



Introductory program for prevention of urinary tract infection in residents in nursing homes

Related to anogenital hygiene, change of diaper and toilet visit.

Trainee:

Supervisor:

Urinary tract infection in older people in nursing homes is a common infection that is preventable in many cases. Taking care of older people in nursing homes often includes care tasks related to anogenital hygiene, change of diaper and assisting with toilet visit. Uneducated healthcare staff often perform these kinds of care tasks. To contribute to prevent urinary tract infection takes knowledge, training, and skills. This program has been developed as a help for both the person who takes care of the introduction task and the person who is receiving the introduction.

On page 1 you find a list of the overall conditions that must be fulfilled to perform the care tasks the right way to prevent urinary tract infection.

On page 2 you find instructions related to anogenital hygiene, change of diaper and assisting with toilet visit.

On page 1 and 2 it is possible to mark when the dissemination and the performing are well completed.

On page 3 and 4 find you find background material to use for further explanation of each topic.

Hand hygiene: hand disinfection and hand washing	Disseminated	Performed
To be performed immediately before and immediately after all care tasks related to anogenital hygiene, change of diaper, assisting with a toilet visit – and after use of single-use gloves. Can be disinfection or hand washing.	Date and signature	Date and signature
Conditions for safe hand hygiene		
<ul style="list-style-type: none"> a. Nails are short and without nail polish and artificial nails. b. Hands and wrists are without jewellery (including wedding ring), hand watch and bandage. c. Sleeves are short (above elbow). 		
Hand disinfection		
<ul style="list-style-type: none"> a. Use when hands are visible clean and dry. b. Use enough alcohol-based product amount to keep hands moist for 20-30 seconds while rubbing. c. For health care staff supplement after hand washing. 		
Hand washing		
<ul style="list-style-type: none"> a. Perform when hands are contaminated with human material (e.g. feces, urine) or when wet and when moist after use of single-use gloves. b. For health care staff supplement with hand disinfection. 		
Barrier precautions	Disseminated	Performed
<ul style="list-style-type: none"> a. Wear single-use gloves and single-use apron related to anogenital hygiene and when changing a diaper. 	Date and signature	Date and signature
Equipment	Disseminated	Performed
<ul style="list-style-type: none"> a. Use clean work area. b. Use clean equipment like wash cloths, towel, wash basin, urine flask, intimate soap, waste bag, bag for laundry. 	Date and signature	Date and signature



Anogenital hygiene Perform anogenital minimum 1 time a day	Disseminated Date and signature	Performed Date and signature
1. Female: <ul style="list-style-type: none"> Wash in the direction from the urethral opening - from the inside out. Use a new washcloth for every wash stroke. Rinse off soap. Wash the rest of the area. Wash towards the anus. Use a new washcloth for each wash stroke. Rinse off soap. Dry the skin well. 		
2. Male: <ul style="list-style-type: none"> Pull back the foreskin carefully. Wash the glans penis in the direction from the urethral opening - from the inside out, use a new washcloth for every wash stroke. Rinse off soap. Wash the rest of the penis and scrotum. Wash towards the anus. Use a new washcloth for each wash stroke. Rinse off soap. Pull back the foreskin carefully into place. Dry the skin well. 		
Change of diaper	Disseminated Date and signature	Performed Date and signature
3. Change minimum 3 times a day. 4. Aim to change the diaper as soon as possible after urination. 5. Rinse the skin of the "diaper area". 6. Choose the right size of a diaper.		
Toilet visit (bladder emptying)	Disseminated Date and signature	Performed Date and signature
7. Aim to get the resident to use the toilet (when possible, according to the resident's physical and mental condition). Assist in: <ul style="list-style-type: none"> Ensuring a good sitting position for emptying the bladder Spending sufficient time and a feeling of security 		





BACKGROUND MATERIAL

Hand hygiene (hand disinfection or hand washing followed by hand disinfection) is at the core of effective infection prevention. Because of this it is important to perform hand hygiene the right way and at the right moment in relation to prevent urinary tract infection.

Conditions for safe hand hygiene

Jewellery, artificial nails, nail polish and long sleeves make bad condition for an effective hand hygiene as these items are reservoir for microorganisms. After hand hygiene microorganisms from these items will remain and can be transmitted among persons.

Hand disinfection

Hand hygiene must be performed immediately before and immediately after all care tasks related to anogenital hygiene, change of diaper, and assisting with a toilet visit.

In most cases first choice of hand hygiene is hand disinfection. This method can be used on visible clean and dry hands. Studies have shown that it takes 20-30 seconds while rubbing to kill most microorganisms on the hands.

Hand washing

Use hand washing when your hands have been contaminated with human material (e.g., feces, urine), when wet and when moist hands after use of single-use gloves. Perform hand washing at least 20 seconds to remove most microorganisms on the hands.

Hand washing must always be supplemented with hand disinfection for health care staff.

Barrier precautions

Assisting a resident with anogenital hygiene, change of diaper and toilet visit are all care tasks related to the risk of the hands and work clothes being contaminated with feces and urine.

Use single-use gloves and single-use apron only in relation to a specific procedure – and throw them away after end of procedure

Start the procedure wearing single-use gloves and single-use apron and take these off immediately after you are done with the care task.

Consider always unclean single-use gloves as a source of transmission like unclean hands without gloves.



Equipment

Before performing these care tasks, the preparation is important. The barrier precautions and other equipment must be placed on a clean work area near the resident (e.g., a shelf or a procedure table). Using an area that is easy to clean minimizes transmission of microorganisms to the resident.

Many kinds of microorganisms can survive on surfaces and materials, especially when these are moist. Because of this it is important to use clean equipment which is either washed the right way or unused single-use types. Use of waste bag and bag for laundry near the care task is a sure way to prevent contamination of the surroundings with the microorganisms from the used equipment and the resident's unclean cloth and linens.

Anogenital hygiene

Most urinary tract infections are caused by bacteria from the person's own gut or from the anogenital skin area. It is important to perform anogenital hygiene the right way – and in the right direction to avoid these bacteria to be transferred to the vulnerable lower part of the urinary tract. This applies to both females and males.

Change of diaper

Many older people in nursing homes suffer from urinary incontinence and because of this they use a diaper. It is well known that urinary incontinence is related to an increased risk of developing urinary tract infection. It is also well known that the number of bacteria will increase when these are situated in a warm and moist environment. Because of this fact it is recommended to change the diaper as soon as possible after the diaper has become wet with urine or contaminated with feces – or at least 3 times a day.

The right size of a diaper is as big as necessary and as small as possible.

Toilet visit (bladder emptying)

Residual urine is the amount of urine that remains in the bladder after urinating. It is well known that residual urine is related to an increased risk of developing urinary tract infection as the residual urine will result the number of bacteria increase. The way and the time a person sit on the toilet often makes a difference to improve the ability to empty the bladder. Therefore, it is important for the healthcare staff to contribute to its success. Make contact of the legs to the floor e.g., with a stool. Assist with physical calm presence for optimizing the feeling of security and need for time to empty the bladder.

References

- World Health Organization. Infection prevention and control. Hand hygiene. Geneva: World Health Organization; 2020.
- Omli R, Skotnes LH, Romild U, Bakke A, Mykletun A, Kuhry E. Pad per day usage, urinary incontinence, and urinary tract infections in nursing home residents. *Age Ageing*. September 2010;39(5):549–54.
- Chenoweth CE, Gould CV, Saint S. Diagnosis, management, and prevention of catheter-associated urinary tract infections. National Institutes of Health; 2013.

