Developed by the BC Provincial Nursing Ostomy Committee in collaboration with NSWOCs from:

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Changing Two-Piece Ostomy Pouching System: Procedure

Endorsement **British Columbia & Yukon**	Endorsement done: TBD Endorsement pending: FNHA, FHA, IHA ISLH, NHA, VCH/PHC & Yukon; until endorsement has been granted by your Heath Authority(HA) please follow your HA document.
DST Indications for Use	This Decision Support Tool (DST) guides nurses in application and removal of a two-piece fecal (colostomy, ileostomy) or urine (urostomy also called ileal conduit) pouching system for a client (neonate, child, youth or adult).

Practice Level
British Columbia & Yukon
BC level determined by Provincial HPA Leads
	British Columbia
	• Registered Nurses and Registered Psychiatric Nurses:
	  ○ Entry level competency: may change a two-piece ostomy pouching system for a post-op ostomy or established ostomy with or without rod or ureteral stents in place.
	• Licensed Practical Nurses:
	  ○ Entry level competency: may change a two-piece ostomy pouching system for a post-op or established ostomy without rod or ureteral stents in place.
	  ○ With Health Authority/agency approved education and achievement of competency, may change a two-piece ostomy pouching system for an established ostomy which has ureteral stents in place.
	For all nurses, doing these changes is to be done within their individual competency to perform the activity.
	
	Yukon:
	Nurse Practitioners, Nurses Specialized in Wound Ostomy Continence (NSWOCs), Registered Nurses, Registered Psychiatric Nurses and Licensed Practical Nurses refer to organizational policy and practice in accordance with regulatory bodies.

Education Requirements & Competencies	• If education is required for changing a two-piece ostomy pouching system for an established urostomy with ureteral stents in place, see education learning plan and competencies.

Need to Know	• A two-piece ostomy pouching system is a combination of two separate products, a flange and a pouch.
	• Flanges are an adhesive barriers that adheres to the peristomal skin and are designed with a ring into which a pouch is clicked into place.
	  ○ Flanges can be flat, convex or concave in shape; the choice of shape is based upon the client's abdominal contour at the stoma site.
	  ○ Flanges can have different types of openings:
	  ○ Cut-to-fit: used in the 6 to 8-week post-op period as the stoma shrinks in size or if the stoma is irregular in shape, (i.e., oval, or oblong).
	  ○ Pre-cut: manufactured with specific sized round openings, (i.e., 25mm or 32mm used once the stoma size is established usually around eight weeks.
	  ○ Mouldable: no cutting is needed as the flange opening is gently stretched/moulded to the size needed.
	• Pouches can be transparent or opaque and either drainable or closed end:
	  ○ Drainable pouches with closure mechanism are used for containing mushy/watery to soft stool; the end of the pouch is opened, the pouch is emptied and then closed for reuse. High-output drainage pouches have a tap that connects to a 2L collection drainage bag.
	  ○ Closed-end pouches are used for containing thicker to formed stool; the pouching system is removed once pouch is a third to half full.
	  ○ Drainable pouches with a spout/tap are used to contain urine; the tap allows for

	urine to be directly emptied from the pouch or can be attached to a drainage bag/ bottle. • A **good seal** between the flange, peristomal barrier rings if used, and the underlying peristomal skin is necessary to prevent leakage of stool or urine under the flange causing peristomal moisture associated skin damage (MASD). The exudate from the damaged skin area will prevent the flange from adhering to the skin which will lead to leakage of stool/urine and further skin damage. In the event of a leak, the pouching system must be changed ***immediately.*** • For the post-op client, the scheduled pouching system change should be done within 48 hours post-op in order to assess the stoma and peristomal area as well as for client teaching. If there is a stoma rod in place the planned change frequency may be 3-4 days post-op unless the pouching system is leaking. • Only water is to be used for cleansing the stoma and the peristomal skin area as soap can leave a residual film that can interfere with the adhesion of the flange. Do not use packaged pre-moistened cleansing cloths, (e.g., hand cleansing wipes or baby wipes), as they contain ingredients such as moisturizers that do not allow the flange to adhere to the skin.
Bookmarks	Procedure Documentation Client/Family Teaching Definitions References/Bibliography Document Management Appendix A: Two-Piece Pouch Change - Urostomy with Ureteral Stents in Place Appendix B: Tow-Piece Pouch Change – Fecal Stoma with Non-Sutured Rod in Place
Related Documents	Learning Plan: One-Piece Pouch Change – Established Urostomy with Ureteral Stents Competencies: One-Piece Pouch Change – Established Urostomy with Ureteral Stents Procedure: Changing One-Piece Ostomy Pouching System Clinical Resource: Ostomy Assessment Terms & Definitions

Supplies & Equipment

- Personal protective equipment (PPE) as per Point of Care Risk Assessment.
- Clean gloves 1-2 pairs as needed.
- Procedure pad
- Wash cloths or dry wipes, (i.e., maceratable wipes or paper towel) and warm tap water; do not use packaged pre-moistened cleansing cloths.
- Flange as per management plan.
- Pouch as per management plan.
- If using a cut-to-fit flange:
  - Stoma measuring guide or pattern made from previous measurements.
  - Pen or fine-tipped marker.
  - Blunt tip scissors.
- Adhesive remover.
- Accessories, (e.g., ostomy paste, ostomy ring, and/or pouch belt as per management plan).
- Container to empty pouch if not emptying into the toilet.
- Dry wipes to catch effluence during pouch change.
- Garbage bag.
- Additional supplies: 10x10cm sterile gauze if ureteral stents are in place.

Changing Two-Piece Ostomy Pouching System: Procedure	
Note: if the client's surgical dressings (incision and/or post-op drain) are to be changed in conjunction with ostomy pouching system change, the dressings are to be done first.	
Steps	**Key Points/Rationale**
1. Review the client's chart for documentation of previous pouching changes: • Stoma and peristomal assessment; note any unusual findings, (e.g., stoma dusky in colour, peristomal skin erosion, etc.) • The ostomy management plan for current pouching system and accessories. • The patient teaching record to see where the client is with their participation in the pouching system change.	Review of previous assessment highlights concerns to be re-assessed with this pouching change. Teaching done with this pouching change should review previous teaching and build upon it.
2. Prepare the client: • Explain the procedure to client/family keeping in mind the concepts of Trauma Informed Practice and, where appropriate for the client, Indigenous Cultural Safety. Obtain verbal consent (if possible). • Ensure privacy. • If client is using a drainable pouch, empty contents into a container or have the client, if able, go to the bathroom to empty contents. ◦ Measure contents and record volume on the In/Out flowsheet as per care plan. • Have the client position themselves as to a comfortable sitting position. Raise the head the bed if needed.	See HA specific documents re Trauma Informed Practice and/or Indigenous Cultural Safety. The pouching system is much easier to change when the pouch is empty. Having the client participate in the emptying of the pouch facilitates learning and independence. Sitting position allows the client to see/participate in the changing of the pouching system as well as nurse's visualization of skin folds and creases.
3. Prepare workspace: • Gather all supplies. • Clean workspace table. • Set up cleansing supplies. • Wash hands and put on PPE as needed. • Put on clean gloves. • Place procedure pad under the pouching system.	If client is participating in the pouching system change, they do not need to wear gloves unless it is their preference.
4. Remove ostomy pouching system: • Use no-sting adhesive remover (wipe or spray) to assist with flange removal. • Slowly and gently lift/roll the flange away from the skin. Use the other hand to support the skin during the removal. ◦ If ureteral stents in place, see Appendix A. ◦ If rod in place, see Appendix B. • Assess the back of the flange for signs of any leakage and document if noted. • Discard old pouching system in the garbage bag	In the immediate post-op period, adhesive remover may be needed for the client due to the swelling in the surgical area making it difficult to remove the flange without causing skin injury. Slow removal will loosen the adhesion between the flange and the skin which will minimize hair stripping, Medical Adhesive Related Skin Injury (MARSI) and client's discomfort /pain.
5. Cleanse the stoma and peristomal area: • Use additional adhesive remover to assist with removing flange or paste residue. • Use a cloth/wipe dampened with warm tap water. • Gently clean, do not scrub. • Gently pat with dry cloth to remove any moisture	Cleansing removes any stool/urine, residue from the old pouching system as well as adhesive remover solution as these will interfere with the adhesion of the new flange. Do not use soap or other forms of skin cleanser

Steps	Key Points/Rationale
or allow to air dry. Note: if the stoma is active, use a container or dry wipes to catch the effluent while preparing the new pouching system.	(e.g., cleansing wipes/spray) as they will interfere with the adhesion of the flange and can irritate the skin under the flange. Note: the stoma is mucosal tissue and in the post-op period is susceptible to bleeding even with the lightest touch and especially for those clients taking blood-thinner medication. A mucocutaneous suture granuloma also bleeds easily. If bleeding occurs, apply gentle pressure with a cool damp cloth until the bleeding stops. If bleeding is related to a suture granuloma, refer to NSWOC.
6. Assess the stoma and the peristomal area: • Measure the stoma in millimeters (mm): ○ If the stoma is round, the diameter is measured with the stoma measuring guide. ○ If the stoma is oval, the length and width are measured with a ruler or using two circular openings on a stoma measuring guide. • Note: ○ The colour of the stoma. ○ The position of the stoma opening (os) ○ The height of the stoma. ○ The approximation of the mucocutaneous margin. ○ Any peristomal skin concern, (e.g., rash, denudement). ○ Any changes in the contours of the abdomen (e.g., creases). • If the findings are new or worsening concerns: ○ Stoma appears dry, dusky or purple/maroon in colour, necrotic and/or if the mucocutaneous junction has separated: ○ If in hospital, consult with surgeon and/or NSWOC. ○ If in community or long-term care, send the client/resident to Urgent Care or Emergency Department. ○ Peristomal skin damage; consult with the NSWOC.	See Ostomy Assessment Terms & Definitions for assessment terms. The size of a newly created stoma decreases in the 6 to 8-week post-op period as swelling subsides. New measurements should be done at least once a week for the first 8 weeks to ensure the flange is cut to correctly fit the stoma. Note: in the post-op period, the stoma may also increase in size due to post-op complications, (e.g., ileus). The healthy stoma is pink/red and moist. A tilted stoma opening may lead to leaking on the side of the tilt. A stoma that is flush to, or retracted below the level of the peristomal area may also lead to leaking – additional ostomy pouching supplies (e.g., barrier ring) will be needed. A separation in the mucocutaneous junction may need to be filled prior to the application of the pouching system. Peristomal skin that is damaged will need to be protected, (e.g., crusting with stoma powder and skin barrier wipe); this also ensures a dry surface for the flange. Need to be aware of creases/dimples as they make the skin surface uneven leading to difficulty getting the flange to adhere properly.
7. Prepare the cut-to-fit or shape-to-fit flange as per management plan. Note: this step is not needed if using a pre-cut flange. • If there is a template from previous pouching system change: ○ Lay template over the stoma and assess the fit. The template opening **must only be 2mm large**r than the stoma. ○ Lay the template on the flange of the new pouching system; ensure not to reverse the image. ○ Using a pen/marker, draw out the opening.	If the template opening is greater than 2mm then a new template is needed. If the stoma is oval shaped, reversing the template image may cause the oval opening to be incorrect.

Steps	Key Points/Rationale
○ Using blunt-tipped scissors, begin at the small starter hole and <u>cut to the outside</u> of the marking on the flange. Check for any jagged edges, if needed use a gloved finger to smooth out the edge. • <u>If no template or the previous template is now not the correct size for the **round-shaped** stoma</u> ○ Using the stoma measuring guide, find the circle with the correct diameter (2mm greater than the stoma itself). ○ Lay this circle over the new flange and use a pen to draw a circle on the flange. ○ Using blunt-tipped scissors, begin at the small starter hole and cut along the pen marking on the flange. Check for any jagged edges, if needed use a gloved finger to smooth out the edge. • <u>If no template or the previous template is now not the correct size for the **oval-shaped** stoma:</u> ○ Using the stoma measuring guide, find the circle with the correct length for the stoma (2mm greater than the stoma itself) and then find another circle with the correct width plus 2mm. or ○ Use a paper measuring guide and determine length and wide (remember to add 2mm to both measurements).	
8. Assess flange re location of incision, drain site or umbilicus. • Keep flange backing in place and lay the flange over the stoma. • Assess if trimming the edges are needed to avoid overlapping of flange onto incision, drain stie or umbilicus. • If trimming required, ensure there is enough of the flange to make a good seal. • Check for any jagged edges, if needed use a gloved finger to smooth out the edge.	
9. Prepare flange for application: • Soften the flange by using the client's body warmth, (e.g., place flange under a thigh) while the peristomal skin is being prepped.	Cool air or room temperature may cause the flange to be less flexible.
10. Prepare peristomal skin as per management plan: • Re-cleanse peristomal skin if ostomy has been active. • For creases or dimples in the peristomal skin surface use ostomy paste/ring to create a flat, even surface. • For areas of moisture associated skin damage, use the crusting technique to protect the area. • Ensure entire pouching surface is dry.	If possible, having the client in a sitting position helps to see creases or dimples. A flat, even pouching surface supports good adhesion of the entire surface of the flange decreasing the risk of leakage. Note: protecting the peristomal skin with a skin barrier film wipe is not routinely needed; to be used only under the direction of an NSWOC.

Steps	Key Points/Rationale
11. Prepare the drainage pouch: • For a fecal pouch, close the end of the pouch. • For a urine pouch, close the tap.	
12. Apply the flange: • Remove the backing of the flange. • As per management plan, add the paste/ostomy ring to back of the flange or to the base of the stoma. Note: if the ostomy ring becomes wet or soiled, apply a new ring. ○ If ureteral stents in place, see Appendix A. ○ If rod in place, see Appendix B. • Using the flat of a hand, gently pull up on the skin above the stoma and place the flange around the stoma without any tension on the skin. • Use a finger and apply gentle pressure to the flange around the stoma • Use fingers to smooth out the surface of the flange. If flange has a taped border, remove the backing from the tape border.	Once flange is in place, the paste/ring will protect the 2mm exposed peristomal skin. If the surface of the ring is wet, the ring will not adhere to the skin. Pulling up on the skin above the stoma will help to flatten any small folds and creases. The entire surface of the flange must be in contact with the skin for a good seal.
13. Attach the pouch to the flange: • Position pouch ring over top of flange ring. • Using fingers and working around the entire ring, gently click/snap the two pieces together.	
14. Ensure a good seal: • Apply a hand with gentle pressure over the pouching system for 1-2 minutes. A warmed towel or blanket may be used instead of a hand. • Check the pouching system with the client in lying, sitting and standing position. • Apply pouch system belt as indicated per management plan.	Heat and gentle pressure will assist with setting up the flange with a good adherence to the skin. Need to ensure the flange is adhering correctly in the each of the positions. Ostomy pouching system belts are not always needed.
15. Clean up workspace: • If using a template, cleanse the template as needed and if template is new, write the date of template was made. Place in the client's supply bag for next pouching system change. • Tie garbage bag and remove garbage bag from the room. • Remove gloves, PPE and wash hands.	Dispose of garbage bag as per HA/agency policy.

Documentation

1. Document assessment and procedure in accordance with BCCNM and health authority/agency standards. See Post-Op Ostomy and Acute Care, LTC Community Established Ostomy Assessments (links).

2. If Medical Device Related Pressure Injury (MDRPI) occurs due to the pouching system, complete a Patient Safety Learning System incident.

Client/Family Teaching

1. Provide instruction sheets to assist the client/family/caregiver to how to change the two-piece pouching system.

Definitions

Client: generic term used to describe a person accessing care regardless of care setting; patient in the hospital, client in community, resident/person-in-care in long-term care.

Established Ostomy: An ostomy that is at least eight weeks post surgery.

Flange: an adhesive disk with an open centre (cut to fit or pre-cut) that sit around the stoma; also called a skin barrier or appliance.

NSWOC: Nurse specialized in wound ostomy and continence care.

Post-Op Ostomy: An ostomy within the first eight weeks of surgery.

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Document Management

This guideline is based on the best evidence-based information available at the time it was published and avoids opinion-based statements, where possible. It was developed by the BC Provincial Nursing Ostomy Committee and has undergone provincial partner review.

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Appendix A: Two-Piece Pouch Change – Urostomy with Ureteral Stents in Place

- Remove the urostomy pouch.
- Remove the urostomy flange:
  - Carefully free the flange from the peristomal area.
  - With clean gloved fingers, hold onto the stents at the point where they exit the stoma.
  - With the other hand, lift the flange up and away from the stoma allowing the stents to glide out of the flange opening.
  - Place tips of the stents onto sterile 10x10cm gauze to collect any urine.
- Apply the flange:
  - Carefully break the anti-reflux seal within the pouch using a gloved finger, this will allow the stents to fit inside the entire pouch area.
  - Prepare the flange and peristomal skin.
  - Place flange just below the stoma, and using gloved fingers, guide the stents through the flange opening.
  - With pouch in one hand, use the other hand to guide the stents through the prepared anti-reflux opening into the pouch.
- Apply the pouch by clicking/snapping the pouch into the flange ring.

Note: IF a stent falls out, continue with applying a new pouching system and then notify the surgeon.

Appendix B: Two-Piece Pouch Change – Fecal Ostomy with Non-Sutured Rod in Place

- Remove the pouch.
- Remove the flange.
  - Gently release the flange from the peristomal skin.
  - Slide rod to the left underneath the now released flange.
  - Carefully lift the flange away from the stoma area.
- Apply the flange:
  - Prepare the flange and the peristomal skin.
  - Slide the rod to the left of the stoma.
  - Position the flange around the right side of the stoma.
  - Slide the rod to the right of the stoma.
  - Lay down the other half of the flange around the left side of the stoma and onto the peristomal skin.
  - Slide the rod to be centered under the stoma.
- Apply the pouch clicking/snapping the pouch into the flange ring.