FUNDAMENTALS OF NURSING · STUDY GUIDE

Exam 4 Study Guide

This guide covers chapters 7 and 8, the two safety chapters. Chapter 7 explains why errors are mostly system failures and walks through the practices that stop them: correct identification, alarm response, fall prevention, restraint rules and emergency response. Chapter 8 is infection prevention: the chain of infection, the bundles that prevent device infections, hand hygiene, PPE, isolation categories and sterile technique. Many of the answers in these chapters are numbers and sequences, so the tables matter. Work each case with the steps covered.

WHAT THIS GUIDE COVERS

- Chapter 7 · culture of safety, high reliability, just culture, Swiss cheese model, near miss to sentinel event, RCA and FMEA, national patient safety goals, two identifiers, critical results, labeling and reconciliation, alarm fatigue, suicide screening, Universal Protocol, fall risk factors, Morse, Hendrich II and TUG, fall bundles and post fall care, restraint types, alternatives, orders, application, monitoring and documentation, RACE, PASS, electrical, radiation and hazardous material safety, seizure precautions and codes.
- Chapter 8 · the six links of the chain of infection, stages of infection, local and systemic signs, atypical signs in older adults, body defenses, HAIs and the CAUTI, CLABSI, SSI, VAP and C. difficile bundles, standard precautions, hand hygiene methods, PPE donning and doffing, contact, droplet and airborne precautions, protective environment, medical versus surgical asepsis, sterile field rules, sterile gloving, sharps safety and exposure response.

CHAPTER 7

Patient Safety and Quality

Read it in full: **Chapter 7 in the textbook**. Practice it in the lab: **Fall Risk Bench: Morse Score, Room Check and After a Fall** and **Restraint Clock: Alternatives, Orders and Monitoring**.

What to know

Most harm comes from faulty systems, not careless people. A **culture of safety** has open reporting without fear for honest mistakes, committed leaders, teamwork where anyone (including a

student) can stop an unsafe process, learning from events, and standardized high risk processes. **High reliability organizations** are preoccupied with failure and defer to expertise over rank.

Just culture responds to the behavior, not the outcome. **Human error** (an unintended slip) gets consoling and a system fix. **At risk behavior** (a shortcut whose risk is not recognized, such as skipping a slow scanner) gets coaching and removal of the reason for the shortcut. **Reckless behavior** (conscious disregard of a substantial risk, such as working intoxicated) gets sanctions.

In the **Swiss cheese model**, each defense has holes: latent conditions (understaffing, confusing equipment) and active failures (a slip). Harm passes only when holes line up. Event types: a **near miss** never reached the patient; a no harm event reached the patient without harm; an **adverse event** is harm from care; a **sentinel event** causes death, permanent harm or severe temporary harm; a never event should never occur. Report all of them, including near misses. **Root cause analysis** looks back after an event; **FMEA** looks ahead at a risky process.

National patient safety goals: use **two person specific identifiers** (name and date of birth or record number), never the room number, and have the patient state them; report **critical results** on time and read back; **label** every medication and container on and off the sterile field; handle anticoagulants carefully; **reconcile medications** at every transition; respond to **alarms** (never silence or disable without assessing); perform hand hygiene; **screen for suicide risk** with a validated tool and ask directly; address equity; and use the **Universal Protocol** (verification, site marking, time out) before procedures.

Alarm fatigue kills. Go to the patient first, fix the cause (probe, electrodes), and change limits only through an order and policy. Asking "Are you thinking about killing yourself?" does not plant the idea; it opens the conversation. Room safety checks remove cords, belts, bags and sharps, and high risk patients get one to one observation.

Falls are common and often injure. The strongest predictor is a **previous fall**. Other risks: age 65 and older, weakness, orthostatic hypotension, delirium or dementia, urgency, nocturia or diuretics, sedatives, opioids and other drugs, polypharmacy (often 5 or more drugs), equipment and an unfamiliar room. Screen on admission, after a change, after a transfer, after a fall and per policy.

The **Morse Fall Scale** adds six items: fall within 3 months 25, secondary diagnosis 15, ambulatory aid (cane, crutches or walker 15, furniture 30), IV or saline lock 20, gait (weak 10, impaired 20) and mental status (overestimates or forgets limits 15), for 0 to 125. Many facilities treat 45 or higher as high risk. **Hendrich II** high risk is 5 or more. The **Timed Up and Go** uses 3 meters; 12 seconds or longer suggests risk in community dwelling older adults. Judgment adds what scales miss, such as a first opioid dose.

Universal fall precautions: orient to the room and call light, bed low and locked, items in reach, nonskid footwear, clear dry floors, night light, hourly rounding, and teach to rise slowly. Higher risk adds identification, scheduled toileting, bed or chair alarms, a room near the station, assistance, medication review and therapy. Raise only the upper rails; four rails is a restraint. After a fall: stay and call for help, assess ABCs, consciousness and injury before moving (a shortened, externally rotated leg suggests hip fracture), move safely, notify the provider and family, watch neurologic status closely if the head was hit or the patient is on an anticoagulant, document facts, file an incident report, and update the plan.

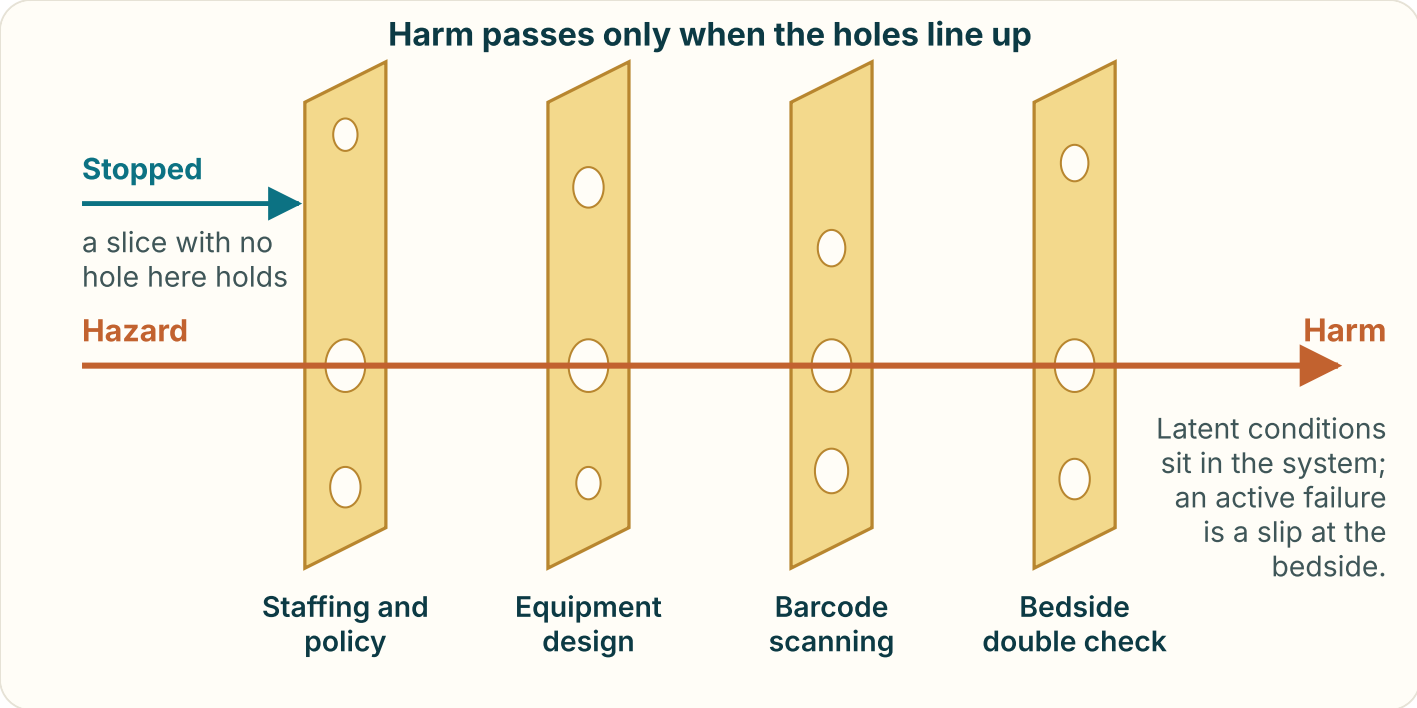
A device is a **restraint** by its effect: anything that limits movement or access to the body that the patient cannot easily remove, including four raised rails or a locked tray table. A **chemical restraint** is a drug used for behavior that is not standard treatment. Find the cause first (pain, hypoxia, full bladder, infection, low glucose, withdrawal, drugs, fear) and try alternatives: cover lines, scheduled toileting, low bed, alarms, reorientation, family or a sitter, de escalation.

Restraint orders are never PRN. In an emergency a trained RN may apply one and get the order right after. For violent or self destructive behavior: 4 hours for adults, 2 hours for ages 9 to 17, 1 hour under 9, renewable to 24 hours before the provider must reassess, with a face to face evaluation within 1 hour. Apply approved devices, pad bony areas, allow two fingers, tie to the **bed frame** (never the side rail) with a **quick release knot**, protect the airway and never restrain face down. Check every 15 minutes for violent restraint (often every 1 to 2 hours for non violent use), release at least every 2 hours for range of motion, skin, fluids and toileting, and remove at the earliest possible time.

Fire needs heat, fuel and oxygen. **RACE**: rescue, alarm, contain (close doors, turn off zone oxygen per policy once patients are supported), extinguish or evacuate. **PASS**: pull, aim at the

base, squeeze, sweep. Evacuate horizontally first, never by elevator. Class A is ordinary combustibles, B flammable liquids, C electrical, ABC multipurpose. Oxygen does not burn but makes everything burn hotter.

Electrical safety: three prong grounded plugs, no extension cords, tag damaged equipment, and turn off the power before touching someone being shocked. Radiation safety rests on **time, distance and shielding**; a dislodged implant is picked up with long forceps into the lead container, never by hand. Hazardous chemicals have a **safety data sheet**; flush eye splashes for at least 15 minutes. **Seizure precautions**: low bed, padded rails per policy, suction and oxygen ready. During a seizure stay, time it, protect the head, turn to the side, loosen clothing, and never restrain or put anything in the mouth. Five minutes or longer is **status epilepticus**.



Harm passes only when the holes line up. Every defense has gaps. Fix the system so the holes stop aligning, rather than blaming the last person in line.

LOCK THESE IN

- Just culture: console error, coach at risk behavior, sanction recklessness.
- Report near misses; the purpose of reporting is system improvement.
- Two identifiers stated by the patient; never the room number.
- Previous fall is the strongest predictor. Morse 45 or more is commonly high risk; TUG 12 seconds or more.
- After a fall: stay, assess before moving, notify, neuro checks if head strike or anticoagulant, document, report.
- Restraints: no PRN; 4, 2 and 1 hour limits; face to face within 1 hour; bed frame and quick release knot.
- RACE then PASS; aim at the base; horizontal evacuation first.
- Seizure: side, protect head, time it, nothing in the mouth, no restraint; 5 minutes is status epilepticus.

Key terms and comparisons: Morse Fall Scale items

Item	Finding	Points
History of falling	Within 3 months	25
Secondary diagnosis	More than one diagnosis	15
Ambulatory aid	Crutches, cane or walker / furniture	15 / 30
IV access	IV or saline lock	20
Gait	Weak / impaired	10 / 20
Mental status	Overestimates or forgets limitations	15
Range and cutoff	Total 0 to 125	45 or more commonly high risk

Priority rules: timing for restraint and emergencies

Situation	Number or sequence
Violent restraint order, adult	Up to 4 hours
Violent restraint order, age 9 to 17 / under 9	2 hours / 1 hour
Maximum before provider reassesses	24 hours
Face to face evaluation	Within 1 hour of applying
Checks (violent use)	Every 15 minutes, or continuous per policy
Release for care	At least every 2 hours
Fire	Rescue, alarm, contain, extinguish or evacuate
Extinguisher	Pull, aim at base, squeeze, sweep
Eye chemical splash	Flush at least 15 minutes
Status epilepticus	Seizure of 5 minutes or longer, or repeated without recovery

Worked cases

WORKED CASE 1 · SCORING THE MORSE FALL SCALE

Mr. Delacroix, 79, fell at home 2 months ago. He has heart failure and diabetes, walks with a walker, has a saline lock, takes short shuffling steps with difficulty rising (impaired gait) and keeps trying to get up alone, saying he does not need help.

STEP 1 · HISTORY OF FALLING

Fell within 3 months: 25.

STEP 2 · SECONDARY DIAGNOSIS

More than one diagnosis: 15.

STEP 3 · AMBULATORY AID

Walker: 15.

STEP 4 · IV ACCESS

Saline lock: 20.

STEP 5 · GAIT AND MENTAL STATUS

Impaired gait: 20. Forgets limitations: 15.

STEP 6 · ADD

25 + 15 + 15 + 20 + 20 + 15 = **110**, far above a common high risk cutoff of 45.

PLAN

Universal precautions plus scheduled toileting, a bed alarm, a room near the station, assistance with every transfer and a medication review.

WORKED CASE 2 · THE RESTRAINT CLOCK

An adult patient with violent behavior is placed in wrist restraints at 1300 after de escalation fails. The order is obtained right away.

STEP 1 · FACE TO FACE EVALUATION

Within 1 hour: by **1400**.

STEP 2 · ORDER EXPIRES

Adult limit 4 hours: **1700**, unless the patient meets release criteria earlier.

STEP 3 · MONITORING

Checks every 15 minutes: 1315, 1330, 1345 and so on, covering circulation, breathing, skin and need.

STEP 4 · RELEASE FOR CARE

At least every 2 hours: by **1500** for range of motion, fluids, toileting and skin care, one limb at a time.

RULE

Release as soon as criteria are met, even if time remains on the order. Reapplying needs a new order.

WORKED CASE 3 · A FALL WITH A HEAD STRIKE

At 0330 a nurse finds Mrs. Halloran, 82, on the floor by her bed. She takes apixaban, is alert, has a bump on her forehead, and her left leg looks shortened and turned outward.

STEP 1 · STAY AND CALL

Stay with her and call for help. Do not lift her back to bed.

STEP 2 · ASSESS BEFORE MOVING

ABCs, vital signs, level of consciousness and pupils; keep the leg still.

STEP 3 · NOTIFY

Tell the provider promptly. Expect hip imaging and likely a head CT because of the anticoagulant.

STEP 4 · MONITOR AND DOCUMENT

Neuro checks at set intervals, factual charting, an incident report, and an updated plan with scheduled toileting.

RULE

A head strike on an anticoagulant is serious even if she seems fine; bleeding can appear hours later.

WORKED CASE 4 · A FIRE IN THE ROOM

A wastebasket is burning next to Mrs. Ito, 70, who is in bed on 2 L/min oxygen. Flames are rising toward the curtain.

STEP 1 · RESCUE

Move her out of the room first, with portable oxygen if needed.

STEP 2 · ALARM

Pull the alarm and call the code with the location.

STEP 3 · CONTAIN

Close the door; zone oxygen is shut off per policy once patients are supported.

STEP 4 · EXTINGUISH OR EVACUATE

If small and an extinguisher is close, use PASS, aiming at the base, staying between the fire and the exit.

RULE

Grabbing the extinguisher first leaves the patient in danger.

TRAPS PEOPLE FALL INTO

- **Punishing every error.** Only reckless behavior is sanctioned. Slips get system fixes.
- **Skipping near miss reports.** Near misses show the same holes as harmful events, for free.
- **Asking "Are you Mr. Lee?"** A confused patient may say yes. Have the patient state name and date of birth.
- **Silencing an alarm from the hallway.** Go to the patient first and fix the cause.
- **Raising all four side rails.** That is a restraint and raises injury from climbing over.
- **Lifting a fallen patient straight back to bed.** Assess for injury first and use enough help or a lift.
- **Tying a restraint to the side rail.** Tie to the bed frame with a quick release knot.
- **Accepting a PRN restraint order.** Restraint orders are never PRN.
- **Holding a seizing patient down or using a tongue blade.** Nothing in the mouth and no restraint. Turn to the side and protect the head.

Chapter 7 self-test · ten items

1. A nurse picks up a look alike vial and catches the error before giving it. Under just culture, what is the best response?

A. Require the nurse to retake the medication course
B. Write up the nurse for a documented medication error
C. Take no action, since the patient was never harmed
D. Report it and redesign storage to separate the vials

D. Report it and redesign storage to separate the vials A slip is human error. The response is consoling and a system fix, and near misses are reported.

2. Which event is a sentinel event?

A. A delayed meal tray for a patient with diabetes
B. An unexpected death from a medication error
C. A dose caught by the pharmacist before dispensing
D. An extra stool softener given with no effect

B. An unexpected death from a medication error Sentinel events cause death, permanent harm or severe temporary harm. The first two examples are a near miss and a no harm event.

3. Which method correctly identifies a patient before giving a medication?

A. Have the patient state name and birth date; check the band
B. Ask, "Are you Mr. Adams?" and wait for him to answer
C. Read the name on the door and confirm the bed number
D. Recognize the patient from caring for him yesterday

A. Have the patient state name and birth date; check the band Two person specific identifiers stated by the patient and compared with the band. Room numbers and yes or no questions are unsafe.

4. A pulse oximeter alarms repeatedly with brief drops. What should the nurse do first?

A. Silence the alarm from the nurses' station desk
B. Turn the alarm volume down until the morning
C. Go to the bedside and check patient and probe
D. Lower the alarm limit so the noise will stop

C. Go to the bedside and check patient and probe Assess the patient first and fix the cause. Changing limits needs an order and policy.

5. Four new admissions are screened for falls. Which history carries the most weight?

A. Takes a daily multivitamin
B. Recently turned 66 years old
C. A fall in the past 3 months
D. Wears reading glasses daily

C. A fall in the past 3 months A previous fall is the single strongest predictor.

6. A patient with dementia keeps pulling at his IV. Which action should come first?

A. Ask the provider for an order for wrist restraints
B. Raise all four side rails and close the door
C. Give a sedative now so the IV stays in place
D. Look for a cause and cover the site with a sleeve

D. Look for a cause and cover the site with a sleeve Find the cause and use the least restrictive alternative. Rails and sedation for behavior can be restraints.

7. Where should a wrist restraint strap be secured?

A. To the bed frame with a quick release knot
B. To the side rail with a quick release knot
C. To the bed frame with a double square knot
D. To the side rail with a tight square knot

A. To the bed frame with a quick release knot The frame moves with the patient when the bed is adjusted, and a quick release knot can be undone fast.

8. A nurse discovers a small fire in a patient's room. What is the first action?

A. Pull the nearest fire alarm station
B. Remove the patient from immediate danger
C. Close every door on the hallway
D. Use the extinguisher on the flames

B. Remove the patient from immediate danger RACE begins with rescue of anyone in immediate danger.

9. A patient's radioactive implant falls onto the bed. What should the nurse do?

A. Wrap it in a towel and take it to the station
B. Pick it up with gloved hands and put it back
C. Leave the room and wait for the next shift
D. Use long forceps to place it in the lead container

D. Use long forceps to place it in the lead container Never touch it by hand. Time, distance and shielding protect staff, and radiation oncology is notified.

10. A patient begins a generalized seizure in bed. Which action is correct?

A. Turn the patient to the side and note the start time
B. Insert a padded tongue blade between the teeth
C. Leave briefly to get the provider from the hall
D. Hold the arms and legs still to prevent injury

A. Turn the patient to the side and note the start time Stay, time it, protect the head and turn to the side. Nothing goes in the mouth and the patient is not restrained.

CHAPTER 8

Infection Prevention and Control

Read it in full: **Chapter 8 in the textbook**. Practice it in the lab: **Break the Chain: Infection Links and Prevention Bundles** and **Isolation Precaution Picker**.

What to know

Infection is invasion and multiplication of organisms in tissue that causes illness. **Colonization** is organisms living on the body without illness, though they can still spread. The **chain of infection** has six links: infectious agent, reservoir, portal of exit, mode of transmission, portal of entry and susceptible host. Break any link and infection stops. **Hand hygiene** breaks the mode of transmission link and is the single most effective measure.

Transmission modes: **contact** is the most common in health care, direct (hands to wound) or indirect through a **fomite** (stethoscope, rail, call light). **Droplet** spread uses large droplets that fall within about 3 to 6 feet. **Airborne** spread uses tiny droplet nuclei that float and travel. Vehicle spread uses food, water or blood; vector spread uses insects or animals.

Stages: **incubation** (entry to first symptoms; the person may already be contagious), **prodromal** (vague symptoms, often highly contagious), **illness** (specific signs) and **convalescence**. Local signs are redness, warmth, swelling, pain and loss of function, often with drainage. Systemic signs are fever, chills, fast heart and breathing, malaise and, when severe, low pressure and confusion.

WBC above about 10,000/mm3 with more bands is a **shift to the left**. Draw ordered cultures before antibiotics.

Older adults often show **atypical** signs: little or no fever, with new confusion, falls, poor appetite or a decline in function as the first clue. Treat a new change in mental status as possible infection until proven otherwise.

Defenses include intact skin, mucous membranes, cilia and cough, urine flow, stomach acid, normal flora, inflammation and immunity. Devices bypass defenses; antibiotics disrupt flora and allow **C. difficile** overgrowth; steroids, malnutrition and high glucose weaken responses. Protein, vitamins C and A and zinc support healing.

A **health care associated infection** was not present or incubating on admission (in hospitals, commonly 48 hours or more after admission). **Bundles** work when every element is done every time. **CAUTI**: insert only for real indications, sterile insertion, closed system, bag below the bladder and off the floor, no dependent loops, routine perineal hygiene, remove as early as possible. **CLABSI**: maximal sterile barriers, chlorhexidine with alcohol prep, avoid the femoral site in adults, scrub the hub 5 to 15 seconds and let dry, transparent dressing every 7 days or gauze every 2 days or sooner if soiled, remove when not needed.

SSI: preoperative bathing, clip (never shave) only if needed, antibiotic within 60 minutes before incision (120 for some drugs) and stopped within 24 hours, glucose control, normothermia. **VAP**: head of bed 30 to 45 degrees, daily sedation breaks and wean checks, oral care with toothbrushing, subglottic suction. **C. difficile**: antibiotic stewardship, contact precautions, soap and water, bleach based cleaning and dedicated equipment. MRSA, VRE and CRE spread mainly by contact.

Standard precautions apply to every patient every time: hand hygiene, PPE for the expected exposure, respiratory hygiene, safe injections (one needle, one syringe, one time), sharps safety, cleaning, and safe linen handling (hold away from your uniform, do not shake). Use **alcohol based hand rub** for most care when hands are not visibly soiled; rub about 20 seconds until dry. Use **soap and water** when hands are visibly soiled, for C. difficile or spores, and per policy for

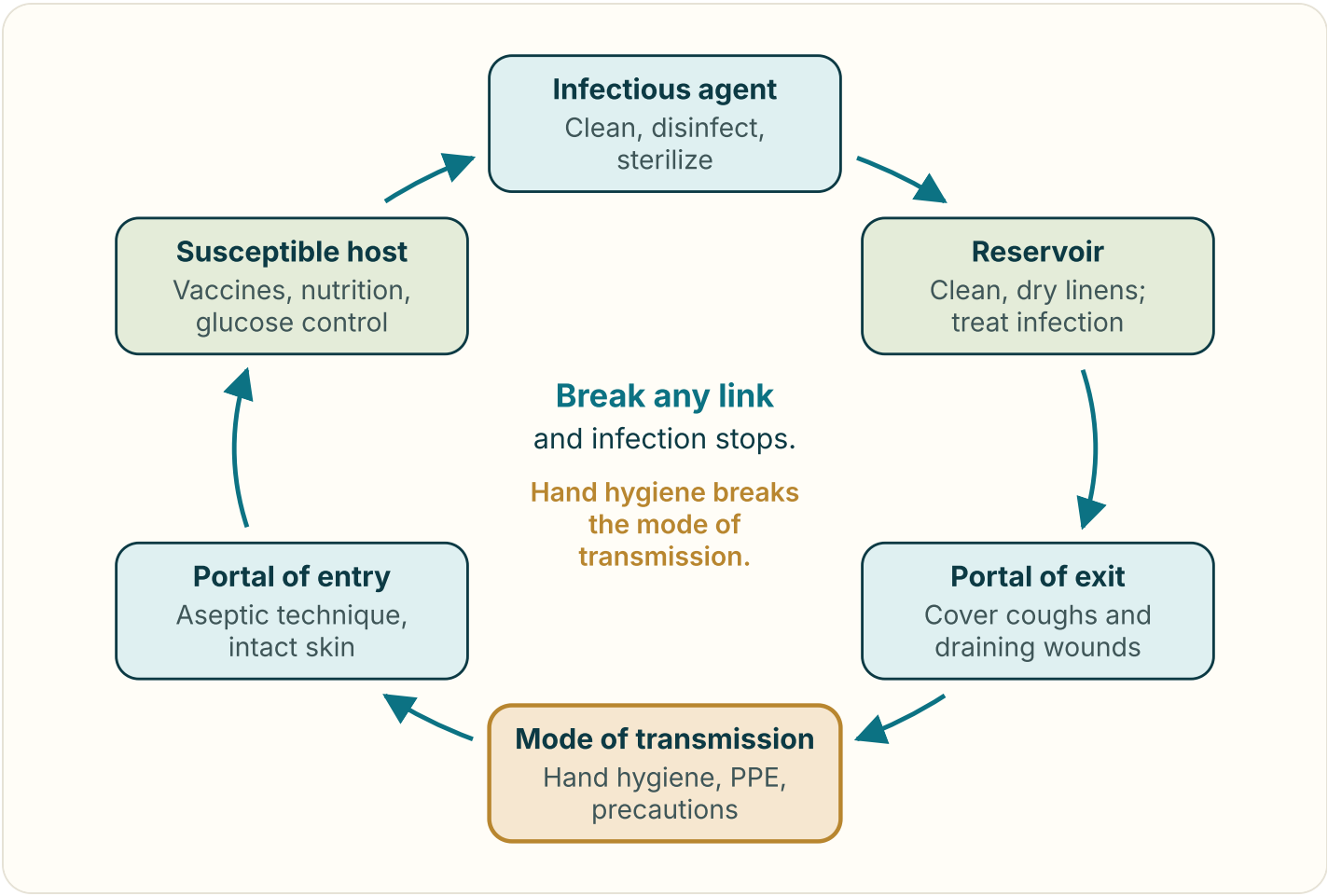
norovirus; scrub at least 15 to 20 seconds with hands lower than elbows. Keep nails short and natural.

PPE order: **on** gown, mask or respirator, goggles or face shield, gloves (gloves cover the gown cuffs). **Off** gloves, goggles, gown, mask, then hand hygiene. The front of the gown, gloves, mask front and goggles are contaminated; touch only ties, loops and bands. A respirator comes off after leaving the room and closing the door. N95 respirators need annual fit testing and a seal check each use.

Contact precautions: single room or cohort, gown and gloves on entry, dedicated equipment (MRSA, VRE, CRE, C. difficile, norovirus, RSV in young children, scabies, lice, impetigo, uncontained drainage). **Droplet**: surgical mask on entry, more than 3 feet between beds, door may stay open, mask on the patient for transport (influenza, pertussis, meningococcal disease, mumps, rubella, group A strep in young children). **Airborne**: negative pressure **airborne infection isolation room** with door closed, fit tested N95 or PAPR, surgical mask on the patient for transport (tuberculosis, measles, varicella and disseminated zoster). Start precautions on suspicion.

A **protective environment** shields severely immunocompromised patients: positive pressure, HEPA filtered air, at least 12 air exchanges per hour, no fresh flowers, plants or standing water. Isolation can cause loneliness and fewer staff visits, so check in often and remove precautions as soon as criteria are met.

Medical asepsis (clean technique) reduces organisms; **surgical asepsis** (sterile technique) eliminates all, including spores, and is used for anything entering sterile tissue, the bloodstream or a sterile cavity, such as urinary catheter insertion. Sterile field rules: sterile touches only sterile; the outer 1 inch is contaminated; only items above the waist and in view are sterile; moisture and air contaminate; open the far flap first and the near flap last; when in doubt, start over. For sterile gloving, pick up the first glove by the inside cuff and slide gloved fingers under the cuff of the second. Never recap a used needle with two hands; fill sharps containers only to about three quarters. After a needlestick: wash with soap and water, report at once, evaluate, and start HIV prophylaxis within hours when indicated.



Six links, one break. Each box shows a way to cut that link. Hand hygiene cuts the mode of transmission and is the single most effective measure.

LOCK THESE IN

- Six links: agent, reservoir, portal of exit, mode of transmission, portal of entry, susceptible host.
- Hand hygiene breaks the mode of transmission link and is the most effective single measure.
- Older adults: new confusion can be the fever. Cultures go before antibiotics.
- Every device: ask daily whether it is still needed. Bag below the bladder and off the floor.
- Alcohol rub unless visibly soiled or spores; C. difficile needs soap and water.
- PPE on: gown, mask, goggles, gloves. Off: gloves, goggles, gown, mask, hand hygiene.
- Airborne: negative pressure, door closed, N95 for staff, surgical mask for the patient in transport.
- Sterile: 1 inch border, above waist, in view, dry, far flap first; when in doubt, throw it out.

Key terms and comparisons: transmission based precautions

Category	Room and PPE	Classic organisms
Contact	Single room or cohort; gown and gloves on entry; dedicated equipment	MRSA, VRE, CRE, C. difficile, norovirus, scabies, lice, impetigo, RSV in young children
Contact (enteric)	As contact, plus soap and water and bleach based cleaning	C. difficile, norovirus, rotavirus
Droplet	Surgical mask on entry; beds more than 3 feet apart; door may be open	Influenza, pertussis, meningococcal disease, mumps, rubella, group A strep in young children
Airborne	Negative pressure AIIR, door closed; fit tested N95 or PAPR	Tuberculosis, measles, varicella, disseminated zoster
Protective environment	Positive pressure, HEPA filtered; no flowers, plants or standing water	Protects severely immunocompromised patients

Priority rules: bundles, hand hygiene and exposures

Item	Rule
CAUTI	Indication only; closed system; bag below bladder, off floor; remove early
CLABSI	Maximal barriers; chlorhexidine; scrub the hub 5 to 15 s; transparent dressing every 7 days
SSI	Clip, do not shave; antibiotic within 60 min before incision; glucose control
VAP	Head of bed 30 to 45 degrees; sedation breaks; oral care
Alcohol rub	Most care; about 20 seconds until dry
Soap and water	Visibly soiled, C. difficile and spores; at least 15 to 20 seconds
Sharps container	Replace at about three quarters full
Needlestick	Wash with soap and water, report at once, HIV prophylaxis within hours if indicated

Worked cases

WORKED CASE 1 · BREAKING EACH LINK

Mr. Bianchi, 72, has MRSA in a draining leg wound and shares a hallway with other surgical patients.

STEP 1 · AGENT AND RESERVOIR

Treat the infection as ordered; keep the dressing dry and intact so the wound is not an open reservoir.

STEP 2 · PORTAL OF EXIT

Contain the drainage with a dressing that holds it.

STEP 3 · MODE OF TRANSMISSION

Hand hygiene, contact precautions with gown and gloves, dedicated equipment.

STEP 4 · PORTAL OF ENTRY AND HOST

Protect other patients' skin and lines with aseptic technique; support his own nutrition and glucose control.

RULE

Of all these, hand hygiene breaks the link that health care workers use most.

WORKED CASE 2 · A CATHETER WITH NO REASON TO STAY

Mr. Okoro, 60, is on day 4 after a colon resection. His catheter was placed "for output monitoring." He walks and drinks well. The bag hangs on the side rail at hip level with urine pooled in a loop.

STEP 1 · RECOGNIZE THE CUES
No remaining indication, and the setup lets urine flow back toward the bladder.

STEP 2 · FIX TODAY'S PROBLEM
Hang the bag on the bed frame below the bladder and off the floor, and drain the loop toward the bag.

STEP 3 · FIX THE REAL RISK
Use the nurse driven removal protocol or contact the provider to remove the catheter.

RULE
Do not send a urine culture from a patient without symptoms. The best CAUTI prevention is no catheter.

WORKED CASE 3 · ISOLATION ON SUSPICION

Mr. Petrescu, 44, has a 6 week cough, night sweats, a 5 kg weight loss and blood in his sputum. He recently arrived from a country where tuberculosis is common.

STEP 1 · RECOGNIZE
The picture suggests pulmonary tuberculosis.

STEP 2 · START NOW
Airborne precautions begin on suspicion, not after sputum results.

STEP 3 · PLACE
Surgical mask on the patient, then the negative pressure room with the door closed.

STEP 4 · PROTECT STAFF
Everyone entering wears a fit tested N95 respirator.

RULE
The patient wears a surgical mask, not an N95, during transport.

WORKED CASE 4 · A BREAK IN STERILE TECHNIQUE

During urinary catheter insertion, the patient moves and the nurse's sterile gloved hand brushes her thigh outside the drape. No one else noticed.

STEP 1 · RECOGNIZE
The glove touched a nonsterile surface, so it is contaminated.

STEP 2 · STOP AND EXPLAIN

Tell the patient what happened.

STEP 3 · RESTART

Remove the contaminated glove and supplies and begin again with new sterile gloves or a new kit, with help holding her position.

RULE

Wiping the glove with antiseptic does not restore sterility. Surgical conscience means reporting your own breaks.

TRAPS PEOPLE FALL INTO

- **Waiting for a fever in an older adult.** Confusion, falls or poor appetite may be the first sign.
- **Starting antibiotics before the culture.** Draw ordered cultures first when possible.
- **Using alcohol rub after C. difficile care.** Alcohol does not kill spores. Use soap and water with friction.
- **Taking off the mask first.** Gloves come off first and the mask comes off last.
- **Giving the patient an N95 for transport.** The patient wears a surgical mask. The N95 protects staff.
- **Delaying isolation until a test is back.** Precautions start on suspicion.
- **Hanging the drainage bag on the side rail.** Rails move above the bladder. Use the frame, below the bladder and off the floor.
- **Thinking the drape edge is sterile.** The outer 1 inch is contaminated.
- **Squeezing a needlestick wound.** Wash with soap and water, then report at once.

Chapter 8 self-test · ten items

1. A nurse cleans a stethoscope between patients. Which link of the chain is this action breaking?

A. Portal of entry
B. Agent of infection
C. Susceptible host
D. Mode of transmission

D. Mode of transmission A shared stethoscope is a fomite. Cleaning it interrupts indirect contact transmission.

2. A resident who is usually oriented is suddenly confused, with temperature 37.2 C and dark urine. What should the nurse suspect?

A. A possible new infection
B. A drug side effect alone
C. Expected dementia progression
D. A normal change with aging

A. A possible new infection Older adults often present atypically, with confusion instead of fever.

3. Which practice belongs to the CAUTI prevention bundle?

A. Clamping the catheter tubing during walks
B. Keeping the drainage bag below bladder level
C. Changing the catheter every three days
D. Cleaning the meatus with antiseptic each hour

B. Keeping the drainage bag below bladder level The bag stays below the bladder and off the floor, the system stays closed, and the catheter comes out early.

4. What is the correct head of bed position for a patient on a ventilator, unless contraindicated?

A. 60 to 90 degrees
B. Flat at 0 degrees
C. 30 to 45 degrees
D. 10 to 15 degrees

C. 30 to 45 degrees Elevation to 30 to 45 degrees reduces aspiration of secretions around the tube.

5. After caring for a patient with C. difficile, which hand hygiene method is correct?

A. A hand wipe with disinfectant
B. Alcohol based hand rub
C. Glove change without hand hygiene
D. Soap and water with friction

D. Soap and water with friction Alcohol does not kill spores. Friction and rinsing remove them.

6. Which removal order of PPE is correct?

A. Mask, gown, goggles, gloves
B. Gown, gloves, mask, goggles
C. Gloves, goggles, gown, mask
D. Goggles, mask, gloves, gown

C. Gloves, goggles, gown, mask Remove the most contaminated items first, and the mask last, followed by hand hygiene.

7. A child is admitted with suspected pertussis. Which precautions apply?

A. Droplet precautions
B. Protective environment
C. Airborne precautions
D. Contact precautions

A. Droplet precautions Pertussis spreads by large droplets. Precautions continue until 5 days of effective therapy.

8. A patient with suspected tuberculosis must go to radiology. What should the patient wear?

A. A face shield only
B. A surgical mask
C. An N95 respirator
D. No mask is needed

B. A surgical mask The patient wears a surgical mask during transport. Staff wear N95 respirators.

9. While setting up a sterile field, which item is considered contaminated?

A. Solution poured with the label against the palm
B. Anything within 1 inch of the drape's edge
C. Items in the center of the drape above waist
D. Sterile gauze dropped onto the field from above

B. Anything within 1 inch of the drape's edge The outer inch is treated as contaminated. The other actions keep sterility.

10. Right after being stuck by a needle used on a patient, what should a nurse do first?

A. Squeeze the site to make it bleed
B. Finish the shift and then report it
C. Apply bleach to the puncture wound
D. Wash the site with soap and water

D. Wash the site with soap and water Wash first, then report at once so prophylaxis can start within hours if indicated.

Cram sheet

Chapters 7 and 8 are full of numbers and sequences. Say each one out loud until it is automatic.

Safety, falls, restraints and emergencies

Item	Rule
Just culture	Error: console and fix; at risk: coach; reckless: sanction
Events	Near miss, no harm, adverse, sentinel, never event; report all
RCA versus FMEA	After the event versus before it
Identification	Two identifiers stated by the patient; never the room
Alarms	Patient first, fix the cause, change limits only by order
Fall predictor	A previous fall
Morse	0 to 125; 45 or more commonly high risk
TUG	3 meters; 12 seconds or more suggests risk
Restraint orders	No PRN; adult 4 h, 9 to 17 2 h, under 9 1 h; 24 h max; face to face within 1 h
Restraint care	Bed frame, quick release, two fingers, checks every 15 min (violent), release every 2 h
Fire	RACE; PASS at the base; horizontal first; no elevators
Seizure	Side, head, time, nothing in mouth, no restraint; 5 min is status epilepticus

Infection prevention

Item	Rule
Chain	Agent, reservoir, exit, transmission, entry, host
Best single measure	Hand hygiene
Shift to the left	More bands with WBC above about 10,000/mm3
HAI timing	Not present on admission; commonly 48 h or more after
CAUTI	Indication only, closed system, bag low and off floor, remove early
CLABSI	Maximal barriers, chlorhexidine, scrub the hub, remove when not needed
Hand hygiene choice	Alcohol rub routinely; soap and water if soiled or spores
PPE	On: gown, mask, goggles, gloves; off: gloves, goggles, gown, mask
Contact	Gown and gloves; MRSA, VRE, C. difficile, scabies
Droplet	Surgical mask; influenza, pertussis, meningococcus
Airborne	Negative pressure, N95; TB, measles, varicella
Sterile field	1 inch border, waist level, in view, dry, far flap first

Dr. Garg Learning · CC BY-SA 4.0