

NGN NCLEX 2026 · PERIOPERATIVE · INTEGUMENTARY

Dehiscence, Evisceration & *Surgical Site Infection*

Post-operative wound complications: how to recognize them early, what to do when the worst happens, and what every nursing student must teach the patient before discharge.

HIGH-YIELD

PRIORITY TOPIC

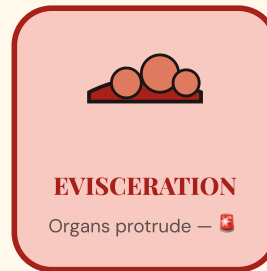
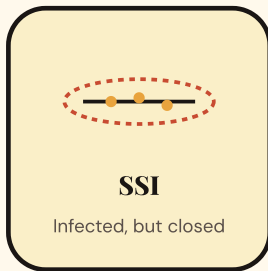
NCJMM READY

TEST PLAN: SAFETY & INFECTION CONTROL



Definition & Overview

Three complications on a spectrum — recognize the difference instantly



SSI

Surgical Site Infection: infection of the incision, deep tissue, or organ space within **30 days** post-op (or up to 90 days if an implant is present). Wound stays closed but becomes red, warm, swollen, drains pus.

INFECTION



Dehiscence

Wound separation: partial or complete splitting open of the surgical wound edges — sutures/staples fail and the layers of skin and subcutaneous tissue pull apart. Bowel/organs remain inside.

PARTIAL



Evisceration

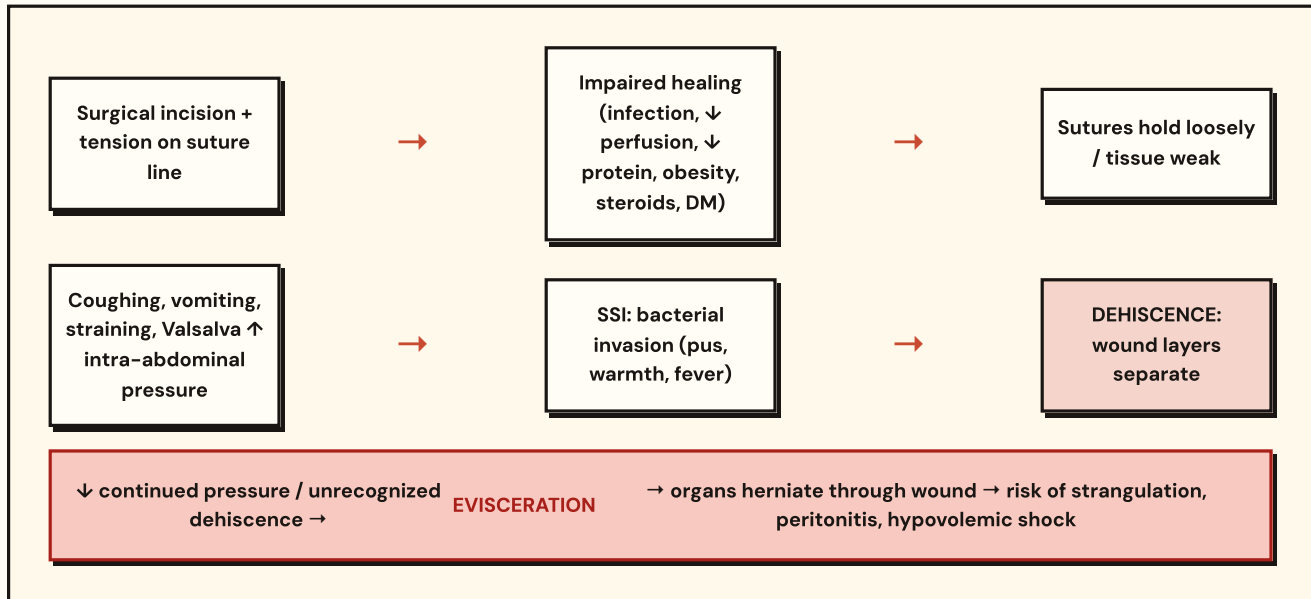
Protrusion of viscera: dehiscence has progressed — abdominal organs (usually intestines) protrude through the open wound. **Surgical emergency.** Risk of shock, peritonitis, death.

EMERGENCY

2

Pathophysiology

How a healing incision becomes a surgical emergency



📌 Highest risk window: Post-op days 4–5 — that's when sutures are weakest, before tissue tensile strength has caught up. The classic patient report is a sudden "popping" or "giving way" sensation with coughing or sneezing.

3

Signs & Symptoms

Early SSI cues vs. late emergency findings

EARLY (SSI Brewing)

- Low-grade fever ($> 100.4^{\circ}\text{F}$ / 38°C) after POD 3
- Tenderness, pain that increases instead of decreasing
- Erythema (redness) around incision $> 1\text{--}2\text{ cm}$
- Warmth and edema at wound edges
- Serous → serosanguineous → purulent drainage
- Foul odor from wound
- Delayed healing, induration
- $\uparrow$ WBC count (leukocytosis)

LATE / EMERGENCY

- ▶ Patient reports "something gave way" or "popping" sensation
- ▶ Sudden gush of pink/serosanguineous drainage saturating the dressing
- ▶ Visible separation of wound edges
- ▶ Protrusion of bowel/organs through wound (evisceration)
- ▶ Tachycardia, hypotension, pallor (shock)
- ▶ Sepsis findings: high fever, confusion, $\downarrow$ BP
- Distended abdomen, absent bowel sounds (ileus)

THE #1 RED FLAG ON THE NCLEX

A sudden gush of **pink/salmon-colored serosanguineous drainage** that saturates the dressing in a post-op patient — especially after coughing or vomiting on POD 4–5 — is the classic herald of **impending dehiscence/evisceration**. Act immediately, even before visible organ protrusion.



Priority Nursing Interventions

ABCs · Safety · NCLEX prioritization

For Suspected SSI

1

ASSESS the wound & vital signs

Note REEDA: **R**edness, **E**dema, **E**cchymosis, **D**rainage (amount/color/odor), **A**pproximation. Trend temperature, pulse, BP. Check WBC.

2

OBTAIN wound culture BEFORE antibiotics

Swab from the depth of the wound, not the surface or crust. **Culture first, then antibiotic** — or the antibiotic will skew the result.

3

NOTIFY the surgeon / HCP

Report fever > 100.4°F, purulent drainage, increasing pain, or wound changes. Anticipate orders for antibiotics, culture, possible incision and drainage (I&D).

4

PERFORM dressing changes with sterile technique

Hand hygiene → sterile gloves. Clean from **incision outward** (least to most contaminated). Document drainage characteristics every shift.

5

ADMINISTER antibiotics + analgesics

Give IV antibiotics on time — peak/trough as ordered. Manage pain so patient will cough, deep breathe, and ambulate.

For Dehiscence

1

STAY with the patient · CALL for help

Do not leave the bedside. Use the call light or have someone notify the surgeon and rapid response.

2

POSITION patient: low Fowler's, knees flexed

Bending the knees relieves tension on the abdominal wall and reduces further wound separation.

3

COVER wound with sterile saline-moistened gauze

Use sterile **0.9% normal saline** — never dry gauze, never water, never antiseptic. Keep moist until surgeon arrives.

KEEP NPO + prepare for OR

4

Patient will likely return to surgery for wound closure. Start IV access if not present. Monitor for shock.

For Evisceration — Surgical Emergency

EVISCERATION: STEP-BY-STEP RESPONSE

- 1 Stay with the patient — do NOT leave. Call for help / activate rapid response.
- 2 Position low Fowler's with knees bent — reduces abdominal strain.
- 3 Cover exposed viscera with sterile gauze saturated in warm sterile 0.9% NS. Do NOT attempt to push organs back inside.
- 4 Keep dressing moist — re-moisten with sterile saline; drying tissue = necrosis.
- 5 NPO immediately — patient is going to OR.
- 6 Start / maintain IV access — bolus fluids if hypotensive; anticipate antibiotics.
- 7 Monitor for shock: VS every 5–15 min — tachycardia, hypotension, pallor, cool skin.
- 8 Notify surgeon STAT and prepare patient for emergent OR.
- 9 Provide emotional support — reassure the patient; this is terrifying.

5

Pharmacology

Medications associated with SSI, dehiscence, and evisceration management

DRUG / CLASS	MECHANISM / USE	KEY SIDE EFFECTS	NURSING CONSIDERATIONS
Cefazolin (Ancef) — 1st-gen cephalosporin	Prophylactic antibiotic given within 60 min before incision	Rash, GI upset, anaphylaxis (cross-allergy with PCN)	Assess penicillin allergy; infuse 30–60 min pre-op; redose if surgery > 3 hours.
Vancomycin	For MRSA prophylaxis or treatment of SSI	Red Man Syndrome (flushing, rash, hypotension); nephrotoxic; ototoxic	Infuse over ≥ 60 min. Monitor trough levels (10–20 mcg/mL). Watch BUN/creatinine.
Piperacillin–Tazobactam (Zosyn)	Broad-spectrum for intra-abdominal infections, deep SSI	Diarrhea, hypokalemia, rash	Monitor renal function, electrolytes. Assess for C. diff (foul diarrhea).
Metronidazole (Flagyl)	Anaerobic coverage — abdominal/GI SSI	Metallic taste, disulfiram-like reaction with alcohol	Teach: NO alcohol during therapy and 3 days after. Avoid sun.
Morphine / Hydromorphone	Pain management — supports cough, deep breathing, ambulation	Respiratory depression, constipation, sedation, hypotension	Monitor RR (> 12). Have naloxone available. Premedicate before dressing changes.
Ondansetron (Zofran)	Antiemetic — prevents vomiting that strains wound	Headache, constipation, QT prolongation	Monitor ECG in cardiac patients. Give before nausea-inducing events.
Docusate (Colace) / Senna	Stool softener / laxative — prevents straining (Valsalva)	Mild cramping	Encourage fluids and fiber. Critical for ortho/abd post-ops to prevent dehiscence.
Corticosteroids (chronic use)	Not given to treat — but listed as a major RISK FACTOR	Impair collagen synthesis → delayed wound healing → ↑ dehiscence risk	If patient is on chronic steroids, anticipate delayed healing and reinforce teaching.
Insulin (sliding scale)	Tight glucose control in surgical patients	Hypoglycemia	Hyperglycemia (> 180 mg/dL) doubles SSI risk. Keep blood glucose 110–180 perioperatively.

6

NCLEX Test Traps

What students get wrong vs. what NCLEX wants

✗ WRONG

"Push the organs back in." NEVER. Pushing tissue back in causes contamination, perforation, and further damage. Will fail boards.

✓ RIGHT

Cover with sterile saline-moistened gauze and leave the organs as they are. Surgeon handles repositioning in the OR.

✗ WRONG

"Leave the patient to call the doctor." Never leave a patient with evisceration. Use the call light.

✓ RIGHT

Stay with the patient. Delegate the call to another staff member. Patient needs continuous monitoring for shock.

✗ WRONG

"High Fowler's position" to help breathing. Wrong — it increases abdominal tension and worsens separation.

✓ RIGHT

Low Fowler's with knees flexed (semi-Fowler's max). This relaxes abdominal muscles and reduces strain on the wound.

✗ WRONG

"Use dry sterile gauze" or "moisten with sterile water." Dry gauze sticks; water is hypotonic and damages tissue.

✓ RIGHT

Sterile 0.9% normal saline only. Keep gauze moist (warm if possible) until OR.

✗ WRONG

"Start antibiotics first, then culture." Antibiotics already in the bloodstream skew the culture result and miss the organism.

✓ RIGHT

Culture FIRST, then antibiotic. Always. (Same rule as meningitis, sepsis, pneumonia.)

✗ WRONG

Confusing **serosanguineous drainage on POD 1–2** (normal) with a dehiscence herald.

✓ RIGHT

The dehiscence herald is a **sudden GUSH of pink drainage on POD 4–5**, often after coughing. Time + amount + suddenness matter.

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Patient & Family Education

Discharge teaching to prevent post-op wound complications

1

Splint your incision.

Hold a firm pillow or folded blanket against the wound when coughing, sneezing, vomiting, or laughing — this absorbs the pressure spike.

2

Avoid heavy lifting.

No lifting > 10 lb (4.5 kg) for 4–6 weeks (or as instructed). No strenuous exercise, mowing, vacuuming.

3

No straining on the toilet.

Use stool softeners; eat fiber; drink water. Constipation triggers Valsalva = wound stress.

4

Eat for healing.

High protein (eggs, fish, lean meat, beans), vitamin C (citrus, peppers), zinc (nuts, seeds), and adequate calories.

5

Hand hygiene before touching the wound

or changing the dressing. Keep incision clean and dry per HCP instructions.

6

Don't smoke.

Nicotine constricts blood vessels → poor oxygen delivery → delayed healing → ↑ dehiscence and SSI risk.

7

Manage blood sugar tightly

if diabetic. Hyperglycemia impairs wound healing and immune function.

8

Call your surgeon if:

fever > 100.4°F, redness/swelling/warmth, pus or foul odor, increasing pain, wound edges separating, or pink/red fluid soaking the dressing.

9

Go to the ER immediately

if you see organs through the wound, you feel a "popping" sensation, or you have sudden severe pain and saturated drainage.

10

Attend all follow-ups.

Suture/staple removal is usually at 7–14 days. Keep your appointments.

8

Memory Boosters & Mnemonics

Pattern recognition for fast NCLEX recall



REEDA — Wound Assessment

R · E · E · D · A

R edness around incision

E dema (swelling)

E cchymosis (bruising)

D rainage — amount, color, odor

A pproximation of wound edges



STOP — Evisceration Response

S · T · O · P

S tay with patient · call for help

T uck knees (low Fowler's, knees bent)

O verlay sterile saline-moist gauze

P repare for OR (NPO, IV, VS, notify)



"POD 4–5 Pink Push"

Pink Pop = Problem

Post-op **day 4–5** is peak risk

A **pop / give-way** = wound separation

Pink/salmon serosanguineous gush = dehiscence herald

P repare to **P** osition and **P** rotect



Risk Factors — "BAD STITCH"

B · A · D · S · T · I · T · C · H

B MI high (obesity)

A ge (elderly)

D iabetes / hyperglycemia

S teroids (chronic)

T obacco / smoking

I nfection at wound site

T ension on suture line (coughing, vomiting)

C achexia / malnutrition (low protein, albumin)

H ematoma / abdominal distension

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NCJMM Clinical Judgment Scenario

Six-step Next Generation Clinical Judgment Measurement Model

CASE SCENARIO

A 68-year-old male is post-op day 4 from an exploratory laparotomy for bowel resection. He has a history of type 2 diabetes (HbA1c 8.4%), obesity (BMI 34), and chronic prednisone use for rheumatoid arthritis. While coughing during incentive spirometry, he calls out, "Something just popped in my belly!" The nurse pulls back the sheet and sees the abdominal dressing soaked with pink-tinged fluid and a loop of bowel protruding through the open incision. VS: T 100.2°F, HR 118, RR 26, BP 96/58, SpO₂ 94%.

STEP

1

Recognize Cues

Relevant cues: POD 4 (peak risk window), audible "pop," pink-tinged saturated dressing, visible bowel protrusion through incision, fever, tachycardia (HR 118), tachypnea (RR 26), hypotension (BP 96/58), borderline hypoxia. **Risk factors:** elderly, obese, uncontrolled DM (HbA1c 8.4%), chronic steroid use, abdominal surgery, coughing episode.

STEP

2

Analyze Cues

The cluster of findings — sudden "pop," pink serosanguineous gush, visible organ protrusion, plus tachycardia/hypotension — confirms **evisceration with early hypovolemic/septic shock**. The risk-factor stack (steroids, hyperglycemia, obesity, coughing) explains both impaired healing and the precipitating event. RR 26 and BP 96/58 indicate the patient is decompensating.

STEP

3

Prioritize Hypotheses

#1 Priority: Evisceration — surgical emergency, immediate risk of contamination, hemorrhage, peritonitis, and death. **#2:** Hypovolemic/septic shock — needs fluid resuscitation. **#3:** Impaired tissue perfusion to exposed bowel — risk of necrosis if tissue dries. **#4:** Acute anxiety/pain. Address #1 and #2 simultaneously.

STEP

4

Generate Solutions

Expected interventions: Stay with patient · activate rapid response · position low Fowler's with knees flexed · cover bowel with sterile saline-moistened gauze · keep moist · NPO · large-bore IV access with NS bolus · VS every 5 min · notify surgeon STAT for emergent OR · prepare consent · obtain CBC, BMP, lactate, type & screen · administer IV antibiotics as ordered.

STEP

5

Take Action

Nurse stays at bedside, calls rapid response. Repositions patient to low Fowler's with knees bent. Applies sterile gauze saturated in warm sterile 0.9% NS over exposed bowel — does **NOT** push organs back in. Confirms patent IV; second large-bore line placed; 1 L NS bolus started. VS reassessed every 5 min. Surgeon notified; OR prepared. Patient kept NPO. Family contacted. Patient reassured calmly.

STEP

Evaluate Outcomes



Effective response: BP rises to 110/68, HR drops to 96, RR 18, SpO₂ 98%. Bowel remains pink and moist (perfused). Patient transferred to OR within 30 minutes; wound surgically closed with retention sutures. Post-op: glycemic control tightened, steroid dose reviewed, abdominal binder applied, incentive spirometry continued with splinting. No further dehiscence; discharge planning includes wound care teaching, BAD-STITCH risk-factor counseling, and follow-up at 7 and 14 days.