

## Central Line-Associated Infections (CLABSI) and Non-Intensive Care Unit

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Bloodstream infections (BSIs) are a major cause of healthcare-associated morbidity and mortality. BSI leads to excess hospital length of stay of 24 days, and can be attributed with 35% mortality. Central Line (CL) use is a major risk factor for BSI, with more than 250,000 CLABSIs in the United States annually.

The prevention of CLABSIs in Intensive Care Units (ICUs) and other locations have associated goals in the HAI Prevention Plan. The first is to reduce CLABSIs to below the 25th percentile by location type in NHSN. The second is for 100% adherence with CL insertion practices in non-emergent situations.

A number of patient groups may have long-term CLs as outpatients: hemodialysis, malignancy, gastrointestinal tract disorders, and pulmonary hypertension. These rates of CLABSI for these groups may be as high as those seen in ICUs.

The more common mechanisms for CLABSI pathogenesis begin with pathogen migration along external surface in fewer than seven days, followed by hub contamination with intraluminal colonization.

Modifiable risk factors for CLABSIs include insertion circumstances, skill of inserter, insertion site, and skin antisepsis for example.

Through promotion of prevention interventions and best practices, significant decreases can be noted in CLABSIs. Pittsburg Regional Health Initiative showed a 68% decrease in infections by implementing such practices as maximal barrier precautions, and use of chlorhexidine for skin cleaning prior to insertion.

The Michigan Keystone Project also showed a significant reduction of 66% fewer CLABSIs. This study implemented similar practices as in the Pittsburg Project as well as the use of an insertion checklist.

Full PDF of this presentation can be accessed at Infectious Disease Epidemiology's online Healthcare Associated Infections Resource Center.

### NHSN Reporting Underscores Healthcare Quality

**2009 NHSN Report**  
[www.cdc.gov/nhsn/enroll](http://www.cdc.gov/nhsn/enroll)

CDC's National Healthcare Safety Network (NHSN) was established in 2005 to integrate and supersede 3 legacy surveillance systems at the CDC: the National Nosocomial Infections Surveillance (NNIS) system, the Dialysis Surveillance Network (DNS), and the National Surveillance System for Healthcare Workers (NaSH).

NHSN facilities voluntarily report their healthcare-associated infection (HAI) surveillance data for aggregation into a single national database for the following purposes: estimation of the magnitude of HAIs, monitoring of HAI trends, comparison with risk-adjusted data, and surveillance and analysis methods for intervention.

To learn how to enroll your facility, visit [www.cdc.gov/nhsn/enroll](http://www.cdc.gov/nhsn/enroll). Current users are invited to join IDES group #15156. Contact [erica.washington@la.gov](mailto:erica.washington@la.gov) to learn how.

### Northshore Prevention Collaborative Group: A Recipe for Success

Prevention collaboratives are initially driven by pending legislation for reporting of HAI rates. Keys to successful collaboratives is identifying leaders, involving multiple disciplines, and identifying possible strategies for implementation.

The Northshore Prevention Collaborative Group (NPCG) is an infection control trailblazer in our state, and is comprised of approximately ten infection practitioners (IPs). These IPs come from a regiospecific area within their local APIC chapter to discuss best practices for implementation in their facilities.

Other business of the meetings includes physician presentations on HAIs, question and answer periods with pharmaceutical companies, and professional networking.



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