

Guidelines for the Prevention of Intravascular Catheter-Related Infections Update

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Guidelines for the Prevention of Intravascular Catheter-Related Infections, 2011

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Process Overview Recap

Recommendation Update: Targeted Approach


- New Topic Areas
 - Priority areas with new data not previously addressed
- Update
 - High priority, key clinical questions
 - Unclear, outdated
 - No recommendations with new data
- Bring forward
 - No new data
 - Standard of care
- Retire
 - Out of date
 - No longer standard of care



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2017 Chlorhexidine-Impregnated Dressing Recommendation Update

12.  Recommendation Update [July 2017] For

patients aged 18 years and older:

- a. Chlorhexidine-impregnated dressings with an FDA-cleared label that specifies a clinical indication for reducing catheter-related bloodstream infection (CRBSI) or catheter-associated blood stream infection (CABSI) are recommended to protect the insertion site of short-term, non-tunneled central venous

catheters. Updated Recommendations References 8-12 *Category IA*

(See Updated Chlorhexidine-Impregnated Dressings, [Implementation](#)

[Considerations for Patients Aged 18 Years and Older](#)

[\[https://www.cdc.gov/infectioncontrol/guidelines/bsi/c-i-dressings/considerations.html\]](https://www.cdc.gov/infectioncontrol/guidelines/bsi/c-i-dressings/considerations.html)).

[Superseded 2011 Recommendation] Use a chlorhexidine-impregnated sponge dressing for temporary short-term catheters in patients older than 2 months of age if the CLABSI rate is not decreasing despite adherence to basic prevention measures, including education and training, appropriate use of chlorhexidine for skin antisepsis, and MSB [93, 96–98]. *Category IB*

**Superseded
Recommendations**

Recommendations 12 & 13 have been superseded. See the [Updated Recommendations on Chlorhexidine-Impregnated Dressings](#) (<https://www.cdc.gov/infectioncontrol/guidelines/bsi/c-i-dressings/index.html>) for more information.

Topic Areas, Key Questions, Timeline

Topic Areas

- 3 “buckets”

Chlorhexidine bathing
Skin preparation

1

Peripherally inserted
central catheters
(PICCs)

2

Antiseptic-impregnated caps
Administration set replacement
Needleless connectors
Catheter locks

3

Topic Areas

Chlorhexidine bathing

Skin preparation

1

Daily Chlorhexidine Bathing: 1,214 references

Does the use of daily chlorhexidine bathing compared with no bathing or bathing with any agent, reduce central line-associated bloodstream infections (CLABSI) in adult and pediatric ICU patients?

Does the use of chlorhexidine bathing compared with no bathing or bathing with any agent, reduce CLABSI in adult and pediatric wards?

Does the use of chlorhexidine bathing compared with no bathing or bathing with any agent, reduce CLABSI in long term acute care?

Does the use of chlorhexidine bathing compared with no bathing or bathing with any agent, reduce CLABSI in skilled nursing facilities?

Skin Preparation: 3,135 references

Does the use of chlorhexidine with alcohol compared with povidone iodine with alcohol for skin preparation reduce CLABSI in adult and pediatric inpatients?

Topic Areas

Peripherally inserted
central catheters
(PICCs)

2

PICCs: 7,676 references

In pediatric and adult inpatients, what is the efficacy of using a short term non-tunneled central venous catheter (CVC) compared with a long term PICCs for prevention of CLABSI?

What are the clinical indications for PICC insertion in adult and pediatric inpatients?

What are the contraindications for PICC insertion in adult and pediatric inpatients?

What is the optimal inflection point to remove and replace a short term non-tunneled CVC with a PICC?

Topic Areas

Antiseptic-impregnated caps

Administration set replacement

Needleless connectors

Catheter locks

Antiseptic-Impregnated Caps: 1,233 references

Do antiseptic-impregnated caps, compared with standard of care, reduce the risk of CLABSI in adult and pediatric patients?

Do antiseptic-impregnated caps, compared with standard of care, reduce the risk of CLABSI in hemodialysis patients?

In adult and pediatric inpatients, what is the optimal antiseptic-impregnated cap to reduce the risk of CLABSI?

In all inpatients, what is the efficacy of scrubbing the hub combined with use of antiseptic-impregnated caps, compared with use of antiseptic-impregnated caps alone, to reduce the risk of CLABSI?

Administration Set Replacement and Needleless Connectors: 398 references

Is the optimal frequency of continuously used administration set change more than or less than 96 hours to prevent CLABSI in adult inpatients?

In adult inpatients, what is the optimal frequency of change for intermittently used administration sets to prevent CLABSI?

Does the use of needleless connectors compared with end caps, prevent CLABSI in pediatric and adult inpatients?

Does the use of needleless connectors compared with end caps, prevent CLABSI in hemodialysis patients?

What is the optimal type of needleless connector to reduce CLABSI in pediatric and adult inpatients?

Does changing needleless connectors at the same frequency as administration sets compared with other frequencies, prevent CLABSI in adult and pediatric inpatients? ie, Optimal frequency of change?

Catheter Locks: 1,591 references

In adult and pediatric inpatients, what is the efficacy of catheter locks, compared with standard of care, to prevent CLABSI?

In adult and pediatric inpatients, what is the optimal agent to use in catheter locks (ie antimicrobial, antiseptic, etc), compared with standard of care, to prevent CLABSI?

What is the optimal population in which to implement the use of catheter locks, compared with standard of care, to prevent CLABSI?

In hemodialysis patients, does the use of recombinant tissue plasminogen activator (TPA), compared with standard of care, prevent CLABSI?

Estimated Timeline for Topic Group 1: Chlorhexidine Bathing

- Title and abstract screen ≈ 3 weeks
- Workgroup engagement ≈ 12/2019
- Full text review ≈ 2 weeks
- Extraction and aggregating ≈ 3 weeks

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Total ≈ 8 weeks (2 months)



- Workgroup discussion ≈ 4 weeks
- **Projected HICPAC review: March 2020**

Estimated Timeline for Topic Group 1: Skin Preparation

- Title and abstract screen ≈ 7 weeks
- Workgroup engagement $\approx 1/2020$
- Full text review ≈ 6 weeks
- Extraction and aggregating ≈ 4 weeks

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Total ≈ 18 weeks (5 months)



- Workgroup discussion ≈ 4 weeks
- **Projected HICPAC review: August 2020**

Other Updates

- Currently reviewing recommendations to retire
 - Anticipate presenting to HICPAC **March 2020**

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

