



# SILVERTOUCH<sup>®</sup> FOLEY CATHETER

## THE STANDARD FOR SILVER



### Important National Initiatives

---

- 2009 CDC Guidelines for Prevention of Catheter Associated UTIs
- APIC Vision 2012
- Joint Commission National Patient Safety Goals
- SHEA Strategies to Prevent Catheter Associated Urinary Tract Infections
- SCIP Measure 9
- Compendium of strategies by CDC and SHEA

# Important National Initiatives

## on Catheter Associated Urinary Tract Infections CAUTI

### A Compendium of Strategies by SHEA and the CDC to Prevent Healthcare-Associated Infections in Acute Care Hospitals

#### Category A - Good evidence to support a recommendation for use

##### A-I Evidence from randomized trial

- Maintain a sterile, continuously closed drainage system.
- Consider other methods for management, including condom catheters or in-and-out catheterization, when appropriate.

##### A-II Evidence from well designed clinical trial

- Provide and implement written guidelines for catheter use, insertion, and maintenance.
- Maintain unobstructed urine flow.

##### A-III Evidence based on opinions of authorities

- Ensure that supplies necessary for aseptic-technique catheter insertion are available.
- Implement a system for documenting the following information in the patient record: indications for catheter insertion, date and time of catheter insertion, individual who inserted catheter, and date and time of catheter removal.
- Ensure that there are sufficient trained personnel and technology resources to support surveillance of catheter use and outcomes.
- Educate healthcare personnel involved in the insertion, care, and maintenance of urinary catheters about CAUTI prevention, including alternatives to indwelling catheters and procedures for catheter insertion, management, and removal
- Properly secure indwelling catheters after insertion to prevent movement and urethral traction.

### SCIP Measure 9

#### Removal of urinary catheters

This new measure states that urinary catheters are to be removed during the first or second day after surgery. The risk of urinary tract infection and bacteremia increase when a catheter remains in place for more than two days. Although this measure pertains primarily to inpatient cases, surgery departments will need to establish protocols for a physician order and a method of documenting catheter removals.

### APIC Vision 2012

- APIC will emphasize prevention and promote zero tolerance for health care-associated infections and other adverse events.



### Joint Commission 2008 National Patient Safety Goals

- Reduce the risk of healthcare-associated infections.
- Encourage patients' active involvement in their own care as a patient safety strategy.



# Important National Initiatives

## on Catheter Associated Urinary Tract Infections CAUTI

### 2009 CDC Guidelines for the Prevention of Catheter Associated UTIs

#### Category IB – Strongly Recommended, Supported by Theoretical Rational

- Insert catheters using aseptic technique and sterile equipment
- Properly secure indwelling catheters
- Insert catheters only for appropriate indications
- Minimize urinary catheter use
- Perform hand hygiene
- Maintain a sterile, continuously closed drainage system
- Maintain unobstructed urine flow
- Do not use systemic antimicrobials routinely to prevent CAUTI
- Remove the catheter as soon as possible postoperatively, preferably within 24 hours

#### Category IC – Required by Regulations

- Keep the catheter and collecting tube free from kinking
- Provide and implement evidence-based guidelines that address catheter use, insertion, and maintenance
- Ensure that healthcare personnel are given periodic in-service training
- Ensure that supplies necessary for aseptic technique for catheter insertion are available

#### Category II – Weak Recommendations

- Consider alternatives to indwelling catheters
- Consider using the smallest bore catheter possible
- Avoid bladder irrigation
- Do not change indwelling catheters or drainage bags at arbitrary fixed intervals
- Consider using an antimicrobial/antiseptic-impregnated catheters only after implementing a comprehensive strategy does not reduce rates of CAUTI.
- Silicone may be preferable to other catheter materials to reduce the risk of encrustation
- Document the following in the patient record: indications for catheter insertion, date and time of catheter insertion, individual who inserted catheter

### SHEA Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals

#### Outcomes associated with CAUTI

Urinary tract infection is the most important adverse outcome of urinary catheter use. Bacteremia and sepsis may occur in a small proportion of infected patients. Morbidity attributable to any single episode of catheterization is limited, but the high frequency of catheter use in hospitalized patients means that the cumulative burden of CAUTI is substantial.

#### Risk Factors

- The duration of catheterization is the most important risk factor for development of infection.
- Limiting catheter use and, when a catheter is indicated, minimizing the duration the catheter remains in situ are primary strategies for CAUTI prevention.

#### Catheter materials

- Reviews of silver-coated and other antibacterial urinary catheters consistently conclude that evidence does not support a recommendation for the uniform use of such devices.
- Silver-alloy catheters may decrease bacteriuria but have not been shown to decrease symptomatic infection or other undesirable outcomes.
- Some of the variability in outcomes reported in trials of silver catheters may be related to whether the comparator catheter is silicone or latex.

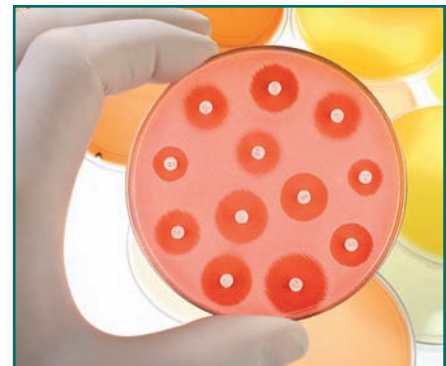
# SILVERTouch<sup>®</sup>

## Foley catheter



### Silver ions provide antimicrobial action

Silver ions have long been recognized for their broad-spectrum antimicrobial action. Ionic silver is effective against gram-positive and gram-negative bacteria, as well as fungi. Ionic silver hydrophilic catheter coatings can be very effective against the most common and serious UTI pathogens, including MRSA, VRE, E. coli, Candida albicans, Staph aureus, Pseudomonas, Klebsiella, and others.\*



The Zone of Inhibition (ZOI) diameter is a measure of the effectiveness of a compound. The larger the clear area, the more effective the compound.

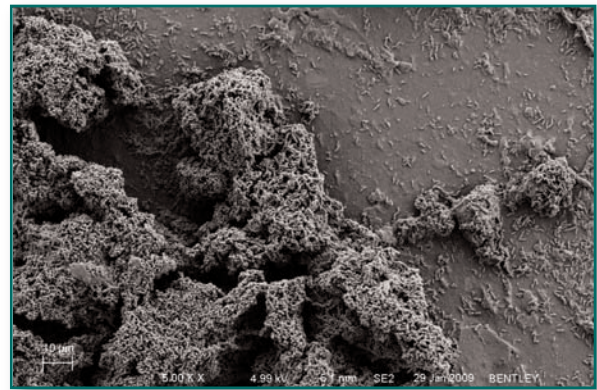
Silvertouch catheters incorporate the power of silver through a patented process that binds silver ions to the catheter's lubricious coating.

Culture Strains	Medline Silvertouch	Competitor X	Competitor Y
Escherichia coli	5	0	0
Pseudomonas aeruginosa	5	0	0
Klebsiella pneumoniae	5	0	1
Enterobacter cloacae	5	0	0
Citrobacter koseri	5	0	1
Proteus Mirabilis	0	0	0
Enterococcus faecium (VRE-A)	2	0	0
Enterococcus faecalis	2	0	0
Saprophyticus	7	0	1
Staphylococcus aureus (MRSA)	25	0	6
Candida albicans	5	0	0

Table 1. The diameters (mm) of grown inhibition zones produced by Silvertouch catheter when tested against a variety of microorganisms. Laboratory testing data available upon request.



Medline's Silvertouch Foley catheter



Competitive silver based catheter

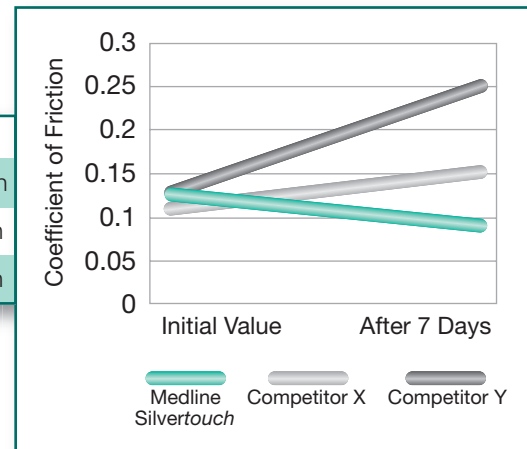
## Biofilm formation

Bacteria formation on the catheter surface is inevitable. Bacteria will locate a suitable environment and attach themselves. Once this occurs, microcolonies will form, called biofilm. The images above show Medline's Silvertouch Foley catheter compared to another silver based catheter on the market. From the images, you can see that due to Medline's ionic bonded silver ions, less biofilm has formed on the Silvertouch catheter surface.

## Better Lubricity Reduces Friction

Catheter Brand	Initial Value	After 7 Days	% Change
Medline Silvertouch	0.13	0.09	31% decrease in friction
Competitor X	0.11	0.15	36% increase in friction
Competitor Y	0.13	0.25	92% increase in friction

Figure 4. After 7 days incubation in artificial urine, the coefficient of friction of the Silvertouch Foley catheter was significantly lower than that of other commercial catheters. Laboratory testing data available upon request.



## Hydrophilic coating ensures patient comfort

An important parameter in clinical use of urinary catheters is their surface lubricity. Lubricity is typically characterized by a coefficient of friction, which is the ratio of the frictional force between the catheter and the patient. A lubricious, hydrophilic coating significantly reduces the friction between the catheter surface and the urethral mucosa. Some lubricious coatings can dissipate quickly once they are in contact with the urethral mucosa; other coatings can flake away. The unique process of covalently bonding polymers to the surface of the Medline Silvertouch catheter assures that the coating will remain on the surface. In fact, tests show that the lubricity on Silvertouch catheters actually improves over time.

# Silvertouch Foley Catheters

## Look for the green!

Why are Silvertouch catheters green? The brilliant color is visual evidence of the silver hydrophilic coating on each catheter.

## Latex-Free

Silvertouch catheters are latex-free, offering patient and caregiver safety, with the advantages of a 100% silicone catheter.



### Ordering Information

Item Number	Description	Pkg
<b>Silvertouch Foley Catheters</b>		
DYND141014	14Fr 10ml	10/cs
DYND141016	16Fr 10ml	10/cs
DYND141018	18Fr 10ml	10/cs
DYND141020	20Fr 10ml	10/cs
DYND141216	16Fr 30ml	10/cs
DYND141218	18Fr 30ml	10/cs
DYND141220	20Fr 30ml	10/cs

### Silvertouch Foley Catheter Trays

DYND140214	14Fr 10ml	10/cs
DYND140216	16Fr 10ml	10/cs
DYND140218	18Fr 10ml	10/cs

### Silvertouch Foley Catheter Trays with Securement Device

DYND140216S	16Fr 10ml	10/cs
DYND140218S	18Fr 10ml	10/cs

### Silvertouch Foley Catheter Urine Meter Trays

DYND140414	14Fr 10ml	10/cs
DYND140416	16Fr 10ml	10/cs
DYND140418	18Fr 10ml	10/cs

### Silvertouch Foley Catheter Urine Meter Trays with Securement Device

DYND140416S	16Fr 10ml	10/cs
DYND140418S	18Fr 10ml	10/cs

**“We initiated exclusive use of the Silvertouch Foley catheter for all of our patients requiring catheterization. We were very excited after two months of use – when we saw no catheter-associated urinary tract infections in our patients using the Silvertouch. As the months progressed – we continued to see fantastic results. At the end of five months – we saw a consistent pattern of zero catheter associated urinary tract infections.”\***

**Jackie Kassler RN, ADON  
St. Vincent’s Rehabilitation Hospital**

\*Surveillance Study on file



Silvertouch Foley Catheter Tray



## It all starts with education and training

Medline's Foley Catheter Management System follows evidence based practice and has an easy to remember acronym.

- E** Evaluate Indications
- R** Read Directions
- A** Aseptic Technique
- S** Secure Catheter
- E** Educate Patient

Medline's ERASE CAUTI™ prevention program is designed to meet the challenges healthcare professionals face with both clinical and educational resources.

The program contains three distinct parts:

1. **Unique Patented Tray Design:** Promotes better processes
2. **Education:** Strategies to prevent CAUTI and a competency tool
3. **Awareness Campaign:** The Race to ERASE CAUTI

## It takes the right kind of products to ERASE Catheter Associated Urinary Tract Infections

Silver ions have a broad-spectrum activity against gram-positive, gram-negative, aerobic, and anaerobic microorganisms. A number of studies have evaluated the effectiveness of antiseptic (silver) urinary catheters in preventing bacteriuria and CAUTI.

A study performed at the Nebraska Medical Center looked at infection outcomes associated with the implementation of a silver urinary catheter. The study observed a significant decline in CAUTI rates.<sup>6</sup>

Item Number	Description	Pkg
<b>Silvertouch Foley Catheter Management System Trays with Drainage Bag</b>		
DYND160414	14Fr 10ml	10/cs
DYND160416	16Fr 10ml	10/cs
DYND160418	18Fr 10ml	10/cs
<b>Silvertouch Foley Catheter Management System Trays with Urine Meter</b>		
DYND160514	14Fr 10ml	10/cs
DYND160516	16Fr 10ml	10/cs
DYND160518	18Fr 10ml	10/cs



Silvertouch ERASE CAUTI Foley Catheter Management System Tray

# SILVERtouch<sup>®</sup>

## Foley catheter

### CDC Guideline for Prevention of Catheter-Associated UTI (Category I Recommendations)<sup>1</sup>

- Strongly recommends:
- Catheterize only when necessary
  - Educate personnel in correct techniques of catheter insertion and care
  - Emphasize handwashing
  - Insert catheter using aseptic technique and sterile equipment
  - Secure catheter properly
  - Maintain closed sterile drainage
  - Obtain urine specimens aseptically
  - Maintain unobstructed urine flow

## Did You Know?

- CAUTI is the # 1 healthcare-associated infection (HAI), accounting for 40% of all nosocomial infections.<sup>2</sup>
- 5% daily risk of CAUTI with short-term catheterization<sup>3</sup>
- 1 in 4 patients receive an indwelling urinary catheter at some point during their hospital stay.<sup>4</sup>
- CMS reported in the 2008 Federal Register that in 2007 there were 12,185 CAUTIs, costing \$44,043 per hospital stay.<sup>5</sup>

#### References:

<sup>1</sup> GUIDELINE FOR PREVENTION OF CATHETER-ASSOCIATED URINARY TRACT INFECTIONS 2008 DRAFT. Center for Disease Control and Prevention. <http://cdc.gov>. 2008

<sup>2</sup> Catheter-related UTIs: a disconnect in preventive strategies. *Physician's Weekly*. 25(6), February 11, 2008.

<sup>3</sup> Wong, Edward S. "Guideline for Prevention of Catheter-Associated Urinary Tract Infections." Centers for Disease Control and Prevention. DHQP P3. 1981.

<sup>4</sup> Saint S, Kaufman SR, Thompson M, Rogers MA, Chenoweth CE. A reminder reduces urinary catheterization in hospitalized patients. *Jt Comm J Qual Patient Saf*. 2005;31(8):455-462.

<sup>5</sup> CMS, Proposed Changes to the Hospital IPPS and FY2009 rates; Available at <http://edocket.access.gpo.gov/2008/pdf/08-1135.pdf>. Accessed July 24, 2009

<sup>6</sup> Rupp, M, Fitzgerald T, Marion N, Helget V, et al. Effect of Silver-coated Urinary Catheters: efficacy, cost-effectiveness, and antimicrobial resistance. *American Journal of Infection Control*. 2004;Vol 32, number 8: 445-450.



**Medline Industries, Inc.**

One Medline Place  
Mundelein, IL 60060

**Medline United States**  
**1-800-MEDLINE (633-5463)**

[www.medline.com](http://www.medline.com) | [info@medline.com](mailto:info@medline.com)

**Medline Canada**  
**1-800-396-6996**

[www.medline.ca](http://www.medline.ca) | [canada@medline.com](mailto:canada@medline.com)

**Medline México**  
**01-800-831-0898**

[www.medlinemexico.com](http://www.medlinemexico.com) | [mexico@medline.com](mailto:mexico@medline.com)

Some products may not be available for sale in Mexico or Canada. We reserve the right to correct any errors that may occur within this brochure.

©2009 Medline Industries, Inc. Medline is a registered trademark and Silvertouch and ERASE CAUTI are trademarks of Medline Industries, Inc.

ERASE CAUTI Foley Catheter Management System Tray design patents pending.

MKT209022/LIT498/3M/TKZ6