Infection Control and Isolation

Standard and transmission-based precautions, PPE order, hand hygiene, neutropenic precautions, sharps and room assignment

STANDARD PRECAUTIONS

For every client, every time, whether or not an infection is known.

- Hand hygiene (below)
- PPE by expected exposure: gloves for body fluids; gown, mask and eye protection for splashes
- Respiratory hygiene: mask coughing clients; seat them more than 3 ft apart
- New sterile needle and syringe for every injection
- Disinfect shared equipment and surfaces; don't shake used linen

Enhanced barrier precautions (nursing homes): gown and gloves for high-contact care of residents with MDROs, wounds or indwelling devices; no room restriction.

TRANSMISSION-BASED PRECAUTIONS

**Also contact. Transport: client masked (droplet, airborne), infected areas covered.*

TYPE	EXAMPLES	PPE AND ROOM
Contact	MRSA, VRE, RSV, scabies, head lice, impetigo	Gown and gloves on entry; dedicated equipment
Contact (enteric)	C. diff, norovirus	Contact PPE, soap-and-water hands, sporicidal (e.g., bleach) cleaning
Droplet	Influenza, pertussis, meningococcus, mumps, rubella, strep throat (children)	Surgical mask on entry
Airborne	Pulmonary or laryngeal TB, measles, varicella*, disseminated zoster*	Fit-tested N95; AIIR, door closed

CONDITION	PRECAUTIONS END
Meningococcus, group A strep, scabies, head lice, impetigo	24 h into effective treatment
Pertussis	5 days into effective antibiotics
Mumps	5 days after swelling begins
Rubella	7 days after rash onset
Measles	4 days after rash onset
Influenza	Longer of: 7 days from onset, or 24 h after symptoms resolve
Pulmonary TB	Improving on therapy, 3 negative smears on separate days
Varicella	All lesions dry and crusted
Norovirus	At least 48 h after symptoms resolve

Localized zoster: standard (lesions covered) if healthy; airborne plus contact if immunocompromised until dissemination is ruled out.

PPE ORDER

STEP	DONNING	DOFFING
1	Gown	Gloves
2	Mask or N95 (seal check)	Goggles or face shield
3	Goggles or face shield	Gown, rolled inside out
4	Gloves over gown cuffs	Mask or N95, by the ties
5	—	Hand hygiene

Hand hygiene first. Remove PPE at the doorway, except a respirator: remove it outside, door closed.

EXAM TIP Gloves on last, off first; mask off last. N95: fit test before first use and yearly, seal check every time.

HAND HYGIENE

- Alcohol rub (60% or more) preferred unless hands are visibly soiled; rub until dry, about 20 s
- Soap and water: visibly soiled, before eating, after the restroom, C. diff, norovirus
- Soap: lather at least 15 s (many texts say 20)
- Gloves never replace hand hygiene: clean hands before and after
- Nails no longer than the fingertip; no artificial nails with high-risk clients

EXAM TIP 'Which staff action needs correction?' Classic errors: alcohol rub after C. diff care (spores survive), N95 removed inside the room, gloves worn in the hall, two-handed recapping.

NEUTROPENIC PRECAUTIONS

- Severe neutropenia: ANC below 500/mm³, or expected to fall below 500 within 48 h
- Private room; strict hand hygiene
- No fresh or dried flowers or potted plants
- No rectal temperatures or rectal exams
- No ill staff or visitors; avoid crowds and recent live-vaccine recipients
- Fully cooked meat, fish and eggs; follow unit policy on raw produce
- Allogeneic stem cell transplant: protective environment (positive pressure, HEPA)

SAFETY Fever may be the only sign of infection: report 38 °C (100.4 °F) or higher at once. Positive pressure protects the client inside; negative pressure protects everyone outside.

SHARPS AND NEEDLESTICKS

- No recapping, bending or breaking; if unavoidable, one-handed scoop
- Activate safety devices; discard at point of use
- Replace containers at the fill line (about 3/4 full); never overfill
- Home teaching: FDA-cleared or heavy-duty plastic container; follow local disposal rules

1. Wash with soap and water; flush mouth, nose or skin with water; eyes with water or saline
2. Report immediately
3. Get evaluated now: source and worker tested for HIV, HBV, HCV
4. HIV PEP if indicated: start ASAP (within 72 h) for 28 days; don't wait for source results

SAFETY Squeezing the wound has no proven benefit. Do not apply bleach or inject antiseptics or disinfectants into the wound.

ROOM ASSIGNMENT

- AIIR: negative pressure, at least 6 (existing) or 12 (new or renovated) air changes/h
- No AIIR: transfer; meanwhile mask the client, private room, door closed, staff in N95s
- Private-room priority: airborne, heavy cough or sputum, stool incontinence, uncontained drainage
- Shared room: beds 3 ft or more apart, curtain drawn
- Immune staff when possible: measles, mumps, varicella, disseminated zoster. Measles: N95 even if immune
- Non-immune pregnant staff avoid rubella

EXAM TIP Roommates: same organism, or neither infected. Never pair an infected client with an immunocompromised one or one with an open wound.

Sources (25) are listed with links at rnbasics.com/sheets/infection-control.html. For education and exam preparation only. Not medical advice; follow current guidelines and your institution's protocols. RN Basics is an independent study aid not affiliated with any certifying body.