

# Preventing Catheter-Associated Urinary Tract Infection

## A guide for healthcare workers

### Basic Principles for Preventing Catheter Associated Urinary Tract Infections (CAUTI)

- Insert urinary catheter only if clinically indicated
- Insert and maintain the catheter using aseptic technique
- Only trained, competent staff to insert urinary catheters
- Document catheter insertion and indication
- Only collect urine samples for culture if clinically indicated
- Maintain unobstructed urine flow and closed sterile drainage system
- Remove urinary catheter as soon as clinical need is resolved
- Daily review and document the indication for a urinary catheter

### What is the problem?

Approximately 25% of patients will have a short-term urinary catheter during their hospital stay. Around 20% of healthcare associated infections (HAI's) are urinary tract infections (UTI) with around 80% of these being attributable to urinary catheters. Reducing the risk around urinary catheter use, insertion, maintenance and removal will reduce the risk of catheter associated UTI's.

### Minimising the risk - Insertion

- Where appropriate consider condom drainage or intermittent catheterisation instead
- Record indication/s for catheter use such as urinary retention/obstruction, fluid monitoring in critically ill patients, injury/surgery affecting urological function, intraoperative output monitoring, neurogenic bladder, to reduce the risk of bladder damage during Caesarean section, urinary incontinence management for wound care and/or end-of-life care
- Trained and competent staff to insert the urinary catheter
- Select appropriate catheter and use smallest possible gauge
- Do not use antibacterial catheters
- Clean urethral meatus before insertion with cleansing solution (0.1% aqueous chlorhexidine solution or 0.9% sterile sodium chloride)
- Insert using aseptic non touch technique
- Connect the urinary catheter to the drainage device and secure catheter to the patient's thigh
- Document catheter insertion, date, time, gauge and person performing insertion

## Minimising the risk - Maintenance

- Daily assessment of ongoing need for urinary catheter
- Maintain sterile, closed urinary catheter system
- Use standard precautions when manipulating the urinary catheter system.
- Do not disconnect the urinary catheter and collecting system unnecessarily.
- Keep collection bag lower than the bladder, off the floor and avoid kinking or clamping
- Perform routine hygiene of the meatal area
- Empty collection bag frequently to maintain urine flow using a separate single use or reusable collection container for each patient.
- Obtain urine samples aseptically
  - For fresh urine, aspirate a sample from sampling port after cleansing with disinfectant
  - Obtain larger volumes aseptically from drainage bag
- Document all procedures in patient/client notes
- Change urinary catheters at intervals adapted to patients, based on clinical indications
- Do not discharge/transfer patient without a plan documenting urinary catheter indication, catheter type, volume of water in balloon, date for removal/review
- Do not treat asymptomatic bacteriuria except before invasive urologic procedures
- Do not use antiseptics to cleanse the meatal area while urinary catheter is in place
- Do not use chronic antibiotic suppressive therapy

## Minimising the risk - Removal

- Remove as soon as clinical need is no longer required
- Develop systems to prompt early removal where clinically appropriate
- Document all information regarding removal

## Quality Improvement

- Implement quality improvement programs include:
  - Protocols for insertion, maintenance and removal of urinary catheters
  - Protocols to assess need for continued catheterisation, stop orders, patient record/chart reminders
  - Protocols for management of post-op urinary retention
  - Develop CAUTI education and competency tools and provide ongoing education
  - Review CAUTI incidents

## Approaches to preventing CAUTI

- Do not use urinary catheters for continence management

## References

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