INTEGUMENTARY · NGN NCLEX 2026

Pressure *Injuries*

Localized damage to skin and underlying tissue from sustained pressure — a top-tested NCLEX topic spanning prevention, staging, intervention, and clinical judgment.

NPIAP 2016 Staging · Braden Risk Tool · NCJMM Clinical Judgment

1 Definition & Overview

What is it?

Localized damage to the skin and/or underlying soft tissue, usually over a bony prominence, caused by intense and/or prolonged pressure — often in combination with shear.

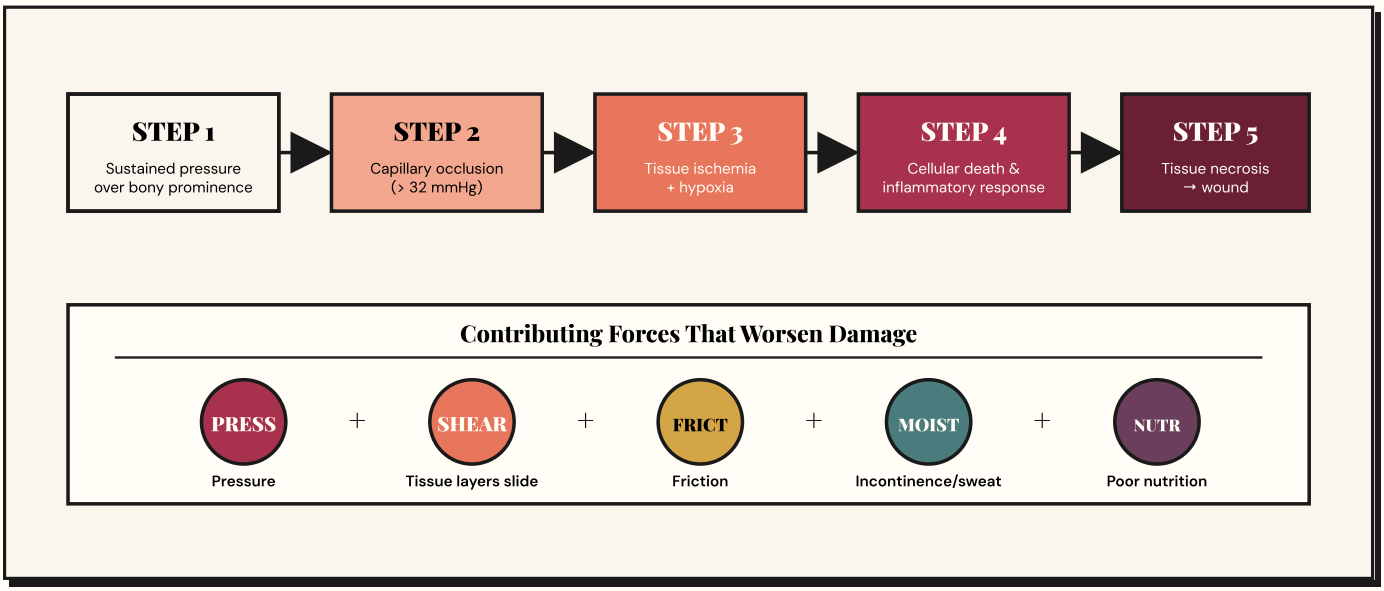
Why it matters

Pressure injuries are largely **preventable**, considered a nurse-sensitive quality indicator, and may be classified as a "never event" in hospitalized patients (Stage 3, Stage 4, Unstageable).

Capillary closing pressure is ≈ 32 mmHg. Sustained pressure above this level occludes blood flow → tissue ischemia → necrosis. Damage can begin in as little as 2 hours of unrelieved pressure.

Also called: *pressure ulcers · decubitus ulcers · bedsores · pressure sores*

2 Pathophysiology



Key concept: Pressure alone causes damage, but shear is often more destructive — when the head of the bed is elevated above 30°, the sacral skin "sticks" while deeper tissue slides downward, tearing capillaries and accelerating injury.

3 Signs & Symptoms — NPIAP Staging

1 Stage 1 · Intact Skin

- **Non-blanchable erythema** over intact skin
- May be painful, firm, soft, warmer or cooler
- Darker skin tones: look for color/temperature change
- 🚨 First reversible sign — act NOW

2 Stage 2 · Partial-Thickness Loss

- Partial-thickness loss with **exposed dermis**
- Pink/red, moist wound bed
- May appear as **intact or ruptured serum-filled blister**
- No granulation tissue, slough, or eschar

3 Stage 3 · Full-Thickness Loss

- Full-thickness skin loss with **adipose (fat) visible**
- Granulation tissue and rolled wound edges often present
- Slough and/or eschar may be present
- No exposed bone, muscle, tendon, or ligament

4 Stage 4 · Full-Thickness Tissue Loss

- Full-thickness loss with **exposed fascia, muscle, tendon, ligament, cartilage, or bone**
- Slough/eschar often visible
- 🚨 High risk for osteomyelitis & sepsis
- Often undermining/tunneling present

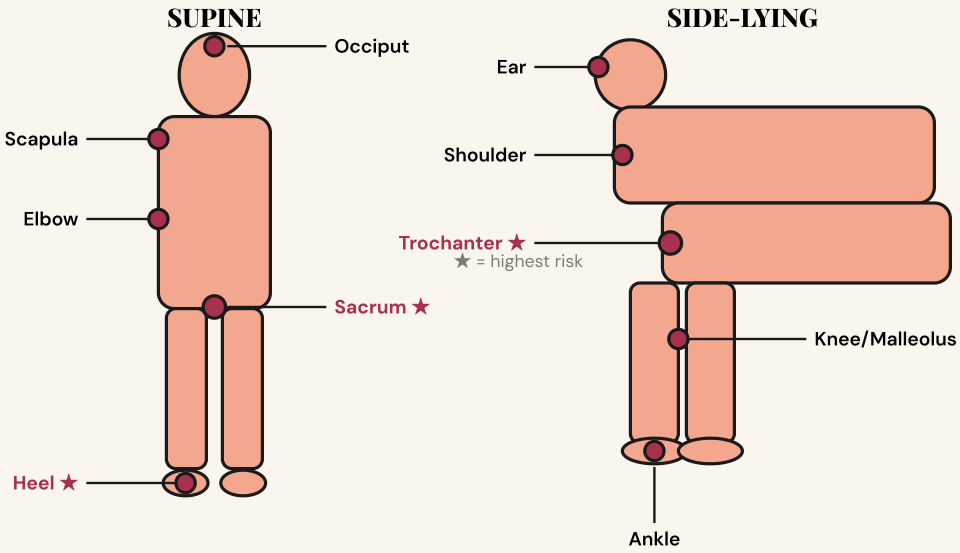
U Unstageable · Obscured Full-Thickness Loss

- Extent of damage **cannot be confirmed** because it is obscured by **slough or eschar**
- If slough/eschar is removed → likely reveals Stage 3 or 4
- ⚠️ **Stable (dry, adherent, intact) eschar on heels = do NOT debride** — serves as a natural cover

DTPI Deep Tissue Pressure Injury

- Persistent **non-blanchable deep red, maroon, or purple discoloration**
- May present as an **intact or non-intact skin** with a blood-filled blister
- Results from intense/prolonged pressure at the bone-muscle interface
- 🚨 Often evolves rapidly into a Stage 3 or 4 even with optimal treatment

Most Common Pressure Injury Sites



RED FLAG signs: non-blanchable erythema · purple/maroon discoloration (DTPI) · serum-filled or blood-filled blister · exposed adipose, muscle, or bone · foul-smelling drainage · spreading erythema with fever (sepsis warning)

4 Priority Nursing Interventions

A

Assess Skin Q Shift

Full head-to-toe skin inspection every shift and with every position change. Use Braden Scale on admission and per protocol.

R

Reposition Q 2 Hours

Turn and reposition at least every 2 hours in bed (q 1 hr if in chair). Use the **30° lateral position**, not full 90° side-lying (avoids trochanter pressure).

H

HOB ≤ 30°

Keep head of bed at or below 30° whenever clinically possible to minimize shear over the sacrum.

O

Offload Heels

"Float" heels OFF the bed using pillows under the calves or heel-suspension boots. Heels are the #2 most common site after the sacrum.

S

Support Surfaces

Use pressure-redistribution mattress (foam, air, low-air-loss). Lift sheets to move patients — never drag or pull (causes shear & friction).

M

Manage Moisture

Cleanse promptly after incontinence with pH-balanced cleanser; apply **barrier cream**. Use absorbent pads — never let the patient lie in moisture.

N

Nutrition & Hydration

High-protein diet (1.2–1.5 g/kg/day if at risk), **vitamin C, vitamin A, zinc**; adequate hydration (≥ 30 mL/kg/day unless contraindicated).

W

Wound Care by Stage

Stage 1: relieve pressure. Stage 2: hydrocolloid/film. Stage 3–4: moist wound healing, debride non-viable tissue (if not stable heel eschar).

D

Document & Photo

Document location, stage, size (length × width × depth), wound bed, drainage, surrounding skin, and pain — at minimum weekly.

⚡ **ABC priority reminder:** Always rule out infection/sepsis first in any patient with Stage 3, 4, or Unstageable injury — fever, tachycardia, hypotension, or new confusion warrants immediate provider notification and sepsis workup before routine wound care.

Braden Scale — Lower Score = Higher Risk

≤ 9	10–12	13–14	15–18	19–23
Severe	High	Moderate	Mild	Minimal

6 subscales (Sensory Perception · Moisture · Activity · Mobility · Nutrition · Friction/Shear). **Score ≤ 18 = AT RISK →** implement full prevention bundle.

5 Pharmacology & Wound Therapies

Agent / Therapy	Purpose	Key Side Effects / Considerations	Nursing Considerations
Topical antibiotics (silver sulfadiazine, mupirocin, bacitracin)	Treat or prevent local wound infection	Local irritation; silver sulfadiazine → leukopenia, sulfa allergy	Verify sulfa allergy before silver sulfadiazine; do NOT use on face
Enzymatic debriders (collagenase / Santyl)	Chemical debridement of slough and necrotic tissue	Periwound irritation; deactivated by heavy metals (silver, iodine)	Apply nickel-thick layer daily; do not combine with silver products
Hydrocolloid dressings (DuoDerm)	Stage 2 — maintain moist wound bed, autolytic debridement	Not for infected or heavily draining wounds	Change every 3–7 days or when leakage occurs
Foam / Alginate dressings	Absorb moderate to heavy exudate (Stage 3–4)	May dry out wound if drainage is minimal	Pack lightly into wound; do NOT overpack tunneling
Systemic antibiotics	Cellulitis, osteomyelitis, sepsis — NOT routine surface colonization	Vary by class; monitor renal/hepatic function	Obtain wound culture *before* first dose if possible
Negative Pressure Wound Therapy (Wound VAC)	Stage 3–4 — promotes granulation, removes exudate	Bleeding, pain at dressing change; never on exposed vessels/organs	Maintain airtight seal; monitor canister output, alarms; analgesia 30 min before change
Analgesics (acetaminophen, opioids, topical lidocaine)	Wound pain — especially during dressing changes	Opioids → constipation, sedation, respiratory depression	Premedicate 30–60 min before dressing changes; reassess pain post-intervention
Nutritional supplements (Vitamin C, zinc, protein shakes, arginine)	Wound healing support	Zinc toxicity → copper deficiency; high doses of Vit C → GI upset	Coordinate with dietitian; trend albumin, prealbumin, and weights

6 NCLEX Test Traps

✗ **WRONG** Massage the reddened bony prominence to "restore circulation."	✓ **RIGHT** NEVER massage red or bony areas — causes additional tissue trauma and deep tissue damage. Relieve pressure and reposition instead.
✗ **WRONG** Place a donut/ring cushion under the sacrum.	✓ **RIGHT** Donuts cause venous congestion and ischemia in the ring. Use a pressure-redistribution cushion instead.
✗ **WRONG** "Reverse-stage" a healing Stage 3 to Stage 2 in documentation.	✓ **RIGHT** Never reverse-stage. Document as "healing Stage 3 pressure injury." The original muscle/fat layer does not regenerate.
✗ **WRONG** Debride a stable, dry, intact eschar on the heel.	✓ **RIGHT** Leave stable heel eschar in place — it acts as a biological cover. Only debride if it is unstable, drainage, fluctuant, or signs of infection.
✗ **WRONG** Use a heat lamp on the wound to "dry it out."	✓ **RIGHT** Heat lamps cause burns and desiccate viable tissue. Modern wound care = **moist wound healing**.
✗ **WRONG** Reposition every 4 hours — patient is comfortable.	✓ **RIGHT** At-risk patients require repositioning at minimum **every 2 hours** in bed (q 1 hr in chair) regardless of comfort report.
✗ **WRONG** Confuse Stage 1 (non-blanchable erythema, intact skin) with DTPI.	✓ **RIGHT** Stage 1 = red, intact, blanching test fails. **DTPI = deep purple/maroon** discoloration with or without blood-filled blister — indicates underlying deep tissue damage.

✗ **WRONG** Position patient in full 90° side-lying after surgery.

→

✓ **RIGHT** Use the **30° lateral tilt** — full lateral places direct pressure on the trochanter, a high-risk bony prominence.

7 Patient & Family Education

1. **Inspect skin daily** — especially over bony areas (sacrum, heels, hips, elbows, back of head). Use a hand mirror or family member to check hard-to-see areas.
2. **Shift position every 15 minutes** when sitting in a wheelchair, and reposition in bed at least every 2 hours.
3. **Keep skin clean and dry**. Change wet pads/clothing immediately. Use barrier creams after incontinence episodes.
4. **Eat a high-protein diet** with fruits, vegetables, and 8 glasses of water daily — protein, vitamin C, and zinc are critical for skin integrity.
5. **Avoid the head of the bed above 30°** for long periods. Use the trapeze bar or lift sheet — never drag yourself across the sheets.
6. **Use prescribed support surfaces** (pressure-redistribution mattress, heel boots) — they only work if used consistently.
7. **Do NOT massage red areas** — instead, relieve the pressure and report to your nurse or provider.
8. **Report immediately:** new red, purple, or maroon areas; blisters; open wounds; foul odor; drainage; fever; or increased pain.

8 Memory Boosters & Mnemonics

"PRESSURE" Prevention Bundle

P R E S S U R E

- **P**osition change q 2 hours
- **R**educe shear (HOB ≤ 30°)
- **E**valuate skin every shift
- **S**upport surfaces & cushions
- **S**kin care — moisture & barrier
- **U**se Braden scale
- **R**ehydration + nutrition (protein, C, zinc)
- **E**levate heels off the bed

Stage Depth Quick-Recall

1 2 3 4

- **"1 = Red, but Not Dead"** — non-blanchable erythema, intact skin
- **"2 = Through the dermis, Blister or Boo-boo"** — partial-thickness, exposed dermis
- **"3 = See the FAT"** — full-thickness, adipose visible
- **"4 = Down to the BONE"** — fascia, muscle, tendon, or bone exposed

"NEVER DO" Pressure Injury Don'ts

- ❌ NEVER massage reddened bony prominences
- ❌ NEVER use donut/ring cushions
- ❌ NEVER reverse-stage a healing ulcer
- ❌ NEVER remove stable, dry heel eschar
- ❌ NEVER drag a patient across the sheets
- ❌ NEVER use heat lamps on wounds

Sites at Highest Risk: "S-H-O-T"

- **S** — **Sacrum** (#1 most common)
- **H** — **Heels** (#2 most common)
- **O** — **Occiput** & Ears (esp. infants & intubated)
- **T** — **Trochanters** & Ischial tuberosities

9 NCJMM Clinical Judgment Scenario

Clinical Scenario

Mrs. Henderson, a 78-year-old female, was admitted 4 days ago after a left hip fracture repair. She has a history of type 2 diabetes, mild dementia, and chronic incontinence. BMI is 19. She is now non–weight bearing on the left leg, sleeps most of the day, and has had two episodes of urinary incontinence in the last shift. Her Braden Scale score is **13**. During the morning skin assessment, the nurse notes a **3 cm area of non-blanchable redness on the sacrum**, intact skin, slightly warm to touch. Vital signs: T 37.2°C, HR 92, BP 128/76, RR 18, SpO_2 95% on RA.

STEP 1

Recognize Cues

Relevant cues: age 78, hip fracture w/ immobility, dementia, incontinence ×2, BMI 19 (poor nutrition), Braden 13 (**moderate risk**), 3 cm non-blanchable erythema on sacrum, intact skin, warmth. Vital signs are stable — no acute infection signs yet.

STEP 2

Analyze Cues

Non-blanchable erythema = **Stage 1 pressure injury**. Multiple risk factors converge: immobility (hip fx, sleeps most of day), moisture (incontinence ×2), poor nutrition (BMI 19), advanced age, and dementia (decreased awareness). Without intervention, this Stage 1 can progress to Stage 2+ within hours.

STEP 3

Prioritize Hypotheses

Highest priority: Existing Stage 1 pressure injury at high risk for progression. **Secondary:** Risk for additional pressure injury at heels and trochanters; risk for incontinence-associated dermatitis; risk for malnutrition impairing healing.

STEP 4

Generate Solutions

Implement full prevention bundle: reposition q 2 hr (using 30° lateral tilt, avoid sacral pressure), pressure-redistribution mattress, heel offloading, HOB ≤ 30°, cleanse and apply barrier cream after incontinence, place absorbent pads, consult dietitian for high-protein supplement, document and trend skin assessment, request order for hydrocolloid dressing if skin breaks.

STEP 5

Take Action

Immediately reposition off the sacrum to right 30° lateral. Cleanse the perineal area with pH-balanced cleanser, apply barrier cream. Float heels with pillows. Order/place pressure-redistribution mattress. Notify provider of the Stage 1 finding and Braden of 13. Initiate q 2 hr turning schedule on the white board. Consult dietitian. Document location, size (3 cm), characteristics, and stage of injury. Do **NOT** massage the area.

STEP 6

Evaluate Outcomes

Expected outcomes within 24–72 hr: non-blanchable redness resolves or does not progress; no new pressure areas develop; skin remains clean and dry; turning schedule completed every 2 hours; nutritional supplement tolerated; Braden score improves or stabilizes. **Re-evaluate:** if erythema progresses to a blister, open wound, or DTPI discoloration → escalate care, obtain wound consult, and reassess care plan.
