



Catheter Associated Urinary Tract Infection (CAUTI) Prevention Policy

Policy Owner: Infection Prevention, Manager

POLICY STATEMENT

Urinary catheterization to facilitate urine drainage will be used only when medically necessary. Indwelling urinary catheters should be **evaluated daily** for necessity and promptly removed when no longer necessary. The following bundle elements will be used during insertion and/or maintenance to prevent associated infections.

AFFECTED STAKEHOLDERS

Indicate all entities and persons within the Enterprise that are affected by this policy:

- Hired Staff
- Housestaff/Residents & Clinical Fellows
- Leased staff
- Medical Staff (includes Physicians, PAs, APNs)
- Vendors/Contractors
- Other:

DEFINITIONS

Catheter Associated Urinary Tract Infection - Urinary tract infection classified by specific, clinical signs and symptoms or asymptomatic bacteremia in patients who have an indwelling urinary catheter at the time of onset or within 48 hours before onset of the infection/event.

Hand Hygiene - The measure used to remove resident and transient organisms from the hands.

Indwelling Urinary Catheter - A drainage tube that is inserted into the urinary bladder through the urethra, left in place, and connected to a closed collection system (not used for irrigation and does not include straight in-and-out/intermittent catheters). Also called a Foley catheter.

Intermittent Catheterization - A drainage tube that is inserted into the urinary bladder through the urethra to drain urine acutely and not left in place. Also called In-and-Out Catheterization.

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Neurogenic Bladder - Condition in which a person lacks bladder control due to a disorder or damage to the brain, spinal cord, or nerves. Symptoms vary from an overactive bladder to an underactive bladder depending on the cause.

Suprapubic Catheter - A drainage tube that is surgically inserted into the urinary bladder through a small hole in the abdomen. Indications for use include failed urethral catheter, urethral disruption, and long term use.

Urinary Catheterization - Process of using a drainage tube to eliminate wastes from the urinary bladder; may be intermittent, indwelling, external or suprapubic.

PROCESS & PROCEDURES

1. Bundle Elements

1. Proper Utilization

- a. Indwelling urinary catheters should be inserted only when medically indicated and evaluated daily for need. Urinary catheters should not be used for convenience of patient care personnel or the patient.
- b. Urinary catheters are deemed medically necessary for the following indications:
 1. Acute urinary retention or bladder outlet obstruction
 2. Accurate measurement of urinary output in critically ill patients
 3. Perioperative use in selected procedures
 - i. Urological surgery or other surgery on contiguous structures of the genitourinary tract
 - ii. Anticipated prolonged duration of surgery (remove catheter in OR or PACU)
 - iii. Anticipated receipt of large volume infusions or diuretics during surgery
 - iv. Need for intraoperative monitoring of urinary output
 4. Assisted healing of perineal and sacral wounds in incontinent patients
 5. Prolonged immobilization for trauma or surgery
 6. Comfort care of the terminally ill patient if needed
- c. Alternative methods for bladder elimination should be considered and documented prior to insertion of an indwelling catheter. Alternative methods may include:
 1. Bladder training, which consists of placing the patient on the bedpan or commode every two hours.
 2. Intermittent catheterization for patients requiring chronic urinary drainage due to neurogenic bladder and postoperative patients with urinary retention.
 3. External, condom catheterization in patients without urinary retention or obstruction.
 4. Ultrasonic bladder scanning device utilization in conjunction with intermittent catheterization for suspected urinary retention.
- d. Patients who perform self-catheterization at home should be encouraged to continue performing this procedure while in the hospital using a clean technique. The patient's performance should be evaluated by care providers and positive behaviors reinforced.
- e. Everyone on the healthcare team, including the patient, is encouraged to question necessity.

2. Hand Hygiene

Practice hand hygiene immediately before insertion of the catheter and before and after any manipulation of the catheter site or apparatus.

3. Aseptic Insertion

When indicated and ordered by a physician, an appropriate bore indwelling urinary catheter is inserted by trained personnel using sterile gloves, sterile supplies, and aseptic technique. As small, a catheter as possible for adequate drainage is used to minimize urethral trauma. A silver impregnated catheter is used when available.

4. Proper Securement

As close to insertion as possible, the catheter is secured to the inner thigh with an approved device in a manner that prevents movement and urethral friction. The catheter should remain appropriately secured until deemed unnecessary and removed.

5. Closed (Sterile) Drainage System

Hospital Epidemiology **must** evaluate and approve all closed sterile drainage systems utilized at AU Medical Center.

- a. A sterile, continuously closed drainage system should be maintained for indwelling and suprapubic catheter systems.
- b. Use triple lumen catheters for large volume or continuous bladder irrigation and/or intra-abdominal pressure monitoring when possible to maintain a closed drainage system.
- c. The catheter and drainage tube should not be disconnected unless the catheter can only be irrigated manually.
- d. If breaks in aseptic technique, disconnection, or leakage occur related to manual irrigation, the collecting system is replaced using aseptic technique after disinfecting the catheter tubing junction with chlorhexidine gluconate. **For all other disruptions in the system, a new closed drainage system will be inserted.**

6. Standard Precautions for Maintenance

Gloves are used when manipulating the catheter site and drainage system. Hand hygiene is practiced before and after glove use (manipulation). A gown and protective eyewear are worn if splashing of urine is anticipated.

7. Adequate Urinary Flow

- a. Collection bags should always be placed below the level of the patient's bladder to facilitate drainage and prevent stasis of urine. The bag should never be allowed to touch the floor.
 1. The collection bag will need to be above the level of the bladder during hydrotherapy as it should not be submerged, but the tubing should be adequately clamped to prevent backflow of urine.
- b. To achieve a free flow of urine, the catheter and collecting tube are kept from kinking without dependent loops. Occasionally, temporary obstruction of the catheter for specimen collection or other medical purposes is necessary using the appropriate clamp.
- c. Plugging of catheters is not permitted and leg bags are discouraged. When leg bags are required for ambulation of homebound patient who require catheters, the drainage bag outflow spigot is protected from hand and environmental contact.

- d. The collection bags are emptied regularly using a separate, clean collecting container for each patient; avoid splashing. Prevent contamination of the outflow spigot at all times and prevent contact with the non-sterile, collection container.
- e. Collection containers are rinsed with tap water and stored in a manner that facilitates drying after each use. One container is issued for each patient and dedicated without drainage of other fluids or substances (i.e. JP drains,), labeled with the patient's name, and discarded when no longer in use.

2. OTHER ELEMENTS OF CARE

1. Perineal Care

The perineum is gently washed with soap and water once daily when the patient is bathed and, as incontinence or other drainage requires. No other routine catheter care is recommended.

2. Change Intervals

- a. Catheters of inpatient post-op urology patients shall be changed by the urologist.
- b. The interval between catheter changes should be determined by the individual patient's needs. A catheter change may be indicated when there is leakage, break in the integrity of the closed system, equipment deterioration, mechanical impediment, and blockage.
- c. Indwelling catheters are not changed at arbitrary fixed intervals.

3. Irrigation

- a. Irrigation, if medically necessary, is performed using aseptic technique.
- b. When possible, the sampling port should be utilized for irrigation; avoid disconnecting the closed system.
- c. Bottles of irrigation solutions are dated and timed when opened and discarded every 24 hours. Syringes are discarded after each use.

4. Specimen Collection/Cultures

- a. When ordered, urine cultures are aseptically obtained from the aspiration port. Ports must be cleansed with chlorhexidine gluconate (CHG)/alcohol both before and after specimen collection.
- b. Urine specimens should be sent to the laboratory immediately.
- c. Bladder catheter tips are not accepted for culture, and urine from the drainage bag is not appropriate.
- d. Small volume specimen collection and intermittent bladder irrigation, when ordered, are performed before and after collection of specimen. Collection is done aseptically via the aspiration port after CHG/alcohol preparation of the port occurs.
- e. Large volumes of urine for special analyses, not culture, are aseptically obtained from drainage bags.

3. EDUCATION

Only persons (e.g., nursing staff, family members, or patients themselves) who know the correct technique of aseptic insertion and maintenance of the catheter should handle catheters. Healthcare workers and others who take care of catheters should be given periodic education and training, stressing the correct techniques and potential complications of urinary catheterization. Patient and their families should receive education on the prevention of infection associated with urinary catheters at the time of admission and/or insertion.

REFERENCES, SUPPORTING DOCUMENTS, AND TOOLS

Centers for Disease Control and Prevention. (2015) *Catheter-associated urinary tract infections (CAUTI)*. Retrieved from https://www.cdc.gov/hai/ca_uti/uti.html

RELATED POLICIES

[Hand Hygiene Policy](#)

[Adult Urinary Catheter Exchange Protocol](#)

[Adult Indwelling Urinary Catheter Removal Protocol & Bladder Management Guidelines](#)