividual fever. Hospitalize immediately.

"60 & 7"

PARTNER & ABSTINENCE RULE

Notify partners from past **60 days**. Abstain for **7 days** after treatment AND until partners are treated.

EYE-rythromycin

NEWBORN PROPHYLAXIS

Newborns get **EYE**-rythromycin in the **EYES**. Lower conjunctival sac, inner → outer canthus, within 1 hour of birth.

Pattern Recognition Quick-Hits

- **Yellow-green discharge + dysuria + new partner** = think gonorrhea/chlamydia → NAAT.
- **Fever + migratory arthritis + skin pustules on extremities** = DGI until proven otherwise.
- **Newborn with bilateral purulent conjunctivitis at days 2–5** = ophthalmia neonatorum.
- **"Chandelier sign" on cervical motion** = PID.
- **RUQ pain + recent PID** = Fitz-Hugh-Curtis (perihepatitis).

NEXT GENERATION CLINICAL JUDGMENT MEASUREMENT MODEL

NCJMM Six-Step Scenario

CLINICAL SCENARIO

A 22-year-old female presents to the women's health clinic with a 5-day history of yellow-green vaginal discharge, burning with urination, and lower abdominal pain. She reports a new sexual partner 2 weeks ago and inconsistent condom use.

VITAL SIGNS:

T 38.2 °C (100.8 °F), HR 98, BP 118/72, RR 18, SpO_2 99%. Pelvic exam reveals

CERVICAL MOTION TENDERNESS

, friable cervix, and copious purulent cervical discharge. Pregnancy test is negative. The patient is anxious and asks, "Is this serious? Will my partner have to know?"

1

STEP ONE

Recognize Cues

Relevant findings: yellow-green purulent discharge, dysuria, lower abdominal pain × 5 days, low-grade fever (38.2 °C), cervical motion tenderness, friable cervix, new sexual partner 2 weeks ago, inconsistent condom use, anxiety/stigma concerns.

2

STEP TWO

Analyze Cues

The constellation — *purulent discharge + dysuria + CMT + fever + recent unprotected sex* — is classic for **gonococcal/chlamydial cervicitis progressing to early PID**. CMT and fever elevate this beyond uncomplicated lower-tract infection. ~50% co-infection rate means both pathogens are suspect. Pregnancy excluded simplifies pharmacologic choices.

3

STEP THREE

Prioritize Hypotheses

Priority #1: Pelvic inflammatory disease secondary to gonococcal infection ± chlamydia co-infection. *Why prioritized:* risk of tubal scarring, infertility, ectopic pregnancy, and disseminated infection. **Differentials to rule out:** UTI, ectopic pregnancy (excluded), appendicitis, ovarian torsion.

4

STEP FOUR

Generate Solutions

- Obtain endocervical NAAT for GC/CT *before* antibiotics; collect HIV, syphilis (RPR), hepatitis panel.
- Initiate CDC-recommended PID outpatient regimen: **Ceftriaxone 500 mg IM × 1 + Doxycycline 100 mg PO BID × 14 days + Metronidazole 500 mg PO BID × 14 days**.
- Mandatory public health reporting + partner notification (past 60 days).
- Pain management; reassess in 48–72 h; hospitalize if no improvement.

- Trauma-informed education on adherence, abstinence × 7 d after tx + partner clearance, condom use, retest at 3 months.

5

STEP FIVE

Take Action

- Collect cervical swab + NAAT urine, blood for STI panel.
- Verify no PCN allergy → administer Ceftriaxone 500 mg IM (deep, Z-track, gluteal/deltoid).
- First doses of doxycycline + metronidazole given, PO scripts dispensed.
- Acknowledge patient's concern: explain reporting is confidential within public health and that partner notification can be done anonymously if desired.
- Provide written instructions; arrange 48–72 h follow-up call/visit and 3-month retest.

6

STEP SIX

Evaluate Outcomes

Expected: fever resolves <48 h; pain and discharge improve by 72 h; patient completes 14-day oral regimen; partner(s) notified and treated; abstinence maintained 7 d post-tx; 3-month retest negative. **Red flags requiring escalation:** persistent fever, worsening pain, RUQ pain (Fitz-Hugh-Curtis), joint swelling/rash (DGI), inability to tolerate orals → hospitalize for IV therapy.