

Developed by the British Columbia Provincial Nursing Continence Committee in collaboration with NSWOCs/NCAs from:



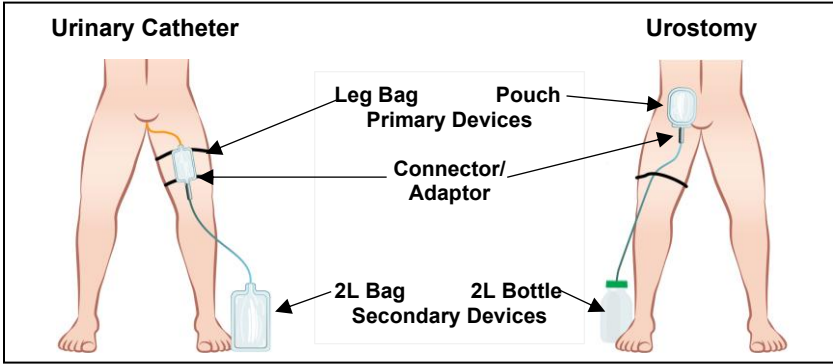
**Title** Procedure: Cleansing Secondary Urine Collection Devices (Bags / Bottles) for Adults & Children

**DST Indication for Use** This Decision Support Tool (DST) provides guidance for the cleansing of **secondary** urinary collection devices (overnight drainage bags or bottles) using soap and water/ vinegar solution for adults and children in Acute, Rehab, Community and Long-Term Care settings **as per health authority or agency policy.**

**Practice Level** All health care professionals in accordance with health authority or agency policy.

**Background**

- Sterile urinary catheters are inserted into the bladder through the urethra or suprapubic area to drain urine from the bladder. The catheter is connected to a **primary** urinary collection device such as a 2L drainage bag or a leg bag. **The connection between the catheter and the primary drainage bag (2L bag or leg bag) is not to be opened until the catheter is changed. This ensures the urinary drainage system remains sterile as per Catheter-associated Urinary Tract Infection (CAUTI) guidelines.**
- For clients with a urinary catheter attached to a leg bag (primary collection device), the leg bag can be connected to a secondary urinary collection device such as a 2L drainage bag to collect greater amounts of urine than what the leg bag can hold, such as, overnight collection of urine. The following systems are available on the current British Columbia Provincial Health Services Authority (PHSA) Supply Chain contract:
  - Coloplast Conveen: a 1500ml overnight bag which is designed to be connected to either a 500ml or 750ml Conveen leg bag.
  - Bard 540ml or 900ml leg bag which, with a ‘home-made’ version of a connector (see Appendix A), can be attached to a 2L drainage bag.
- For clients with a urostomy, the pouch (the primary collection device) can be connected to either a 2L drainage bag or 2L drainage bottle for overnight collection of urine.
- Cleansing and disinfecting of the secondary drainage bag / bottle is to be done when ever it is disconnected from the leg bag or the pouch, (e.g., each morning).
- The entire urinary collection system, catheter, leg bag (primary) and 2L bag (secondary) is to be changed as per the client’s specific schedule, (e.g., every 6 weeks).
- For clients with a urostomy, the drainage bag or bottle is to be changed at least every 6 months or sooner if it becomes discoloured or damaged.
- Should a urinary tract infection occur, the entire system; catheter, leg bag or urostomy pouch (primary) and 2L bag or bottle (secondary), is to be changed.



**Bookmarks** [Procedure: Cleansing of Secondary Urinary Collection Devices](#)  
[Client/Family Education and Resources](#)  
[Documentation](#)  
[Definitions](#)  
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<b>Related Documents</b>	<ul style="list-style-type: none"> <li>• <a href="#">Quick Reference Guide (QRG): Cleaning Secondary Urine Drainage Bag</a></li> <li>• <a href="#">Quick Reference Guide (QRG): Cleaning Urine Drainage Bottle</a></li> <li>• <a href="#">Client Health Education Resource (CHER) Cleaning Secondary Urine Drainage Bag</a></li> <li>• <a href="#">Client Health Education Resource (CHER) Cleaning Urine Drainage Bottle</a></li> </ul>
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**Equipment and Supplies:**

- Personal Protective Equipment (PPE) e.g., gloves, goggles, gown, mask, as per Point-of-Care Risk Assessment
- Alcohol swab(s)
- Water
- Liquid Dish Soap
- 5% Acetic Acid (white vinegar)
- 2 – 500 mL (2 cup) containers
- A small, graduated plastic measurement cup
- A clean 50 or 60mL catheter tip syringe or an agency-approved turkey baster or squeeze bottle with a small nozzle
- If needed, new 2L drainage bag or 2L drainage bottle
- If needed, a connector/adaptor: see Appendix A or make a “home-made version’ of a connector, (e.g., a small length of latex or PVC tubing)
- If needed, reusable, plastic container

<b>Procedure: Cleansing Secondary Urine Collection Devices</b>	
<b>Steps</b>	<b>Key Points</b>
1. Set up workspace: <ul style="list-style-type: none"> <li>• Gather the client-specific supplies.</li> <li>• Wash hands</li> <li>• Put on appropriate PPE; gloves, gown and face mask.</li> </ul>	Soap, vinegar, containers, cup, syringe/ bottle/baster are client-specific use only. There is the potential for spillage or splash of either soap or vinegar.
2. Remove the secondary collection bag / bottle: <ul style="list-style-type: none"> <li>• Close the spout for leg bag or urostomy pouch.</li> <li>• Cleanse the connecting point of the leg bag or urostomy spout and the secondary drainage tubing connector/adaptor with an alcohol swab for 30+ seconds; let dry for 30 seconds.</li> <li>• Disconnect the secondary bag or bottle from leg bag or urostomy pouch. If a connector/adaptor is present, leave the connector/adaptor attached to the secondary drainage bag tubing.</li> <li>• Open the 2L bag’s spout, or remove the lid from the bottle, and empty the urine. Close the clamp on the spout, or secure the lid back on the bottle, keeping the tubing attached.</li> <li>• Assess bag/bottle for odour, colour change or damage.</li> <li>• Discard gloves; wash hands.</li> </ul>	The alcohol swab is used to clean and disinfect the connecting point.  Replace connector / adaptor when it no longer provides a snug fit or is damaged.  The bag / bottle is to be replaced if it is damaged or if there is a strong odour, clouding, discoloration.
3. Prepare cleaning and disinfecting solutions: <ul style="list-style-type: none"> <li>• Cleaning: mix a few drops of liquid dish soap and 250ml of water in one container.</li> <li>• Disinfecting: in the other container mix:                             <ul style="list-style-type: none"> <li>○ 75 mL of 5% white vinegar and 225 mL of water.</li> <li><u>or</u></li> <li>○ 1/3 cup of 5% white vinegar and 1 cup of water.</li> </ul> </li> <li>• Wash hands and don clean gloves.</li> </ul>	The vinegar solution is made as 1 part white vinegar to 3 parts water.

Steps	Key Points
<p>4. Clean the secondary collection device:</p> <ul style="list-style-type: none"> <li>• Draw up soap solution into syringe, bottle or baster.</li> <li>• Attach the syringe/bottle/baster to the drainage tubing and introduce the solution.</li> <li>• Repeat above steps until all of the solution is added to the bag/bottle.</li> <li>• Gently shake solution around the bag for 30 seconds.</li> <li>• Open the drainage spout or remove the lid from the bottle. Drain out the soap solution.</li> <li>• Using the syringe/bottle/baster, rinse bag / bottle and its tubing with tap water and drain.</li> <li>• If drainage tubing has a protective cap, cleanse the cap with the soap and water. Rinse well.</li> <li>• If using a plastic container for storing the drainage bag, wash it with the soap solution.</li> </ul>	<p>Cleaning solution along with the agitation helps to physically remove gross organic matter and bio-burden from the interior surfaces of the bag/bottle.</p> <p>Rinsing with water removes soap solution.</p>
<p>5. Disinfect the secondary collection device:</p> <ul style="list-style-type: none"> <li>• Ensure the bag's drainage spout is closed or the lid is on the bottle.</li> <li>• Draw up the vinegar into the syringe/bottle/baster.</li> <li>• Attach the syringe/bottle/baster to the drainage tubing and introduce the solution.</li> <li>• Repeat above steps until all of the solution is added to the bag / bottle.</li> <li>• Gently shake the solution around the bag/bottle for 30 seconds. Whenever possible, allow the disinfecting solution to sit for 10-15 minutes for the disinfection.</li> <li>• Open the bag's drainage spout or remove the lid from the bottle. Drain out the vinegar solution.</li> <li>• If the drainage tubing has a protective cap, disinfect the cap by putting it into a small amount of the vinegar.</li> <li>• If using a plastic container for storing the drainage bag, disinfect it with the vinegar solution.</li> </ul>	<p>Disinfection helps reduce the number of viable bacteria.</p>
<p>6. Set up for drying:</p> <ul style="list-style-type: none"> <li>• Clean the outside of the bag/bottle with soap/water and disinfect with vinegar solution. Pat dry. <ul style="list-style-type: none"> <li>○ If applicable, dry the drainage tubing cap.</li> <li>○ Use an alcohol swab to cleanse the draining tubing end for 30 seconds and allow to dry for 30 seconds before replacing the cap.</li> </ul> </li> <li>• For the drainage bag either: <ul style="list-style-type: none"> <li>○ Hang to dry in the bathtub and open the spout to allow the vinegar solution to drain out. Leave spout open. Ensure the tubing end and spout do not come in contact with any surface.</li> </ul> <p><u>or</u></p> <ul style="list-style-type: none"> <li>○ Ensure that the vinegar solution has been drained from the bag. Close the spout.</li> <li>○ Place the bag in a clearly labeled, client-specific, clean, reusable, plastic container and store appropriately at the client's bedside.</li> </ul> </li> <li>• For the drainage bottle: <ul style="list-style-type: none"> <li>○ Ensure the vinegar solution has been drained from the drainage tubing and bottle.</li> <li>○ Leave the lid off of the bottle.</li> </ul> </li> </ul>	<p>Chose the method best suited to the care environment e.g., long-term care or client's home.</p>

Steps	Key Points
<ul style="list-style-type: none"> <li>○ Place the bottle and tubing in a clearly labeled, client-specific, clean, reusable, plastic container and store appropriately at the client's bedside</li> </ul>	
<p>7. Clean up workspace:</p> <ul style="list-style-type: none"> <li>● Cleanse/rinse the containers and syringe/bottle/baster.</li> <li>● Store client-specific equipment and supplies.</li> <li>● Remove PPE and wash hands.</li> </ul>	Supplies should be stored either at the bedside or in a clearly labeled bag / box.

### **Client/Family Education and Resources**

Teach the client and/or family how to cleanse the overnight drainage bag/bottle at home and provide written instructions: Client Health Education Resource (CHER): *Cleaning the Secondary Urine Drainage Bag*

### **Documentation**

Document what client/family education/resource(s) were provided.

### **Definitions** <https://www.picnet.ca/>

**Cleaning:** Physical removal of foreign material (e.g., dust, soil) and organic material (e.g., blood, secretions, excretions, microorganisms). Cleaning physically removes, rather than kills, micro-organisms and is accomplished with water, soap or detergents and mechanical action. Cleaning must be performed before disinfection or sterilization.

**Disinfecting:** Using a chemical agent e.g., chlorine bleach, hydrogen peroxide, to kill most disease-producing microorganisms. To ensure an effective disinfection, a thorough cleaning of the area is to be done before disinfecting

### **References/Bibliography**

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4. Cleveland Clinic. (2019). *Urine drainage bag and leg bag care*. <https://my.clevelandclinic.org/health/articles/14832-urine-drainage-bag-and-leg-bag-care>
5. WOCN. (2016). *Care and management of patients with urinary catheters: A clinical resource guide*. <https://cdn.ymaws.com/www.wocn.org/resource/resmgr/publications/Care & Mgmt Pts w Urinary Ca.pdf>

### **Date of Creation**

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

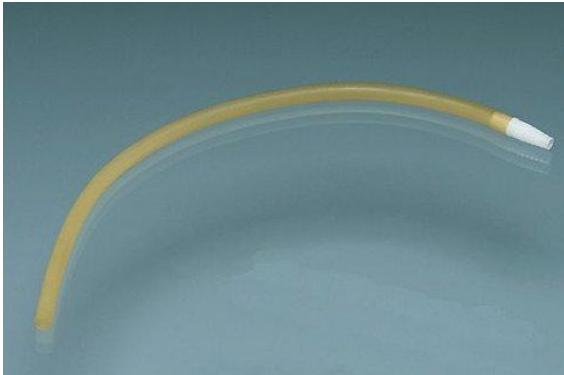
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## Appendix A: Urinary Drainage Bag Connectors

**Bower Medical Vendor# ADTO2219**



**Bard Vendor# 4A4194** (45cm/18" latex tubing could be cut and/or adaptor removed as needed)



**Hollister Vendor#9345** (45cm/18" tubing that can be cut and/or adaptor removed as needed)

