NGN NCLEX 2026 · GI / GENITOURINARY ELIMINATION

Ostomy *Care*

Colostomies · Ileostomies · Urostomies — high-yield clinical judgment review built on the NCJMM framework

SURGICAL | ELIMINATION | SKIN INTEGRITY | BODY IMAGE

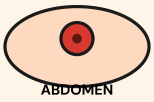
1 Definition & Overview

WHAT IT IS · WHY IT MATTERS

- An **ostomy** is a surgically created opening (a **stoma**) through the abdominal wall that diverts **stool or urine** when the normal route is diseased, obstructed, or removed.
- The **location of the stoma along the bowel** determines stool consistency — the more proximal, the more liquid and enzyme-rich the output (and the higher the risk for skin breakdown and dehydration).
- Ostomies may be **temporary** (allowing bowel rest and healing) or **permanent** (after total resection, e.g., abdominoperineal resection for rectal cancer).

Colostomy

LARGE INTESTINE → STOOL



Output ranges from **liquid** (ascending) to **formed** (sigmoid). Sigmoid is the most common.

Ileostomy

SMALL INTESTINE → LIQUID STOOL

Constant liquid effluent rich in digestive enzymes — **highest** risk of skin breakdown, dehydration, and electrolyte loss.

Urostomy

URINARY DIVERSION → URINE

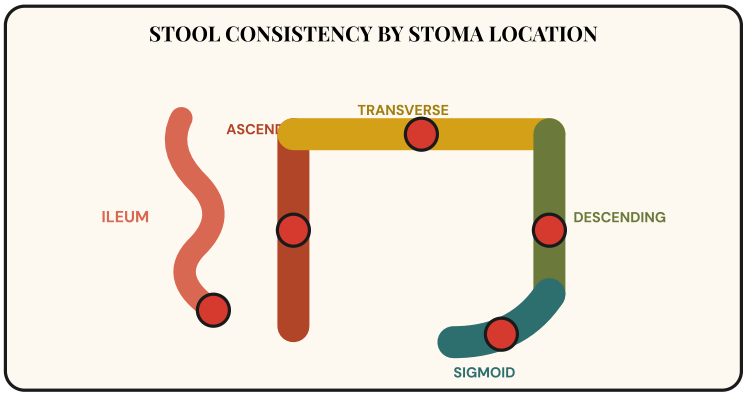
Ileal conduit diverts urine via a section of ileum. Urine should always have **mucus** (from the bowel segment) — this is normal.

2 Pathophysiology — Output by Location

WHERE THE STOMA SITS DETERMINES WHAT COMES OUT

Disease/Trauma → Bowel/Bladder Damage → Surgical Resection → Stoma Created →

Effluent Diverted to Pouch

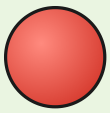


Stoma Location	Stool Consistency	Frequency	Skin Risk
Ileostomy	Liquid, enzyme-rich	Continuous	🔴 HIGHEST
Ascending Colostomy	Liquid → Semi-liquid	Continuous	🔴 High
Transverse Colostomy	Mushy, semi-formed	Frequent	🟡 Moderate
Descending Colostomy	Semi-formed → Formed	Less frequent	🟢 Low
Sigmoid Colostomy	Formed (most like normal)	1–2× daily	🟢 Lowest

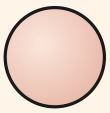
3 Stoma Assessment & Red Flags

HEALTHY VS. DANGEROUS FINDINGS

Normal stoma: beefy red or pink, moist, slightly raised above skin, painless. Initial post-op edema and small amounts of bleeding when wiping are **expected**.

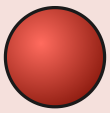


Beefy Red / Pink
Moist, slightly raised
NORMAL



Pale / Dusky Pink
Possible anemia or low perfusion
NOTIFY HCP

Dark / Purple / Black
Ischemia → necrosis
EMERGENCY



Excessive Bleeding
Beyond minor capillary ooze
NOTIFY HCP

Expected Post-Op Findings

- Stoma **pink/red, moist**; slight edema for 4–6 weeks
- Colostomy: **function within 2–4 days**
- Ileostomy: **functions almost immediately** (within hours)
- Initial **liquid** output even from a colostomy until bowel adapts
- Small amount of **mucus in urostomy urine** = normal

Complications to Watch

- **Prolapse:** stoma protrudes > expected length
- **Retraction:** stoma sinks below skin level
- **Stenosis / Necrosis:** narrowing or tissue death
- **Peristomal skin breakdown:** excoriation, fungal rash
- **Parastomal hernia** — bulge around stoma

RED FLAGS — Notify the HCP Immediately

- **Dark, purple, or black stoma** → ischemia/necrosis (surgical emergency)
- **No ileostomy output for 4–6 hours** + cramping/distension/N&V → obstruction
- **Sudden severe abdominal pain or rigid abdomen** → perforation
- **Decreased urinary output < 30 mL/hr** from a urostomy → obstruction or dehydration
- **Signs of dehydration / electrolyte imbalance** (especially ileostomy): dry mucosa, dizziness, dark urine, leg cramps, low Na^+/K^+
- **Bleeding from the stoma lumen** (not just wiping) — internal source

4 Priority Nursing Interventions

ABCS · SAFETY · SKIN · HYDRATION

Stoma & Pouch Care

- **Assess stoma color** and output q4h × 24h, then per shift
- **Empty pouch when 1/3 to 1/2 full** — fuller pouches leak under their own weight
- **Change appliance q3–7 days** or sooner if leaking, itching, or burning
- **Cut wafer 1/8 inch (≈ 2 mm) larger than the stoma** — too small cuts the stoma, too large exposes skin to effluent
- Cleanse peristomal skin with **warm water only**; pat dry — no soap with oils, lotions, or alcohol
- Best time to change pouch: **before meals**, when output is lowest

Systemic & Safety

- **Monitor I&O strictly** — ileostomy output > 1000–1500 mL/day = high risk
- Encourage **2–3 L fluid/day** (unless contraindicated)
- Monitor **electrolytes** — especially K^+ and Na^+ for ileostomies
- Provide **privacy** during care; address **body image** concerns
- Position upright when changing pouch — easier visualization, reduces gas escape
- **Consult ostomy / wound nurse (WOCN)** early

Colostomy Irrigation

Only for sigmoid/descending colostomies. Goal: regulate bowel pattern so the patient may not need a pouch.

- 500–1000 mL warm tap water
- Bag held 12–18 inches above stoma
- Same time daily
- **Cramping = slow or stop, lower the bag**

Urostomy Specifics

- Use **night drainage bag** to prevent reflux
- Encourage **acidic urine** (cranberry, vitamin C) to prevent UTI
- **Mucus in urine is normal**
- Output should be **≥ 30 mL/hr**
- Watch for **UTI** — cloudy/foul urine, fever, flank pain

5 Pharmacology

DRUGS THAT CHANGE OSTOMY OUTPUT · DRUGS TO AVOID

Loperamide (Imodium)

ANTIDIARRHEAL · SLOWS MOTILITY

USE	High-output ileostomy (>1000–1500 mL/day) to thicken effluent
WATCH	Constipation, ileus; hold if no output

Psyllium (Metamucil)

BULK-FORMING AGENT

USE	Thickens loose stool in colostomy/ileostomy
WATCH	Must take with adequate fluid; risk of obstruction if too little water

Oral Rehydration / Electrolyte Replacement

SODIUM · POTASSIUM · MAGNESIUM

USE	Ileostomy patients lose Na^+ and K^+ continuously
WATCH	Hyponatremia, hypokalemia → cramps, dysrhythmias

Topical Antifungals (e.g., Nystatin powder)

PERISTOMAL SKIN · CANDIDA

USE	Red rash with satellite lesions around stoma
WATCH	Apply *powder* first, then skin barrier — creams interfere with adhesion

⚠️ Medications to AVOID with an Ileostomy

- **Enteric-coated tablets** — designed to dissolve in the small intestine; pass through unabsorbed
- **Time-release / sustained-release capsules** — same issue, no time to release
- **Large or intact tablets** — may obstruct stoma; request liquid, chewable, or crushable forms
- **Laxatives** — generally unnecessary and dangerous

6 NCLEX Test Traps

WHAT STUDENTS GET WRONG

Stoma Color

✗ Pale / dark / black stoma noted — document and reassess in 1 hour.

✓ Pale or dark stoma → notify HCP *immediately*. Black = surgical emergency (ischemia).

Pouch Emptying

✗ Empty the pouch only when it is full to maximize wear time.

✓ Empty when **1/3 to 1/2 full** — weight breaks the seal and causes leaks.

Wafer Sizing

✗ Cut the opening to fit snugly against the stoma.

✓ Cut **1/8 inch larger** than the stoma — snug = trauma; far too large = skin breakdown.

Urostomy Output

✗ Mucus shreds in the urine = infection → call HCP.

✓ Mucus in urostomy urine is **normal** (from the bowel segment used for the conduit).

Irrigation Indication

✗ Irrigate the new ileostomy daily to regulate output.

✓ Irrigation is for **sigmoid/descending colostomies only** — never for ileostomies.

Ileostomy + Meds

✗ Give the patient's enteric-coated aspirin as ordered.

✓ Hold and contact HCP — enteric-coated and time-release meds are **not absorbed** through an ileostomy.

Initial Output

✗ A new sigmoid colostomy with liquid stool on day 2 indicates a complication.

✓ Expected — stool gradually **firms over weeks** as the bowel adapts.

Body Image / Communication

✗ "Don't worry — your ostomy will hardly change your life at all."

✓ Therapeutic: "Tell me what concerns you most about your ostomy." Acknowledge and explore feelings.

7 Patient & Family Education

DISCHARGE TEACHING PRIORITIES

Diet

Avoid early post-op:

- Gas-producing: beans, cabbage, broccoli, onions, carbonated drinks
- Odor-producing: fish, eggs, garlic, asparagus
- **Ileostomy obstruction risk:** popcorn, nuts, seeds, corn, raw celery, mushrooms, coconut

Encourage:

- **Chew thoroughly**
- Add foods one at a time
- Yogurt, parsley, buttermilk reduce odor

Hydration & Activity

- **2–3 L fluid/day** (especially ileostomy)
- Replace electrolytes with sports drinks during heat or illness
- Most activities can resume — walking, swimming (pouch is waterproof)
- **Avoid heavy lifting** for 6–8 weeks → hernia risk
- Discuss **contact sports** (use stoma guard)
- Sexual activity may resume; intimacy concerns are normal

When to Call the HCP

- Stoma turns **dark, purple, or black**
- **No output** from ileostomy > 4–6 hrs with cramping/N&V
- Severe abdominal pain or distension
- **Fever**, increased redness or drainage at site
- Persistent skin breakdown around stoma
- Signs of dehydration: dizzy, dark urine, dry mouth, weakness
- Uncontrolled diarrhea or bleeding

Psychosocial Support

Acknowledge grief, altered body image, and fears about odor, leakage, intimacy, and identity. Refer to a **WOCN (wound, ostomy, continence nurse)** and to support groups (United Ostomy Associations of America). Involve the patient in care *as soon as possible* — looking at and touching the stoma is a major step in adaptation.

8 NCJMM Clinical Judgment Scenario

APPLY THE 6-STEP FRAMEWORK

Scenario: A 58-year-old client is post-op day 2 from an ileostomy following a colectomy for ulcerative colitis. The nurse enters the room and assesses the stoma. The stoma appears **dusky purple**, the pouch is empty, and the client reports **cramping abdominal pain and nausea**. BP 92/56, HR 118, T 100.8°F, RR 22.

STEP 1

Recognize Cues

Dusky/purple stoma · empty pouch · cramping pain · N/V · ↓BP · tachycardia · low-grade fever.

STEP 2

Analyze Cues

Stoma color = ischemia/necrosis. No output + pain + N/V = obstruction. Vital signs suggest early sepsis or hypovolemia.

STEP 3

Prioritize Hypotheses

#1 Stoma ischemia/necrosis (surgical emergency). #2 Obstruction. #3 Hypovolemia/early sepsis.

STEP 4

Generate Solutions

Notify surgeon STAT · NPO · IV access + fluids · monitor VS q15min · prepare for possible OR.

STEP 5

Take Action

Notify HCP *immediately*; document stoma color, output, VS; place NPO; ensure 2 large-bore IVs; call rapid response if needed.

STEP 6

Evaluate Outcomes

Stoma returns to pink/red? VS stabilize? Output resumes? Pain controlled? Surgical revision required?

9 Memory Boosters

MNEMONICS & QUICK ASSOCIATIONS

"S-T-O-M-A"

STOMA ASSESSMENT

- **S** — Size & shape
- **T** — Tissue color (beefy red = good)
- **O** — Output (amount, consistency)
- **M** — Mucosa moist?
- **A** — Around the stoma — peristomal skin intact?

"ILEO = I LOSE"

ILEOSTOMY FLUID/ELECTROLYTE RISK

- **I** — Intake of fluids must be high
- **L** — Loss of Na^+ and K^+ is constant
- **O** — Obstruction risk → no nuts/seeds/popcorn
- **S** — Skin breakdown — wafer 1/8" larger
- **E** — Enteric-coated meds = NO

"Ascend → Liquid · Descend → Formed"

STOOL CONSISTENCY BY LOCATION

Higher up = **more water + enzymes**

Lower down = **more reabsorption**, firmer stool

Sigmoid stoma stool ≈ normal stool

"Pink & Moist = Perfect"

STOMA COLOR RULES

Pink/Red → Perfect ✓

Pale → Poor perfusion (call HCP)

Purple/Black → Panic — ischemia/necrosis 🚨

"1/8 & 1/3"

SIZING & EMPTYING RULES

1/8 inch — wafer opening larger than stoma

1/3 to 1/2 full — empty the pouch

3–7 days — change appliance

"DRAIN"

WHEN SOMETHING IS WRONG

- **D** — Dark stoma
- **R** — Retraction or prolapse
- **A** — Absent output (ileostomy > 4–6 hrs)
- **I** — Intense pain or distension
- **N** — Notify the HCP