

Release of CDC's National and State Healthcare-associated Infection Progress Report Key Messages

Main Messages:

CDC Tracks Progress Nationwide and Makes Data Public

- The annual *National and State Healthcare-associated Infection Progress Report* gives a closer look at the healthcare-associated infections most commonly reported to CDC. Most prevention focus to date has been related to these infections.
 - National metrics were presented on six infection types: CLABSI, CAUTI, hospital lab-identified methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections and *Clostridium difficile* (*C. difficile*) infections MRSA bloodstream infections, *C. difficile*, and SSIs. SSIs are comprised of infections reported following 10 common operative procedures.
- The report expands upon and provides an update to previous reports detailing progress toward the goal of eliminating HAIs.
- Healthcare-associated infections are a major, yet often preventable, threat to patient safety. On any given day, approximately one in 25 U.S. patients has at least one infection contracted during the course of their hospital care, demonstrating the need for improved infection control in U.S. healthcare facilities.
- Early successes to date are based on the crucial investments made years earlier in research to determine the best ways to tackle specific infections among HAIs. As we turn our attention to other infections, we're building the knowledge as we go.
- Successes to date have made use of the staffing and training resources available in ICU settings; as we work to drive HAI rates down in other settings, alternatives to those resources are needed.

More Work and Investment in Infection Control Needed

- HHS set aggressive goals in 2009 to improve the safety of all patients receiving care in US healthcare settings.
- Despite progress, the nation did not reach the 2013 goals. More action is needed at every level of public health and health care.
- Although these reports focus on hospitals, many infections are associated with healthcare in other settings such as nursing homes, dialysis facilities, and outpatient surgery centers.
- This report provides the hospital piece of the overall picture of national or state progress in preventing infections in all healthcare settings.
 - For example, the majority of *C. difficile* infections and MRSA infections develop in the community or are diagnosed in healthcare settings other than hospitals.
 - Recent reports about infections caused by germs such as MRSA and *C. difficile* suggest that infections in hospitalized patients only account for about one-third of all healthcare-associated infections.
- Healthcare-associated infections can be prevented when hospitals use CDC-recommended infection prevention steps.

Early Indicators of Success

- HAI data give healthcare facilities and public health agencies information they can use to design, implement, and evaluate HAI prevention efforts. Infection data are needed anywhere

healthcare is delivered to identify emerging problems and areas of concern that need intervention, and to measure progress in HAI reduction against national, state, and local prevention goals.

- Using these data, CDC was able to identify specific hospitals and patient care locations within those hospitals that could benefit from additional infection control expertise.
- Together with professional partners, CMS [Quality Improvement Organizations](#), and the [Agency for Healthcare Research and Quality's Comprehensive Unit-based Safety Program](#) increased attention to the prevention of catheter-associated urinary tract infections, resulting in a reversal of the CAUTI trend beginning in early 2014.

Healthcare Infections Fuel Antibiotic Resistance

- Preventing infections in the first place means that patients will not need antibiotics to treat those infections. This can help to slow the rise of antibiotic resistance and avoid patient harm from unnecessary side-effects and *C. difficile* infections, which are associated with antibiotic use.
- Today in health care, some bacteria are about to defeat all of the drugs designed to treat them, which threatens our ability to perform life-saving medical procedures such as organ transplants and chemotherapy.
- Continued progress and expanded efforts to prevent HAIs will support the response to the threat of antibiotic resistance.

Key Points:

- Nationally, progress has been achieved and is being made in some categories of infections included in the HHS Goals of 2009.
- National metrics were presented on six infection types: CLABSI, CAUTI, MRSA bloodstream infections, *C. difficile*, and SSIs. SSIs were related to 10 select procedures, including colon surgery and abdominal hysterectomy.
 - 46% decrease in CLABSI between 2008 and 2013
 - 19% decrease in SSIs related to the 10 select procedures* between 2008 and 2013
 - *The 10 select procedures are Surgical Care Improvement Project (SCIP) procedures
 - 14% decrease in abdominal hysterectomy SSIs
 - 8% decrease in colon surgery SSIs
 - 8% decrease in hospital-onset MRSA bacteremia between 2011 and 2013
 - 10% decrease in hospital-onset *C. difficile* infections between 2011 and 2013
 - And a slight increase was seen for CAUTI – 6% increase between 2009 and 2013
- State-by-state metrics were presented on six infection types: CLABSI, CAUTI, hospital lab-identified MRSA bloodstream infections and *C. difficile* and surgical site infections due to colon surgery and abdominal hysterectomy surgery.
- State progress varies overall and per each infection type.
 - 26 states performed better than the national SIR on at least two infections, including 16 states performing better on three infections.
 - 19 states performed worse than the national SIR on at least two infections, including 8 states performing worse on at least three infections.

Additional Background on HAI Progress Report:

- The report is based on 2013 data, published in January 2015.
- The HAI Progress Report summarizes data submitted to CDC's [National Healthcare Safety Network](#) (NHSN), the nation's healthcare-associated infection tracking system, which is used by more than 14,500 healthcare facilities across all 50 states, Washington, D.C., and Puerto Rico.

- Not all states reported or had enough data to calculate valid infection information on every infection in this report.
- Although this report is only released once a year, HAI data for nearly all U.S. hospitals are frequently published on the Hospital Compare website. Patients can use NHSN data posted publicly on the Department of Health and Human Services' [Hospital Compare website](#) to see how their local facilities are doing.
- Use of NHSN began at 300 hospitals, and has expanded to more than 14,500 healthcare facilities over recent years due to CMS quality improvement programs and state mandates that require numerous healthcare facility types to report select HAIs and other process of care measures into the system.
 - CDC is also working to use HAI data to help identify specific hospitals and wards that can benefit from additional infection control expertise.
 - Next year, hospitals will be able to look at an even more granular level due to NHSN network's ability to run Targeted Assessment for Prevention (TAP) Reports.
 - The TAP strategy allows for the ranking of facilities (or locations) to identify and target those areas that have the combined characteristics of being in greatest need for improvement and that, once improved, will have the greatest impact on overall patient safety.
 - New output options, referred to as "TAP Reports", will be available for facilities and groups and will be generated for CLABSI, CAUTI, and *C. difficile* laboratory identified data.

Frequently Asked Questions:

What are some reasons the nation did not meet the HHS HAI prevention goals?

- The goals set by HHS in 2009 were intentionally aggressive. We want to move this process as fast as we can.
- Progress was made toward the HAI prevention goals, but more work needs to be done. This points to the fact that continued investment in infection control in U.S. hospitals is critical. Additional action is needed at every level of public health and health care.
- Early rapid success was based on many years of CDC investment in research and outbreak control, combined with strong financial incentives from CMS for facilities to prioritize HAI prevention.
- Current challenges hinge on the need for additional research to identify best practices that can be similarly incentivized, and on stresses faced by the US healthcare system ranging from ensuring sufficient staffing and managing staff turnover, systematically assessing competencies in infection control, and accommodating the growing demand for complex care outside of intensive care units.

Why did colon surgery surgical site infections increase for the nation or a state compared to last year (2012)?

- Several changes to the NHSN 2013 SSI protocol likely contributed to an increase in the national and some state-specific colon surgery SIRs compared to 2012.
 - First, the procedure priority list was updated and colon surgeries were moved higher on the priority list compared to 2012. If a patient had multiple procedures through the same incision, NHSN users would use the priority list in order to determine to which procedure to attribute the SSI (Colon was moved from 5th to 2nd on the list).

- Second, one of the definitions was updated to include a broader definition of primary closure, and therefore more SSIs could meet this definition and be reported.
- The nation saw a 14% increase in colon surgery SSIs since 2012.

What year is the 2013 data being compared to in order to determine the increase or decrease in infection?

- This report compares the number of infections reported to a national baseline. Infection types presented in this report have different baselines:
 - 2008: CLABSI and SSI (abdominal hysterectomy and colon surgery)
 - 2009: CAUTI
 - 2011: MRSA bacteremia and *C. difficile* infections