NATIONAL AND STATE HEALTHCARE ASSOCIATED INFECTIONS PROGRESS REPORT

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016

Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases
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Data tables are available on CDC’s website at www.cdc.gov/hai/progress-report.
EXECUTIVE SUMMARY

Healthcare-associated infections (HAIs) are a major, yet often preventable, threat to patient safety. The Centers for Disease Control and Prevention (CDC) is committed to helping all Americans receive the best and safest care. The National and State Healthcare-Associated Infections Progress Report (HAI Progress Report) expands upon and provides an update to previous reports detailing progress toward the ultimate goal of eliminating HAIs. The reports can serve as a reference for anyone looking for information about national and state HAI prevention progress. It is specifically designed to be accessible to many audiences. For detailed methods, references, and definitions please refer to the Technical Appendix and Glossary within this report. For complete data tables and frequently asked questions, please visit CDC’s HAI Progress Report website at www.cdc.gov/hai/progress-report.

To help improve patient safety, CDC tracks infections, responds to outbreaks, provides infection prevention expertise and guidelines, spearheads prevention research, and serves as the nation’s gold-standard laboratory. CDC’s National Healthcare Safety Network (NHSN), the nation’s most widely used HAI tracking system, is critical in this work. More than 17,000 hospitals and other healthcare facilities report data to NHSN. This vital information is then used for summarizing HAI data at the national level, including for this HAI Progress Report, and for care improvement by facilities, states, regions, quality groups, and national public health agencies including CDC.

The HAI Progress Report includes national and state-by-state summaries of six HAI types based on 2014 data. The report helps measure progress toward the HAI prevention goals outlined in the National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination (HAI Action Plan) set by the U.S. Department of Health and Human Services (HHS). Progress is measured using the standardized infection ratio (SIR), a summary statistic that can be used to track HAI prevention progress over time.

Similar to CDC’s previous report, most infections have decreased compared to the national baseline. Furthermore, in 2014 CLABSI reached the 2013 goals established by the HAI Action Plan in 2009. While CAUTI increased between 2009 and 2013, during this time there was progress in non-ICU settings, progress in all settings between 2013 and 2014, and most notably, even more progress in all settings towards the end of 2014. Despite progress, more action is needed at every level of public health and health care to eliminate infections that commonly threaten hospital patients, and to reach the new HHS proposed targets for December 2020.
This report’s national and state factsheets include infection-specific SIRs and progress in reducing HAIs. State-specific information also includes prevention efforts, HAI reporting mandates, and data validation. These customized factsheets can aid in identifying areas in need of improvement from a national level and within states.

The report includes national and state-level data from acute care hospitals for

- central line-associated bloodstream infections (CLABSI),
- catheter-associated urinary tract infections (CAUTI),
- surgical site infections (SSI),
- hospital-onset *Clostridium difficile* infections (*C. difficile*), and
- hospital-onset methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia (bloodstream infections).

State-specific SSI data are presented for colon surgery and abdominal hysterectomy surgery, the two surgeries mandated by the Centers for Medicare and Medicaid (CMS) Inpatient Quality Reporting Program. National SSI data includes the 10 select procedures published in previous years, and, for the first time in this report, the additional 29 surgical procedures reported to NHSN.

The report includes data reported to NHSN from the following locations:

- CLABSI: intensive care units, neonatal intensive care unit, and wards
- CAUTI: intensive care units and wards
- *C. difficile*: all inpatient locations in the facility, with the exception of the neonatal intensive care units and well-baby locations
- MRSA bacteremia: all inpatient locations in the facility

For more details on location-specific information, refer to the report’s Technical Appendix.

Previous reports included data from acute care hospitals only. For the first time, this report includes national data from two additional facility types. The report will describe CLABSI and CAUTI data from long-term acute care hospitals (LTACH), which provide treatment for patients who are generally very sick and stay, on average, more than 25 days. The report will also describe CAUTI data from inpatient rehabilitation facilities (IRFs), which include hospitals, or part of a hospital, that provide intensive rehabilitation services using an interdisciplinary team approach. Data in this report are reported from free-standing IRFs and rehabilitation locations within other hospitals.
The report describes significant reductions reported at the national level in 2014 for nearly all infection types when compared to the baseline data. CLABSI and abdominal hysterectomy SSI show the greatest reduction. Some progress is shown in reducing both hospital-onset MRSA bacteremia and hospital-onset *C. difficile* infections. The previous two reports showed an increase in CAUTI from the prior year, signaling a strong need for additional prevention efforts. CAUTI did decrease from 2013 to 2014, but continued prevention efforts are essential to improve patient safety.

**Among national acute care hospitals, the report found:**

- 50 percent decrease in CLABSI between 2008 and 2014
- No change in overall CAUTI between 2009 and 2014
  - However, there was progress in non-ICU settings between 2009 and 2014, progress in all settings between 2013 and 2014, and even more progress in all settings towards the end of 2014
- 17 percent decrease in SSI related to the 10 select procedures tracked in previous reports
  - 17 percent decrease in abdominal hysterectomy SSI between 2008 and 2014
  - 2 percent decrease in colon surgery SSI between 2008 and 2014

- 8 percent decrease in *C. difficile* infections between 2011 and 2014
- 13 percent decrease in MRSA bacteremia between 2011 and 2014

**On the state level:**

- 25 states performed better than the national SIR on at least two infection types
- 10 states performed better than the national SIR on at least three infection types
- 3 states performed better than the national SIR on at least four infection types
- 20 states performed worse than the national SIR on at least two infection types
- 10 states performed worse than the national SIR on at least three infection types

**The number of states performing better than the rest of the nation by infection type:**

- CLABSI – 13 states
- CAUTI – 18 states
- SSI, abdominal hysterectomy – 3 states
- SSI, colon surgery – 9 states
- *C. difficile* infections – 20 states
- MRSA bacteremia – 19 states

**The number of states performing worse than the rest of the nation by infection type:**

- CLABSI – 11 states
- CAUTI – 16 states
- SSI, abdominal hysterectomy – 4 states
- SSI, colon surgery – 14 states
- *C. difficile* infections – 13 states
- MRSA bacteremia – 12 states

This report provides the first national snapshot of HAIs in LTACHs and IRFs using NHSN data. LTACHs reported a 9 percent decrease in CLABSI and an 11 percent decrease in CAUTI between 2013 (baseline) and 2014. IRFs reported a 14 percent decrease in CAUTI between 2013 (baseline) and 2014.

Although significant progress was made in some infection types, there is much more work to be done. 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. Steps can be taken to control and prevent healthcare-associated infections in a variety of settings. Research shows that when healthcare facilities, care teams, and individual doctors and nurses, are aware of infection problems and take specific steps to prevent them, rates of some targeted HAIs (e.g., CLABSI) can decrease by more than **70 percent**.

Full engagement between local, state, and federal public health agencies and their partners in the healthcare sector will be vital to sustaining and extending HAI surveillance and prevention progress. CDC will continue its prevention, tracking, laboratory, and guideline work to push the country further toward the goal of eliminating HAIs.

Any comments and suggestions that would improve the usefulness of future publications are appreciated and should be sent to the Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop A-07; Atlanta, Georgia, 30333. E-mail can also be used: patientsafety@cdc.gov.
### CLABSIs: CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

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<th>Data Checked for Quality‡</th>
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*The number of hospitals that reported to NHSN and are included in the SIR calculation.

‡State Health Department

†State analyzed 2014 data for quality and completeness.

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* The number of hospitals that reported to NHSN and are included in the SIR calculation.

‡ State Health Department

³ State reviewed medical records to determine 2014 data accuracy.

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### CAUTIs: CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

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*The number of hospitals that reported to NHSN and are included in the SIR calculation.
‡State Health Department
¶State analyzed 2014 data for quality and completeness.
State reviewed medical records to determine 2014 data accuracy.

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016
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‡State Health Department

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\*The number of hospitals that reported to NHSN and are included in the SIR calculation.
\*State Health Department
\*State analyzed 2014 data for quality and completeness.
\*State reviewed medical records to determine 2014 data accuracy.
## STATE HAI PROGRESS

### ACUTE CARE HOSPITALS

#### LEGEND
- **↓** 2014 state SIR is significantly lower (better) than comparison group in column header
- **↑** 2014 state SIR is significantly higher (worse) than comparison group in column header
- **↔** Change in 2014 state SIR compared to group in column header is not statistically significant
- **---** 2014 state SIR cannot be calculated

SSIs: SURGICAL SITE INFECTIONS, COLON SURGERY

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*The number of hospitals that reported to NHSN and are included in the SIR calculation.
†State Health Department
§State analyzed 2014 data for quality and completeness.
¶State reviewed medical records to determine 2014 data accuracy.

**This report is based on 2014 data, published in 2016.**
## SSIs: SURGICAL SITE INFECTIONS, COLON SURGERY

### 2014 Reporting and Validation

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‡State Health Department  
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State reviewed medical records to determine 2014 data accuracy.
## MRSA Bacteremia: LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS

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This report is based on 2014 data, published in 2016.
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### C. difficile Infections: LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS

#### 2014 Reporting and Validation

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<tr>
<td>Wyoming</td>
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</tr>
</tbody>
</table>

* The number of hospitals that reported to NHSN and are included in the SIR calculation.
‡ State Health Department
State analyzed 2014 data for quality and completeness.
State reviewed medical records to determine 2014 data accuracy.

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC's National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs
**Centrally Line-Associated Bloodstream Infections**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- U.S. hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
- Among the 2,442 hospitals in U.S. with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs
**Catheter-Associated Urinary Tract Infections**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- U.S. hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 2,880 U.S. hospitals with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia
**Laboratory Identified Hospital-Onset Bloodstream Infections**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- U.S. hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.
- Among the 2,042 U.S. hospitals with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### SSIs
**Surgical Site Infections**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

#### SSI: Abdominal Hysterectomy

- U.S. hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 794 U.S. hospitals with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

#### SSI: Colon Surgery

- U.S. hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.
- Among the 2,051 U.S. hospitals with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

### C. difficile Infections
**Laboratory Identified Hospital-Onset C. Difficile Infections**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- U.S. hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
- Among the 3,554 U.S. hospitals with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### HAI Type Table

<table>
<thead>
<tr>
<th>HAI Type</th>
<th># of U.S. Hospitals That Reported Data to CDC's NHSN, 2014*</th>
<th>2014 Nat'l SIR vs. 2013 Nat'l SIR</th>
<th>2014 Nat'l SIR vs. Nat'l Baseline‡</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>3,655</td>
<td>8%</td>
<td>50%</td>
<td>0.50</td>
</tr>
<tr>
<td>CAUTI</td>
<td>3,791</td>
<td>5%</td>
<td>0%</td>
<td>1.00</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>3,225</td>
<td>5%</td>
<td>17%</td>
<td>0.83</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>3,377</td>
<td>5%</td>
<td>2%</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>3,949</td>
<td>4%</td>
<td>13%</td>
<td>0.87</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>3,994</td>
<td>4%</td>
<td>8%</td>
<td>0.92</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

---

**What Does the Standardized Infection Ratio (SIR) Mean?**

**IF THE NATIONAL SIR IS:**

- **MORE THAN 1**
  - There was an increase in the number of infections reported in the nation in 2014 compared to the national baseline.

- **1**
  - There were about the same number of infections reported in the nation in 2014 compared to the national baseline.

- **LESS THAN 1**
  - There was a decrease in the number of infections reported in the nation in 2014 compared to the national baseline.
U.S. hospitals reported a significant increase in SSIs from 10 select procedures between 2013 and 2014.

Among the 2,580 U.S. hospitals with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

Almost all U.S. hospitals report SSI data following colon surgeries and abdominal hysterectomies to NHSN.

**Surgical Site Infections (SSIs): 10 Select Procedures**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip arthroplasty</td>
<td>1,928</td>
<td>291,628</td>
<td>↓ 22%</td>
<td>0.78</td>
</tr>
<tr>
<td>Knee arthroplasty</td>
<td>1,907</td>
<td>417,937</td>
<td>↓ 41%</td>
<td>0.59</td>
</tr>
<tr>
<td>Colon surgery</td>
<td>3,377</td>
<td>300,526</td>
<td>↓ 2%</td>
<td>0.98</td>
</tr>
<tr>
<td>Rectal surgery</td>
<td>329</td>
<td>6,561</td>
<td>↓ 40%</td>
<td>0.60</td>
</tr>
<tr>
<td>Abdominal hysterectomy</td>
<td>3,225</td>
<td>307,648</td>
<td>↓ 17%</td>
<td>0.83</td>
</tr>
<tr>
<td>Vaginal hysterectomy</td>
<td>822</td>
<td>30,961</td>
<td>↓ 14%</td>
<td>0.86</td>
</tr>
<tr>
<td>Coronary artery bypass graft</td>
<td>755</td>
<td>117,972</td>
<td>↓ 45%</td>
<td>0.55</td>
</tr>
<tr>
<td>Other cardiac surgery</td>
<td>379</td>
<td>44,713</td>
<td>↓ 58%</td>
<td>0.42</td>
</tr>
<tr>
<td>Peripheral vascular bypass surgery</td>
<td>295</td>
<td>8,755</td>
<td>↓ 30%</td>
<td>0.70</td>
</tr>
<tr>
<td>Abdominal aortic aneurysm repair</td>
<td>273</td>
<td>2,121</td>
<td>↓ 72%</td>
<td>0.28</td>
</tr>
<tr>
<td>These 10 procedures combined</td>
<td>3,618</td>
<td>1,528,822</td>
<td>↓ 17%</td>
<td>0.83</td>
</tr>
</tbody>
</table>

**Legend**
- ▼ or ▪: Change in 2014 national SIR compared to the 2008 SSI national baseline is not statistically significant.
- ▼: 2014 national SIR is significantly lower (better) than the 2008 SSI national baseline.
- ▲: 2014 national SIR is significantly higher (worse) than 2008 SSI national baseline.

Statistically significant

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016
## SURGICAL SITE INFECTIONS SSIs: ADDITIONAL PROCEDURES

<table>
<thead>
<tr>
<th>PROCEDURE CATEGORY</th>
<th># HOSPITALS REPORTING</th>
<th># PROCEDURES REPORTED</th>
<th>2014 NAT’L SIR VS. NAT’L BASELINE</th>
<th>2014 NAT’L SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Limb amputation</td>
<td>133</td>
<td>5,461</td>
<td>↓ 6%</td>
<td>0.94</td>
</tr>
<tr>
<td>2 Appendix surgery</td>
<td>412</td>
<td>51,057</td>
<td>↑ 21%</td>
<td>1.21</td>
</tr>
<tr>
<td>3 Shunt for dialysis</td>
<td>92</td>
<td>1,849</td>
<td>↓ 77%</td>
<td>0.23</td>
</tr>
<tr>
<td>4 Bile duct, liver, or pancreatic surgery</td>
<td>295</td>
<td>10,228</td>
<td>↓ 71%</td>
<td>0.29</td>
</tr>
<tr>
<td>5 Breast surgery</td>
<td>218</td>
<td>13,801</td>
<td>↑ 74%</td>
<td>1.74</td>
</tr>
<tr>
<td>6 Carotid endarterectomy</td>
<td>274</td>
<td>9,831</td>
<td>↓ 72%</td>
<td>0.28</td>
</tr>
<tr>
<td>7 Gallbladder surgery</td>
<td>442</td>
<td>65,079</td>
<td>↓ 4%</td>
<td>0.96</td>
</tr>
<tr>
<td>8 Craniotomy</td>
<td>126</td>
<td>21,913</td>
<td>↓ 24%</td>
<td>0.76</td>
</tr>
<tr>
<td>9 Cesarean section</td>
<td>437</td>
<td>211,468</td>
<td>↓ 73%</td>
<td>0.27</td>
</tr>
<tr>
<td>10 Spinal fusion</td>
<td>506</td>
<td>110,975</td>
<td>↓ 33%</td>
<td>0.67</td>
</tr>
<tr>
<td>11 Open reduction of fracture</td>
<td>410</td>
<td>47,698</td>
<td>↓ 56%</td>
<td>0.44</td>
</tr>
<tr>
<td>12 Gastric surgery</td>
<td>396</td>
<td>31,494</td>
<td>↓ 44%</td>
<td>0.56</td>
</tr>
<tr>
<td>13 Hernorrhaphy</td>
<td>223</td>
<td>16,134</td>
<td>↓ 32%</td>
<td>0.68</td>
</tr>
<tr>
<td>14 Heart transplant</td>
<td>28</td>
<td>622</td>
<td>↓ 47%</td>
<td>0.53</td>
</tr>
<tr>
<td>15 Kidney transplant</td>
<td>34</td>
<td>3,142</td>
<td>↓ 37%</td>
<td>0.63</td>
</tr>
</tbody>
</table>

**Legend**

- ↓ 2014 national SIR is significantly lower (better) than the 2008 SSI national baseline
- ↑ 2014 national SIR is significantly higher (worse) than 2008 SSI national baseline
- ➔ or ➘ Change in 2014 national SIR compared to the 2008 SSI national baseline is not statistically significant

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016

Learn how your hospital is performing: [www.medicare.gov/hospitalcompare](http://www.medicare.gov/hospitalcompare)

For additional information:

- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- Preventing HAIs: [www.cdc.gov/hai](http://www.cdc.gov/hai)
### NATIONAL SSIs BY PROCEDURE TYPE

**SURGICAL SITE INFECTIONS, ACUTE CARE HOSPITALS**

<table>
<thead>
<tr>
<th>PROCEDURE CATEGORY</th>
<th># HOSPITALS REPORTING</th>
<th># PROCEDURES REPORTED</th>
<th>2014 NAT’L SIR VS. NAT’L BASELINE</th>
<th>2014 NAT’L SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Laminectomy</td>
<td>477</td>
<td>100,750</td>
<td><img src="#" alt="green down arrow" /> 47%</td>
<td>0.53</td>
</tr>
<tr>
<td>17 Liver transplant</td>
<td>21</td>
<td>1,307</td>
<td><img src="#" alt="green down arrow" /> 63%</td>
<td>0.37</td>
</tr>
<tr>
<td>18 Neck surgery</td>
<td>62</td>
<td>1,080</td>
<td><img src="#" alt="green down arrow" /> 32%</td>
<td>0.68</td>
</tr>
<tr>
<td>19 Kidney surgery</td>
<td>276</td>
<td>9,157</td>
<td><img src="#" alt="green down arrow" /> 68%</td>
<td>0.32</td>
</tr>
<tr>
<td>20 Ovarian surgery</td>
<td>371</td>
<td>32,082</td>
<td><img src="#" alt="green down arrow" /> 16%</td>
<td>1.16</td>
</tr>
<tr>
<td>21 Pacemaker surgery</td>
<td>328</td>
<td>24,347</td>
<td><img src="#" alt="green down arrow" /> 5%</td>
<td>1.05</td>
</tr>
<tr>
<td>22 Prostate surgery</td>
<td>86</td>
<td>2,384</td>
<td><img src="#" alt="green down arrow" /> 21%</td>
<td>0.79</td>
</tr>
<tr>
<td>23 Refusion of spine</td>
<td>300</td>
<td>5,740</td>
<td><img src="#" alt="green down arrow" /> 39%</td>
<td>0.61</td>
</tr>
<tr>
<td>24 Small bowel surgery</td>
<td>396</td>
<td>22,058</td>
<td><img src="#" alt="green down arrow" /> 40%</td>
<td>0.60</td>
</tr>
<tr>
<td>25 Spleen surgery</td>
<td>249</td>
<td>2,488</td>
<td><img src="#" alt="green down arrow" /> 74%</td>
<td>0.26</td>
</tr>
<tr>
<td>26 Thoracic surgery</td>
<td>307</td>
<td>18,993</td>
<td><img src="#" alt="green down arrow" /> 48%</td>
<td>0.52</td>
</tr>
<tr>
<td>27 Thyroid and/or parathyroid surgery</td>
<td>109</td>
<td>3,820</td>
<td><img src="#" alt="green down arrow" /> 71%</td>
<td>0.29</td>
</tr>
<tr>
<td>28 Ventricular shunt</td>
<td>105</td>
<td>7,399</td>
<td><img src="#" alt="green down arrow" /> 43%</td>
<td>0.57</td>
</tr>
<tr>
<td>29 Abdominal surgery</td>
<td>408</td>
<td>56,754</td>
<td><img src="#" alt="green down arrow" /> 32%</td>
<td>0.68</td>
</tr>
</tbody>
</table>

**LEGEND**

- **2014 national SIR is significantly lower (better) than the 2008 SSI national baseline**
- **2014 national SIR is significantly higher (worse) than 2008 SSI national baseline**
- **Change in 2014 national SIR compared to the 2008 SSI national baseline is not statistically significant**
NATIONAL FACTSHEETS
Long-term Acute Care Hospitals
and Inpatient Rehabilitation Facilities
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

This report is based on 2014 data, published in 2016.

**LONG-TERM ACUTE CARE HOSPITALS (LTACHs)**

Acute care hospitals that provide treatment for patients who are generally very sick and stay, on average, more than 25 days. Services include comprehensive rehabilitation, respiratory therapy, head trauma treatment, and pain management. Most patients are transferred from an intensive or critical care unit.

**CLABSIs**

CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

13% Among the 478 U.S. LTACHs with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.91, the value of the national SIR.

**CAUTIs**

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

8% Among the 567 U.S. IRFs with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.86, the value of the national SIR.

**INPATIENT REHABILITATION FACILITIES (IRFs)**

Hospitals, or part of a hospital, that provide intensive rehabilitation services using an interdisciplinary team approach. Admission to an IRF is appropriate for patients with complex nursing, medical management, and rehabilitative needs. Data are reported from free-standing IRFs and rehabilitation locations within other hospitals.

**CAUTIs**

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

8% Among the 567 U.S. IRFs with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.86, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Long-Term Acute Care Hospitals

<table>
<thead>
<tr>
<th>HAI TYPE</th>
<th># of U.S. LTACHs that Reported Data to CDC’s NHSN, 2014*</th>
<th>2014 Nat'l SIR vs. Nat’l Baseline</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>501</td>
<td>9%</td>
<td>0.91</td>
</tr>
<tr>
<td>CAUTI</td>
<td>501</td>
<td>11%</td>
<td>0.89</td>
</tr>
</tbody>
</table>

*The number of facilities that reported to NHSN and are included in the SIR calculation.

### Inpatient Rehabilitation Facilities

<table>
<thead>
<tr>
<th>HAI TYPE</th>
<th># of U.S. IRFs that Reported Data to CDC’s NHSN, 2014*</th>
<th>2014 Nat'l SIR vs. Nat’l Baseline</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTI</td>
<td>1,135</td>
<td>14%</td>
<td>0.86</td>
</tr>
</tbody>
</table>

*The number of facilities that reported to NHSN and are included in the SIR calculation.

### What Does the Standardized Infection Ratio (SIR) Mean?

**If the National SIR is:**

- **More than 1**
  - There was an increase in the number of infections reported in the nation in 2014 compared to the national baseline.

- **1**
  - There were about the same number of infections reported in the nation in 2014 compared to the national baseline.

- **Less than 1**
  - There was a decrease in the number of infections reported in the nation in 2014 compared to the national baseline.
STATE FACTSHEETS
Acute Care Hospitals
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- **Alabama hospitals reported no significant change in CLABSIs between 2013 and 2014.**
- Among the 39 hospitals in Alabama with enough data to calculate an SIR, 21% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- **Alabama hospitals reported no significant change in CAUTIs between 2013 and 2014.**
- Among the 65 hospitals in Alabama with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- **Alabama hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.**
- Among the 35 hospitals in Alabama with enough data to calculate an SIR, 14% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **Alabama hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.**
- Among the 13 hospitals in Alabama with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- **Alabama hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.**
- Among the 35 hospitals in Alabama with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- **Alabama hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.**
- Among the 74 hospitals in Alabama with enough data to calculate an SIR, 1% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### LEGEND

| 2014 state SIR is significantly lower (better) than comparison group in column header |
| Change in 2014 state SIR compared to group in column header is not statistically significant |
| 2014 state SIR is significantly higher (worse) than comparison group in column header |

### WHAT IS THE STANDARDIZED INFECTION RATIO? (SIR)

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS ALABAMA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Alabama has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (C. difficile)
- Ventilator-associated events
- Long-term care facilities
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### ALABAMA ACUTE CARE HOSPITALS

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

<table>
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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>Nat’l Baseline: 2008</td>
<td>70</td>
<td>6%</td>
<td>45%</td>
<td>29%</td>
<td>0.71</td>
</tr>
<tr>
<td>CAUTI</td>
<td>Nat’l Baseline: 2009</td>
<td>86</td>
<td>7%</td>
<td>13%</td>
<td>13%</td>
<td>0.87</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>Nat’l Baseline: 2008</td>
<td>58</td>
<td>13%</td>
<td>34%</td>
<td>45%</td>
<td>0.55</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>Nat’l Baseline: 2008</td>
<td>70</td>
<td>63%</td>
<td>21%</td>
<td>22%</td>
<td>0.78</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>Nat’l Baseline: 2011</td>
<td>91</td>
<td>19%</td>
<td>34%</td>
<td>15%</td>
<td>1.15</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>Nat’l Baseline: 2011</td>
<td>89</td>
<td>4%</td>
<td>28%</td>
<td>33%</td>
<td>0.67</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.

This report is based on 2014 data, published in 2016.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Alaska hospitals reported a significant increase in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Alaska hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Alaska hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Alaska hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Alaska hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Alaska hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 10 hospitals in Alaska with enough data to calculate an SIR, 20% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

*Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### HEALTHCARE-ASSOCIATED INFECTIONS PROGRESS

#### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio (SIR)** is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

#### WHAT IS ALASKA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Prevention efforts to reduce specific HAIs:
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (*C. difficile*, CRE, other)
- Antibiotic stewardship

For prevention effort details, see glossary.

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### LEGEND

- **↓** 2014 state SIR is significantly lower (better) than comparison group in column header
- **↑** or **↓** Change in 2014 state SIR compared to group in column header is not statistically significant
- **↓** 2014 state SIR is significantly higher (worse) than comparison group in column header
- **∥** 2014 state SIR cannot be calculated

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### HAI TYPE

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>CLABSI</strong></td>
<td><strong>11</strong></td>
<td><strong>↑ 129%</strong></td>
<td><strong>↑ 31%</strong></td>
<td><strong>↓ 35%</strong></td>
<td>0.65</td>
<td>0.50</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CAUTI</strong></td>
<td><strong>11</strong></td>
<td><strong>↓ 14%</strong></td>
<td><strong>↓ 11%</strong></td>
<td><strong>↑ 10%</strong></td>
<td>0.90</td>
<td>1.00</td>
</tr>
<tr>
<td>Nat’l Baseline: 2009</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td><strong>9</strong></td>
<td><strong>↑ 42%</strong></td>
<td><strong>↓ 23%</strong></td>
<td><strong>↑ 36%</strong></td>
<td>0.64</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td><strong>9</strong></td>
<td><strong>↑ 10%</strong></td>
<td><strong>↓ 3%</strong></td>
<td><strong>↑ 6%</strong></td>
<td>0.94</td>
<td>0.98</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td><strong>11</strong></td>
<td><strong>↑ 43%</strong></td>
<td><strong>↑ 66%</strong></td>
<td><strong>↓ 71%</strong></td>
<td>0.29</td>
<td>0.87</td>
</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong></td>
<td><strong>11</strong></td>
<td><strong>↑ 31%</strong></td>
<td><strong>↓ 8%</strong></td>
<td><strong>↑ 15%</strong></td>
<td>0.85</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.

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**NOTES**

- **ALASKA**
- **ACUTE CARE HOSPITALS**

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**FOR ADDITIONAL INFORMATION:**
- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- HAIs and prevention activities in Alaska: [www.epi.hss.state.ak.us/id/hai/default.htm](http://www.epi.hss.state.ak.us/id/hai/default.htm)

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**THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016**
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Arizona hospitals reported a significant decrease in CLABSIs between 2013 and 2014.

- Among the 46 hospitals in Arizona with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Arizona hospitals reported no significant change in CAUTIs between 2013 and 2014.

- Among the 48 hospitals in Arizona with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Arizona hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.

- Among the 34 hospitals in Arizona with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Arizona hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.

- Among the 19 hospitals in Arizona with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Arizona hospitals reported a significant decrease in *C. difficile* infections between 2013 and 2014.

- Among the 57 hospitals in Arizona with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Arizona Doing to Prevent Healthcare-Associated Infections?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, *C. difficile*, other)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.

### Table of HAI Data

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>60</td>
<td>↓ 18%</td>
<td>↑ 7%</td>
<td>↓ 47%</td>
<td>0.53</td>
<td>0.50</td>
</tr>
<tr>
<td>CAUTI</td>
<td>60</td>
<td>↓ 3%</td>
<td>↓ 2%</td>
<td>↑ 1%</td>
<td>0.99</td>
<td>1.00</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>53</td>
<td>↓ 25%</td>
<td>↑ 5%</td>
<td>↑ 13%</td>
<td>0.87</td>
<td>0.83</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>56</td>
<td>↓ 1%</td>
<td>↑ 13%</td>
<td>↑ 10%</td>
<td>1.10</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>68</td>
<td>↑ 1%</td>
<td>↑ 14%</td>
<td>↓ 1%</td>
<td>0.99</td>
<td>0.87</td>
</tr>
<tr>
<td><em>C. difficile</em> Infections</td>
<td>68</td>
<td>↓ 7%</td>
<td>&lt; 1%</td>
<td>↓ 7%</td>
<td>0.93</td>
<td>0.92</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

†Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

<table>
<thead>
<tr>
<th>CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.</td>
</tr>
</tbody>
</table>

- **Arkansas hospitals reported no significant change in CLABSIs between 2013 and 2014.**

- **Among the 24 hospitals in Arkansas with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.**

**CAUTIs**

<table>
<thead>
<tr>
<th>CATHETER-ASSOCIATED URINARY TRACT INFECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.</td>
</tr>
</tbody>
</table>

- **Arkansas hospitals reported a significant decrease in CAUTIs between 2013 and 2014.**

- **Among the 39 hospitals in Arkansas with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.**

**MRSA Bacteremia**

<table>
<thead>
<tr>
<th>LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methicillin-resistant <em>Staphylococcus aureus</em> (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.</td>
</tr>
</tbody>
</table>

- **Arkansas hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.**

- **Among the 24 hospitals in Arkansas with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.**

**SSIs**

<table>
<thead>
<tr>
<th>SURGICAL SITE INFECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.</td>
</tr>
</tbody>
</table>

**SSI: Abdominal Hysterectomy**

- **Arkansas hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.**

- **Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.**

**SSI: Colon Surgery**

- **Arkansas hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.**

- **Among the 23 hospitals in Arkansas with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.**

**C. difficile Infections**

<table>
<thead>
<tr>
<th>LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from <em>Clostridium difficile</em> (<em>C. difficile</em>), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.</td>
</tr>
</tbody>
</table>

- **Arkansas hospitals reported no significant change in C. difficile infections between 2013 and 2014.**

- **Among the 47 hospitals in Arkansas with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.**

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Table: Arkansas Healthcare-Associated Infections (HAI) Data 2014

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>Total Hospitals in Arkansas: 87</td>
<td>47</td>
<td>↑ 1%</td>
<td>↑ 12%</td>
<td>↓ 44%</td>
<td>0.56</td>
</tr>
<tr>
<td>CAUTI</td>
<td>Nat’l Baseline: 2008</td>
<td>49</td>
<td>↓ 20%</td>
<td>↓ 17%</td>
<td>↑ 16%</td>
<td>0.84</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>Nat’l Baseline: 2008</td>
<td>37</td>
<td>↓ 5%</td>
<td>↑ 7%</td>
<td>↓ 12%</td>
<td>0.88</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>Nat’l Baseline: 2008</td>
<td>41</td>
<td>↑ 8%</td>
<td>↓ 14%</td>
<td>↑ 16%</td>
<td>0.84</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>Nat’l Baseline: 2011</td>
<td>48</td>
<td>↓ 5%</td>
<td>↑ 29%</td>
<td>↓ 12%</td>
<td>1.12</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>Nat’l Baseline: 2011</td>
<td>50</td>
<td>↓ 9%</td>
<td>↓ 27%</td>
<td>↓ 33%</td>
<td>0.67</td>
</tr>
</tbody>
</table>

- †The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.
- ‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

### What is the Standardized Infection Ratio?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Arkansas Doing to Prevent Healthcare-Associated Infections?

Arkansas has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.
CALIFORNIA ACUTE CARE HOSPITALS

Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs
**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- California hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 291 hospitals in California with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs
**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- California hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 308 hospitals in California with enough data to calculate an SIR, 14% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia
**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- California hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 224 hospitals in California with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### C. difficile Infections
**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- California hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
- Among the 334 hospitals in California with enough data to calculate an SIR, 25% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

### SSIs
**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - California hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 79 hospitals in California with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - California hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.
  - Among the 210 hospitals in California with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The **standardized infection ratio (SIR)** is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### California Doing to Prevent Healthcare-Associated Infections

California has a state mandate to publicly report at least one HAI to NHSN. California is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile, CRE)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Colorado hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 33 hospitals in Colorado with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Colorado hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 35 hospitals in Colorado with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Colorado hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.
- Among the 25 hospitals in Colorado with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Colorado hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
- Among the 49 hospitals in Colorado with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Colorado hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Colorado hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 33 hospitals in Colorado with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Colorado Doing to Prevent Healthcare-Associated Infections?

Colorado has a state mandate to publicly report at least one HAI to NHSN. Colorado is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:

- Catheter-associated urinary tract infections
- Multidrug-resistant infections (C. difficile)

For additional information:
- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- Colorado validation efforts: [www.cdc.gov/hai/pdfs/state-progress-landscape.pdf](http://www.cdc.gov/hai/pdfs/state-progress-landscape.pdf)

### Table: Colorado HAI Data

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLABS</strong></td>
<td>53</td>
<td>16%</td>
<td>17%</td>
<td>59%</td>
<td>0.41</td>
<td>0.50</td>
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<tr>
<td><strong>CAUTI</strong></td>
<td>52</td>
<td>20%</td>
<td>32%</td>
<td>32%</td>
<td>0.68</td>
<td>1.00</td>
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<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>57</td>
<td>6%</td>
<td>19%</td>
<td>2%</td>
<td>0.98</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>57</td>
<td>10%</td>
<td>21%</td>
<td>22%</td>
<td>0.78</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>60</td>
<td>33%</td>
<td>44%</td>
<td>51%</td>
<td>0.49</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong></td>
<td>58</td>
<td>11%</td>
<td>21%</td>
<td>11%</td>
<td>1.11</td>
<td>0.92</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.
‡ Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

Central Line-Associated Bloodstream Infections

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Connecticut hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 26 hospitals in Connecticut with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

Catheter-Associated Urinary Tract Infections

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Connecticut hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 27 hospitals in Connecticut with enough data to calculate an SIR, 26% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

Laboratory-Identified Hospital-Onset Bloodstream Infections

Methicillin-resistant Staphylococcus aureus (MRSA) is a bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Connecticut hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 23 hospitals in Connecticut with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

Surgical Site Infections

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Connecticut hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 11 hospitals in Connecticut with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Connecticut hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 23 hospitals in Connecticut with enough data to calculate an SIR, 30% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

Laboratory-Identified Hospital-Onset C. difficile Infections

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Connecticut hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 32 hospitals in Connecticut with enough data to calculate an SIR, 28% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS CONNECTICUT DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Connecticut has a state mandate to publicly report at least one HAI to NHSN. Connecticut is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

For prevention effort details, see glossary.

- Long-term care facilities
- Antibiotic stewardship

Prevention efforts to reduce specific HAIs:
- Multidrug-resistant infections (MRSA, *C. difficile*)
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

Central line-associated bloodstream infections

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- D.C. hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

Catheter-associated urinary tract infections

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- D.C. hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

Laboratory identified hospital-onset bloodstream infections

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- D.C. hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

Lower compared to national baseline

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- D.C. hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

Lower compared to national baseline

- D.C. hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

Laboratory identified hospital-onset *C. difficile* infections

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- D.C. hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
ACUTE CARE HOSPITALS

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Healthcare-Associated Infections

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CLABS (Central Line-Associated Bloodstream Infection)</td>
<td>8</td>
<td>➡️ 15%</td>
<td>➡️ 22%</td>
<td>➡️ 40%</td>
<td>0.60</td>
<td>0.50</td>
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</tr>
<tr>
<td>CAUTI (Catheter-Associated Urinary Tract Infection)</td>
<td>7</td>
<td>➡️ 26%</td>
<td>➡️ 2%</td>
<td>➡️ 2%</td>
<td>0.98</td>
<td>1.00</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>7</td>
<td>➡️ 22%</td>
<td>➡️ 9%</td>
<td>➡️ 10%</td>
<td>0.90</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>7</td>
<td>➡️ 34%</td>
<td>➡️ 3%</td>
<td>➡️ 6%</td>
<td>0.94</td>
<td>0.98</td>
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</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>8</td>
<td>➡️ 41%</td>
<td>➡️ 9%</td>
<td>➡️ 5%</td>
<td>0.95</td>
<td>0.87</td>
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<tr>
<td>Nat'l Baseline: 2011</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>7</td>
<td>➡️ 2%</td>
<td>➡️ 4%</td>
<td>➡️ 11%</td>
<td>0.89</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
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</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

**What is the Standardized Infection Ratio?**

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

**What is D.C. doing to prevent healthcare-associated infections?**

D.C has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (CRE)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Delaware hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**45% LOWER COMPARED TO NAT’L BASELINE**

### CAUTIs

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Delaware hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**25% HIGHER COMPARED TO NAT’L BASELINE**

### MRSA Bacteremia

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Delaware hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**1% HIGHER COMPARED TO NAT’L BASELINE**

### SSIs

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Delaware hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**0% NO CHANGE COMPARED TO NAT’L BASELINE**

**SSI: Colon Surgery**

- Delaware hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**55% HIGHER COMPARED TO NAT’L BASELINE**

### C. difficile Infections

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Delaware hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**6% HIGHER COMPARED TO NAT’L BASELINE**

*Statistically significant*
Delaware has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Multidrug-resistant infections (MRSA)
- Hand hygiene

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Florida hospitals reported a significant decrease in CLABSIs between 2013 and 2014.

- Among the 171 hospitals in Florida with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Florida hospitals reported no significant change in CAUTIs between 2013 and 2014.

- Among the 178 hospitals in Florida with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Florida hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.

- Among the 152 hospitals in Florida with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Florida hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 49 hospitals in Florida with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Florida hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 150 hospitals in Florida with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Florida hospitals reported no significant change in C. difficile infections between 2013 and 2014.

- Among the 185 hospitals in Florida with enough data to calculate an SIR, 19% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What Is the Standardized Infection Ratio?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What Is Florida Doing to Prevent Healthcare-Associated Infections?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, C. difficile, CRE)

- Long-term care facilities
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

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**Table:**

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</tr>
</thead>
<tbody>
<tr>
<td>CLABSI Nat’l Baseline: 2008</td>
<td>194</td>
<td>↓ 14%</td>
<td>↑ 3%</td>
<td>↓ 49%</td>
<td>0.51</td>
<td>0.50</td>
</tr>
<tr>
<td>CAUTI Nat’l Baseline: 2009</td>
<td>192</td>
<td>↑ 2%</td>
<td>↓ 6%</td>
<td>↓ 6%</td>
<td>0.94</td>
<td>1.00</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy Nat’l Baseline: 2008</td>
<td>167</td>
<td>↓ 19%</td>
<td>↑ 12%</td>
<td>↓ 27%</td>
<td>0.73</td>
<td>0.83</td>
</tr>
<tr>
<td>SSI, Colon Surgery Nat’l Baseline: 2008</td>
<td>184</td>
<td>↓ 7%</td>
<td>↓ 26%</td>
<td>↓ 26%</td>
<td>0.74</td>
<td>0.98</td>
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<tr>
<td>MRSA Bacteremia Nat’l Baseline: 2011</td>
<td>191</td>
<td>↓ 5%</td>
<td>↑ 22%</td>
<td>↓ 4%</td>
<td>1.04</td>
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</tr>
<tr>
<td>C. difficile Infections Nat’l Baseline: 2011</td>
<td>191</td>
<td>↓ 2%</td>
<td>↑ 5%</td>
<td>↓ 12%</td>
<td>0.88</td>
<td>0.92</td>
</tr>
</tbody>
</table>

* The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Georgia hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 70 hospitals in Georgia with enough data to calculate an SIR, 24% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Georgia hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 84 hospitals in Georgia with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Georgia hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 55 hospitals in Georgia with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Georgia hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.
- Among the 106 hospitals in Georgia with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Georgia hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 32 hospitals in Georgia with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Georgia hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 58 hospitals in Georgia with enough data to calculate an SIR, 2% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

**What is the Standardized Infection Ratio?**

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

**What is Georgia doing to prevent Healthcare-Associated Infections?**

Georgia has a state mandate to publicly report at least one HAI to NHSN. Georgia is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:
- Catheter-associated urinary tract infections
- Surgical site infection
- Multidrug-resistant infections (CRE)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Hawaii hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 13 hospitals in Hawaii with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Hawaii hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 13 hospitals in Hawaii with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Hawaii hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Hawaii hospitals reported a significant increase in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Hawaii hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Hawaii hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 14 hospitals in Hawaii with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

**WHAT IS HAWAII DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?**

Hawaii has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Surgical site infections
- Multidrug-resistant infections (CRE)
- Long-term care facilities

- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Idaho hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

- **Lower compared to nat’l baseline:** 65%

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Idaho hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 10 hospitals in Idaho with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

- **Lower compared to nat’l baseline:** 27%

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Idaho hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

- **Lower compared to nat’l baseline:** 65%

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Idaho hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **Abdominal Hysterectomy:** 5% ** Higher compared to nat’l baseline

- Idaho hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

- **Colon Surgery:** 17% ** Higher compared to nat’l baseline

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Idaho hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

- **29% Lower compared to nat’l baseline**

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is the Standardized Infection Ratio?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Idaho Doing to Prevent Healthcare-Associated Infections?

Learn how your hospital is performing: [www.medicare.gov/hospitalcompare](http://www.medicare.gov/hospitalcompare)

- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- HAIs and prevention activities in Idaho: healthandwelfare.idaho.gov/Health/DiseasesConditions/MethicillinresistantStaphylococcusaureus(MRSA)/tabid/203/Default.aspx

### Table: Healthcare-Associated Infections in Idaho

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<tbody>
<tr>
<td><strong>CLABSI</strong></td>
<td>15</td>
<td>34%</td>
<td>30%</td>
<td>65%</td>
<td>0.35</td>
<td>0.50</td>
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<tr>
<td>Nat'l Baseline: 2008</td>
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<tr>
<td><strong>CAUTI</strong></td>
<td>18</td>
<td>15%</td>
<td>27%</td>
<td>27%</td>
<td>0.73</td>
<td>1.00</td>
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<tr>
<td>Nat'l Baseline: 2009</td>
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</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>14</td>
<td>18%</td>
<td>27%</td>
<td>5%</td>
<td>1.05</td>
<td>0.83</td>
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<tr>
<td>Nat'l Baseline: 2008</td>
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<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>16</td>
<td>40%</td>
<td>20%</td>
<td>17%</td>
<td>1.17</td>
<td>0.98</td>
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<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>21</td>
<td>14%</td>
<td>59%</td>
<td>65%</td>
<td>0.35</td>
<td>0.87</td>
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<tr>
<td>Nat'l Baseline: 2011</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong></td>
<td>19</td>
<td>15%</td>
<td>23%</td>
<td>29%</td>
<td>0.71</td>
<td>0.92</td>
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<tr>
<td>Nat'l Baseline: 2011</td>
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</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Illinois hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 104 hospitals in Illinois with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Illinois hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 116 hospitals in Illinois with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Illinois hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 93 hospitals in Illinois with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Among the 160 hospitals in Illinois with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Illinois hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 37 hospitals in Illinois with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Illinois hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 89 hospitals in Illinois with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Illinois Doing to Prevent Healthcare-Associated Infections?

Illinois has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (MRSA, *C. difficile*, CRE, other)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

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**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- **Indiana hospitals reported a significant decrease in CLABSIs between 2013 and 2014.**
- **Among the 59 hospitals in Indiana with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.**

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**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- **Indiana hospitals reported a significant decrease in CAUTIs between 2013 and 2014.**
- **Among the 70 hospitals in Indiana with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.**

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**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- **Indiana hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.**
- **Among the 45 hospitals in Indiana with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.**

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**C. difficile**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- **Indiana hospitals reported no significant change in C. difficile infections between 2013 and 2014.**
- **Among the 94 hospitals in Indiana with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.**

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**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - **Indiana hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.**
  - **Among the 20 hospitals in Indiana with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.**

- **SSI: Colon Surgery**
  - **Indiana hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.**
  - **Among the 50 hospitals in Indiana with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.**

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* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS INDIANA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Indiana has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAI:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (CRE)
- Long-term care facilities
- Antibiotic stewardship

For prevention effort details, see glossary.

### LEGEND

- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

### Table: Healthcare-associated infections by type and state SIR differences

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>CLABSI</strong> Nat’l Baseline: 2008</td>
<td>101</td>
<td><strong>↓12%</strong></td>
<td><strong>↑23%</strong></td>
<td><strong>↓39%</strong></td>
<td>0.61</td>
<td>0.50</td>
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<tr>
<td><strong>CAUTI</strong> Nat’l Baseline: 2009</td>
<td>106</td>
<td><strong>↓16%</strong></td>
<td><strong>↑3%</strong></td>
<td><strong>↑3%</strong></td>
<td>1.03</td>
<td>1.00</td>
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<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>98</td>
<td><strong>↓17%</strong></td>
<td><strong>↓16%</strong></td>
<td><strong>↑30%</strong></td>
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<td><strong>SSI, Colon Surgery</strong> Nat’l Baseline: 2008</td>
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<td><strong>↓1%</strong></td>
<td><strong>↑8%</strong></td>
<td><strong>↑6%</strong></td>
<td>1.06</td>
<td>0.98</td>
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<tr>
<td><strong>MRSA Bacteremia</strong> Nat’l Baseline: 2011</td>
<td>107</td>
<td><strong>↓6%</strong></td>
<td><strong>↓12%</strong></td>
<td><strong>↑23%</strong></td>
<td>0.77</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong> Nat’l Baseline: 2011</td>
<td>104</td>
<td><strong>↑5%</strong></td>
<td><strong>↓2%</strong></td>
<td><strong>↑6%</strong></td>
<td>0.94</td>
<td>0.92</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

This report is based on 2014 data, published in 2016.

### CLABSIs

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Iowa hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 20 hospitals in Iowa with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Iowa hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 31 hospitals in Iowa with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Iowa hospitals reported a significant increase in MRSA bacteremia between 2013 and 2014.
- Among the 18 hospitals in Iowa with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### C. difficile Infections

**LABORATORY IDENTIFIED HOSPITAL-ONSET *C. DIFFICILE* INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Iowa hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.
- Among the 44 hospitals in Iowa with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

### SSIs

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Iowa hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Iowa hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 22 hospitals in Iowa with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

* *Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS IOWA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (*C. difficile*)
- Ventilator-associated events
- Long-term care facilities
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

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**Healthcare-Associated Infections**

**# OF IOWA HOSPITALS THAT REPORTED DATA TO CDC’S NHSN, 2014**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CLABSI</td>
<td>61</td>
<td>↓ 14%</td>
<td>↓ 7%</td>
<td>↓ 54%</td>
<td>0.46</td>
<td>0.50</td>
</tr>
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<td>CAUTI</td>
<td>81</td>
<td>↓ 7%</td>
<td>↓ 18%</td>
<td>↓ 17%</td>
<td>0.83</td>
<td>1.00</td>
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<td>40</td>
<td>↓ 4%</td>
<td>↑ 9%</td>
<td>↑ 10%</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>42</td>
<td>↓ 9%</td>
<td>↑ 9%</td>
<td>↑ 6%</td>
<td>1.06</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>48</td>
<td>↑ 66%</td>
<td>↓ 16%</td>
<td>↓ 27%</td>
<td>0.73</td>
<td>0.87</td>
</tr>
<tr>
<td><em>C. difficile</em> Infections</td>
<td>59</td>
<td>↑ 18%</td>
<td>↑ 3%</td>
<td>↑ 5%</td>
<td>0.95</td>
<td>0.92</td>
</tr>
</tbody>
</table>

The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Kansas hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 21 hospitals in Kansas with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Kansas hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 31 hospitals in Kansas with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Kansas hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 14 hospitals in Kansas with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Kansas hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 18 hospitals in Kansas with enough data to calculate an SIR, 22% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**SSI: Colon Surgery**

- Kansas hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 18 hospitals in Kansas with enough data to calculate an SIR, 22% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Kansas hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 49 hospitals in Kansas with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio (SIR)?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Kansas Doing to Prevent Healthcare-Associated Infections?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (C. difficile)
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

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**LEGEND**

- **↓** 2014 state SIR is significantly lower (better) than comparison group in column header
- **↑** 2014 state SIR is significantly higher (worse) than comparison group in column header
- **Change** in 2014 state SIR compared to group in column header is not statistically significant
- **↓** 2014 state SIR cannot be calculated

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<tbody>
<tr>
<td>CLABS</td>
<td>Total Hospitals in Kansas: 146</td>
<td><a href="#">6%</a></td>
<td><a href="#">24%</a></td>
<td><a href="#">39%</a></td>
<td>0.61</td>
<td>0.50</td>
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<td>Nat’l Baseline: 2008</td>
<td><a href="#">10%</a></td>
<td><a href="#">1%</a></td>
<td><a href="#">1%</a></td>
<td>1.01</td>
<td>1.00</td>
</tr>
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<td>SSI, Abdominal Hysterectomy</td>
<td>Nat’l Baseline: 2008</td>
<td><a href="#">107%</a></td>
<td><a href="#">4%</a></td>
<td><a href="#">14%</a></td>
<td>0.86</td>
<td>0.83</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>Nat’l Baseline: 2008</td>
<td><a href="#">3%</a></td>
<td><a href="#">46%</a></td>
<td><a href="#">42%</a></td>
<td>1.42</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>Nat’l Baseline: 2011</td>
<td><a href="#">15%</a></td>
<td><a href="#">37%</a></td>
<td><a href="#">45%</a></td>
<td>0.55</td>
<td>0.87</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>Nat’l Baseline: 2011</td>
<td><a href="#">1%</a></td>
<td>&lt;1%</td>
<td><a href="#">8%</a></td>
<td>0.92</td>
<td>0.92</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Kentucky hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 39 hospitals in Kentucky with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Kentucky hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 55 hospitals in Kentucky with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Kentucky hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 34 hospitals in Kentucky with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Kentucky hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 69 hospitals in Kentucky with enough data to calculate an SIR, 14% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Kentucky hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 15 hospitals in Kentucky with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Kentucky hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.
- Among the 36 hospitals in Kentucky with enough data to calculate an SIR, 14% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Kentucky Doing to Prevent Healthcare-Associated Infections?

Prevention efforts to reduce specific HAIs:

- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile, CRE)

- Long-term care facilities
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.

### Healthcare-Associated Infections (HAI) Progress Report for Kentucky, 2014

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<tbody>
<tr>
<td>CLABSI</td>
<td>Total Hospitals in Kentucky: 116</td>
<td>▼ 16%</td>
<td>▼ 12%</td>
<td>▼ 45%</td>
<td>0.55</td>
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<td>Nat’l Baseline: 2008</td>
<td>70</td>
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<tr>
<td>CAUTI</td>
<td>Change in 2014 state SIR compared to group in column header</td>
<td>▼ 18%</td>
<td>▼ 4%</td>
<td>▼ 3%</td>
<td>0.97</td>
<td>1.00</td>
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<td>Nat’l Baseline: 2009</td>
<td>71</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>2014 state SIR is significantly lower (better) than comparison group in column header</td>
<td>▼ 4%</td>
<td>▼ 15%</td>
<td>▼ 5%</td>
<td>0.95</td>
<td>0.83</td>
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<td>Nat’l Baseline: 2008</td>
<td>59</td>
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</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>2014 state SIR is significantly higher (worse) than comparison group in column header</td>
<td>▼ 36%</td>
<td>▼ 9%</td>
<td>▼ 6%</td>
<td>1.06</td>
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<td>66</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>2014 state SIR cannot be calculated</td>
<td>▼ 1%</td>
<td>▼ &lt; 1%</td>
<td>▼ 8%</td>
<td>0.92</td>
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<td>Nat’l Baseline: 2011</td>
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<td>C. difficile Infections</td>
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<td></td>
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</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
<td>72</td>
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</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Louisiana hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 49 hospitals in Louisiana with enough data to calculate an SIR, 17% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Louisiana hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 57 hospitals in Louisiana with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Louisiana hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 39 hospitals in Louisiana with enough data to calculate an SIR, 26% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Louisiana hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 13 hospitals in Louisiana with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Louisiana hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 36 hospitals in Louisiana with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Louisiana hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
- Among the 75 hospitals in Louisiana with enough data to calculate an SIR, 1% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Healthcare-Associated Infections

#### Legend
- **↓** 2014 state SIR is significantly lower (better) than comparison group in column header
- **↑** or **↓** Change in 2014 state SIR compared to group in column header is not statistically significant
- **↑** 2014 state SIR is significantly higher (worse) than comparison group in column header
- **|** 2014 state SIR cannot be calculated

#### HAI Type
<table>
<thead>
<tr>
<th>HAI Type</th>
<th># of Louisiana Hospitals that Reported Data to CDC's NHSN, 2014&lt;sup&gt;+&lt;/sup&gt;</th>
<th>2014 State SIR vs. 2013 State SIR</th>
<th>2014 State SIR vs. 2014 Nat'l SIR</th>
<th>2014 State SIR vs. Nat'l Baseline&lt;sup&gt;‡&lt;/sup&gt;</th>
<th>2014 State SIR</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABS&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Total Hospitals in Louisiana: 160</td>
<td>↓ 12%</td>
<td>↑ 22%</td>
<td>↓ 40%</td>
<td>0.60</td>
<td>0.50</td>
</tr>
<tr>
<td>CAUTI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Nat'l Baseline: 2008</td>
<td>↓ &lt; 1%</td>
<td>↑ 20%</td>
<td>↓ 20%</td>
<td>0.80</td>
<td>1.00</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>Nat'l Baseline: 2009</td>
<td>↓ 15%</td>
<td>↑ 10%</td>
<td>↓ 25%</td>
<td>0.75</td>
<td>0.83</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>Nat'l Baseline: 2008</td>
<td>↓ 13%</td>
<td>↓ 3%</td>
<td>↓ 5%</td>
<td>0.95</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>Nat'l Baseline: 2011</td>
<td>↓ 10%</td>
<td>↑ 25%</td>
<td>↑ 8%</td>
<td>1.08</td>
<td>0.87</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>Nat'l Baseline: 2011</td>
<td>↑ 10%</td>
<td>↓ 27%</td>
<td>↓ 32%</td>
<td>0.68</td>
<td>0.92</td>
</tr>
</tbody>
</table>

<sup>+</sup> The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.  

<sup>‡</sup> Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

### What is the Standardized Infection Ratio?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Louisiana Doing to Prevent Healthcare-Associated Infections?

Prevention efforts to reduce specific HAIs:
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (C. difficile)

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Maine hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Maine hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 12 hospitals in Maine with enough data to calculate an SIR, 17% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Maine hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Maine hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Maine hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 10 hospitals in Maine with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Maine hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 35 hospitals in Maine with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS MAINE DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Maine has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (C. difficile, CRE)
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### MAINE HEALTHCARE-ASSOCIATED INFECTIONS PROGRESS

<table>
<thead>
<tr>
<th></th>
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<td><img src="white-up-arrow" alt="3%" /></td>
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<td><strong>SSI, Colon Surgery</strong></td>
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<td>1.31</td>
<td>0.98</td>
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<td><strong>MRSA Bacteremia</strong></td>
<td>35</td>
<td><img src="white-down-arrow" alt="17%" /></td>
<td><img src="green-down-arrow" alt="31%" /></td>
<td><img src="green-down-arrow" alt="40%" /></td>
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<td>0.87</td>
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<td>Nat’l Baseline: 2011</td>
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<td><img src="white-down-arrow" alt="17%" /></td>
<td><img src="green-down-arrow" alt="31%" /></td>
<td><img src="green-down-arrow" alt="40%" /></td>
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<td><strong>C. difficile Infections</strong></td>
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<td><img src="red-down-arrow" alt="41%" /></td>
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<td><img src="white-up-arrow" alt="9%" /></td>
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<td><img src="red-down-arrow" alt="41%" /></td>
<td>0.59</td>
<td>0.92</td>
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</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs
**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Maryland hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 38 hospitals in Maryland with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs
**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Maryland hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 41 hospitals in Maryland with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia
**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Maryland hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 39 hospitals in Maryland with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### C. difficile Infections
**LABORATORY IDENTIFIED HOSPITAL-ONSET *C. DIFFICILE* INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Maryland hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.
- Among the 46 hospitals in Maryland with enough data to calculate an SIR, 48% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

### SSIs
**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Maryland hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 12 hospitals in Maryland with enough data to calculate an SIR, 25% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Maryland hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 34 hospitals in Maryland with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

### C. difficile Infections
**LABORATORY IDENTIFIED HOSPITAL-ONSET *C. DIFFICILE* INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Maryland hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.
- Among the 46 hospitals in Maryland with enough data to calculate an SIR, 48% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
MARYLAND

ACUTE CARE HOSPITALS

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

**LEGEND**

- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS MARYLAND DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Maryland has a state mandate to publicly report at least one HAI to NHSN. Maryland is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:
- Multidrug-resistant infections (C. difficile, CRE, other)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship

For prevention effort details, see glossary.

### TABLE: 2014 STATE SIR vs. 2013 State SIR vs. 2014 Nat’l SIR

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>CLABSI</strong> Nat’l Baseline: 2008</td>
<td>48</td>
<td>↑ 2%</td>
<td>↑ 7%</td>
<td>↓ 47%</td>
<td>0.53</td>
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<tr>
<td><strong>CAUTI</strong> Nat’l Baseline: 2009</td>
<td>48</td>
<td>↓ 2%</td>
<td>↑ 36%</td>
<td>↑ 35%</td>
<td>1.35</td>
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<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong> Nat’l Baseline: 2008</td>
<td>41</td>
<td>↓ 1%</td>
<td>↑ 44%</td>
<td>↑ 18%</td>
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<tr>
<td><strong>SSI, Colon Surgery</strong> Nat’l Baseline: 2008</td>
<td>45</td>
<td>↑ 15%</td>
<td>↓ 1%</td>
<td>↓ 4%</td>
<td>0.96</td>
<td>0.98</td>
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<tr>
<td><strong>MRSA Bacteremia</strong> Nat’l Baseline: 2011</td>
<td>47</td>
<td>↑ 48%</td>
<td>↑ 41%</td>
<td>↓ 22%</td>
<td>1.22</td>
<td>0.87</td>
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<tr>
<td><strong>C. difficile Infections</strong> Nat’l Baseline: 2011</td>
<td>47</td>
<td>↑ 6%</td>
<td>↑ 31%</td>
<td>↓ 20%</td>
<td>1.20</td>
<td>0.92</td>
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</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

†Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.

---

**Two-column summary:**

- **Progress:**
  - NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
  - HAIs and prevention activities in Maryland: [www.marylandqmdc.org/](http://www.marylandqmdc.org/)
  - Maryland validation efforts: [www.cdc.gov/hai/pdfs/state-progress-landscape.pdf](http://www.cdc.gov/hai/pdfs/state-progress-landscape.pdf)

- **Learn:**
  - how your hospital is performing: [www.medicare.gov/hospitalcompare](http://www.medicare.gov/hospitalcompare)

- **For additional information:**
  - [www.cdc.gov/hai/](http://www.cdc.gov/hai/)
  - [www.marylandqmdc.org/](http://www.marylandqmdc.org/)

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**Note:**

- For 2014 SIR calculation, 62 hospitals in Maryland reported data to NHSN.
- Data represent healthcare-associated infections that met criteria for surveillance, occurred after the date of admission or the index procedure, and were not part of other infection processes.
- For specific methodology and data definitions, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Massachusetts hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 45 hospitals in Massachusetts with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Massachusetts hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 57 hospitals in Massachusetts with enough data to calculate an SIR, 19% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Massachusetts hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 49 hospitals in Massachusetts with enough data to calculate an SIR, 2% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Massachusetts hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 70 hospitals in Massachusetts with enough data to calculate an SIR, 21% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Massachusetts hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 11 hospitals in Massachusetts with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Massachusetts hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 42 hospitals in Massachusetts with enough data to calculate an SIR, 14% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### Massachusetts Preventing HAIs

Massachusetts has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### Table: Healthcare-associated Infections in Massachusetts Hospitals

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<tbody>
<tr>
<td>CLABSI</td>
<td>69</td>
<td>2% down arrow</td>
<td>1% up arrow</td>
<td>50% down arrow</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
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<tr>
<td>CAUTI</td>
<td>69</td>
<td>18% down arrow</td>
<td>29% up arrow</td>
<td>28% up arrow</td>
<td>1.28</td>
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<td>Nat’l Baseline: 2009</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>58</td>
<td>13% down arrow</td>
<td>36% up arrow</td>
<td>11% up arrow</td>
<td>1.11</td>
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<td></td>
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</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>62</td>
<td>2% down arrow</td>
<td>22% up arrow</td>
<td>18% up arrow</td>
<td>1.18</td>
<td>0.98</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
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</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>73</td>
<td>14% down arrow</td>
<td>41% up arrow</td>
<td>48% up arrow</td>
<td>0.52</td>
<td>0.87</td>
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<tr>
<td>Nat’l Baseline: 2011</td>
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<tr>
<td>C. difficile Infections</td>
<td>72</td>
<td>1% down arrow</td>
<td>4% up arrow</td>
<td>4% up arrow</td>
<td>0.96</td>
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<tr>
<td>Nat’l Baseline: 2011</td>
<td></td>
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</tbody>
</table>

Notes:
- †The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.
- ‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Michigan hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 61 hospitals in Michigan with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Michigan hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 77 hospitals in Michigan with enough data to calculate an SIR, 21% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Michigan hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 55 hospitals in Michigan with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Michigan hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 95 hospitals in Michigan with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Michigan hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 27 hospitals in Michigan with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Michigan hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.
- Among the 57 hospitals in Michigan with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Michigan doing to prevent healthcare-associated infections?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, *C. difficile, CRE*)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

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<tbody>
<tr>
<td>CLABSI</td>
<td>98</td>
<td>↓ 6%</td>
<td>↓ 19%</td>
<td>↓ 60%</td>
<td>0.40</td>
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<tr>
<td>CAUTI</td>
<td>102</td>
<td>↓ 6%</td>
<td>↑ 16%</td>
<td>↑ 15%</td>
<td>1.15</td>
<td>1.00</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>86</td>
<td>↓ 11%</td>
<td>↑ 32%</td>
<td>↑ 8%</td>
<td>1.08</td>
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<td>SSI, Colon Surgery</td>
<td>93</td>
<td>↑ 16%</td>
<td>↑ 26%</td>
<td>↑ 22%</td>
<td>1.22</td>
<td>0.98</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>102</td>
<td>↑ &lt; 1%</td>
<td>↑ 12%</td>
<td>↓ 3%</td>
<td>0.97</td>
<td>0.87</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>101</td>
<td>↑ 2%</td>
<td>↓ 1%</td>
<td>↓ 9%</td>
<td>0.91</td>
<td>0.92</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

†Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Minnesota hospitals reported no significant change in CLABSIs between 2013 and 2014.

- Among the 20 hospitals in Minnesota with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Minnesota hospitals reported no significant change in CAUTIs between 2013 and 2014.

- Among the 28 hospitals in Minnesota with enough data to calculate an SIR, 25% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Minnesota hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.

- Among the 23 hospitals in Minnesota with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Minnesota hospitals reported no significant change in C. difficile infections between 2013 and 2014.

- Among the 50 hospitals in Minnesota with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Minnesota hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.

- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Minnesota hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.

- Among the 26 hospitals in Minnesota with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### LEGEND

- **↓** 2014 state SIR is significantly lower (better) than comparison group in column header
- **↑** or **↓** Change in 2014 state SIR compared to group in column header is not statistically significant
- **↑** 2014 state SIR is significantly higher (worse) than comparison group in column header
- **∥** 2014 state SIR cannot be calculated

### HAI TYPE

<table>
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<tr>
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<tbody>
<tr>
<td>CLABSI</td>
<td>Total Hospitals in Minnesota: 143</td>
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<td>⨳ 9%</td>
<td>⨳ 55%</td>
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<tr>
<td>CAUTI</td>
<td>48</td>
<td>⨳ 1%</td>
<td>⨳ 25%</td>
<td>⨳ 24%</td>
<td>1.24</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>50</td>
<td>⨳ 13%</td>
<td>⨳ 40%</td>
<td>⨳ 15%</td>
<td>1.15</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
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<td></td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>49</td>
<td>⨳ 5%</td>
<td>⨳ 6%</td>
<td>⨳ 4%</td>
<td>1.04</td>
<td>0.98</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>54</td>
<td>⨳ 16%</td>
<td>⨳ 58%</td>
<td>⨳ 63%</td>
<td>0.37</td>
<td>0.87</td>
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<tr>
<td>C. difficile Infections</td>
<td>54</td>
<td>⨳ 3%</td>
<td>⨳ 12%</td>
<td>⨳ 19%</td>
<td>0.81</td>
<td>0.92</td>
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<td>Nat’l Baseline: 2011</td>
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† The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS MINNESOTA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Minnesota has a state mandate to publicly report at least one HAI to NHSN. Minnesota is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile, CRE)
- Long-term care facilities
- Antibiotic stewardship

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- **Mississippi hospitals reported no significant change in CLABSIs between 2013 and 2014.**
- **Among the 29 hospitals in Mississippi with enough data to calculate an SIR, 26% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.**

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- **Mississippi hospitals reported no significant change in CAUTIs between 2013 and 2014.**
- **Among the 35 hospitals in Mississippi with enough data to calculate an SIR, 17% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.**

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- **Mississippi hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.**
- **Among the 24 hospitals in Mississippi with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.**

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- **Mississippi hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.**
- **Among the 55 hospitals in Mississippi with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.**

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS MISSISSIPPI DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Mississippi has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, *C. difficile*)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### LEGEND

- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

### # OF MISSISSIPPI HOSPITALS THAT REPORTED DATA TO CDC’S NHSN, 2014

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<tbody>
<tr>
<td>CLABSQ</td>
<td>49</td>
<td>↓ 2%</td>
<td>↑ 54%</td>
<td>↓ 24%</td>
<td>0.76</td>
<td>0.50</td>
</tr>
<tr>
<td>CAUTI</td>
<td>49</td>
<td>↓ 1%</td>
<td>↑ 7%</td>
<td>↑ 7%</td>
<td>1.07</td>
<td>1.00</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>43</td>
<td>↓ 40%</td>
<td>↓ 36%</td>
<td>↑ 47%</td>
<td>0.53</td>
<td>0.83</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>43</td>
<td>↓ 23%</td>
<td>↓ 37%</td>
<td>↓ 38%</td>
<td>0.62</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>64</td>
<td>↓ 26%</td>
<td>↑ 4%</td>
<td>↓ 17%</td>
<td>0.83</td>
<td>0.87</td>
</tr>
<tr>
<td><em>C. difficile</em> Infections</td>
<td>63</td>
<td>↑ 24%</td>
<td>↑ 24%</td>
<td>↓ 30%</td>
<td>0.70</td>
<td>0.92</td>
</tr>
</tbody>
</table>

‡ The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Missouri hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 50 hospitals in Missouri with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Missouri hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 56 hospitals in Missouri with enough data to calculate an SIR, 20% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Missouri hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 43 hospitals in Missouri with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Missouri hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 16 hospitals in Missouri with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Missouri hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 44 hospitals in Missouri with enough data to calculate an SIR, 2% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

- Missouri hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 16 hospitals in Missouri with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Missouri hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 76 hospitals in Missouri with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

**WHAT IS THE STANDARDIZED INFECTION RATIO?**

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

**WHAT IS MISSOURI DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?**

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, *C. difficile*)
- Long-term care facilities
- Hand hygiene
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

Central Line-Associated Bloodstream Infections

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Montana hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

---

**CAUTIs**

Catheter-Associated Urinary Tract Infections

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Montana hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 10 hospitals in Montana with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

---

**MRSA Bacteremia**

Laboratory-Identified Hospital-Onset Bloodstream Infections

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Montana hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

---

**C. difficile Infections**

Laboratory-Identified Hospital-Onset C. difficile Infections

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Montana hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 14 hospitals in Montana with enough data to calculate an SIR, 21% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

---

**SSIs**

Surgical Site Infections

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Montana hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Montana hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

---

* Statistically significant
# OF MONTANA HOSPITALS THAT REPORTED DATA TO CDC’S NHSN, 2014

Total Hospitals in Montana: 63

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<td><strong>CLABSI</strong></td>
<td>16</td>
<td>↓ 14%</td>
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<td>↓ 44%</td>
<td>0.56</td>
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<td>↓ 17%</td>
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<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>15</td>
<td>↓ 55%</td>
<td>↓ 46%</td>
<td>↓ 55%</td>
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<td><strong>SSI, Colon Surgery</strong></td>
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<td>↓ 18%</td>
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<td><strong>MRSA Bacteremia</strong></td>
<td>15</td>
<td>↑ 49%</td>
<td>↓ 8%</td>
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<tr>
<td><strong>C. difficile Infections</strong></td>
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<td>↓ 9%</td>
<td>↓ 16%</td>
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The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries. For additional data points, refer to the technical data tables.

†Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

## WHAT IS THE STANDARDIZED INFECTION RATIO?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

## WHAT IS MONTANA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Long-term care facilities

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

*CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS*

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Nebraska hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 17 hospitals in Nebraska with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

*CATHETER-ASSOCIATED URINARY TRACT INFECTIONS*

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Nebraska hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 20 hospitals in Nebraska with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

*LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS*

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Nebraska hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 12 hospitals in Nebraska with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

*SSIPSURGICAL SITE INFECTIONS*

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Nebraska hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Nebraska hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 12 hospitals in Nebraska with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

*LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS*

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Nebraska hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 25 hospitals in Nebraska with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Nebraska Doing to Prevent Healthcare-Associated Infections?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (MRSA, *C. difficile*)
- Long-term care facilities
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.

### Table: Nebraska Acute Care Hospitals

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<tbody>
<tr>
<td>CLABSI Nat'l Baseline: 2008</td>
<td>27</td>
<td>↑ 1%</td>
<td>↑ 46%</td>
<td>↓ 28%</td>
<td>0.72</td>
<td>0.50</td>
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<td>27</td>
<td>↑ 13%</td>
<td>↑ 7%</td>
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<td>1.07</td>
<td>1.00</td>
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<td>SSI, Abdominal Hysterectomy Nat'l Baseline: 2008</td>
<td>21</td>
<td>↓ 3%</td>
<td>↓ 26%</td>
<td>↓ 39%</td>
<td>0.61</td>
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<td>21</td>
<td>↓ 7%</td>
<td>↑ 23%</td>
<td>↑ 20%</td>
<td>1.20</td>
<td>0.98</td>
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<tr>
<td>MRSA Bacteremia Nat'l Baseline: 2011</td>
<td>28</td>
<td>↓ 20%</td>
<td>↓ 42%</td>
<td>↓ 49%</td>
<td>0.51</td>
<td>0.87</td>
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<td>C. difficile Infections Nat'l Baseline: 2011</td>
<td>30</td>
<td>↑ 11%</td>
<td>↓ 24%</td>
<td>↓ 30%</td>
<td>0.70</td>
<td>0.92</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Nevada hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 19 hospitals in Nevada with enough data to calculate an SIR, 22% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Nevada hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 23 hospitals in Nevada with enough data to calculate an SIR, 26% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Nevada hospitals reported a significant increase in MRSA bacteremia between 2013 and 2014.
- Among the 17 hospitals in Nevada with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Nevada hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 22 hospitals in Nevada with enough data to calculate an SIR, 32% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a **surgical site infection**. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Nevada hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.
- **SSI: Colon Surgery**
  - Nevada hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 15 hospitals in Nevada with enough data to calculate an SIR, 20% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

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<td>↑ 18%</td>
<td>↓ 42%</td>
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<td>CAUTI</td>
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<td>↓ 5%</td>
<td>↑ 2%</td>
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<td>1.02</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>20</td>
<td>↑ &lt; 1%</td>
<td>↓ 6%</td>
<td>↑ 22%</td>
<td>0.78</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>22</td>
<td>↑ 31%</td>
<td>↑ 44%</td>
<td>↑ 40%</td>
<td>1.40</td>
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<td>MRSA Bacteremia</td>
<td>23</td>
<td>↑ 43%</td>
<td>↑ 24%</td>
<td>↑ 8%</td>
<td>1.08</td>
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<td>C. difficile Infections</td>
<td>23</td>
<td>↑ 5%</td>
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*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

†Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

WHAT IS THE STANDARDIZED INFECTION RATIO?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

WHAT IS NEVADA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Nevada has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile)
- Ventilator-associated events
- Long-term care facilities
- Antibiotic stewardship

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- New Hampshire hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- New Hampshire hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 16 hospitals in New Hampshire with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- New Hampshire hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- New Hampshire hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.
- Among the 20 hospitals in New Hampshire with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- New Hampshire hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 12 hospitals in New Hampshire with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

- New Hampshire hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 12 hospitals in New Hampshire with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

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<td>↑ 11%</td>
<td>↓ 45%</td>
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<td>CAUTI</td>
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<td>↑ 3%</td>
<td>↑ 3%</td>
<td>1.03</td>
<td>1.00</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>23</td>
<td>↓ 54%</td>
<td>↓ 58%</td>
<td>↑ 65%</td>
<td>0.35</td>
<td>0.83</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>25</td>
<td>↑ 26%</td>
<td>↓ 10%</td>
<td>↓ 12%</td>
<td>0.88</td>
<td>0.98</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>21</td>
<td>↑ 10%</td>
<td>↓ 36%</td>
<td>↓ 45%</td>
<td>0.55</td>
<td>0.87</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>21</td>
<td>↑ 22%</td>
<td>↑ 8%</td>
<td>↓ 1%</td>
<td>0.99</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.
‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

What is the Standardized Infection Ratio?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

What is New Hampshire Doing to Prevent Healthcare-Associated Infections?

New Hampshire has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:

- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

CLABSIs

CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- New Jersey hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 70 hospitals in New Jersey with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

CAUTIs

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- New Jersey hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 72 hospitals in New Jersey with enough data to calculate an SIR, 19% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

MRSA Bacteremia

LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- New Jersey hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 62 hospitals in New Jersey with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

C. difficile Infections

LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- New Jersey hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 72 hospitals in New Jersey with enough data to calculate an SIR, 21% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

SSIs

SURGICAL SITE INFECTIONS

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- New Jersey hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 20 hospitals in New Jersey with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- New Jersey hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 53 hospitals in New Jersey with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS NEW JERSEY DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

New Jersey has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections

For prevention effort details, see glossary.

---

**Table: Healthcare-associated Infection (HAI) Data**

<table>
<thead>
<tr>
<th>HAI Type</th>
<th># of New Jersey Hospitals that Reported Data to CDC's NHSN, 2014†</th>
<th>2014 State SIR vs. 2013 State SIR</th>
<th>2014 State SIR vs. 2014 Nat'l SIR</th>
<th>2014 State SIR vs. Nat'l Baseline‡</th>
<th>2014 State SIR</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>72</td>
<td>4%</td>
<td>19%</td>
<td>41%</td>
<td>0.59</td>
<td>0.50</td>
</tr>
<tr>
<td>CAUTI</td>
<td>72</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
<td>1.08</td>
<td>1.00</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>66</td>
<td>19%</td>
<td>27%</td>
<td>4%</td>
<td>1.04</td>
<td>0.83</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>71</td>
<td>10%</td>
<td>21%</td>
<td>23%</td>
<td>0.77</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>72</td>
<td>5%</td>
<td>23%</td>
<td>6%</td>
<td>1.06</td>
<td>0.87</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>72</td>
<td>3%</td>
<td>5%</td>
<td>3%</td>
<td>0.97</td>
<td>0.92</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**
- **CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**
- When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.
- New Mexico hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 15 hospitals in New Mexico with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**
- **CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**
- When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.
- New Mexico hospitals reported a significant increase in CAUTIs between 2013 and 2014.
- Among the 19 hospitals in New Mexico with enough data to calculate an SIR, 21% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**
- **LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**
- Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.
- New Mexico hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**
- **LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**
- When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.
- New Mexico hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 32 hospitals in New Mexico with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**
- **SURGICAL SITE INFECTIONS**
- When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.
- New Mexico hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.
- New Mexico hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
### Healthcare-Associated Infection (HAI) Data

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is New Mexico Doing to Prevent Healthcare-Associated Infections?

New Mexico has a state mandate to publicly report at least one HAI to NHSN. New Mexico is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:

- Multidrug-resistant infections (C. difficile, CRE)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.

### Table: Healthcare-Associated Infections in New Mexico, 2014

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>34</td>
<td>12%</td>
<td>12%</td>
<td>45%</td>
<td>0.55</td>
<td>0.50</td>
</tr>
<tr>
<td>(Nat’l Baseline: 2008)</td>
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</tr>
<tr>
<td>CAUTI</td>
<td>34</td>
<td>48%</td>
<td>22%</td>
<td>22%</td>
<td>1.22</td>
<td>1.00</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>26</td>
<td>55%</td>
<td>44%</td>
<td>19%</td>
<td>1.19</td>
<td>0.83</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>26</td>
<td>99%</td>
<td>52%</td>
<td>48%</td>
<td>1.48</td>
<td>0.98</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>37</td>
<td>35%</td>
<td>52%</td>
<td>58%</td>
<td>0.42</td>
<td>0.87</td>
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<td>(Nat’l Baseline: 2011)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>39</td>
<td>11%</td>
<td>23%</td>
<td>14%</td>
<td>1.14</td>
<td>0.92</td>
</tr>
<tr>
<td>(Nat’l Baseline: 2011)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

† The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.

This report is based on 2014 data, published in 2016.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- New York hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
- Among the 139 hospitals in New York with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- New York hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 149 hospitals in New York with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- New York hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 130 hospitals in New York with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### C. difficile Infections

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- New York hospitals reported a significant decrease in *C. difficile* infections between 2013 and 2014.
- Among the 176 hospitals in New York with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

### SSIs

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - New York hospitals reported a significant decrease in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 49 hospitals in New York with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - New York hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 119 hospitals in New York with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### New York

#### What is the Standardized Infection Ratio?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

#### What is New York Doing to Prevent Healthcare-Associated Infections?

New York has a state mandate to publicly report at least one HAI to NHSN. New York is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:

- Multidrug-resistant infections (MRSA, C. difficile, CRE, other)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.

### Table: Healthcare-Associated Infections

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>CLABSI</strong></td>
<td>Total Hospitals in New York: 217</td>
<td>168</td>
<td>&lt; 1%</td>
<td>50%</td>
<td>0.50</td>
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<td>12%</td>
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<tr>
<td><strong>CAUTI</strong></td>
<td>170</td>
<td>8%</td>
<td>16%</td>
<td>15%</td>
<td>1.15</td>
<td>1.00</td>
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<td>Nat’l Baseline: 2009</td>
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<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>152</td>
<td>24%</td>
<td>20%</td>
<td>3%</td>
<td>0.97</td>
<td>0.83</td>
</tr>
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<td>Nat’l Baseline: 2008</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>166</td>
<td>8%</td>
<td>29%</td>
<td>24%</td>
<td>1.24</td>
<td>0.98</td>
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<tr>
<td>Nat’l Baseline: 2008</td>
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<td></td>
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</tr>
<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>179</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
<td>0.93</td>
<td>0.87</td>
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<tr>
<td>Nat’l Baseline: 2011</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong></td>
<td>182</td>
<td>6%</td>
<td>4%</td>
<td>11%</td>
<td>0.89</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
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</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

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**Legend**

- Green down arrow: 2014 state SIR is significantly lower (better) than comparison group in column header
- Red up arrow: 2014 state SIR is significantly higher (worse) than comparison group in column header
- White up arrow: Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR cannot be calculated

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**Learn how your hospital is performing:**

www.medicare.gov/hospitalcompare

**For additional information:**

- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs
**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- North Carolina hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
- Among the 59 hospitals in North Carolina with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs
**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- North Carolina hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 79 hospitals in North Carolina with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia
**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- North Carolina hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 62 hospitals in North Carolina with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### SSIs
**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- North Carolina hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 26 hospitals in North Carolina with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- North Carolina hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 55 hospitals in North Carolina with enough data to calculate an SIR, 2% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

### C. difficile Infections
**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- North Carolina hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
- Among the 98 hospitals in North Carolina with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

*Statistically significant*
## Legend

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 state SIR is significantly lower (better) than comparison group in column header</td>
<td>2014 state SIR is significantly higher (worse) than comparison group in column header</td>
<td>2014 state SIR cannot be calculated</td>
<td></td>
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</tbody>
</table>

### What is the Standardized Infection Ratio (SIR)?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### North Carolina has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:

- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### What is North Carolina doing to prevent healthcare-associated infections?

- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- HAIs and prevention activities in North Carolina: [epi.publichealth.nc.gov/cd/diseases/hai.html](http://epi.publichealth.nc.gov/cd/diseases/hai.html)

### Table: North Carolina Healthcare-Associated Infections (HAI) Data

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>Nat’l Baseline: 2008</td>
<td>98</td>
<td>↓ 21%</td>
<td>↓ 16%</td>
<td>58%</td>
<td>0.42</td>
</tr>
<tr>
<td>CAUTI</td>
<td>Nat’l Baseline: 2009</td>
<td>99</td>
<td>↑ 7%</td>
<td>↑ 22%</td>
<td>22%</td>
<td>1.22</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>Nat’l Baseline: 2008</td>
<td>88</td>
<td>↓ 11%</td>
<td>↑ 11%</td>
<td>9%</td>
<td>0.91</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>Nat’l Baseline: 2008</td>
<td>94</td>
<td>↓ 8%</td>
<td>↑ 15%</td>
<td>16%</td>
<td>0.84</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>Nat’l Baseline: 2011</td>
<td>105</td>
<td>↓ 10%</td>
<td>↓ 1%</td>
<td>14%</td>
<td>0.86</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>Nat’l Baseline: 2011</td>
<td>104</td>
<td>↑ 9%</td>
<td>↓ 5%</td>
<td>12%</td>
<td>0.88</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- North Dakota hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- North Dakota hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- North Dakota hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- North Dakota hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- North Dakota hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- North Dakota hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### Prevention Efforts

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, C. difficile, CRE, other)
- Long-term care facilities

### North Dakota Prevention Efforts

- **Central line-associated bloodstream infections (CLABSI)**
  - Nat'l Baseline: 2008
  - Number of hospitals reporting: 8
  - 2014 State SIR vs. 2013 State SIR: Up 3%
  - 2014 State SIR vs. Nat'l SIR: Down 61%
  - 2014 Nat'l SIR: 0.39

- **Catheter-associated urinary tract infections (CAUTI)**
  - Nat'l Baseline: 2009
  - Number of hospitals reporting: 9
  - 2014 State SIR vs. 2013 State SIR: Down < 1%
  - 2014 State SIR vs. Nat'l SIR: Down 26%
  - 2014 Nat'l SIR: 0.74

- **Surgical site infections (SSI, Abdominal Hysterectomy)**
  - Nat'l Baseline: 2008
  - Number of hospitals reporting: 6
  - 2014 State SIR vs. 2013 State SIR: Down 17%
  - 2014 State SIR vs. Nat'l SIR: Up 31%
  - 2014 Nat'l SIR: 1.31

- **Surgical site infections (SSI, Colon Surgery)**
  - Nat'l Baseline: 2008
  - Number of hospitals reporting: 6
  - 2014 State SIR vs. 2013 State SIR: Down 16%
  - 2014 State SIR vs. Nat'l SIR: Up 5%
  - 2014 Nat'l SIR: 1.05

- **MRSA Bacteremia**
  - Nat'l Baseline: 2011
  - Number of hospitals reporting: 12
  - 2014 State SIR vs. 2013 State SIR: Down 42%
  - 2014 State SIR vs. Nat'l SIR: Down 31%
  - 2014 Nat'l SIR: 0.69

- **C. difficile Infections**
  - Nat'l Baseline: 2011
  - Number of hospitals reporting: 11
  - 2014 State SIR vs. 2013 State SIR: Up 8%
  - 2014 State SIR vs. Nat'l SIR: Down 2%
  - 2014 Nat'l SIR: 0.90

### Resources

- [2014 HAI Progress Report](https://www.cdc.gov/hai/progress-report/)
- [NHSN](https://www.cdc.gov/nhsn)
- [HAIs and prevention activities in North Dakota](https://www.ndhealth.gov/disease/hai/)
- [North Dakota validation efforts](https://www.cdc.gov/hai/pdfs/state-progress-landscape.pdf)

### For Additional Information

- Learn how your hospital is performing: [www.medicare.gov/hospitalcompare](https://www.medicare.gov/hospitalcompare)
- **Hand hygiene**
- **Antibiotic stewardship**
- **Healthcare personnel influenza vaccination**

**Note:**
- The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.
- The number of hospitals that reported to NHSN and are included in the SIR calculation.
- Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

**For additional data points, refer to the technical data tables.**
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

This report is based on 2014 data, published in 2016.

**CLABSIs**

**Central Line-Associated Bloodstream Infections**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Ohio hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 91 hospitals in Ohio with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**Catheter-Associated Urinary Tract Infections**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Ohio hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 110 hospitals in Ohio with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**Laboratory Identified Hospital-Onset Bloodstream Infections**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Ohio hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 89 hospitals in Ohio with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**Surgical Site Infections**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Ohio hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 36 hospitals in Ohio with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Ohio hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 92 hospitals in Ohio with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**Laboratory Identified Hospital-Onset C. difficile Infections**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Ohio hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 131 hospitals in Ohio with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

**WHAT IS THE STANDARDIZED INFECTION RATIO?**

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### Ohio's HAI Prevention Efforts

**WHAT IS OHIO DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?**

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, *C. difficile*)
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### HAI Data Table

<table>
<thead>
<tr>
<th>HAI TYPE</th>
<th># OF OHIO HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014†</th>
<th>2014 STATE SIR</th>
<th>2014 STATE SIR</th>
<th>2014 STATE SIR</th>
<th>2014 STATE SIR</th>
<th>2014 STATE SIR</th>
<th>2014 STATE SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>CLABSI</em></td>
<td>Total Hospitals in Ohio: 186</td>
<td>137</td>
<td>↓ 4%</td>
<td>↓ 20%</td>
<td>↓ 60%</td>
<td>0.40</td>
<td>0.50</td>
</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>CAUTI</em></td>
<td></td>
<td>136</td>
<td>↓ 5%</td>
<td>↓ 13%</td>
<td>13%</td>
<td>0.87</td>
<td>1.00</td>
</tr>
<tr>
<td>Nat'l Baseline: 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>SSI, Abdominal Hysterectomy</em></td>
<td></td>
<td>128</td>
<td>↓ 3%</td>
<td>↓ 26%</td>
<td>38%</td>
<td>0.62</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>SSI, Colon Surgery</em></td>
<td></td>
<td>129</td>
<td>↓ 12%</td>
<td>↓ 18%</td>
<td>19%</td>
<td>0.81</td>
<td>0.98</td>
</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>MRSA Bacteremia</em></td>
<td></td>
<td>140</td>
<td>↑ 7%</td>
<td>↑ 4%</td>
<td>10%</td>
<td>0.90</td>
<td>0.87</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>C. difficile Infections</em></td>
<td></td>
<td>139</td>
<td>↓ &lt; 1%</td>
<td>↓ 8%</td>
<td></td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

Central Line-Associated bloodstream infections

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Oklahoma hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 27 hospitals in Oklahoma with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

Catheter-Associated Urinary Tract Infections

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Oklahoma hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 37 hospitals in Oklahoma with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

Laboratory Identified Hospital-Onset Bloodstream Infections

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Oklahoma hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 19 hospitals in Oklahoma with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

Laboratory Identified Hospital-Onset C. difficile Infections

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Oklahoma hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 68 hospitals in Oklahoma with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

Surgical Site Infections

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Oklahoma hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 29 hospitals in Oklahoma with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Healthcare-Associated Infections (HAI) Data

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLABSI</strong></td>
<td>Total Hospitals in Oklahoma: 143</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
<td>58</td>
<td>↑ 16%</td>
<td>↓ 13%</td>
<td>↓ 57%</td>
<td>0.43</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>CAUTI</strong></td>
<td>Nat'l Baseline: 2009</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>62</td>
<td>↑ 10%</td>
<td>↓ 16%</td>
<td>↓ 15%</td>
<td>0.85</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>Nat'l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>↑ 7%</td>
<td>↓ 35%</td>
<td>↓ 46%</td>
<td>0.54</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>Nat'l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>↑ 27%</td>
<td>↓ 13%</td>
<td>↓ 15%</td>
<td>0.85</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>Nat'l Baseline: 2011</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>91</td>
<td>↑ 2%</td>
<td>↑ 24%</td>
<td>↑ 8%</td>
<td>1.08</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong></td>
<td>Nat'l Baseline: 2011</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>↑ 4%</td>
<td>↑ 2%</td>
<td>↓ 6%</td>
<td>0.94</td>
<td>0.92</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

### What Is the Standardized Infection Ratio?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What Is Oklahoma Doing to Prevent Healthcare-Associated Infections?

Oklahoma has a state mandate to publicly report at least one HAI to NHSN.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- **Oregon hospitals reported a significant increase in CLABSIs between 2013 and 2014.**
- Among the 25 hospitals in Oregon with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- **Oregon hospitals reported a significant decrease in CAUTIs between 2013 and 2014.**
- Among the 37 hospitals in Oregon with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- **Oregon hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.**
- Among the 21 hospitals in Oregon with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- **Oregon hospitals reported no significant change in C. difficile infections between 2013 and 2014.**
- Among the 50 hospitals in Oregon with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIS**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **Oregon hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.**
- Among the 24 hospitals in Oregon with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

- **Oregon hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.**
- Among the 24 hospitals in Oregon with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Legend

- **↓** 2014 state SIR is significantly lower (better) than comparison group in column header
- **↑** 2014 state SIR is significantly higher (worse) than comparison group in column header
- **→ or ←** Change in 2014 state SIR compared to group in column header is not statistically significant
- **∥** 2014 state SIR cannot be calculated

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<td>CAUTI</td>
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<td>← 5%</td>
<td>← 5%</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>44</td>
<td>↓ 20%</td>
<td>↑ 10%</td>
<td>↑ 9%</td>
<td>0.91</td>
<td>0.83</td>
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<td>48</td>
<td>↑ 10%</td>
<td>↓ 14%</td>
<td>↓ 16%</td>
<td>0.84</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>57</td>
<td>↑ 9%</td>
<td>↓ 26%</td>
<td>↓ 35%</td>
<td>0.65</td>
<td>0.87</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
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</tr>
<tr>
<td>C. difficile Infections</td>
<td>58</td>
<td>↓ 4%</td>
<td>↓ 22%</td>
<td>↓ 27%</td>
<td>0.73</td>
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</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

### What is the Standardized Infection Ratio?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Oregon doing to prevent Healthcare-Associated Infections?

Oregon has a state mandate to publicly report at least one HAI to NHSN. Oregon is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (C. difficile, CRE, other)

- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**Central Line-Associated Bloodstream Infections**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Pennsylvania hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
- Among the 127 hospitals in Pennsylvania with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**Catheter-Associated Urinary Tract Infections**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Pennsylvania hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 151 hospitals in Pennsylvania with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**Laboratory Identified Hospital-Onset Bloodstream Infections**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Pennsylvania hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.
- Among the 101 hospitals in Pennsylvania with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**Laboratory Identified Hospital-Onset C. difficile Infections**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Pennsylvania hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 163 hospitals in Pennsylvania with enough data to calculate an SIR, 15% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**Surgical Site Infections**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Pennsylvania hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 39 hospitals in Pennsylvania with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Pennsylvania hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 105 hospitals in Pennsylvania with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### LEGEND
- 2014 state SIR is significantly lower (better) than comparison group in column header.
- Change in 2014 state SIR compared to group in column header is not statistically significant.
- 2014 state SIR is significantly higher (worse) than comparison group in column header.
- 2014 state SIR cannot be calculated.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS PENNSYLVANIA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Pennsylvania has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (*C. difficile*, CRE)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### TABLE: PENNSYLVANIA HOSPITALS THAT REPORTED DATA TO CDC’S NHSN, 2014

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<td>↓ 19%</td>
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<tr>
<td><strong>CAUTI</strong></td>
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<td>↓ 3%</td>
<td>↓ 3%</td>
<td>0.97</td>
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<tr>
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<td>↑ 7%</td>
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<td><strong>SSI, Colon Surgery</strong></td>
<td></td>
<td>158</td>
<td>↑ 3%</td>
<td>↓ 6%</td>
<td>↓ 8%</td>
<td>0.92</td>
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<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td></td>
<td>175</td>
<td>↓ 13%</td>
<td>↓ 10%</td>
<td>↓ 21%</td>
<td>0.79</td>
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<tr>
<td><strong>C. difficile Infections</strong></td>
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<td>↑ 1%</td>
<td>&lt; 1%</td>
<td>↑ 8%</td>
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</table>

† The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

### CLABSIs

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Puerto Rico hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 12 hospitals in Puerto Rico with enough data to calculate an SIR, 20% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### CAUTIs

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Puerto Rico hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 17 hospitals in Puerto Rico with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

### SSI: Abdominal Hysterectomy

- Puerto Rico hospitals did not report 2014 abdominal hysterectomy data to NHSN.

### SSI: Colon Surgery

- Puerto Rico hospitals did not report 2014 colon surgery data to NHSN.

### C. difficile Infections

**LABORATORY IDENTIFIED HOSPITAL-ONSET *C. DIFFICILE* INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

**Legend**
- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

**Table**

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<td>CAUTI</td>
<td>17</td>
<td>↓ 34%</td>
<td>↓ 48%</td>
<td>↓ 48%</td>
<td>0.52</td>
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<td>0.83</td>
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</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.
‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

**WHAT IS THE STANDARDIZED INFECTION RATIO?**

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

**WHAT IS PUERTO RICO DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?**

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, other)
- Ventilator-associated events

- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

For prevention effort details, see glossary.

Learn how your hospital is performing: www.medicare.gov/hospitalcompare

For additional information:
- NHSN: www.cdc.gov/nhsn
- HAIs and prevention activities in Puerto Rico: www.salud.gov.pr/Pages/Home.aspx
- Puerto Rico validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Rhode Island hospitals reported no significant change in CLABSIs between 2013 and 2014.

- Among the 11 hospitals in Rhode Island with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Rhode Island hospitals reported no significant change in CAUTIs between 2013 and 2014.

- Among the 10 hospitals in Rhode Island with enough data to calculate an SIR, 30% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Rhode Island hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.

- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Rhode Island hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.

- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Rhode Island hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.

- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Rhode Island hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.

- Among the 11 hospitals in Rhode Island with enough data to calculate an SIR, 27% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### Rhode Island Prevention Efforts

- **Central line-associated bloodstream infections**
- **Catheter-associated urinary tract infections**
- **Multidrug-resistant infections (C. difficile)**
- **Long-term care facilities**
- **Hand hygiene**
- **Antibiotic stewardship**
- **Healthcare personnel influenza vaccination**

For additional information, refer to the technical data tables. For prevention effort details, see glossary.

### HAI Data

<table>
<thead>
<tr>
<th>HAI Type</th>
<th># of Rhode Island Hospitals that Reported Data to CDC's NHSN, 2014†</th>
<th>2014 State SIR vs. 2013 State SIR</th>
<th>2014 State SIR vs. Nat'l SIR</th>
<th>2014 State SIR vs. Nat'l Baseline‡</th>
<th>2014 State SIR</th>
<th>2014 Nat'l SIR</th>
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<td>24%</td>
<td>39%</td>
<td>0.61</td>
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<td>SSI, Abdominal Hysterectomy</td>
<td>11</td>
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<td>18%</td>
<td>0.82</td>
<td>0.83</td>
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<td>11</td>
<td>14%</td>
<td>17%</td>
<td>14%</td>
<td>1.14</td>
<td>0.98</td>
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<td>11</td>
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<td>25%</td>
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<td></td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>11</td>
<td>1%</td>
<td>27%</td>
<td>17%</td>
<td>1.17</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
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</table>

† The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

- **CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**
  - When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.
  - South Carolina hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
  - Among the 44 hospitals in South Carolina with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

- **CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**
  - When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.
  - South Carolina hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
  - Among the 52 hospitals in South Carolina with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

- **LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**
  - Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.
  - South Carolina hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
  - Among the 33 hospitals in South Carolina with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

- **LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**
  - When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.
  - South Carolina hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
  - Among the 62 hospitals in South Carolina with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

- **SURGICAL SITE INFECTIONS**
  - When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.
  - South Carolina hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 15 hospitals in South Carolina with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.
  - South Carolina hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 31 hospitals in South Carolina with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

*Statistically significant*
### Healthcare-associated infection (HAI) data

Healthcare facilities and public health agencies use HAI data to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The SIR is a summary statistic used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### South Carolina's HAI Prevention Efforts

- **Central line-associated bloodstream infections**
- **Catheter-associated urinary tract infections**
- **Surgical site infections**
- **Multidrug-resistant infections (MRSA, C. difficile)**
- **Healthcare personnel influenza vaccination**

### Additional Information

- **NHSN**: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- **HAIs and prevention activities in South Carolina**: [www.scdhec.gov/hai/](http://www.scdhec.gov/hai/)
- **South Carolina validation efforts**: [www.cdc.gov/hai/pdfs/state-progress-landscape.pdf](http://www.cdc.gov/hai/pdfs/state-progress-landscape.pdf)

### Table: Standardized Infection Ratios for South Carolina

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</thead>
<tbody>
<tr>
<td><strong>CLABSI</strong> Nat'l Baseline: 2008</td>
<td>67</td>
<td>↓ 14%</td>
<td>↓ 1%</td>
<td>↓ 51%</td>
<td>0.49</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>CAUTI</strong> Nat'l Baseline: 2009</td>
<td>65</td>
<td>↓ 17%</td>
<td>↑ 7%</td>
<td>↑ 7%</td>
<td>1.07</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong> Nat'l Baseline: 2008</td>
<td>52</td>
<td>↑ 25%</td>
<td>↑ 26%</td>
<td>↑ 4%</td>
<td>1.04</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>SSI, Colon Surgery</strong> Nat'l Baseline: 2008</td>
<td>56</td>
<td>↑ 16%</td>
<td>↑ 13%</td>
<td>↑ 10%</td>
<td>1.10</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>MRSA Bacteremia</strong> Nat'l Baseline: 2011</td>
<td>68</td>
<td>↑ 6%</td>
<td>↑ 14%</td>
<td>↓ 1%</td>
<td>0.99</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong> Nat'l Baseline: 2011</td>
<td>66</td>
<td>↑ 14%</td>
<td>↑ 9%</td>
<td>↑ 15%</td>
<td>0.85</td>
<td>0.92</td>
</tr>
</tbody>
</table>

○ The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat'l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**
- **Central Line-Associated Bloodstream Infections**
  - When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.
  - South Dakota hospitals reported no significant change in CLABSIs between 2013 and 2014.
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.
  - **75%** lower compared to Nat’l baseline.

**CAUTIs**
- **Catheter-Associated Urinary Tract Infections**
  - When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.
  - South Dakota hospitals reported no significant change in CAUTIs between 2013 and 2014.
  - Among the 12 hospitals in South Dakota with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.
  - **16%** higher compared to Nat’l baseline.

**MRSA Bacteremia**
- **Laboratory Identified Hospital-Onset Bloodstream Infections**
  - Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.
  - South Dakota hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.
  - **47%** lower compared to Nat’l baseline.

**SSIs**
- **Surgical Site Infections**
  - When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.
  - South Dakota hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.
  - South Dakota hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
  - **31%** lower compared to Nat’l baseline.

**C. difficile Infections**
- **Laboratory Identified Hospital-Onset C. difficile Infections**
  - When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.
  - South Dakota hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
  - Among the 16 hospitals in South Dakota with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
  - **4%** higher compared to Nat’l baseline.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Healthcare-Associated Infections (HAI) Data

#### What is the Standardized Infection Ratio (SIR)?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

#### What is South Dakota doing to prevent healthcare-associated infections?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile, CRE)
- Long-term care facilities
- Hand hygiene

- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

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#### Table: Healthcare-Associated Infections (HAI) Data

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<tbody>
<tr>
<td><strong>CLABSI</strong>&lt;br&gt;Natl’l Baseline: 2008</td>
<td>13</td>
<td>⬆ 30%</td>
<td>⬇ 49%</td>
<td>⬇ 75%</td>
<td>0.25</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>CAUTI</strong>&lt;br&gt;Natl’l Baseline: 2009</td>
<td>18</td>
<td>⬆ 16%</td>
<td>⬇ 16%</td>
<td>⬆ 16%</td>
<td>0.84</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong>&lt;br&gt;Natl’l Baseline: 2008</td>
<td>15</td>
<td>⬇ 56%</td>
<td>⬆ 16%</td>
<td>⬆ 31%</td>
<td>0.69</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>SSI, Colon Surgery</strong>&lt;br&gt;Natl’l Baseline: 2008</td>
<td>16</td>
<td>⬆ 48%</td>
<td>⬆ 45%</td>
<td>⬆ 41%</td>
<td>1.41</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>MRSA Bacteremia</strong>&lt;br&gt;Natl’l Baseline: 2011</td>
<td>23</td>
<td>⬇ 27%</td>
<td>⬇ 39%</td>
<td>⬇ 47%</td>
<td>0.53</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong>&lt;br&gt;Natl’l Baseline: 2011</td>
<td>23</td>
<td>⬆ 44%</td>
<td>⬆ 12%</td>
<td>⬇ 4%</td>
<td>1.04</td>
<td>0.92</td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Natl’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAIs data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Tennessee hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 64 hospitals in Tennessee with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Tennessee hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 84 hospitals in Tennessee with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Tennessee hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 54 hospitals in Tennessee with enough data to calculate an SIR, 9% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Tennessee hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Among the 17 hospitals in Tennessee with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Tennessee hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 51 hospitals in Tennessee with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Tennessee hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 108 hospitals in Tennessee with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

**TENNESSEE**

**ACUTE CARE HOSPITALS**

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio (SIR)** is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS TENNESSEE DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Tennessee has a state mandate to publicly report at least one HAI to NHSN. Tennessee is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:

- NHSN: [www.cdc.gov/nhsn](http://www.cdc.gov/nhsn)
- HAIs and prevention activities in Tennessee: [tn.gov/health/topic/hai](http://tn.gov/health/topic/hai)

#### LEGEND

- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

#### Table: # of Tennessee Hospitals That Reported Data to CDC's NHSN, 2014

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<tbody>
<tr>
<td>CLABSI</td>
<td>105</td>
<td>0%</td>
<td>▼ 4%</td>
<td>▼ 52%</td>
<td>0.48</td>
<td>0.50</td>
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<tr>
<td>Nat'l Baseline: 2008</td>
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<tr>
<td>CAUTI</td>
<td>106</td>
<td>▼ 17%</td>
<td>▲ 1%</td>
<td>▲ 1%</td>
<td>1.01</td>
<td>1.00</td>
</tr>
<tr>
<td>Nat'l Baseline: 2009</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>84</td>
<td>▼ 9%</td>
<td>▼ 3%</td>
<td>▼ 20%</td>
<td>0.80</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>92</td>
<td>▼ 2%</td>
<td>▼ 7%</td>
<td>▼ 9%</td>
<td>0.91</td>
<td>0.98</td>
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<tr>
<td>Nat'l Baseline: 2008</td>
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</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>114</td>
<td>▼ 8%</td>
<td>▲ 17%</td>
<td>▲ 1%</td>
<td>1.01</td>
<td>0.87</td>
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<tr>
<td>Nat'l Baseline: 2011</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>114</td>
<td>▼ 3%</td>
<td>▼ 16%</td>
<td>▼ 22%</td>
<td>0.78</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
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</table>

1. The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

2. Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.

---

**LEGEND**

- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

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**WHAT IS THE STANDARDIZED INFECTION RATIO?**

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

---

**WHAT IS TENNESSEE DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?**

Tennessee has a state mandate to publicly report at least one HAI to NHSN. Tennessee is one of 10 state health departments participating in CDC’s Emerging Infections Program, which allows for extra surveillance and research of HAIs.

Prevention efforts to reduce specific HAIs:

- Multidrug-resistant infections (MRSA, C. difficile, CRE)
- Ventilator-associated events
- Long-term care facilities
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- **Texas hospitals reported a significant decrease in CLABSIs between 2013 and 2014.**
- **6%** Among the 207 hospitals in Texas with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- **Texas hospitals reported no significant change in CAUTIs between 2013 and 2014.**
- **16%** Among the 235 hospitals in Texas with enough data to calculate an SIR, 16% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- **Texas hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.**
- **7%** Among the 163 hospitals in Texas with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **Texas hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.**
- **Among the 72 hospitals in Texas with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.**

- **Texas hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.**
- **Among the 164 hospitals in Texas with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.**

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- **Texas hospitals reported a significant increase in C. difficile infections between 2013 and 2014.**
- **Among the 296 hospitals in Texas with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.**

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

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<tbody>
<tr>
<td>CLABSI</td>
<td>289</td>
<td>↓ 9%</td>
<td>↓ 6%</td>
<td>↓ 53%</td>
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<tr>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>288</td>
<td>↓ 13%</td>
<td>↓ 25%</td>
<td>↓ 36%</td>
<td>0.64</td>
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<td>SSI, Colon Surgery</td>
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<td>↑ 14%</td>
<td>↑ 15%</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>372</td>
<td>↓ 4%</td>
<td>↓ 4%</td>
<td>↓ 17%</td>
<td>0.83</td>
<td>0.87</td>
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<td>Nat’l Baseline: 2011</td>
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<tr>
<td>C. difficile Infections</td>
<td>371</td>
<td>↑ 16%</td>
<td>&lt; 1%</td>
<td>8%</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
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</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

WHAT IS THE STANDARDIZED INFECTION RATIO?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

WHAT IS TEXAS DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Texas has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (CRE, other)

Long-term care facilities
Hand hygiene

For prevention effort details, see glossary.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Utah hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
- Among the 14 hospitals in Utah with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Utah hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 18 hospitals in Utah with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant Staphylococcus aureus (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Utah hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 10 hospitals in Utah with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

**SSI: Abdominal Hysterectomy**

- Utah hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- Utah hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Among the 12 hospitals in Utah with enough data to calculate an SIR, 17% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from Clostridium difficile (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Utah hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 31 hospitals in Utah with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The **standardized infection ratio (SIR)** is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Utah Doing to Prevent Healthcare-Associated Infections?

Utah has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (MRSA, *C. difficile*, CRE, other)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### Data Table

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<tr>
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<tr>
<td><strong>CLABSI</strong></td>
<td>27</td>
<td>↓ 32%</td>
<td>↓ 9%</td>
<td>↓ 55%</td>
<td>0.45</td>
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<tr>
<td><strong>CAUTI</strong></td>
<td>28</td>
<td>↓ 5%</td>
<td>↑ 56%</td>
<td>↑ 55%</td>
<td>1.55</td>
<td>1.00</td>
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<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
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<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>32</td>
<td>↑ 16%</td>
<td>↑ 39%</td>
<td>↑ 35%</td>
<td>1.35</td>
<td>0.98</td>
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<td>Nat'l Baseline: 2008</td>
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<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>37</td>
<td>↑ 4%</td>
<td>↑ 28%</td>
<td>↑ 37%</td>
<td>0.63</td>
<td>0.87</td>
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<tr>
<td><strong>C. difficile Infections</strong></td>
<td>37</td>
<td>↑ 10%</td>
<td>↑ 10%</td>
<td>↑ 17%</td>
<td>0.83</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
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</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

This report is based on 2014 data, published in 2016.

**CLABSIs**  
**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Vermont hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**  
**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Vermont hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**  
**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Vermont hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**  
**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**  
**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Vermont hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio (SIR)?

The **standardized infection ratio (SIR)** is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Vermont Doing to Prevent Healthcare-Associated Infections?

Vermont has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Multidrug-resistant infections (MRSA, *C. difficile*, CRE, other)
- Long-term care facilities
- Antibiotic stewardship

### Table of Healthcare-Associated Infections (HAI)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>CLABSI</strong></td>
<td>7</td>
<td>↑ 79%</td>
<td>↓ 9%</td>
<td>↓ 55%</td>
<td>0.45</td>
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<td><strong>CAUTI</strong></td>
<td>5</td>
<td>↑ 56%</td>
<td>↑ 35%</td>
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<td>1.35</td>
<td>1.00</td>
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<td></td>
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</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>12</td>
<td>↑ 102%</td>
<td>↑ 58%</td>
<td>↑ 30%</td>
<td>1.30</td>
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<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>6</td>
<td>↓ 16%</td>
<td>↑ 94%</td>
<td>↑ 89%</td>
<td>1.89</td>
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<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>10</td>
<td>↓ 23%</td>
<td>↓ 76%</td>
<td>↓ 79%</td>
<td>0.21</td>
<td>0.87</td>
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<tr>
<td><strong>C. difficile Infections</strong></td>
<td>9</td>
<td>↓ 1%</td>
<td>↓ 40%</td>
<td>↓ 45%</td>
<td>0.55</td>
<td>0.92</td>
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<tr>
<td>Nat’l Baseline: 2011</td>
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</tbody>
</table>

\(^\d\)The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

\(\d\)Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.

For prevention effort details, see glossary.

---

**LEgend**

- 2014 state SIR is significantly lower (better) than comparison group in column header
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR cannot be calculated

---


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

**HAIs and prevention activities in Vermont:** [www.healthvermont.gov/prevent/HAI/index.aspx](http://www.healthvermont.gov/prevent/HAI/index.aspx)

**Vermont validation efforts:** [www.cdc.gov/hai/pdfs/state-progress-landscape.pdf](http://www.cdc.gov/hai/pdfs/state-progress-landscape.pdf)
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC's National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Virginia hospitals reported a significant decrease in CLABSIs between 2013 and 2014.
- Among the 55 hospitals in Virginia with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Virginia hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Among the 67 hospitals in Virginia with enough data to calculate an SIR, 12% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Virginia hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 49 hospitals in Virginia with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - Virginia hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 19 hospitals in Virginia with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - Virginia hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 47 hospitals in Virginia with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Virginia hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 82 hospitals in Virginia with enough data to calculate an SIR, 18% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

**LEGEND**

- 2014 state SIR is significantly lower (better) than comparison group in column header
- Change in 2014 state SIR compared to group in column header is not statistically significant
- 2014 state SIR is significantly higher (worse) than comparison group in column header
- 2014 state SIR cannot be calculated

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<th># OF VIRGINIA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014†</th>
<th>2014 STATE SIR VS. 2013 STATE SIR</th>
<th>2014 STATE SIR VS. 2014 NATIONWIDE SIR</th>
<th>2014 STATE SIR VS. NATIONWIDE BASELINE‡</th>
<th>2014 STATE SIR</th>
<th>2014 NAT'L SIR</th>
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<td>22%</td>
<td>21%</td>
<td>61%</td>
<td>0.39</td>
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<td>CAUTI</td>
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<td>7%</td>
<td>3%</td>
<td>3%</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>71</td>
<td>&lt; 1%</td>
<td>2%</td>
<td>19%</td>
<td>0.81</td>
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<td>SSI, Colon Surgery</td>
<td>77</td>
<td>12%</td>
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<td>MRSA Bacteremia</td>
<td>86</td>
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<td>16%</td>
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<td>86</td>
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<td>7%</td>
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</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

**WHAT IS THE STANDARDIZED INFECTION RATIO?**

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

**WHAT IS VIRGINIA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?**

Virginia has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile, CRE)

- Ventilator-associated events
- Long-term care facilities
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAIs data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Washington hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Among the 51 hospitals in Washington with enough data to calculate an SIR, 7% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Washington hospitals reported a significant decrease in CAUTIs between 2013 and 2014.
- Among the 61 hospitals in Washington with enough data to calculate an SIR, 5% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Washington hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Among the 34 hospitals in Washington with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (C. difficile), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Washington hospitals reported no significant change in C. difficile infections between 2013 and 2014.
- Among the 67 hospitals in Washington with enough data to calculate an SIR, 13% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **SSI: Abdominal Hysterectomy**
  - **22%**
  - **LOWER COMPARED TO NAT’L BASELINE**
  - Washington hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
  - Among the 11 hospitals in Washington with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- **SSI: Colon Surgery**
  - **6%**
  - **LOWER COMPARED TO NAT’L BASELINE**
  - Washington hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
  - Among the 39 hospitals in Washington with enough data to calculate an SIR, 10% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

* Statistically significant
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### HAI Type

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>86</td>
<td>5%</td>
<td>3%</td>
<td>49%</td>
<td>0.51</td>
<td>0.50</td>
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<tr>
<td>CAUTI</td>
<td>78</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
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<td>1.00</td>
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<td>SSI, Abdominal Hysterectomy</td>
<td>68</td>
<td>3%</td>
<td>5%</td>
<td>22%</td>
<td>0.78</td>
<td>0.83</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>67</td>
<td>3%</td>
<td>3%</td>
<td>6%</td>
<td>0.94</td>
<td>0.98</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>65</td>
<td>7%</td>
<td>3%</td>
<td>16%</td>
<td>0.84</td>
<td>0.87</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>91</td>
<td>4%</td>
<td>9%</td>
<td>0%</td>
<td>1.00</td>
<td>0.92</td>
</tr>
</tbody>
</table>

† The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡ Nat'l baseline time period varies by HAI type. See first column of this table for specifics.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS WASHINGTON DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Washington has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:

- Multidrug-resistant infections (C. difficile)
- Antibiotic stewardship

For prevention effort details, see glossary.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN).

HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- West Virginia hospitals reported no significant change in CLABSIs between 2013 and 2014.
- 0% Among the 23 hospitals in West Virginia with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- West Virginia hospitals reported no significant change in CAUTIs between 2013 and 2014.
- 4% Among the 28 hospitals in West Virginia with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- West Virginia hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- 11% Among the 19 hospitals in West Virginia with enough data to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- West Virginia hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- 8% Among the 36 hospitals in West Virginia with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a *surgical site infection*. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- West Virginia hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- 22% Among the 18 hospitals in West Virginia with enough data to calculate an SIR, 22% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

- West Virginia hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- 32% Among the 18 hospitals in West Virginia with enough data to calculate an SIR, 32% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.
## Healthcare-associated infection (HAI) data

Healthcare facilities and public health agencies use Healthcare-associated infection (HAI) data to design, implement, and evaluate HAI prevention efforts.

### Standardized Infection Ratio (SIR)

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### West Virginia Doing to Prevent Healthcare-Associated Infections

West Virginia has a state mandate to publicly report at least one HAI to NHSN.

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile)
- Ventilator-associated events
- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

### Table: 2014 West Virginia HAI Data

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>43</td>
<td>6%</td>
<td>24%</td>
<td>62%</td>
<td>0.38</td>
</tr>
<tr>
<td>CAUTI</td>
<td>50</td>
<td>8%</td>
<td>36%</td>
<td>36%</td>
<td>0.64</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>33</td>
<td>38%</td>
<td>29%</td>
<td>6%</td>
<td>1.06</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>35</td>
<td>39%</td>
<td>36%</td>
<td>32%</td>
<td>1.32</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>38</td>
<td>10%</td>
<td>3%</td>
<td>16%</td>
<td>0.84</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>41</td>
<td>2%</td>
<td>4%</td>
<td>4%</td>
<td>0.96</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- **Wisconsin hospitals reported a significant decrease in CLABSIs between 2013 and 2014.**
- Among the 51 hospitals in Wisconsin with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- **Wisconsin hospitals reported no significant change in CAUTIs between 2013 and 2014.**
- Among the 62 hospitals in Wisconsin with enough data to calculate an SIR, 3% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- **Wisconsin hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.**
- Among the 33 hospitals in Wisconsin with enough data to calculate an SIR, 0% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSI: Abdominal Hysterectomy**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- **Wisconsin hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.**
- Among the 16 hospitals in Wisconsin with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

**SSI: Colon Surgery**

- **Wisconsin hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.**
- Among the 45 hospitals in Wisconsin with enough data to calculate an SIR, 4% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- **Wisconsin hospitals reported no significant change in C. difficile infections between 2013 and 2014.**
- Among the 83 hospitals in Wisconsin with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.

*Statistically significant*
Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio** (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### WHAT IS WISCONSIN DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Prevention efforts to reduce specific HAIs:
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections
- Multidrug-resistant infections (C. difficile, CRE)
- Long-term care facilities

- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

---

### Healthcare-associated infections (HAI) data

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### LEGEND

- **2014 state SIR is significantly lower (better)** than comparison group in column header
- **Change in 2014 state SIR compared to group in column header is not statistically significant**
- **2014 state SIR is significantly higher (worse)** than comparison group in column header
- **2014 state SIR cannot be calculated**

### Table: HAI TYPE

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLABSI</strong></td>
<td>Total Hospitals in Wisconsin: 144</td>
<td>96</td>
<td>↓ 28%</td>
<td>↓ 30%</td>
<td>↓ 65%</td>
<td>0.35</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CAUTI</strong></td>
<td>118</td>
<td>↓ 3%</td>
<td>↓ 22%</td>
<td>↓ 21%</td>
<td>0.79</td>
<td>1.00</td>
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<td>Nat’l Baseline: 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SSI, Abdominal Hysterectomy</strong></td>
<td>81</td>
<td>↑ 15%</td>
<td>↓ 12%</td>
<td>↓ 28%</td>
<td>0.72</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>SSI, Colon Surgery</strong></td>
<td>90</td>
<td>↑ 2%</td>
<td>↓ 2%</td>
<td>↓ 5%</td>
<td>0.95</td>
<td>0.98</td>
</tr>
<tr>
<td>Nat’l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>MRSA Bacteremia</strong></td>
<td>89</td>
<td>↓ 7%</td>
<td>↓ 44%</td>
<td>↓ 51%</td>
<td>0.49</td>
<td>0.87</td>
</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. difficile Infections</strong></td>
<td>99</td>
<td>↑ 3%</td>
<td>↑ 3%</td>
<td>↓ 10%</td>
<td>0.90</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat’l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

†The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.

For additional data points, refer to the technical data tables.
Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. Working toward the elimination of HAIs is a CDC priority. The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The infection data are reported to CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website. This report is based on 2014 data, published in 2016.

**CLABSIs**

**CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS**

When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood.

- Wyoming hospitals reported no significant change in CLABSIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

**CAUTIs**

**CATHETER-ASSOCIATED URINARY TRACT INFECTIONS**

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Wyoming hospitals reported no significant change in CAUTIs between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

**MRSA Bacteremia**

**LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is bacteria usually spread by contaminated hands. In a healthcare setting, such as a hospital, MRSA can cause serious bloodstream infections.

- Wyoming hospitals reported no significant change in MRSA bacteremia between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

**SSIs**

**SURGICAL SITE INFECTIONS**

When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material.

- Wyoming hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

- Wyoming hospitals reported no significant change in SSIs related to colon surgery between 2013 and 2014.
- Not enough data to report how many hospitals had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**C. difficile Infections**

**LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS**

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Wyoming hospitals reported no significant change in *C. difficile* infections between 2013 and 2014.
- Among the 17 hospitals in Wyoming with enough data to calculate an SIR, 6% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.
## Healthcare-associated infection (HAI) data

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

### What is the Standardized Infection Ratio (SIR)?

The standardized infection ratio (SIR) is a summary statistic that can be used to track HAI prevention progress over time; lower SIRs are better. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.

### What is Wyoming doing to prevent healthcare-associated infections?

Prevention efforts to reduce specific HAIs:
- Multidrug-resistant infections (C. difficile)
- Hand hygiene
- Antibiotic stewardship

For prevention effort details, see glossary.

### Table: Healthcare-associated infections

<table>
<thead>
<tr>
<th>HAI Type</th>
<th># of Wyoming Hospitals that Reported Data to CDC's NHSN, 2014†</th>
<th>2014 State SIR vs. 2013 State SIR</th>
<th>2014 State SIR vs. 2014 Nat'l SIR</th>
<th>2014 State SIR vs. Nat'l Baseline‡</th>
<th>2014 State SIR</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>22</td>
<td>↓30%</td>
<td>↓25%</td>
<td>↓63%</td>
<td>0.37</td>
<td>0.50</td>
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<tr>
<td>Nat'l Baseline: 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAUTI</td>
<td>26</td>
<td>↓6%</td>
<td>↓50%</td>
<td>↓50%</td>
<td>0.50</td>
<td>1.00</td>
</tr>
<tr>
<td>Nat'l Baseline: 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>13</td>
<td>↓100%</td>
<td>↓100%</td>
<td>↓100%</td>
<td>0.00</td>
<td>0.83</td>
</tr>
<tr>
<td>Nat'l Baseline: 2008</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>13</td>
<td>↑176%</td>
<td>↑9%</td>
<td>↑6%</td>
<td>1.06</td>
<td>0.98</td>
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<tr>
<td>Nat'l Baseline: 2008</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>14</td>
<td>↓49%</td>
<td>↓59%</td>
<td>↓64%</td>
<td>0.36</td>
<td>0.87</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>26</td>
<td>↓17%</td>
<td>↓28%</td>
<td>↓33%</td>
<td>0.67</td>
<td>0.92</td>
</tr>
<tr>
<td>Nat'l Baseline: 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

‡Nat’l baseline time period varies by HAI type. See first column of this table for specifics.
The National and State Healthcare-Associated Infection Progress Report should be used by health departments, hospital associations, professional societies, healthcare systems and facilities, and quality improvement groups to identify infections that need additional prevention efforts.

As described in this report, most infections are decreasing when compared to their respective baselines. In 2014, CLABSI in acute care hospitals reached the 2013 goal established by the HAI Action Plan, decreasing 50 percent between 2008 and 2014. Additionally, in contrast to previous years, CAUTI in acute care hospitals decreased 5 percent between 2013 and 2014. Despite this progress, more work is needed to ensure patients are safe when receiving medical care, and to reach the new HHS proposed targets for December 2020.

Together with health care and public health partners, CDC is working to bring increased attention to HAI prevention, and continue to decrease CAUTI and other infection types. CDC-recommended infection prevention strategies for several infection types, including CAUTI, have proven effective in a variety of patient care locations. CDC also summarizes core elements of successful stewardship programs, which can help reduce rates of *C. difficile* infections and antibiotic resistant infections; improve individual patient outcomes; and save healthcare dollars. CDC continues to assist public health and clinical partners with implementation of these recommendations. CDC also works with health departments and quality improvement groups to specifically identify and assist hospitals in need of infection prevention assistance.

State health department efforts to assess the quality and completeness of data reported to NHSN are critical to improving confidence in data validity. State health departments are uniquely positioned to maximize HAI prevention efforts by working across the healthcare system to facilitate statewide HAI prevention activities. CDC encourages state health departments to build and maintain partnerships, plan for and respond to HAI outbreaks, and conduct trainings focused on HAI surveillance and prevention. Ongoing interactions between state and federal public health agencies and their partners in the healthcare sector will be vital to sustaining and extending HAI tracking and prevention.

CDC will continue to measure progress at the state and national levels and report movement toward the HHS HAI Action Plan targets. These goals are most likely to be met with targeted efforts to cut infection types shown to be lagging behind and continued effort to make further progress on the infection types headed in the right direction.
Preventing HAIs is possible, but it will take a conscious effort of everyone–clinicians, healthcare facilities and systems, public health, quality improvement groups, and the federal government–working together toward improving care, protecting patients, and saving lives.
METHODS

The current National and State Healthcare-Associated Infections Progress Report presents data reported to the National Healthcare Safety Network (NHSN) for the calendar year 2014. The healthcare-associated infection (HAI) data were reported in response to a mandate or voluntarily from hospitals in all 50 states, Washington, D.C., and Puerto Rico. Data included in the annual report use standard NHSN definitions\(^1\) for central line-associated bloodstream infections (CLABSIs), catheter-associated urinary tract infections (CAUTIs), surgical site infections (SSIs), and laboratory-identified (LabID) methicillin-resistant Staphylococcus aureus (MRSA) bacteremia (bloodstream infections) and Clostridium difficile (C. difficile) infections. To account for delayed reporting, 2014 data reported to NHSN through July 1, 2015 were included.

National data included in this report are shown separately for acute care hospitals (including critical access hospitals), long-term acute care hospitals (LTACHs), and inpatient rehabilitation facilities (IRFs). State-specific data include only those data reported from acute care and critical access hospitals.

The CLBSI and CAUTI data shown in this report are inclusive of data reported from all eligible locations within hospitals; however, CLBSI and CAUTI data are also stratified by location type (critical care units, neonatal critical care units, and inpatient wards as appropriate) in the Data Tables associated with this report. For this report, “wards” included step-down units and specialty care areas including hematology/oncology and bone marrow transplant units. The national SSI data are inclusive of all 39 specific procedure categories identified by NHSN; the 10 select procedures that approximate the procedures included in the Centers for Medicare & Medicaid Services (CMS) Surgical Care Improvement Project (SCIP) were shown separately. Only deep incisional and organ/space SSIs detected during the same admission as the inpatient procedure or upon readmission to the same hospital that performed the inpatient procedure were included in the report; superficial incisional SSIs and those identified on post-discharge surveillance were excluded.

This report published state-specific SSI data following the two surgical procedures required by the CMS Hospital Inpatient Quality Reporting (IQR) program\(^5\) – colon surgery and abdominal hysterectomy surgery. MRSA bacteremia and C. difficile infections in this report included only cases classified as hospital-onset (i.e., occurred on or after day 4 of admission). Community-acquired cases are reported to NHSN and are included in the risk adjustment of LabID event data.

The standardized infection ratios (SIRs) published in this report compare the observed number of infections reported to NHSN during 2014 to the predicted number of infections based on the national aggregate data reported to NHSN during a baseline time
period, and are adjusted for key risk factors (see table below for baseline time periods). The risk adjustment methodology used to produce the CLABSI, CAUTI, SSI, MRSA bacteremia, and C. difficile SIRs are summarized in previous reports\(^6,7\) and have not changed. SSI data were risk adjusted using CDC’s Complex Admission/Readmission (A/R) model, and the LabID event SIRs were risk adjusted using a negative binomial regression model.\(^8,9\) A complete list of risk factors used in the calculation of all SIRs can be found in the technical Data Tables associated with this report.

### National SIR Baselines for each HAI and Facility Type

<table>
<thead>
<tr>
<th>HAI TYPE</th>
<th>NATIONAL BASELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acute Care Hospitals</td>
</tr>
<tr>
<td>CLABSI</td>
<td>2006–2008(^10)</td>
</tr>
<tr>
<td>CAUTI</td>
<td>2009(^11)</td>
</tr>
<tr>
<td>MRSA, C. difficile</td>
<td>2010–2011</td>
</tr>
<tr>
<td>SSI</td>
<td>2006–2008</td>
</tr>
</tbody>
</table>

Facility-specific SIRs were calculated if the facility had at least one predicted HAI for a given location category or surgical procedure. These facility-specific SIRs were used to create percentile distributions for each HAI if at least 20 facilities had sufficient data to calculate an SIR. Percentile distributions among the national data are shown in increments of 5, from 5% to 95%; SIRs at key percentiles are calculated for state-level data (10%, 25%, 50%, 75%, 90%). Additionally, the facility-specific SIRs were compared to the nominal value equal to the national SIR for each location or procedure category; if at least 10 facilities in each category had sufficient data to calculate an SIR, the percent of facilities with an SIR significantly higher or lower than the value of the national SIR was calculated both nationally and by state. If at least five facilities reported 2014 data in a state, the state-specific SIRs were then calculated for each HAI type, location category or surgical procedure by pooling 2014 data from all reporting facilities in the state.

Annual progress in preventing CLABSIs, CAUTIs, SSIs, MRSA bacteremia, and C. difficile infections was evaluated for acute care hospitals, both nationally and by state, by comparing 2014 and 2013 SIRs by HAI type and location or surgical procedure category. SIRs between the two years were compared for all reporting acute care hospitals in each state, and the change in SIRs was assessed for statistical significance using a mid-p exact test. For any state with a 2013 SIR of 0.00, the percent change was reflected as greater than 100 percent. State SIRs were compared to the national SIRs with the state’s data removed; significance was assessed using a two-tailed mid-p exact test.
In addition to the NHSN data used to produce the SIRs in this report, several external data sources were used to provide additional metrics. State health department HAI programs provided CDC with the status and specific requirements of state HAI reporting mandates to NHSN, previous efforts to validate 2014 HAI data, and prevention collaboratives that occurred, or are planned, in the state (either from the state health department or other organization) from January 2014 to December 2015. An indicator for a state mandate was provided for mandates enacted by either the state health department or the state’s hospital association. Validation efforts were classified into two categories for each HAI type: data checked for quality and additional in-depth data review. The following criteria were used to assign credit to states that performed data quality checks: state health department had access to 2014 NHSN data; performed regular data cleaning/quality checks on at least 6 months of 2014 data prior to July 1, 2015; and contacted hospitals if data errors, outliers, or missing information were found. A state received credit for additional in-depth data review if the state performed an audit of their hospitals’ medical or laboratory records prior to July 1, 2015, meaning the state health department reviewed hospital records to confirm proper case ascertainment and data entry into NHSN. Validation efforts should be taken into account when evaluating an individual state’s performance. States that perform more vigorous data validation activities are more likely to find hospital records of infections, and therefore these states may have higher SIRs compared to states that do not perform validation. Not all state health departments have access to NHSN data or have access to NHSN data from every hospital included in this report. Furthermore, some states may currently be involved in 2014 data validation efforts that are not reflected in this report due to the validation deadlines stated above. Data validation efforts were self-reported by state health departments to CDC and may vary between states.

The total number of acute care hospitals in each state was computed from the American Hospital Association (AHA) annual survey for fiscal year 2013, after excluding rehabilitation hospitals and long-term acute care hospitals (available at http://www.ahadataviewer.com/about/hospital-database/). Because of this methodology, these counts may differ slightly from counts provided by state regulatory authorities. The total number of acute care hospitals reporting to NHSN was calculated for each state, HAI type, location category, and surgical procedure. The counts displayed on the state factsheets and State Progress Landscape reflect the number of hospitals that reported at least one month of 2014 data to NHSN and were included in the SIR calculations (i.e., after SIR exclusion criteria were applied). 9,13
REFERENCES


ACKNOWLEDGEMENTS

We thank the infection preventionists, hospital epidemiologists, and other dedicated hospital staff who report surveillance data to NHSN. We also thank our colleagues in HAI programs at state and local health departments.

This report was prepared by the following CDC staff: Zuleika Aponte-Torres, Lacey Avery, Ramona Bennett, Meredith Boyter, Nicole Coffin, Swapna Deshpande, Margaret Dudeck, Jonathan Edwards, Angela Fisher, Susan Fuller, Jeremy Goodman, Rebecca Konnor, Renee Maciejewski, L. Clifford McDonald, Elizabeth Mothershed, Kelly Peterson, Minn Soe, Jason Snow, Abbigail Tumpey, Lindsey Weiner, and Kim Zimmerman (National Center for Emerging and Zoonotic Infectious Diseases, Division of Healthcare Quality Promotion).
Terms and topics from CDC’s *National and State Healthcare-Associated Infections Progress Report*.

Click on the category to locate specific terms:
- **AGENCIES, PROGRAMS, AND HEALTHCARE DELIVERY LOCATIONS**
- **Infections Reported and Key Antibiotic Resistant Terms**
- **Prevention Strategies**
- **Calculations and Analysis Terms**

### AGENCIES, PROGRAMS, AND HEALTHCARE DELIVERY LOCATIONS

**Acute care hospital**: A hospital is an institution that mainly provides diagnostic and therapeutic services to inpatients, including medical diagnosis, treatment, and care. The Centers for Medicare & Medicaid Services requires that all patients in hospitals be under the care of a physician and provided 24-hour nursing assistance.

**Centers for Disease Control and Prevention (CDC)**: Housed within U.S. Department of Health and Human Services, CDC is charged with protecting the public health of the nation by providing leadership and direction in the prevention of and control of diseases and other preventable conditions, and responding to public health emergencies. CDC works 24/7 to protect America from health, safety and security threats, both foreign and in the U.S.

**Emerging Infections Program (EIP)**: A national resource utilized for surveillance, prevention, and control of emerging infectious diseases. EIP is a network of state health departments and their collaborators in local health departments, academic institutions, other federal agencies, and public health and clinical laboratories; infection preventionists; and healthcare providers.

**Hospital Compare**: A consumer-oriented website that provides information about the quality of care at over 4,000 Medicare-certified hospitals. Hospital Compare was created through the efforts of the Centers for Medicare & Medicaid Services (CMS), in collaboration with organizations representing consumers, hospitals, doctors, employers, accrediting organizations, and other Federal agencies. Hospitals participating in the CMS quality reporting program submit healthcare-associated infection data to CDC’s National Healthcare Safety Network (NHSN). NHSN shares these data with CMS for public posting on Hospital Compare to help consumers make informed decisions about their health care.

**Inpatient rehabilitation facilities (IRF)**: Hospitals, or part of a hospital, that provide intensive rehabilitation services using an interdisciplinary team approach. Admission to an IRF is appropriate for patients with complex nursing, medical management, and rehabilitative needs. Data in this report are reported from free-standing IRFs and rehabilitation locations within other hospitals.
Long-term acute care hospital (LTACH): Acute care hospitals that provide treatment for patients who are generally very sick and stay, on average, more than 25 days. Services include comprehensive rehabilitation, respiratory therapy, head trauma treatment, and pain management. Most patients are transferred from an intensive or critical care unit.

Long-term care facilities (LTCF): Nursing homes, skilled nursing facilities, and assisted living facilities (collectively known as long-term care facilities) provide a variety of services, both medical and personal care, to people who are unable to manage independently in the community.

National Healthcare Safety Network (NHSN): CDC’s NHSN is the nation’s most widely used healthcare-associated infection (HAI) tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate HAIs. In addition, NHSN allows healthcare facilities to track antimicrobial use and resistance, blood safety errors and important healthcare process measures such as healthcare personnel influenza vaccine status and infection control adherence rates.

INFECTIONS REPORTED
AND KEY ANTIBIOTIC RESISTANCE TERMS

Antibiotic resistance (antimicrobial resistance): Antibiotic resistance is the result of bacteria changing in ways that reduce or eliminate the effectiveness of antibiotics. Antimicrobial resistance is result of microorganisms changing in ways that reduce or eliminate the effectiveness of drugs, chemicals, or other agents used to cure or prevent infections. Antibiotic resistance is one type of antimicrobial resistance.

Carbapenem-resistant Enterobacteriaceae (CRE) infections: A family of germs that is difficult to treat because they have high levels of resistance to antibiotics. CRE infections are most commonly seen in people with exposure to healthcare settings, like hospitals and long-term care facilities.

Catheter-associated urinary tract infection (CAUTI): A urinary tract infection (UTI) is an infection involving any part of the urinary system, including urethra, bladder, ureters, and kidney. When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys. In this report, the CAUTI data include all infections reported to the National Healthcare Safety Network from all applicable locations, including intensive care units and wards.
Central line-associated bloodstream infection (CLABSI): When a tube is placed in a large vein and not put in correctly or kept clean, it can become a way for germs to enter the body and cause deadly infections in the blood. In this report, the CLABSI data include all infections reported to the National Healthcare Safety Network from all applicable locations, including intensive care units, neonatal intensive care unit, and wards.

Clostridium difficile (C. difficile): When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from C. difficile, bacteria that cause life-threatening diarrhea. Often, C. difficile infections occur in hospitalized or recently hospitalized patients. In this report, the C. difficile data include all laboratory identified hospital-onset infections reported to the National Healthcare Safety Network from all inpatient locations in the facility, with the exception of the neonatal intensive care units and well-baby locations.

Healthcare-associated infection (HAI): An infection patients can get while receiving medical treatment in hospitals, outpatient clinics, nursing homes, and other facilities where people receive care.

Laboratory identified (LabID) Event: For reporting to the National Healthcare Safety Network, an infection is considered laboratory identified when a patient sample is tested and confirmed positive by laboratory test only (i.e., clinical evaluation of the patient is not required).

Hospital-onset HAI: For LabID events, an infection is considered hospital-onset if the positive specimen is collected on or after the fourth day of admission.

Methicillin-resistant Staphylococcus aureus (MRSA): A type of staph bacteria that is resistant to many antibiotics. In this report, the MRSA data include all laboratory identified hospital-onset MRSA bacteremia (bloodstream infections) reported to the National Healthcare Safety Network from all inpatient locations in the facility.

Multi-drug resistant organism (MDRO) infection: An infection caused by a germ that is resistant to multiple classes of antimicrobials. In some cases, the germs have become so resistant that no available antibiotics are effective against them.

Surgical site infection (SSI): When germs get into an area where surgery is or was performed, patients can get a surgical site infection. Sometimes these infections involve only the skin. Other SSIs can involve tissues under the skin, organs, or implanted material (an object or material inserted or grafted into the body, such as prosthetic joints).
PREVENTION STRATEGIES

**Antibiotic stewardship**: Coordinated efforts and programs to improve the use of antimicrobials in healthcare settings to ensure that hospitalized patients receive the right antibiotic, at the right dose, at the right time, and for the right duration.

**Hand hygiene**: The practice of cleaning hands to prevent the spread of disease-causing germs.

**Healthcare personnel influenza vaccination**: Influenza, or the flu, is a mild to severe respiratory illness caused by a virus. The contagious illness can easily spread from person to person, including from healthcare workers to patients. Vaccination is the best way to prevent getting and spreading the flu.

**Prevention collaboratives**: Prevention projects that consist of multiple hospitals within a state to target an infection as a team, implement prevention strategies, share experiences between facilities, measure progress as a group, and provide feedback to clinicians and staff.

**Ventilator-associated events (VAE)**: A ventilator is a machine used to help a patient breathe by giving oxygen through a tube placed in a patient’s mouth or nose, or through a hole in the front of the neck. An infection, such as pneumonia, may occur if germs enter a patient through the tube.

CALCULATIONS AND ANALYSIS TERMS

**National baseline**: Aggregated data reported to the National Healthcare Safety Network (NHSN) during a historical baseline period that is used to “predict” the number of infections expected to occur in a hospital, state, or in the country. Many federal and state mandates were not enacted during the baseline time periods, and therefore not all states or facilities may have contributed to the baseline (see state mandate).

*In this report*, the number of predicted infections is an estimate based on data reported to NHSN during the following time periods:

<table>
<thead>
<tr>
<th>HAI TYPE</th>
<th>NATIONAL BASELINE</th>
<th>LTACHs and IRFs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute Care Hospitals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLABSI</td>
<td>2006–2008</td>
<td>2013</td>
</tr>
<tr>
<td>CAUTI</td>
<td>2009</td>
<td>2013</td>
</tr>
<tr>
<td>MRSA, <em>C. difficile</em></td>
<td>2010–2011</td>
<td></td>
</tr>
<tr>
<td>SSI</td>
<td>2006–2008</td>
<td></td>
</tr>
</tbody>
</table>

Infection types presented have different baseline years for comparison. Moving forward, HAI prevention progress for future years will be measured in comparison to infection data from 2015.
**Statistical significance:** Term used in the context of a statistical hypothesis test to determine if a finding is unlikely to have occurred by chance alone. A statistically significant test result means it is unlikely that the two groups sampled are different simply by chance alone (suggesting that the two populations sampled are, in fact, different). *In this report,* statistical hypothesis testing is used to compare a calculated standardized infection ratio value (see **SIR**) to the value of 1.0. A statistically significant result from this test means there is statistical evidence that the calculated SIR is different than what would be predicted from the national data. *In this report,* statistical hypothesis testing is also used to compare two SIR values to each other.

**Standardized Infection Ratio (SIR):** A summary statistic that can be used to track healthcare-associated infection (HAI) prevention progress over time; lower SIRs are better. The SIR compares the number of infections in a facility or state to the number of infections that were “predicted” to have occurred, based on historically reported data (see **national baseline**). The SIR is not calculated when the number of predicted infections is less than 1. *In this report,* the SIRs compare the observed number of infections reported to National Healthcare Safety Network (NHSN) during 2014 to the predicted number of infections based on the referent period, adjusting for key risk factors.

**Risk adjustment:** A process used to level the playing field by adjusting for the differences in risk. When the data are risk-adjusted, it makes it possible to fairly compare hospital performance. *In this report,* the SIRs are adjusted for **risk factors** that may impact the number of infections reported by a hospital, such as type of patient care location, bed size of the hospital, patient age, and other factors.

**National 2014 SIR:** A summary statistic calculated from all reported HAIs that occurred in the country in 2014. It was calculated as the total number of observed infections in the country, divided by the total number of predicted infections in the country in 2014.

**State 2014 SIR:** A summary statistic calculated from all reported HAIs that occurred in an individual state in 2014. It was calculated as the total number of observed infections from all hospitals in the state, divided by the total number of predicted infections in the state in 2014.

**State mandate** (for data reporting): A state legislative or regulatory requirement (enacted by the state’s government) requiring hospitals in the state to report healthcare-associated infections to the National Healthcare Safety Network.
Targeted Assessment for Prevention (TAP) strategy: a method developed by the Centers for Disease Control and Prevention (CDC) to use data for action to prevent healthcare-associated infections (HAIs). The TAP strategy targets healthcare facilities and specific units within facilities with a disproportionate burden of HAIs to address infection prevention gaps.

Validation: Double-checking, or confirming, healthcare-associated infection (HAI) data reported to the National Healthcare Safety Network (NHSN). This generally involves an assessment to ensure all relevant infections were captured in the system. It may also involve checking the accuracy, or quality, of the submitted data. Currently, state health departments may use different methods to validate the HAI data that hospitals submit to NHSN. For example, some states only validate data from one facility while other states validate more widely. Validation efforts should be taken into account when evaluating an individual state’s performance. States that validate data or use advanced methods to detect HAIs may find and report more infections than states that do not validate. In this report, state validation efforts are specified and classified into two categories for each HAI type: data checked for quality and additional in-depth data review.

Data Quality: State health departments may assess a hospital’s overall reported HAI data for data entry errors, outliers, or missing information. This does not involve reviewing medical records.

In this report, the following criteria were used to assign credit to states that performed data quality checks:

- State health department had access to 2014 data from NHSN.
- State health department performed quality checks on at least 6 months of 2014 NHSN data prior to July 1, 2015.
- State health department contacted hospitals when data errors, outliers, or missing information were found.

Additional In-depth Data Review: State health departments may perform a review, or “audit”, of a hospital’s medical records to ensure the hospital defined and reported all appropriate HAIs to NHSN. The auditing process may identify more HAIs in a hospital than originally reported. As such, states that perform data audits may have a higher SIR when compared to states that do not perform data audits. In this report, credit is given to states that performed any type of audit of their hospitals’ 2014 medical or laboratory records prior to July 1, 2015.