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Wounds & Hygiene

1. Integumentary System

The skin is the largest organ and has many functions, including:

- **Protecting** against microorganisms
- **Regulating temperature** and preventing **moisture** loss; injuries, like burns, can impair this ability.
- Sensing **pain**, **pressure**, and **temperature**

2. Pressure Injuries

Pressure injuries = localized **damage** to the skin and/or underlying tissue caused by prolonged **pressure, friction, and/or shear**.

- Prolonged pressure → Tissue ischemia and **necrosis**

Risk factors include **impaired mobility**, frequent moisture exposure, and **decreased sensory perception** (**TABLE 1**).

TABLE 1. RISK FACTORS FOR PRESSURE INJURIES

- ↓ **sensory perception** (neuropathy, paralysis)
- ↓ **mobility** (paraplegia, stroke)
- **Friction** and **shear**
- ↑ **moisture exposure (incontinence)**
- ↓ **nutrition**
- ↓ **perfusion** (peripheral vascular disease, diabetes mellitus)

Skin assessment

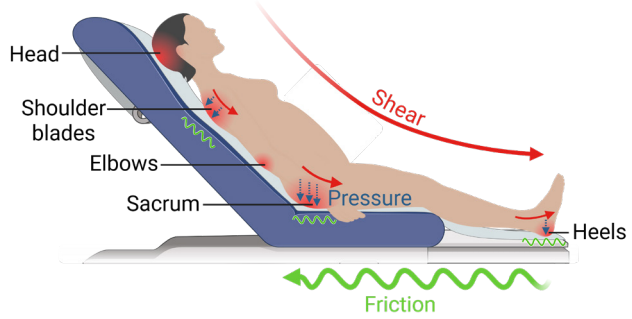
- Assess skin on **admission** and at **regular intervals** (e.g., Q4H).

Use the **Braden Scale** to assess pressure injury risk based on factors like mobility and nutrition (see **TABLE 1**).

- Score range: 6 to 23 (↓ score = ↑ risk)
- Score **<18 = at risk**.

- Inspect skin **under medical devices** and at **bony prominences** (sacrum, heels) where friction and shear injuries can occur (**FIGURE 1**).
- For clients with **darker skin**, assess for pressure injuries by comparing **temperature** and **blanching** of affected area to that of the surrounding skin.

FIGURE 1. PRESSURE POINTS



Pressure injury assessment

- Determine **stage** of pressure injury based on **extent** of tissue damage (**TABLE 2**).

Do not massage reddened areas; this can cause further tissue injury.

- Document wound location, size, color, tissue involvement, and **drainage** (exudate).
  - **Serous**: Clear, watery
  - **Serosanguineous**: Pink or red-tinged
  - **Sanguineous**: Bright red = active **bleeding**.
  - **Purulent**: Thick, yellow, green = **infection**.

Report signs of **infection**.

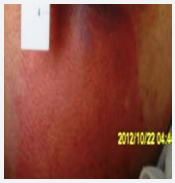
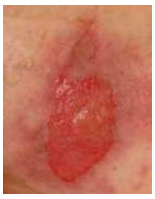
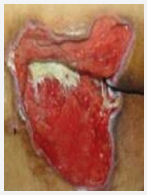
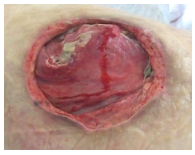
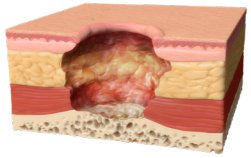
- **Purulent**, foul-smelling **drainage**, edema
- **Fever**, **warmth**, ↑ pain

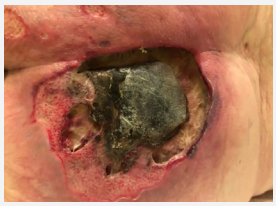
NCLEX Star Points

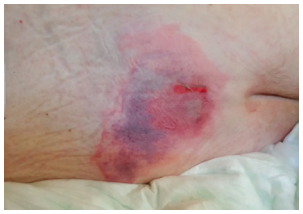
Pressure injury risk: Assess client risk for pressure injuries by using the **Braden Scale** (Score **<18 = at risk**). **Impaired mobility**, frequent **moisture exposure**, and **decreased sensory perception** are risk factors for pressure injuries.

2. Pressure Injuries, Continued

TABLE 2. TYPES OF PRESSURE INJURIES

Type	Description
Stage 1  	**Intact** skin with **non-blanchable** redness
Stage 2  	• **Partial-thickness** loss with shallow wound or **blister**
Stage 3  	• Full-thickness loss with visible **subcutaneous** tissue
Stage 4  	• Full-thickness loss with exposed **muscle**, **tendon**, or **bone**

Unstageable 	• Full-thickness loss; **slough** and/or **eschar** obstruct wound visualization.
	  • **Slough** = stringy yellow or white tissue.
	  • **Eschar** = black, brown, or tan necrotic tissue.
	• Slough and eschar must be **removed (debrided)** to visualize and stage the wound bed.

Deep tissue pressure injury 	• Non-blanchable, **dark discoloration** (red or purple) that feels **spongy** or **boggy**

2. Pressure Injuries, Continued

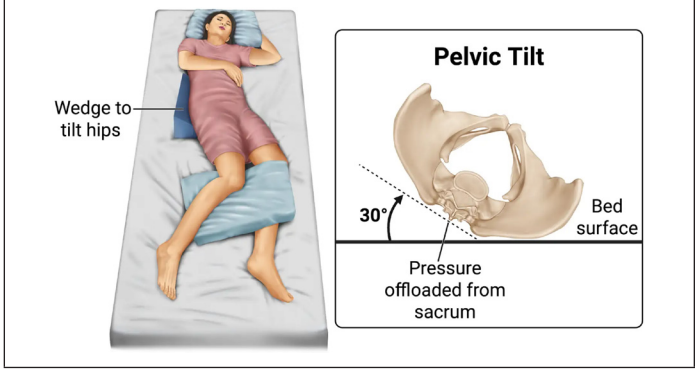
Nursing interventions

#1 priority = prevention of pressure injuries. Nursing care for pressure injury prevention focuses on:

1. **Repositioning** and **offloading** pressure
2. **Protecting** skin
3. Promoting **nutrition** and **hydration**

1. **Reposition** and **offload** pressure:
   - ★ **Turn** immobile clients at least **every 2 hr**.
   - **Tilt**: Use a **30-degree lateral tilt** to ↓ pressure on bony prominences (trochanters, sacrum) (**FIGURE 2**).
   - **Lift**
     - ★ Elevate **HOB** to **≤30 degrees**.
     - ★ Use **pillows**, wedges, heel protectors, and **mattress overlays** (egg-crate).
       - Do not use donut cushions when seated; ↓ perfusion to the area.
       - Use **lifting devices** (draw sheet, mechanical lift).
         - **Do not drag** or **pull** client, which can cause friction and shear.

FIGURE 2. 30-DEGREE LATERAL TILT



2. **Protect** skin:
   - Use **mild soap** and **warm** water, **not hot**.
   - ★ For clients with **incontinence**, **keep** skin **dry**.
     - Use **absorbent pads** and **barrier creams**.
     - Immediately **change soiled linens**.
   - **Apply moisturizer** to intact skin to prevent cracking.
   - Apply **dressings** over wounds.

3. Promote **nutrition** and **hydration**:
   - Encourage ↑ **protein** and **fluid** intake to promote repair.
   - Monitor **weight** and **prealbumin levels** to assess for malnutrition.
   - If pressure injury is present, consult a **wound care specialist** and **dietitian** to optimize healing.

3. Wound Care

Poor wound management → Infection, delayed healing, and life-threatening **complications**

Wound dressings

- Protect wounds and help maintain a **moist healing environment** while removing **excess** drainage or exudate as needed.
- Dressing type is selected based on **wound characteristics** (e.g., absorbent dressings for **draining** wounds, moist dressings for **dry** wounds) (**TABLE 3**).
- Perform wound **dressing change**.
  - ★ **Premedicate** with oral analgesics **30-45 min** before wound care.
  - Don appropriate **PPE**; wear gown, mask, and goggles when there is a risk of **splash** (wound irrigation).
  - **Remove old** dressing by **pulling tape toward** the center of the wound.
  - ★ Don clean gloves, **cleanse** wound with sterile saline, and clean from **center to edges (least to most contaminated)** (**FIGURE 3**).
    - Do **not** use **povidone-iodine** or **hydrogen peroxide** (cytotoxic).
  - Perform **wound irrigation** as needed using **sterile** technique.
    - Gently flush wound from **top to bottom** until fluid runs **clear** (**FIGURE 3**).
  - Apply new dressing.
- ★ **Report** signs of **infection** (e.g., **foul odor**, **purulent** drainage) and anticipate:
  - **Wound culture**: **Irrigate** or **clean** wound **before** collecting culture directly from the wound base.
  - **Antibiotics** as prescribed
  - Maintain wound **drains** to remove drainage from **surgical wounds** (**TABLE 4**).

NCLEX Star Points

❷ **Pressure injury stages**: **Stage 1** wounds have **non-blanchable** redness, and **stage 2** wounds have **partial-thickness** loss with a shallow wound or **blister**. **Stage 3** wounds have **visible subcutaneous** tissue, and **stage 4** wounds have **exposed muscle**, **tendon**, or **bone**.

❸ **Pressure injury prevention**: To **prevent** pressure injuries and **offload pressure**, **turn** immobile clients **at least every 2 hours**, **lift HOB ≤30 degrees**, and **use pillows** and **wedges**. **Do not massage reddened areas**; this can cause further tissue damage.

3. Wound Care, Continued

TABLE 3. DRESSING TYPES

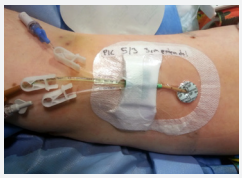
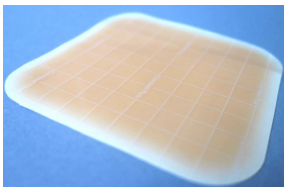
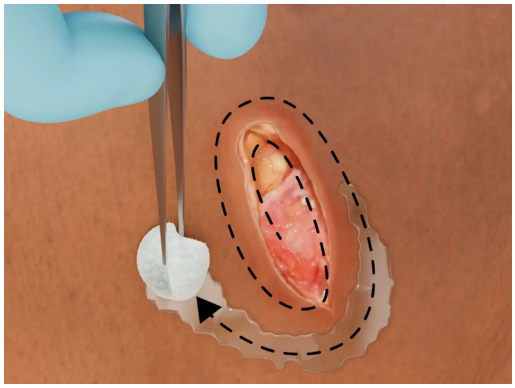
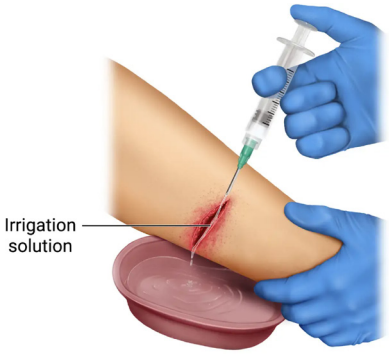
Dressing Type & Examples	Wound Type
Transparent film Protects wound and allows visualization 	**Dry**, superficial wounds (stage 1 pressure injuries)
Moist Maintains moisture for autolytic debridement • Hydrocolloid, hydrogel 	**Minimal drainage** or **dry** wounds (necrotic, granulating wounds)
Absorbent Absorbs excessive drainage • Foam, gauze, alginate 	Deep wounds with **heavy drainage**
Antimicrobial Accelerate healing • Contains silver sulfadiazine, chlorhexidine	**Infected** wounds and burns

FIGURE 3. WOUND CLEANING & IRRIGATION

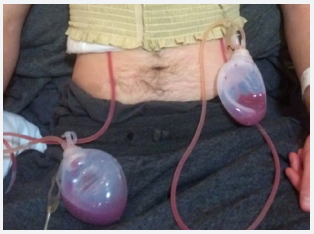




Using sterile technique, gently flush wound from **top to bottom** until fluid runs **clear**.

TABLE 4. COMMON WOUND DRAINS

Types: Jackson-Pratt, Hemovac



Nursing considerations

- **Compress drain reservoir** before sealing to maintain suction.
- Record **output** and notify HCP for **changes** in drainage **characteristics** or **amount**.

NCLEX Star Points

❹ **Wound care**: Cleanse wounds from **least to most contaminated** areas–from **center** to **edges**. **Report** signs of **infection**, including **foul odor** and **purulent** drainage.

4. Hygiene

Proper hygiene helps remove microorganisms and secretions to maintain **skin integrity** and **prevent infection**.

Bathing

- ★ Ensure a **comfortable temperature** and **privacy** (close curtains) before bathing.
- ★ Use **warm** water, **not hot water**.
- ★ Wash body from **clean to dirty** (head to toes), including in skin folds and under devices (SCDs).
- ★ **Pat skin dry**, especially in **skin folds** (axillae, under breasts).
- Apply **lotion**; do **not** apply **between toes** (↑ infection risk).
- Ask about grooming practices; do **not trim** hair **without permission**.

Perineal care

- Use a **clean wipe** or clean part of the wipe for **each stroke**.
- **Females**: Separate labia and clean **front to back** to prevent UTIs.
- **Males**: Clean in a **circular motion** from urethra to glans (from center outward).
  - **Uncircumcised**: Retract, clean, and return foreskin to prevent **constriction**.

Foot and nail care

- ★ Trim nails **straight across** to prevent ingrown nails.
- Perform specialized foot and nail care for clients with **peripheral vascular disease** or **diabetes mellitus** due to ↑ risk for foot injury and infection (**TABLE 5**).

TABLE 5. SPECIALIZED FOOT AND NAIL CARE

- **Inspect** feet **daily**.
- **Dry** feet thoroughly.
- ★ **Do not soak** feet in water or apply lotion **between toes**.
- **Do not trim** toenails without an HCP order due to risk for **client injury**.

Oral care

- ★ Place client in **semi-Fowler** position during oral care to ↓ **aspiration risk**.
- For clients with:
  - ↑ **bleeding risk** (taking anticoagulants): Use a **soft-bristle** toothbrush.
  - ★ **Ventilators**: Provide oral care with **chlorhexidine** to ↓ risk of ventilator-associated **pneumonia**.
  - **Radiation and chemotherapy treatments**: Provide **frequent oral care** and monitor for signs of **mucositis** (redness, mouth pain).
  - **Dentures**: Clean **daily** and store in water in a **labeled container** to prevent accidental disposal.
- **Do not** let children take **milk or juice to bed**, as it can ↑ risk for dental caries.

5. Postmortem Care

After a client's death, the nurse should provide culturally sensitive care while **preparing the body** for viewing and transport.

- Provide **emotional support** to the client's family and allow them time to view the body.
- ★ Respect **religious** and **cultural preferences** and ask family if they wish to **participate** in postmortem care.
- **Report death** to the appropriate **organ donation** agency or staff, if applicable.
- To prepare body:
  - Position **supine** with head on a pillow to prevent skin discoloration.
  - **Remove** medical **equipment** per agency policy.
  - Gently clean the body, **close eyes**, brush hair, insert dentures (if applicable), and cover with a sheet.
- Apply **identification tags** before transporting the body.

NCLEX Star Points

❺ **Hygiene**: **Wash** body from **clean to dirty** (head to toes) and **pat skin dry**, especially in **skin folds** (axillae, perineum).

NCLEX Top 5 Targets

❶ Assess a client's risk of pressure injury using the _____ **scale**; a **score** of **<** _____ indicates increased risk. What are three major **risk factors** for a **pressure injury**?

❷ What are the characteristics of a **stage 1 pressure injury**? A **stage 2** pressure injury? What tissue is **visible** in a **stage 3** pressure injury? A **stage 4** pressure injury?

❸ To **prevent** pressure injuries and **offload pressure**, **turn** immobile clients at least **every** _____ **hours**, **lift HOB** ≤_____ **degrees**, and use **pillows** and _____. The nurse should **massage reddened areas** to promote circulation **(True or False?)**.

❹ When cleansing a wound, **clean** from the wound **edges to** the **center (True or False?)**. What are **two signs** of a wound **infection**?

❺ Wash the client's body from _____ to _____ and **pat skin** _____, especially in **skin** _____.

Answers: 1. Braden, 18; impaired mobility, decreased sensory perception, and frequent moisture exposure 2. Stage 1: Non-blanchable redness; Stage 2: Partial-thickness loss with a shallow wound or blister; Stage 3: Visible subcutaneous tissue; Stage 4: Exposed muscle, tendon, or bone 3. 2, 30, wedges; False: This can cause tissue breakdown. 4. False: Cleanse from center to the edges (from least to most contaminated areas); Foul odor and purulent drainage. 5. clean, dirty, dry, folds

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