

## **FIRE SAFETY & PREVENTION (IN-DEPTH)**

### **FIRE TRIANGLE**

A fire needs **ALL 3**:

- **Heat**
- **Fuel**
- **Oxygen**

**Remove ANY one = fire stops**

## **FIRE PREVENTION**

### **General Prevention:**

- Do not overload outlets
- Inspect electrical cords
- Keep flammable materials away from heat sources
- Store oxygen properly
- No smoking in oxygen areas

### **Hospital-Specific Risks:**

- Oxygen-rich environments
- Electrical equipment (X-ray machines)
- Paper/linen supplies

## **FIRE EMERGENCY RESPONSE**

### **RACE (MUST MEMORIZE)**

- **Rescue** → remove patients from danger
- **Alarm** → activate fire alarm / call code
- **Contain** → close doors/windows
- **Extinguish** → if safe

## **FIRE EXTINGUISHERS**

### **PASS (HOW TO USE)**

- **P**ull the pin
- **A**im at base of fire
- **S**queeze handle
- **S**weep side to side

## TYPES OF FIRE EXTINGUISHERS

Class	Type of Fire
A	Wood, paper
B	Flammable liquids
C	Electrical fires
ABC	Multi-purpose (MOST COMMON in hospitals)

Electrical fire → **Class C**

### **FIRE CONTAINMENT**

- Close doors → slows spread
- Turn off oxygen if safe
- Do NOT use elevators
- Follow evacuation routes

### **FIRE PREPAREDNESS**

- Know fire exits
- Know extinguisher locations
- Participate in drills
- Keep hallways clear

## ELECTRICAL SAFETY

### **BASIC RULES**

- Never use equipment with damaged cords
- Keep hands dry
- Do not overload outlets
- Report malfunctioning equipment
- Use grounded outlets

### **HOSPITAL RISKS**

- X-ray machines
- Portable equipment
- Wet environments

### **WHAT TO DO IF EQUIPMENT MALFUNCTIONS**

- Stop using immediately
- Unplug if safe
- Tag and report

## ELECTRICAL SHOCK

### WHAT IS ELECTRICAL SHOCK?

Electric current passing through body → can cause:

- Burns
- Cardiac arrest
- Muscle spasms

### **!** DO NOT:

- Touch patient if still in contact with electricity

### CORRECT ACTIONS:

1. Turn off power source
2. Use non-conductive object (wood/plastic) if needed
3. Call for help
4. Check ABCs (Airway, Breathing, Circulation)
5. Begin CPR if needed

### SEVERITY FACTORS

- Voltage
- Duration
- Path through body

- **RACE = fire response**
- **PASS = extinguisher use**
- **Class C = electrical fire**
- **Oxygen increases fire risk**
- **NEVER touch patient during active shock**
- **Turn power OFF first**
- **Close doors to contain fire**

**1. A fire requires which three elements?**

- A. Water, heat, oxygen
- B. Heat, fuel, oxygen
- C. Fuel, water, air
- D. Heat, electricity, oxygen

**2. The FIRST step in RACE is:**

- A. Alarm
- B. Contain
- C. Rescue
- D. Extinguish

**3. What does PASS stand for?**

- A. Pull, Aim, Squeeze, Sweep
- B. Push, Aim, Stop, Spray
- C. Pull, Activate, Spray, Sweep
- D. Push, Alert, Squeeze, Sweep

**4. Electrical fires are classified as:**

- A. Class A
- B. Class B
- C. Class C
- D. Class D

**5. Which increases fire risk in hospitals?**

- A. Water
- B. Oxygen
- C. Lead aprons
- D. Gloves

**6. What should you do FIRST in an electrical shock situation?**

- A. Touch patient
- B. Call family
- C. Turn off power
- D. Start CPR

**7. What should NEVER be done during electrical shock?**

- A. Call for help
- B. Turn off power
- C. Touch patient directly
- D. Use nonconductive object

**8. Best way to contain a fire:**

- A. Open doors
- B. Close doors
- C. Add water
- D. Turn lights off

**9. Which extinguisher is most commonly used in hospitals?**

- A. Class A
- B. Class B
- C. Class C
- D. ABC

**10. Where should you aim a fire extinguisher?**

- A. Top of flames
- B. Middle of fire
- C. Base of fire
- D. Above fire

**11. Overloading outlets can cause:**

- A. Water damage
- B. Fire hazard
- C. Radiation exposure
- D. Infection

**12. What type of material fuels a Class A fire?**

- A. Gasoline
- B. Paper
- C. Electrical wires
- D. Metals

**13. Which action is part of fire preparedness?**

- A. Ignoring drills
- B. Blocking exits
- C. Knowing evacuation routes
- D. Overloading outlets

**14. If equipment sparks, you should:**

- A. Continue using it
- B. Ignore it
- C. Stop and report
- D. Pour water

**15. Which material is safe to use to move a shocked patient?**

- A. Metal rod
- B. Wet towel
- C. Wooden stick
- D. Bare hands

**16. What does oxygen do in a fire?**

- A. Stops fire
- B. Slows fire
- C. Fuels fire
- D. Has no effect

**17. What should you do after rescuing a patient in a fire?**

- A. Leave building
- B. Alarm
- C. Contain fire
- D. Use extinguisher

**18. Fire extinguishers should be used:**

- A. Always
- B. Only if trained and safe
- C. Never
- D. Only by firefighters

**19. What is the main danger of electrical shock?**

- A. Infection
- B. Burns only
- C. Cardiac arrest
- D. Radiation

**20. What should be checked regularly for safety?**

- A. Gloves
- B. Cords
- C. Masks
- D. Shoes

## FALLS & COLLISION ACCIDENTS + SPILLS

### WHY FALLS HAPPEN

- Weakness / mobility issues
- Dizziness (medications, post-op, contrast reactions)
- Elderly patients
- Poor communication
- Cluttered environment

### FALL PREVENTION STRATEGIES

#### BEFORE MOVING PATIENT

- Verify patient condition
- Ask: “Are you dizzy or weak?”
- Assess ability to move

#### DURING MOVEMENT

- Stay close to patient
- Use assistive devices if needed
- Support patient properly
- Move slowly

#### EQUIPMENT SAFETY

- Lock wheels (bed, stretcher, wheelchair)
- Keep bed low when possible
- Raise side rails if needed

#### AFTER POSITIONING

- Ensure patient is stable
- Call bell within reach
- Never leave unstable patient alone

### IF A PATIENT STARTS TO FALL DO NOT try to stop fall forcefully

#### Correct Action:

- Guide patient to floor
- Protect head
- Bend knees to lower safely

### IF A PATIENT FALLS

1. Stay with patient
2. Assess for injury
3. Call for help
4. Do NOT move patient if injury suspected
5. Report incident

## COLLISION ACCIDENTS

### COMMON CAUSES

- Moving too fast
- Poor visibility
- Cluttered hallways
- Not checking surroundings

### PREVENTION

- Move equipment slowly
- Look ahead when transporting
- Announce presence when turning corners
- Keep hallways clear
- Use proper lighting

### ! IF COLLISION OCCURS

1. Stop immediately
2. Check patient condition
3. Report incident
4. Document appropriately

## SPILLS

### TYPES OF SPILLS

#### 1. NON-HAZARDOUS

- Water
- Juice

#### 2. HAZARDOUS

- Blood/body fluids
- Chemicals

### ⚠ RISKS

- Slips and falls
- Infection spread
- Chemical exposure

## SPILL PREVENTION

- Clean immediately
- Use warning signs (“Wet Floor”)
- Keep work areas organized
- Dispose of waste properly

## CLEANING SPILLS

### NON-HAZARDOUS:

- Wipe immediately
- Dry area
- Place warning sign

### HAZARDOUS (BIOHAZARD):

- Wear PPE (gloves minimum)
- Use approved disinfectant
- Dispose in biohazard container

### CHEMICAL SPILLS:

- Follow SDS guidelines
- Use spill kit
- Report incident

### ! IMPORTANT RULES

- Never ignore a spill
  - Always mark area
  - Protect yourself FIRST
- 
- **Lock wheels before transfer**
  - **Never leave weak patient alone**
  - **Guide fall — don't stop it**
  - **Clean spills immediately**
  - **Use PPE for body fluids**
  - **Report ALL incidents**
  - **Move equipment slowly**
  - **Use "Wet Floor" signs**

**1. The MOST important step before moving a patient is:**

- A. Positioning
- B. Assess patient condition
- C. Lock doors
- D. Increase speed

**2. Which patient is at highest risk for falls?**

- A. Healthy adult
- B. Elderly patient
- C. Athlete
- D. Technician

**3. What should you do if a patient says they feel dizzy?**

- A. Ignore
- B. Proceed quickly
- C. Stop and assist
- D. Leave patient

**4. Wheels should be:**

- A. Unlocked
- B. Locked before transfer
- C. Removed
- D. Adjusted after transfer

**5. If a patient begins to fall, you should:**

- A. Grab forcefully
- B. Step away
- C. Guide to floor
- D. Lift patient

**6. After a fall, what is FIRST?**

- A. Move patient
- B. Assess injury
- C. Continue exam
- D. Leave area

**7. Which is a common cause of collisions?**

- A. Moving slowly
- B. Good lighting
- C. Cluttered hallways
- D. Clear pathways

**8. Best way to prevent collisions:**

- A. Move quickly
- B. Look ahead
- C. Ignore surroundings
- D. Run

**9. What should you do if equipment hits a patient?**

- A. Ignore
- B. Continue
- C. Check patient and report
- D. Leave

**10. What type of spill is blood?**

- A. Non-hazardous
- B. Hazardous
- C. Safe
- D. Chemical

**11. What PPE is required for blood spill?**

- A. Mask only
- B. Gloves
- C. None
- D. Shoes

**12. First step when seeing a spill:**

- A. Walk away
- B. Clean immediately
- C. Ignore
- D. Call later

**13. Wet floor signs are used to:**

- A. Decorate
- B. Warn others
- C. Clean faster
- D. Reduce lighting

**14. Chemical spills require:**

- A. Water only
- B. SDS protocol
- C. Ignoring
- D. Towels only

**15. When transporting a patient, you should:**

- A. Run
- B. Move slowly
- C. Close eyes
- D. Rush

**16. If a patient is weak, you should:**

- A. Leave them
- B. Assist them
- C. Ignore
- D. Move quickly

**17. What is the biggest risk of spills?**

- A. Fire
- B. Slips/falls
- C. Radiation
- D. Noise

**18. Hallways should be:**

- A. Cluttered
- B. Clear
- C. Dark
- D. Narrow

**19. What is FIRST in preventing falls?**

- A. Speed
- B. Assessment
- C. Equipment
- D. Lighting

**20. What should you NEVER do with a spill?**

- A. Clean it
- B. Ignore it
- C. Mark area
- D. Report

## **ERGONOMICS**

**Ergonomics** = designing work to fit the worker

### **Goals:**

- \* Prevent injury (especially back injuries)
- \* Improve efficiency
- \* Reduce fatigue

### **In Radiography:**

- \* Adjust table height
- \* Position equipment before moving patient
- \* Avoid awkward reaching
- \* Use assistive devices

**Poor ergonomics = chronic injury risk**

## **BODY MECHANICS**

### **PRINCIPLES**

#### **1. BASE OF SUPPORT**

- \* Feet shoulder-width apart
- \* Wide base = more stability

#### **2. CENTER OF GRAVITY**

- \* Keep patient/object close to body

#### **3. USE LEGS, NOT BACK**

- \* Bend knees
- \* Keep back straight

#### **4. AVOID TWISTING**

- \* Pivot with feet

#### **5. SMOOTH, CONTROLLED MOVEMENTS**

- \* Avoid jerking

#### **6. GET HELP WHEN NEEDED**

- \* Never lift heavy patient alone

### **COMMON ERRORS**

- \* Twisting while lifting
- \* Bending at waist
- \* Lifting too far from body
- \* Not locking wheels

## **BODY POSITIONS (PATIENT POSITIONING BASICS)**

### **Common Positions:**

- \* Supine → lying on back
- \* Prone → lying on stomach
- \* Lateral → side-lying
- \* Fowler's → semi-upright
- \* Sims → semi-prone

## **SUPPORT & PADDING**

### **PURPOSE:**

- \* Comfort
- \* Prevent injury
- \* Maintain position

### **Common Tools:**

- \* Sponges
- \* Pillows
- \* Sandbags

### **Key Points:**

- \* Support joints
- \* Protect bony prominences
- \* Prevent pressure injuries

## **HELPING PATIENTS CHANGE POSITIONS**

**STEPS:**

1. Explain procedure
2. Lock equipment
3. Use proper body mechanics
4. Move slowly
5. Support patient

**HELPING PATIENTS MOVE ABOUT****Ambulation Assistance:**

- \* Stand close
- \* Support weak side
- \* Use gait belt if needed
- \* Watch for dizziness

**High-Risk Patients:**

- \* Elderly
- \* Post-op
- \* Weak/dizzy

**LIFTING & TRANSFERRING PATIENTS****GENERAL RULES:**

- \* Lock wheels
- \* Lower bed to working height
- \* Use draw sheet
- \* Count before moving

**TYPES OF TRANSFERS:****Bed → Table**

- \* Use draw sheet
- \* 2+ people if needed

**Wheelchair → Table**

- \* Lock wheelchair
- \* Remove footrests
- \* Assist standing & pivot

**STRETCHER → TABLE**

- \* Align heights
- \* Use slide board if needed

**TRANSFER FROM WHEELCHAIR**

**Steps:**

1. Lock wheels
2. Remove footrests
3. Position close to table
4. Assist patient to stand
5. Pivot toward table
6. Lower patient safely

**IMMOBILIZATION****PURPOSE:**

- \* Prevent movement
- \* Improve image quality
- \* Reduce repeats

**METHODS:**

- \* Sponges
- \* Sandbags
- \* Straps
- \* Tape

**IMPORTANT RULE:**

- \* Immobilize body part, not entire patient

**Pediatric Patients:**

- \* Use gentle restraint
- \* Parent assistance if needed

** ACCIDENTS & INCIDENT REPORTS****DEFINITIONS:**

- \* Accident → event causing harm
- \* Incident → event that could have caused harm

**INCIDENT REPORT PURPOSE:**

- \* Legal documentation
- \* Improve safety
- \* Prevent recurrence

**WHEN TO REPORT:**

- \* Patient falls
- \* Equipment injury
- \* Medication/contrast reactions
- \* Collisions

#### **WHAT TO INCLUDE:**

- \* Facts only (NO opinions)
- \* Time/date
- \* What happened
- \* Actions taken

#### **! IMPORTANT RULES:**

- \* Do NOT chart “incident report filed” in patient chart
- \* Be objective
- \* Report immediately

- **Use legs, not back**
- **Lock wheels before transfer**
- **Keep patient close to body**
- **Avoid twisting**
- **Use assistive devices**
- **Immobilization reduces repeats**
- **Always support patient movement**
- **Report ALL incidents**
- **Objective documentation only**

**1. Ergonomics is best defined as:**

- A. Patient movement
- B. Designing work to fit worker
- C. Lifting techniques
- D. Positioning methods

**2. The MOST important principle of body mechanics:**

- A. Speed
- B. Use back
- C. Use legs
- D. Twist body

**3. Base of support should be:**

- A. Narrow
- B. Wide
- C. Uneven
- D. Irregular

**4. When lifting, the patient should be:**

- A. Far away
- B. Close to body
- C. Above head
- D. On floor

**5. Twisting while lifting can cause:**

- A. Strength
- B. Injury
- C. Balance
- D. Speed

**6. Supine position means:**

- A. On stomach
- B. On side
- C. On back
- D. Sitting

**7. Purpose of padding:**

- A. Decoration
- B. Comfort & support
- C. Speed
- D. Imaging

**8. First step before moving patient:**

- A. Lift
- B. Explain procedure
- C. Walk away
- D. Ignore

**9. High-risk fall patient:**

- A. Young adult
- B. Elderly
- C. Athlete
- D. Technician

**10. Before transferring from wheelchair:**

- A. Unlock wheels
- B. Lock wheels
- C. Remove seat
- D. Ignore

**11. Immobilization is used to:**

- A. Increase movement
- B. Prevent motion
- C. Cause pain
- D. Delay exam

**12. Which is an immobilization device?**

- A. Gloves
- B. Sponge
- C. Mask
- D. Apron

**13. When lifting heavy patient:**

- A. Do alone
- B. Get help
- C. Rush
- D. Ignore

**14. What reduces repeat exposures?**

- A. Movement
- B. Immobilization
- C. Speed
- D. Noise

**15. Incident report should include:**

- A. Opinions
- B. Facts
- C. Assumptions
- D. Blame

Infection occurs only when **all 6 links are intact**:

1. **Infectious Agent**
2. **Reservoir**
3. **Portal of Exit**
4. **Mode of Transmission**
5. **Portal of Entry**
6. **Susceptible Host**

**Break ANY link = stop infection**

## INFECTIOUS AGENTS

### **BACTERIA**

- Single-celled organisms
- Can reproduce independently
- Some form **spores** (very resistant)
- Example: MRSA, TB

### **VIRUSES**

- Require a host cell to reproduce
- Not killed by antibiotics
- Example: HIV, influenza, hepatitis

### **PROTOZOA**

- Single-celled parasites
- Often water/food-borne
- Example: malaria

### **FUNGI**

- Thrive in warm, moist areas
- Example: Candida (yeast infections)

### **PRIONS**

- Abnormal proteins
- Cause brain disease
- Very resistant to sterilization
- Example: Creutzfeldt-Jakob disease

## RESERVOIR OF INFECTION

Where microorganisms live and multiply:

- Humans (most common)
- Animals
- Water/food
- Surfaces (equipment, tables)

## SUSCEPTIBLE HOST

People at higher risk:

- Elderly
- Infants
- Immunocompromised
- Chronic illness patients

## MODES OF TRANSMISSION

### DIRECT CONTACT

- Person-to-person
- Example: touching wound

### INDIRECT CONTACT (FOMITES)

- Contaminated objects
- Example: X-ray table, IR, gloves

### VECTORS

- Insects/animals
- Example: mosquitoes

## VEHICLES

- Food, water, medications

### AIRBORNE

- Tiny particles (droplet nuclei)
- Stay in air long time
- Travel far distances
- Example: TB

### DROPLET

- Large particles
- Travel **3–6 feet**
- Example: influenza

## DISEASE INFORMATION

### HIV / AIDS

- Virus attacking immune system
- Spread through:
  - Blood
  - Sexual contact
  - Needle exposure
- NOT spread by casual contact

### HEPATITIS (B, C)

- Affects liver
- Spread through blood/body fluids
- High risk in healthcare workers

## 📄 TUBERCULOSIS (TB)

- Airborne disease
- Affects lungs
- Requires:
  - **N95 respirator**
  - **Negative pressure room**

## 👤 STANDARD PRECAUTIONS

Treat **ALL** patients as infectious

**Includes:**

- Hand hygiene
- PPE
- Safe handling of equipment
- Proper disposal of waste

## 🧼 MEDICAL ASEPSIS (CLEAN TECHNIQUE)

- Reduces number of microorganisms
- Used in radiography

## 🧴 HAND HYGIENE (MOST IMPORTANT)

**WHEN:**

- Before/after patient contact
- After removing gloves
- After body fluids

**METHODS:**

### 🧼 SOAP & WATER

- Required for:
  - **C. diff**
  - Visible contamination

### 🧴 ALCOHOL-BASED

- Routine use
- Fast and effective

**COMMON ERRORS:**

- Skipping after gloves
- Not enough time (20 sec)
- Long/artificial nails

## 🧹 HOUSEKEEPING

**PURPOSE:**

- Reduce reservoirs of infection

**KEY PRACTICES:**

- Clean surfaces between patients
- Use approved disinfectants
- Focus on high-touch areas

**HANDLING LINENS****RULES:**

- Wear gloves
- Do NOT shake linens
- Hold away from body
- Place directly in designated bag

Prevents airborne contamination

**CONTAMINATED ITEMS & WASTE****TYPES:****BIOHAZARD WASTE**

- Blood, body fluids
- Dispose in red bags

**SHARPS**

- Needles, blades
- Use sharps container
- NEVER recap

**OTHER WASTE**

- Follow facility policy

**SAFETY RULES:**

- Wear PPE
- Do not overfill containers
- Seal properly
  
- **Break chain of infection = stop disease**
- **Hand hygiene = #1 prevention**
- **TB = airborne (N95 + negative pressure)**
- **Droplet = surgical mask (3–6 ft)**
- **Fomites = contaminated objects**
- **C. diff = SOAP & WATER ONLY**
- **Never shake linens**
- **Sharps → NEVER recap**
- **HIV/Hepatitis = bloodborne**
- **Clean equipment between patients**

**1. Infection occurs when:**

- A. One link exists
- B. All links are present
- C. Only bacteria present
- D. Only host present

**2. Breaking the chain of infection:**

- A. Causes disease
- B. Stops infection
- C. Increases spread
- D. Has no effect

**3. Which is a virus?**

- A. TB
- B. HIV
- C. MRSA
- D. Fungus

**4. Reservoir is:**

- A. Entry point
- B. Where organisms live
- C. Exit route
- D. Transmission

**5. Susceptible host is:**

- A. Resistant person
- B. High-risk person
- C. Equipment
- D. Surface

**6. Fomites are:**

- A. Insects
- B. Objects
- C. Air
- D. Food

**7. TB is transmitted by:**

- A. Contact
- B. Droplet
- C. Airborne
- D. Vector

**8. Droplets travel:**

- A. 1 ft
- B. 3–6 ft
- C. 10 ft
- D. Unlimited

**9. HIV spreads through:**

- A. Air
- B. Casual contact
- C. Blood
- D. Food

**10. Hepatitis affects:**

- A. Lungs
- B. Brain
- C. Liver
- D. Skin

**11. Standard precautions apply to:**

- A. Sick patients only
- B. All patients
- C. None
- D. Staff only

**12. Medical asepsis:**

- A. Sterile technique
- B. Clean technique
- C. No cleaning
- D. Surgery only

**13. MOST important infection control:**

- A. PPE
- B. Hand hygiene
- C. Mask
- D. Gown

**14. Soap and water required for:**

- A. TB
- B. HIV
- C. C. diff
- D. Hepatitis

**15. Housekeeping reduces:**

- A. Oxygen
- B. Reservoirs
- C. Patients
- D. Exposure

**16. Linens should:**

- A. Be shaken
- B. Be held close
- C. Be bagged carefully
- D. Be ignored

**17. Sharps should:**

- A. Be recapped
- B. Be bent
- C. Be disposed properly
- D. Be reused

**18. Biohazard waste:**

- A. Regular trash
- B. Red bags
- C. Blue bags
- D. Paper bins

**19. Airborne requires:**

- A. Mask
- B. Gloves
- C. N95
- D. None

**20. Droplet requires:**

- A. N95
- B. Surgical mask
- C. Gloves
- D. Gown

**Surgical asepsis = complete elimination of ALL microorganisms (including spores)**

Used for:

- Surgery
- Invasive procedures
- Wound care

### MEDICAL vs SURGICAL ASEPSIS

Type	Purpose
Medical asepsis	Reduce microorganisms
Surgical asepsis	Eliminate ALL microorganisms

### **STERILIZATION**

**Process that destroys ALL microorganisms (including spores)**

#### **METHODS:**

##### **STEAM (AUTOCLAVE)**

- Most common
- Uses heat + pressure
- Reliable and fast



##### **CHEMICAL**

- For heat-sensitive items
- Requires proper contact time



##### **RADIATION**

- Industrial use
- **Sterile items must remain dry and intact**
- **Wet/tear = contaminated**
- **Expiration date matters**

### **STERILE FIELDS**

**DEFINITION:** Area free of microorganisms



##### **RULES**

##### **BASIC PRINCIPLES:**

- Only sterile touches sterile
- Never reach over sterile field
- Keep field **above waist level**
- Do not turn back on sterile field
- Keep field in sight at all times

### CONTAMINATION RULES:

- If in doubt → **consider contaminated**
- Moisture contaminates (strike-through)
- Edges (1 inch border) = contaminated

### MOVEMENT RULES:

- Face sterile field
- Do not talk, cough, or sneeze over field

**“When in doubt = contaminated”**

### SURGICAL GLOVING

#### TYPES:

- Open gloving
- Closed gloving (used with sterile gown)

#### OPEN GLOVING STEPS

1. Open sterile package
2. Touch **ONLY** inside of first glove
3. Put on first glove
4. Use gloved hand to handle second glove
5. Avoid touching skin

#### KEY RULES:

- Skin = non-sterile
- Outside of glove must remain sterile
- If contaminated → restart

#### REMOVING GLOVES

#### STEPS:

1. Grasp outside of glove
2. Peel off
3. Hold in gloved hand
4. Remove second glove without touching outside
5. Perform hand hygiene

#### APPLYING DRESSINGS

#### PURPOSE:

- Protect wound
- Prevent infection
- Absorb drainage

#### STEPS:

1. Perform hand hygiene
2. Apply sterile gloves
3. Clean wound (center → outward)
4. Apply sterile dressing
5. Secure dressing

#### KEY POINTS:

- Do NOT touch sterile dressing surface
- Maintain sterile field
- Use proper technique

## REMOVING DRESSINGS

### PURPOSE:

- Assess wound
- Prevent infection spread

### STEPS:

1. Perform hand hygiene
  2. Wear **non-sterile gloves**
  3. Remove dressing carefully
  4. Observe wound (color, odor, drainage)
  5. Dispose properly
  6. Perform hand hygiene
- Removal = **dirty procedure**
  - Application = **sterile procedure**

## CONTAMINATION RISKS

- Touching non-sterile surface
  - Wet surfaces
  - Dropping below waist
  - Turning away from field
  - Air exposure
- **Surgical asepsis = sterile**
  - **Sterilization kills ALL microorganisms**
  - **Sterile field must stay in sight & above waist**
  - **1-inch border = contaminated**
  - **Moisture = contamination**
  - **Only sterile touches sterile**
  - **Remove dressing = clean**
  - **Apply dressing = sterile**
  - **When in doubt → contaminated**

### 1. Surgical asepsis means:

- A. Clean technique
- B. Reduce bacteria
- C. Eliminate all microorganisms
- D. Hand hygiene

**2. Sterilization destroys:**

- A. Some bacteria
- B. Viruses only
- C. All microorganisms
- D. Dirt

**3. Most common sterilization method:**

- A. Air
- B. Steam
- C. Water
- D. Light

**4. A sterile field must be:**

- A. Below waist
- B. Visible at all times
- C. Ignored
- D. Covered

**5. The border of sterile field:**

- A. Sterile
- B. Contaminated
- C. Clean
- D. Dry

**6. Moisture causes:**

- A. Sterility
- B. Contamination
- C. Cleaning
- D. Protection

**7. If unsure about sterility:**

- A. Use item
- B. Ignore
- C. Consider contaminated
- D. Wash

**8. Only \_\_\_\_\_ touches sterile field:**

- A. Clean
- B. Sterile
- C. Dirty
- D. Air

**9. Open gloving requires:**

- A. Touching outside
- B. Touching inside only
- C. No gloves
- D. Water

**10. Removing gloves requires:**

- A. Touching outside
- B. Peeling carefully
- C. Ignoring
- D. Dropping

**11. Dressing removal uses:**

- A. Sterile gloves
- B. Clean gloves
- C. No gloves
- D. Mask only

**12. Dressing application uses:**

- A. Clean technique
- B. Sterile technique
- C. No technique
- D. Dirty technique

**13. Wound cleaning direction:**

- A. Outside → center
- B. Center → outward
- C. Random
- D. Circular inward

**14. If sterile field is below waist:**

- A. Safe
- B. Contaminated
- C. Clean
- D. Protected

**15. Turning back on sterile field:**

- A. Safe
- B. Required
- C. Contaminates
- D. Cleans

**16. Talking over sterile field:**

- A. Safe
- B. Risky
- C. Required
- D. Sterile

**17. Sterile items must be:**

- A. Wet
- B. Torn
- C. Dry & intact
- D. Open

**18. First step in dressing removal:**

- A. Gloves
- B. Hand hygiene
- C. Remove dressing
- D. Walk away

**19. Which is contamination?**

- A. Sterile touching sterile
- B. Wet surface
- C. Clean glove
- D. Dry item

**20. Glove outside is:**

- A. Non-sterile
- B. Sterile
- C. Dirty
- D. Wet