

Ostomies: Colostomy, ileostomy and urostomy

An **ostomy** is a surgically created opening (called a *stoma*) in the body that allows for the elimination of waste products such as stool or urine. It bypasses a damaged or diseased part of the gastrointestinal or urinary tract and directs waste through the abdominal wall into an external pouching system.

Ostomies are common surgical interventions used to manage a wide range of conditions affecting the digestive or urinary systems. They may be temporary or permanent, depending on the underlying medical condition and surgical outcome. There are three primary types of ostomies:

- **Colostomy** – opening from the colon.
- **Ileostomy** – opening from the ileum.
- **Urostomy** – opening for urinary diversion.

Nurses play a vital role in the **preoperative education** , **postoperative care** , and **long-term management** of clients with ostomies.

1. Types of Stomas

Colostomy

A surgical procedure where a portion of the colon is brought through the abdominal wall to create a stoma.

- **Types Based on Location** :
 - **Ascending Colostomy** : Produces liquid to semi-liquid stool.
 - **Transverse Colostomy** : Produces semi-formed stool.
 - **Descending Colostomy** : Produces semi-formed to formed stool.
 - **Sigmoid Colostomy** : Produces formed stool, offering the highest potential for bowel continence.
- **Indications** :
 - Obstruction or perforation of the colon (e.g., colorectal cancer, diverticulitis).
 - Trauma to the colon.
 - Congenital abnormalities or anorectal malformations.

Ileostomy

A surgical procedure where the ileum (last part of the small intestine) is brought through the abdominal wall to form a stoma.

- **Indications** :
 - Inflammatory bowel diseases (e.g., Crohn's disease, ulcerative colitis).
 - Familial adenomatous polyposis (FAP).
 - Colon or rectal cancer requiring resection of the entire colon.
 - Trauma or infection leading to removal of the colon.

- **Output** : Liquid to semi-liquid stool with high enzyme content, requiring vigilant skin care.

Urostomy (Urinary Diversion)

A surgical procedure to create a stoma for urinary elimination, typically using a segment of the small intestine.

- **Types** :
 - **Ileal Conduit** : Most common urinary diversion using a piece of the ileum to redirect urine.
 - **Continent Urostomy** : An internal pouch is created to store urine and is drained using a catheter.
- **Indications** :
 - Bladder cancer requiring cystectomy.
 - Neurogenic bladder or severe incontinence.
 - Congenital defects of the urinary tract (e.g., exstrophy of the bladder).

2. Types of Stoma Placement

- **Temporary Stoma** :
 - Created to allow bowel or bladder rest post-surgery/trauma.
 - Common in bowel anastomosis or infections.
 - Reversed after 6–12 weeks of healing.
- **Permanent Stoma** :
 - Required when the distal bowel or organ is permanently removed (e.g., total colectomy or cystectomy).

3. Preoperative Considerations

- **Stoma Site Selection** :
 - Marked preoperatively by an enterostomal therapist.
 - Avoids skin folds, scars, and bony prominences.
- **Patient and Family Education** :
 - **Stoma Location** : Visibility and ease of access.
 - **Appearance** : New stomas are red, moist, swollen; healing over time.
 - **Psychosocial Support** : Discuss body image, sexual function, and lifestyle changes.

4. Postoperative Care

- **Stoma Assessment** :
 - Healthy: Red, moist, slightly protruding.
 - Unhealthy: Pale, blue, or black ? indicates ischemia (urgent!).
- **Skin Care** :
 - Prevent peristomal breakdown with proper appliance fit and barriers.
 - New stomas may be swollen—subsides in 6–8 weeks.

5. Lifestyle Adjustments

Dietary Modifications

- **Ileostomy** :
 - **Chew Thoroughly** : Prevent blockages.
 - **Avoid High-Fiber Foods** : Popcorn, nuts, unpeeled vegetables, seeds.
 - **Fluid/Electrolyte Balance** : Encourage 2–3L fluid/day; electrolyte replacement.
- **Colostomy** :
 - **Gradual Diet Resumption** : Reintroduce food slowly.
 - **Avoid Trigger Foods** : Beans, carbonated drinks, spicy foods.

Activity and Mobility

- Return to normal activities post-recovery.
- Avoid heavy lifting initially.

Sexual Function

- Discuss openly. Refer to counseling/support groups as needed.

Follow-Up Care

- Regular check-ups to assess function, manage complications, and provide education.

6. Pouch Care

- **Pouching System** :
 - Snug fit with 1/8-inch clearance from stoma to adhesive.
 - Use clip/closure device to prevent leakage.
 - Empty when one-third to one-half full.
- **Pouch Replacement** :
 - Change every 3–7 days.
 - Ideal timing: Early morning or post-meals.
 - Always maintain extra supplies.
- **Cleaning** :
 - Use soft cloth or squirt bottle.
- **Irrigation** (*Descending/Sigmoid Colostomies*) :
 - Daily, same time.
 - Use lukewarm water.
 - Clean with lukewarm water and mild soap.
 - Use commercial skin barriers.
- **Odor Control** :
 - Deodorizers available.
 - Avoid odor-causing foods (garlic, onions, cabbage).

7. Complications

Irritation and Peristomal Skin Breakdown

- **Signs** : Redness, blistering, ulceration, burning, itching, pain.

- **Prevention/Management :**
 - Proper-fitting appliances with barriers.
 - Use stoma powder/barrier creams.
 - Promptly change leaking pouches.

Stoma Ischemia/Necrosis

- **Signs :** Pale, dusky, black stoma; cold to touch; foul odor; sloughing tissue.
- **Action :** Notify healthcare provider immediately; may require surgery.

Stoma Retraction

- **Signs :** Stoma at/below skin level; leakage; appliance attachment issues.
- **Management :** Use convex pouches; surgery if severe.

Stoma Prolapse

- **Signs :** Protrudes several inches; discomfort/difficulty with pouching.
- **Action :** Protect stoma; notify provider; surgical intervention may be needed.

Bowel Obstruction

- **Signs :** Pain, cramping, absent/reduced output, nausea, vomiting, distension.
- **Action :** Hydration, diet changes; notify provider immediately.

Infection

- **Signs :** Redness, swelling, warmth, purulent discharge, foul smell, fever.
- **Management :** Good hygiene; antibiotics if confirmed.

Psychological and Emotional Complications

- Depression, anxiety, frustration.
- Support groups and counseling are key.

Dehydration *(More Common with Ileostomy)*

- **Signs :** Dry mucosa, low urine, dark urine, fatigue, weakness, cramps.
- **Prevention :** 2–3L fluid/day, monitor electrolytes.