

Leg Bags: Frequently Asked Questions

A multidisciplinary team reviewed the medical literature to identify evidence-based practices regarding the use of leg bags to prevent infection and maximize resident independence. A majority of the leg bag questions raised by facility teams could not be answered with the medical literature review, so content experts from the *AHRQ Safety Program for Long-Term Care: HAIs/CAUTI* national project team shared their seasoned experience.

General Recommendations

Maintaining a leg bag requires clean technique. Prior to handling the leg bag, health care personnel should first perform hand hygiene and then put on (don) clean gloves. Upon completion of care, remove (doff) the gloves and discard in the trash. Perform hand hygiene again.

LTC facilities should determine their optimal approach (leg bag versus a continuous, large capacity urine collection bag) and each care practice recommendation based on national recommendations, evidence-based practices, this FAQ, their own facility risk assessment and best practices in shared decision-making with residents and/or families.

Using Leg Bags

1. What is the recommendation for using leg bags?

Residents and patients with an indwelling urethral urinary catheter will sometimes break a closed urinary drainage system (with its large size urine collection bag) in order to use a smaller sized leg bag for mobility, dignity and comfort issues. The leg bag can be concealed under clothing and may assist with optimizing independence with activities of daily living.

However, this practice conflicts with the Centers for Disease Control and Preventionⁱ (CDC) and The Society for Healthcare for Epidemiology of Americaⁱⁱ (SHEA) guidelines to maintain a closed drainage system. While there is no compelling evidence to recommend discontinuing the use of leg bags there are policies and procedures in place to aseptically maintain the leg bag. The facility should perform a risk assessment prior to initiating leg bag use.

2. How often should the leg bag be changed?

The manufacturer may recommend their product is for single-use only and should not be reused due to a potential safety risk to the resident (e.g., infection, compromised structural integrity leading to device failure). An alternative approach is to perform a multi-disciplinary risk assessment that addresses the benefits and disadvantages of reusing the leg drainage bags. Benefits include potential convenience, cost savings and decreased environmental waste. The assessment should be documented and approved by the appropriate facility committee(s), such as a safety committee. If leg bags will be reused, it is important to develop a policy and procedure that includes:

- Performing hand hygiene and wearing personal protective equipment (PPE)
- Step-by-step instructions to adhere to aseptic technique

- When and how to wipe all connecting tips with an alcohol wipe
- Ensuring the connecting tips are kept covered and clean while being stored
- Cleaning the exterior of the bag and leg straps
- Rinsing the interior of the bag
- Storing the bag
- Replacing the leg and drainage bag on a schedule (e.g., weekly), and as needed (e.g., urinary tract infection, bag cleanliness is compromised).

Cleaning and Storing Leg Bag Materials

Leg Bag Care

1. How should the *exterior* of the leg bag and straps be cleaned, and how often?

Both the exterior of the leg bag and the leg straps, which have prolonged skin-to-skin contact, should be:

1. Wiped down during routine, daily bathing care with the resident's preferred bathing method (e.g., soap, brand skin cleaner).
2. Rinsed and promptly dried. Do not allow prolonged skin-to-skin contact with wet/damp materials.

2. How should the *interior* of the leg bag be cleaned?

Both diluted vinegar (one-part vinegar to 3-parts water (1:3)) and bleach (one-part bleach to 10-parts water (1:10)) have bactericidal properties and may be used to clean the interior of the leg bag. Either agent disinfects to reduce infection and may reduce odor and lessen embarrassment. When using any chemical such as vinegar or bleach, ensure a consistent dilution protocol is developed. Also, appropriate personal protective equipment (PPE) should be worn to prevent a splashing injury.

Appropriate steps to take to clean the interior of the leg bag include:

1. Don appropriate PPE.
2. Fill the leg bag up with the preferred agent.
3. Ensure both caps are secured and the inside components are covered with the chemical.
4. After the soaking time, don appropriate PPE, and carefully empty the contents into the toilet; avoid potential splashing.
5. Rinse the bag and caps, using tap water.

NOTE: While there are many types of soap with varying bactericidal properties, soap is generally recommended to be used on the skin and not as a disinfecting product, per manufacturer's instructions.

3. How should the leg bag be stored?

1. Prior to initial use and when storing the leg bag, ensure a resident identifier (e.g., name, initials) is on the leg bag.
2. Allow the leg bag and caps to air dry by:
 - Placing upright in a clean container¹ (e.g., bath basin with a resident-identifier)

¹ Clean/disinfect the container when soiled or discard. Change the wash basin per facility policy.

- Place a clean paper towel in the bottom of the container and change daily.
- Storing container, leg bag, straps and caps in the bathroom when not in use.²

Leg Bag Nozzle and Cap Care

1. How should the leg bag caps be cleaned?

Leg bag caps can be cleaned the same way the interior leg bag is cleaned. For more information, see [“Leg Bag Care” section](#), question 2. Alternatively, the inside of the cap can be disinfected with alcohol prep pad for 5 seconds and allowed to air dry. Store the leg bag cap in a clean container or on a clean paper towel, in the bathroom.

2. How should the following be cleaned/disinfected prior to connecting the leg bag to the indwelling catheter?

- *Nozzle*: Use appropriate hand hygiene and don gloves. Remove leg bag caps and drain fluid into the receptacle (i.e., urine collection container or toilet). Disinfect the nozzle by rubbing an alcohol prep pad on the leg bag nozzle for 5 seconds and allow it to air dry. Then insert the leg bag nozzle into the urinary catheter.
- *Cap*: Change when contaminated and when the entire system is changed, per policy. Disinfect the cap by rubbing an alcohol prep pad on and in the cap for 5 seconds and allow it to air dry.

References

ⁱ Gould CV, Umschid CA, Agarwal RK, Kuntz G., Pegues DA, and the Healthcare Infection Control Practices Advisory Committee. Guideline for prevention of catheter-associated urinary tract infections 2009. Available at: <http://www.cdc.gov/hicpac/pdf/CAUTI/CAUTIguideline2009final.pdf>. Accessed November 29, 2015.

ⁱⁱ Lo E., Nicolle LE, Coffin SE, Gould C., Maragakis LL, Meddings J., Pegues DA et al. Strategies to prevent catheter-associated urinary tract infections in acute care hospitals: 2014 Update. Available at: [http://www.icsne.org/SHEA%202014%20Updated%20CAUTI%20Prevention%20Guidelines%20\(1\).pdf](http://www.icsne.org/SHEA%202014%20Updated%20CAUTI%20Prevention%20Guidelines%20(1).pdf). Accessed November 29, 2015.

² Storing the leg bag in the resident’s bathroom in a clean container minimizes contamination (from aerosols, dust, etc.) and also prevents cross-contamination to clean items in the resident’s room.