

Best practices to reduce CAUTI

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Strategies to prevent CAUTI

SHEA/IDSA PRACTICE RECOMMENDATION

Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals: 2014 Update

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Guideline for prevention of catheter- associated urinary tract infections,CDC;2009

Recommended for all acute care hospitals

II. Summary of Recommendations

Table 1. Modified HICPAC Categorization Scheme* for Recommendations

Category IA	A strong recommendation supported by high to moderate quality† evidence suggesting net clinical benefits or harms
Category IB	A strong recommendation supported by low quality evidence suggesting net clinical benefits or harms or an accepted practice (e.g., aseptic technique) supported by low to very low quality evidence
Category IC	A strong recommendation required by state or federal regulation.
Category II	A weak recommendation supported by any quality evidence suggesting a trade off between clinical benefits and harms
No recommendation/ unresolved issue	Unresolved issue for which there is low to very low quality evidence with uncertain trade offs between benefits and harms

Summary of recommendations:

- Appropriate Urinary Catheter Use
- Proper Techniques for Urinary Catheter Insertion
- Proper Techniques for Urinary Catheter Maintenance
- Quality Improvement Programs
- Administrative Infrastructure
- Surveillance and definition for UTI

1. Appropriate Urinary Catheter Use:

- Insert catheters only for appropriate indication and leave in place only as long as need
 - Minimize urinary catheter use and duration of use in all Pts
 - Avoid use urinary catheter; management of incontinence

1. Appropriate Urinary Catheter Use:

- Use urinary catheter in operative Pts only necessary, remove as soon as possible, within 24 hrs

Examples of Appropriate Urinary Catheter Use

- Pt has acute urinary retention or bladder outlet obstruction
- Need for accurate measurements of urinary output in critically ill Pts
- Peri- operative use for selective procedures
 - Undergoing urologic surgery or contiguous
 - Anticipated prolonged duration of surgery, to receive large- volume infusion or diuretics surgery
 - Need for intra-operative monitoring of urine

Examples of Appropriate Urinary Catheter Use

- To assist in healing of open sacral or perineal wounds in incontinent Pts
- Pts prolong immobilization
- To improve comfort for end of life care

2. Proper Techniques for Urinary Catheter Insertion

- hand hygiene immediately before and after insertion or any manipulation of the catheter device or site.
- Only properly trained persons
- In the acute care hospital setting, insert urinary catheters using aseptic technique and sterile equipment.

2. Proper Techniques for Urinary Catheter Insertion

- In the nonacute care setting, clean (ie, nonsterile) technique for intermittent catheterization acceptable (IA)
- If intermittent catheterization is used, perform it at regular intervals to prevent bladder overdistension.
- Properly secure indwelling catheters after insertion to prevent movement and urethral traction

3. Proper Techniques for Urinary Catheter Maintenance

- A closed drainage system: If breaks in aseptic technique, or disconnection, or leakage occur, replace the catheter and collecting system using aseptic technique and sterile equipment
- Maintain **unobstructed** urine flow; free from kinking, below the bladder all the times, do not rest the bag on the floor.

3. Proper Techniques for Urinary Catheter Maintenance

- Empty the collecting bag regularly using a separate, clean collecting container for each patient; avoid splashing, and prevent contact of the drainage spigot with the nonsterile collecting container.
- Keep the collecting bag below the level of the bladder at all time. Do not rest the bag on the floor.

3. Proper Techniques for Urinary Catheter Maintenance

- Use Standard Precautions, including the use of gloves and gown as appropriate, during any manipulation of the catheter or collecting system.

3. Proper Techniques for Urinary Catheter Maintenance

- Do not clean the periurethral area with antiseptics to prevent CAUTI while the catheter is in place.
- Routine hygiene (e.g, cleansing of the meatal surface during daily bathing or showering) is appropriate.
- Clamping indwelling catheters prior to removal is not necessary.

4. Quality Improvement Programs

- Implement quality improvement (QI) programs or strategies to enhance appropriate use of indwelling catheters and to reduce the risk of CAUTI based on a facility risk assessment.

4. Quality Improvement Programs

The purposes of QI programs should be:

- To assure appropriate utilization of catheters.
- To identify and remove catheters that are longer need.
- To assure adherence to hand hygiene and proper care catheters.
- To identify peri-operative catheter management

5. Administrative Infrastructure

- Provision of guidelines.
- Education and training.
- Supplies; a single- use packet of sterile lubricant jelly for insertion

6. Surveillance

- Identify the patient groups
- Use standardized methodology for performing:
collect catheter-days calculate etc.
- CAUTI definition

Problem for implementation programs to prevent CAUTI

- Engagement
 - Some nurses may not be on board with indwelling urinary catheter removal
 - Lack of or problem nurses champions
 - Lack of physician champions
 - leadership does not see CAUTI as priority

Problem for implementation programs to prevent CAUTI

- Education
 - Gap of knowledge of infectious consequences CAUTI
 - Not knowing what to do to prevent CAUTI
 - Nurses' schedule are inflexible, so difficult to do education

Problem for implementation programs to prevent CAUTI

- **Execute**
 - Eliminate unnecessary placement of indwelling catheter; no order written, favor by inserting
 - No catheter policy regarding insertion standard in place
 - Nursing work load
 - No catheter policy on discontinuation in place
 - Nurses are not confident speaking with physician about removal

CAUTI bundle

- Avoid unnecessary urinary catheters
- Insert urinary catheters using aseptic technique
- Maintain urinary catheters based on recommended guidelines
- Review urinary catheter necessity daily and remove promptly

Thank You

