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

Title	**Urostomy Urine Collection for Culture & Susceptibility (C&S): Procedure**
Endorsement **British Columbia & Yukon**	Endorsement pending: FNHA, FHA, IHA, Island, NHA, PHSA, VCH/PHC & Yukon; until endorsement has been granted by your HA please follow your HA's current document.
DST Indications for Use	This Decision Support Tool (DST) guides nurses in obtaining a urine sample from a client's urostomy for microbiology culture & susceptibility testing. The specimen is obtained from the stoma by either collecting drips of urine or sterile straight catheterization.
Practice Level **British Columbia & Yukon**	British Columbia: Obtaining urine for C&S from a urostomy by: • Drip collection is a basic skill for all nurses. • Catheterization of a post-op or an established urostomy is a basic skill for NSWOCs. • Catheterization of an established urostomy may be done by a RN following the catheter procedure (page 2) as per HA/agency. Yukon: Registered Nurses, Registered Psychiatric Nurses and Licensed Practical Nurses refer to organizational policy and practice in accordance with regulatory bodies.
Need to Know	• Urostomy is also referred to as an 'ileal conduit'. • As the construction of the urostomy is done using a small segment of the small bowel's ileum, culturing urostomy urine will show bacteria due to the bowel's normal flora. • The ureters are attached to ileal conduit with the potential for the urine to flow from the ileal conduit back up towards the kidneys; this leads to the risk of upper urinary tract infection and pyelonephritis. • If the client shows signs & symptoms of flank pain, fever and chills, consultation with the Most Responsible Provider (MRP) is required. C&S testing of urostomy urine may be one of the investigations done. • If urostomy stents are in place; **do not** collect urostomy urine by catheterization.
Bookmarks	Procedure: Collection by Drip Procedure: Catheterization Documentation Definitions References/Bibliography Document Creation/Review Appendix A: Troubleshooting Tips
Related Documents	N/A

Supplies & Equipment – Collection by Drip

- Personal protective equipment (PPE) as per Point of Care Risk Assessment
- Procedure pad
- Clean gloves x1 pair
- Wash cloth or paper wipe and warm tap water
- Sterile dressing tray
- Sterile cleansing solution - normal saline
- Sterile gloves x 1 pair
- Sterile specimen container with lid, client label, specimen bag
- Urostomy pouching system

Urostomy Urine Collection for C&S – Collection by Drip Procedure	
Steps	**Key Points/Rationale**
1. Prepare the client: • Explain procedure. • Ask client to drink 250mL of fluid, if not on fluid restriction. • Ensure privacy. • Ask client to sit or if in bed, raise head of bed into sitting position; ensure comfortable position.	A urostomy does not have a reservoir to hold the urine. Fluid intake just before the procedure will assist with the kidneys producing urine which in turn leads to the flow of urine through the ileum conduit. Upright position assists with gravity flow of urine into the specimen container.
2. Prepare work space: • Gather all supplies. • Clean workspace table with HA/agency approved cleanser. • Set up stoma cleansing supplies. • Wash hands and put on PPE as needed. • Put on clean gloves.	
3. Remove pouching system: • Place procedure pad under the ostomy. • Remove pouching system (flange & pouch). • Wash stoma and peristomal area with cloth or wipe dampened with warm tap water. • Remove gloves and wash hands.	The entire pouching system must be removed to ensure that the collection of urine is as clean as possible. Cleansing removes any residue from the pouching system.
4. Set up sterile field: • Open sterile dressing tray and add the normal saline cleansing solution. • Remove lid from the urine specimen container. • Wash hands and don sterile gloves. • Using sterile 5 x 5cm gauzes dampened with cleansing solution, cleanse the stoma and the peristomal area. Start at the centre of the stoma and circle out. Pat stoma dry using sterile gauze.	Sterile technique for specimen collection is required to prevent contamination of the specimen. Thorough cleansing of the stoma ensures the specimen is as clean as possible.
5. Take urine sample: • Hold a sterile 5 x 5cm gauze over the stoma and allow the first few drops of urine to flow. Remove the gauze. • Hold the sterile specimen container under the stoma and catch 3 - 5mL of urine. • Replace lid securely and set container aside.	It may take 5-15 minutes for the urine to flow and to obtain the 3-5mL needed for the microbiology test (minimum amount is 3mL). If it is taking longer than 10 minutes or there is not sufficient amount of urine, see Troubleshooting Tip: No Urine.
6. Reapply pouching system as per care plan.	
7. Clean up work area.	
8. Reposition client for comfort.	
9. Send urine sample to the lab: • Prepare container for transport to the lab as per Health Authority/agency policy. • **Ensure the lab requisition clearly states urine sample is from a urostomy.** • If transport to the lab cannot be done within one hour, then refrigerate the container.	Urostomy urine will show bacteria due to the bowel's normal flora.

Supplies & Equipment – Collection by Catheterization

- Personal protective equipment (PPE) as per Point of Care Risk Assessment
- Procedure pad
- Clean gloves x1 pair
- Wash cloth/paper wipe x 2
- Warm water
- Sterile gloves x 1 pair
- Sterile catheter tray – tray may come with sterile cleansing solution and/or sterile water-soluble lubricant, if either are missing, will need health authority/agency approved sterile cleansing solution or sterile lubricant
- Sterile intermittent catheter #14Fr or #16 Fr (20cm/8in) - consider two catheters in case of contamination
- Sterile specimen container with lid, label, specimen bag
- Urostomy pouching system

Urostomy Urine Collection for C&S – Catheterization Procedure	
Steps	**Key Points/Rationale**
1. Prepare the client: • Explain procedure. • Ask client to drink 250mL of fluid, if not on fluid restriction. • Ensure privacy. • Ask client to sit or if in bed, raise head of bed into sitting position; ensure comfortable position.	A urostomy does not have a reservoir to hold the urine. Fluid intake just before the procedure will assist with the kidneys producing urine which in turn leads to urine being available in the ileum conduit. Upright position assists with gravity flow of urine into the specimen container.
2. Prepare work space and sterile field: • Gather all supplies. • Clean workspace table with HA/agency approved cleanser. • Set up stoma cleansing supplies. • Open sterile catheter tray and add sterile cleansing solution (if not in the kit) and sterile catheter. • Remove lid from the urine specimen container. • Wash hands and put on PPE as needed. • Don clean gloves.	If second catheter is part of the supplies, keep it in its sterile package for use only if the first catheter becomes contaminated.
3. Remove pouching system: • Place procedure pad under the ostomy. • Remove pouching system (flange & pouch). • Wash stoma and peristomal area with cloth or wipe dampened with warm tap water. • Remove gloves and wash hands. • Don sterile gloves.	Sterile technique for specimen collection is required to prevent contamination of the specimen.

4. Take the sample:
• If sterile cleansing solution in the kit, open container.
• Using sterile cotton balls/gauze dampened with cleansing solution, cleanse the stoma and the peristomal area. Start at the centre of the stoma and circle out. Pat area dry with cotton ball/gauze.
• Remove catheter from protective wrap:
  ○ Lubricate the tip of catheter.
  ○ Place the distal end of the catheter in the collection basin.
	Thorough cleansing of the stoma ensures the specimen is as clean as possible.

Steps	Key Points/Rationale

• Gently insert the lubricated tip into the stoma until there is urine flow. If resistance is felt:
  ○ Pull back on the catheter and slowly re-insert.
  ○ Gently rotate the catheter as it is being inserted**. Do not** apply force.
• Allow the first few drops of urine to flow into the basin.
• Move the distal end of the catheter into the specimen container, ensure the end of the catheter does not come in contact with the outside of the specimen container to maintain sterility. Collect 3 – 5 mL of urine.
• Remove the catheter.
• Place lid securely on the specimen container.
	If concerns, see Troubleshooting Tip: Issues with Insertion.
	
	Forcing the insertion of the catheter can cause damage to the mucosal lining of the stoma tract and/or perforation of the bowel.
	
	It may take 5 - 15 minutes for the urine to flow and to obtain the 3 – 5 mL needed for the microbiology test (minimum amount is 3 mL).
	
	If it is taking longer than 10 minutes or there is not sufficient amount of urine, see Troubleshooting Tip: No Urine.

5. Reapply the pouching system as per care plan.	
6. Clean up workspace.	
7. Ensure client comfort: • Reposition client if needed. • Observe the client for discomfort/pain or blood in the urine.	If pain and/or bleeding is noted, contact MRP.
8. Send urine sample to the lab: • Prepare container for transport to the lab as per Health Authority/agency policy. • **Ensure lab requisition clearly states urine sample is from a urostomy.** • If transport to the lab cannot be done within one hour then refrigerate the urine container.	Urostomy urine will show bacteria due to the bowel's normal flora.

Documentation

Document as per HA/agency guidelines, the assessed S&S of potential upper urine tract infection and which procedure was used to collect the urine specimen.

Definitions

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

Established Ostomy: Ostomy which is at least eight weeks post surgery.

NSWOC: Nurse Specialized in Wound Ostomy and Continence.

Post-Op Ostomy: Ostomy within the first eight weeks following surgery.

References/Bibliography

1. Nurses Specialized in Wound, Ostomy and Continence Canada (NSWOCC). A Guide to Living with an Ileal Conduit. (2nd ed.) 2022.
2. Wound Ostomy and Continence Nurses (WOCN) Society. Procedure for Obtaining a Urine Sample from A Urostomy, Ileal Conduit, and Colon Conduit: Best Practice for Clinicians. Revised 2018.

Document Creation/Review

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 stakeholder review.

Created By	British Columbia Provincial Nursing Ostomy Committee with collaboration with NSWOCs from across all Health Authorities.
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Appendix A: Trouble-Shooting Tips

Issues with Insertion	• The lumen of the conduit may not be straight; therefore requiring gently maneuvering. Do not apply force. • If urine draining around catheter, reposition catheter. • The islets of the catheter may be plugged with mucous, remove the catheter and insert another sterile catheter. • If still having difficulty with the insertion, take specimen as per the collection procedure above.
No Urine	• Reposition client and/or ask them to cough. • Ask client to drink more fluid if not on a fluid restriction.