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 collected through CDC’s National Healthcare Safety Network (NHSN). HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.

**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 a significant decrease in CLABSIs between 2012 and 2013.
- Among the 26 hospitals in Mississippi with enough data to calculate an SIR, 35% had an SIR significantly worse than the national SIR of 0.54.

**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 2012 and 2013.
- Among the 33 hospitals in Mississippi with enough data to calculate an SIR, 15% had an SIR significantly worse than the national SIR of 1.06.

**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.

- Among the 23 hospitals in Mississippi with enough data to calculate an SIR, 22% had an SIR significantly worse than the national SIR of 0.92.

**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**

- Mississippi hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2012 and 2013.
- Among the 11 hospitals in Mississippi with enough data to calculate an SIR, 0% had an SIR significantly worse than the national SIR of 0.86.

**SSI: Colon Surgery**

- Mississippi hospitals reported no significant change in SSIs related to colon surgery between 2012 and 2013.
- Several changes to the NHSN 2013 SSI protocol likely contributed to an increase in the national and some state-specific colon surgery SIRs compared to 2012.
- Among the 22 hospitals in Mississippi with enough data to calculate an SIR, 9% had an SIR significantly worse than the national SIR of 0.92.

**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 56 hospitals in Mississippi with enough data to calculate an SIR, 0% had an SIR significantly worse than the national SIR of 0.90.

*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?

Prevention efforts to reduce specific HAI s:

- Multidrug-resistant infections

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CLABSI | 47 | ↓ 18% | ↑ 44% | ↓ 23% | 0.77 | 0.54
CAUTI | 48 | ↓ 10% | ↑ 2% | ↑ 8% | 1.08 | 1.06
SSI, Abdominal Hysterectomy | 42 | ↓ 36% | ↓ 2% | ↓ 16% | 0.84 | 0.86
SSI, Colon Surgery | 43 | ↓ 1% | ↓ 12% | ↓ 19% | 0.81 | 0.92
MRSA Bacteremia | 64 | 2012 SIR not available | ↑ 23% | ↑ 13% | 1.13 | 0.92
C. difficile Infections | 65 | 2012 SIR not available | ↓ 34% | ↓ 40% | 0.60 | 0.90

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*Not all hospitals are required to report these infections; for example, some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

†The state’s 2012 SIR can be found in the data tables of this report.

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

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LEGEND

- 2013 state SIR is significantly lower (better) than comparison group in column header
- Change in 2013 state SIR compared to group in column header is not statistically significant
- 2013 state SIR is significantly higher (worse) than comparison group in column header
- 2013 state SIR cannot be calculated

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This report is based on 2013 data, published December 2014.