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.

* Statistically significant
# OF KENTUCKY HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014

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<tbody>
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<td>CLABSI</td>
<td>70</td>
<td>↓ 16%</td>
<td>↑ 12%</td>
<td>↓ 45%</td>
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<tr>
<td>CAUTI</td>
<td>71</td>
<td>↓ 18%</td>
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<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>59</td>
<td>↑ 4%</td>
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<tr>
<td>SSI, Colon Surgery</td>
<td>66</td>
<td>↑ 36%</td>
<td>↑ 9%</td>
<td>↑ 6%</td>
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<tr>
<td>MRSA Bacteremia</td>
<td>72</td>
<td>↑ 1%</td>
<td>↑ 45%</td>
<td>↑ 25%</td>
<td>1.25</td>
<td>0.87</td>
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<tr>
<td>C. difficile Infections</td>
<td>72</td>
<td>↓ &lt; 1%</td>
<td>↓ &lt; 1%</td>
<td>↓ 8%</td>
<td>0.92</td>
<td>0.92</td>
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### 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 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.