

HOW TO PREVENT URINARY TRACT INFECTION IN OLDER PEOPLE IN NURSING HOMES



Learn about:

- Hand hygiene
- Barrier precautions and other kinds of equipment
- Anogenital hygiene
- Changing diapers
- Bladder emptying
- Urinary catheter

**THE RIGHT WAY
DOES THE DIFFERENCE**

**Do you have infection hygiene star quality?
Read this folder to see if your star quality will increase**

Older people in nursing homes are at serious risk of developing urinary tract infections. By taking a few simple actions, you can improve the quality of your infection hygiene and help prevent urinary tract infections. This folder will guide you in maintaining or improving basic practices that have been proven to reduce the risk of urinary tract infections in older people in nursing homes.

On the front pages you will find topics presented shortly. On the back pages there is text that support the recommendations.

1. Mody L, Krein SL, Saint S, Min LC, Montoya A, Lansing B, et al. A targeted infection prevention intervention in nursing home residents with indwelling devices. National Institutes of Health; 2015.
2. Meddings J, Saint S, Krein SL, Gaies E, Reichert H, Hickner A, et al. Systematic review of interventions to reduce urinary tract infection in nursing home residents. National Institutes of Health; 2017.
3. Omli R, Skotnes LH, Mykletun A, Bakke A, Kuhry E, Midthjell K. Pad per day usage, urinary incontinence, and urinary tract infections in nursing home residents. National Institutes of Health; 2010.
4. Raz R, Stamm WE. Recurrent urinary tract infections in postmenopausal women. National Institutes of Health; 2000.
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6. World Health Organization. Infection prevention and control. Geneva: World Health Organization; 2020.



HAND HYGIENE

PROTECT THE RESIDENT AGAINST
URINARY TRACT INFECTION
BY PERFORMING:

- HAND DISINFECTION
- HANDWASH



TRANSMISSION OF BACTERIA FROM THE HANDS TO THE URINARY TRACT CAN CAUSE URINARY TRACT INFECTION

GOOD QUALITY OF HAND HYGIENE NEEDS GOOD CONDITIONS:

- Intact skin, sleeves above elbow, clean short nails without nail polish, fingers without jewelry, and forearms without wristwatch or jewelry are requirements for an optimal hand hygiene.

THE RIGHT CHOICE:

- On clean and dry hands, hand disinfection is first choice.
- On visible unclean or wet hands and after assisting a resident with a toilet visit, it is recommended to wash hand and then disinfect them.

THE RIGHT MOMENT:

- Hand hygiene must be performed:
 - Before and after all tasks related to anogenital hygiene, changing diapers, and handling a permanent urinary catheter.
 - After the use of single-use gloves.

BARRIER PRECAUTIONS AND OTHER KINDS OF EQUIPMENT

PROTECT THE RESIDENT AGAINST URINARY TRACT INFECTION BY USING:



Single-use gloves



Single-use apron

CLEAN EQUIPMENT LIKE:

- WASH CLOTHS
- TOWELS
- WASH BASIN
- CONTAINER FOR EMPTYING THE PERMANENT CATHETER URINARY BAG



TRANSMISSION OF BACTERIA FROM WORKING CLOTHES AND EQUIPMENT TO THE URINARY TRACT CAN CAUSE URINARY TRACT INFECTION.

Barrier precautions and other equipment must be clean and must not have been used for other tasks or other residents to prevent transmission of microorganisms.

To make a safe workflow all barrier precautions and other equipment must be placed on a clean area before tasks of changing diapers, performing anogenital hygiene and handling a permanent urinary catheter.



The single-use gloves must be changed when switching from unclean task to clean task.



The single-use gloves and single-use aprons must be discarded after each use.

ANOGENITAL HYGIENE

REMEMBER YOUR HAND HYGIENE IMMEDIATELY
BEFORE AND AFTER ANOGENITAL HYGIENE.



PERFORM ANOGENITAL HYGIENE DAILY
AND WHEN THE DIAPER IS CHANGED.



Female

Perform anogenital hygiene
in the direction from the
urethral opening - from the
inside out.



Male

Pull back the foreskin carefully.
Wash the glans penis in the
direction from the urethral
opening - from the inside out.
Pull back the foreskin carefully
into place

Permanent urinary catheter

Wash the urinary hose in the
direction from the urethral
opening - from the inside out





It is important to wash the urethral opening in the direction from the urethral opening - from the inside out. The urethral opening is port of entry for bacteria that easily can be transmitted through the urinary tract and can lead to urinary tract infection.

It is also important to perform anogenital hygiene daily and when the diaper is changed, as a wet and/or feces-contaminated diaper provides a good environment for bacteria to multiply.

CHANGING A DIAPER

REMEMBER YOUR HAND HYGIENE IMMEDIATELY BEFORE AND AFTER ANOGENITAL HYGIENE.

CHANGE THE DIAPER MINIMUM 3 TIMES A DAY. AIM TO CHANGE THE DIAPER AS SOON AS POSSIBLE AFTER URINATION.

EXPLORE, OVER TIME, AROUND WHAT TIMES OF THE DAY THE DIAPER BECOMES WET TO ASSIST TOILET VISIT AS AN ALTERNATIVE TO USE DIAPERS FOR URINATING - IF POSSIBLE



- KEEP THE ANOGENITAL AREA CLEAN.
- CHOOSE THE RIGHT SIZE OF A DIAPER.





Many older residents in nursing homes suffer from urinary incontinence and use diapers.

Transmission of bacteria from the wet or feces-contaminated pad to the skin can be transferred to the urinary tract and cause urinary tract infection.

The right size of a diaper is when the diaper can absorb the amount of urine that is expected until next time of changing.

BLADDER EMPTYING

REMEMBER YOUR HAND HYGIENE IMMEDIATELY BEFORE AND AFTER ASSISTING WITH A TOILET VISIT.

AIM TO GET THE RESIDENT TO USE THE TOILET VISIT MINIMUM 3 TIMES A DAY (WHEN POSSIBLE, ACCORDING TO THE RESIDENT'S PHYSICAL AND MENTAL CONDITION).



- Assist to spend sufficient time and ensure a good sitting position for emptying the bladder.
- Consider the option of triple voiding– if possible.
- Consider the need for bladder scanning is assessed – if possible.



Post Void Residual Volume is related to e.g., high age, incontinence, reduced mobility, and constipation. Residual urine left in the bladder is a good growth medium for bacteria.

Pedagogical considerations about time consumption and helping persons feel safe when emptying the bladder can prevent residual urine.

Triple voiding means that you try to empty the bladder three times in a row instead of just one time. This can contribute to make the bladder even more empty.



INSERTING AND MAINTAINING A URINARY CATHETER

PERFORM HAND HYGIENE IMMEDIATELY BEFORE AND AFTER INSERTION OF A CATHETER AND IMMEDIATELY BEFORE AND AFTER ANY MANIPULATION OF THE CATHETER



- Allow only trained healthcare providers to insert a urinary catheter.
- Ensure aseptic technique when inserting a catheter.
- Assess the resident daily for any pain or discomfort.
- Clean the meatus daily, and inspect for redness and irritation.
- Assess the catheter where it enters the meatus for encrusted material and drainage.
- Remove catheters when no longer needed.





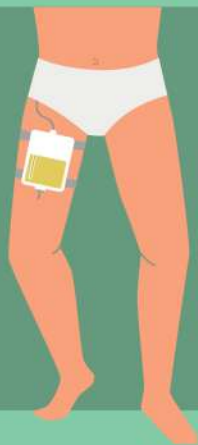
When inserting a urinary catheter, an aseptic technique is important. Perform anogenital hygiene, discard gloves, and perform hand hygiene prior to insertion. Set up a sterile field with sterile gloves, drapes, and sponges, and a sterile catheter. Do not touch items in the sterile field with non-sterile hands or non-sterile equipment.

Make sure not to contaminate the catheter, and that the catheter tip does not touch the genitalia before being introduced into urethra. If the catheter is accidentally contaminated, discard it, and obtain a new sterile catheter.

Even with a good hygiene, having a urinary catheter increases the risk of getting a urinary tract infection. Therefore, urinary catheters should only be used when medically necessary and should be removed as soon as they are no longer needed.

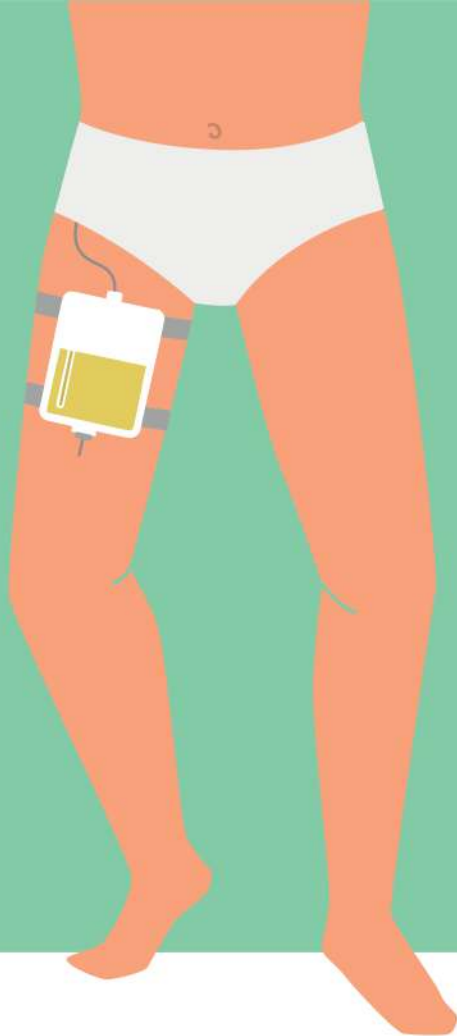
HANDLING A URINARY CATHETER BAG

REMEMBER YOUR HAND HYGIENE IMMEDIATELY BEFORE AND AFTER EMPTYING A URINARY BAG.



- Place the urinary bag below or at bladder level.
- Avoid contaminating the urinary bag from the floor.
- Fix the hose of the urinary bag right to avoid kinking, pulling and pressure of the urinary bag and hose.
- Use a new, unused urinary bag when changing the bag.





It is important to ensure that drainage does not make backflow. This can be avoided when the urinary bag is placed below or at bladder level.

One simple rule is that the urinary bag must not touch the floor, as bacteria from the floor can be transmitted via the urinary bag to the urinary tract.

The hose of the urinary bag must be fixed right to avoid kinking, pulling and pressure since this can cause small lesions to appear in the urinary tract, increasing the risk of urinary tract infection.

When the urinary bag is being changed the connection is easily contaminated and can cause urinary tract infection. This can be avoided by using a new, unused urinary bag when it is changed.

EMPTYING A URINARY CATHETER BAG

REMEMBER YOUR HAND HYGIENE IMMEDIATELY BEFORE AND AFTER EMPTYING A URINARY BAG.

REMEMBER TO WEAR CLEAN SINGLE USE GLOVES AND CLEAN SINGLE USE APRON.

- Empty the urinary bag when it is max $\frac{3}{4}$ full.
- Use a clean container.
- Wipe the spout with a clean paper towel or similar after emptying the urinary bag.



Be aware of emptying the urinary bag when it is max $\frac{3}{4}$ full to prevent stasis in the hose and backflow of urine.

Using a clean container such as a urine flask or bucket prevents contaminating the catheter tip.

Drops of urine contain bacteria. Removing these, contributes preventing risk of transmission.

