

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

## **MARYLAND** 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**

## **J**47% LOWER COMPARED

#### **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

1 35% HIGHER COMPARED TO NAT'L BASELINE\*

#### 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.

٦	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 122% HIGHER COMPARED TO NAT'L BASELINE\*

### 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.
- **18**% 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.

## 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

## 18% HIGHER COMPARED TO NAT'L BASELINE

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

-4%

**25%** 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

3%

\* Statistically significant

#### LOWER COMPARED TO NAT'L BASELINE

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

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#### 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.

Learn how your hospital is performing: www.medicare.gov/hospitalcompare For additional information:

- 2014 HAI Progress Report: www.cdc.gov/hai/progress-report/
- NHSN: www.cdc.gov/nhsn
- HAIs and prevention activities in Maryland: www.marylandqmdc.org/
- Maryland validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



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LEGEND	HAI TYPE	# OF MARYLAND HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Maryland: 62	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline <sup>‡</sup>	2014 STATE SIR	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column header	CLABSI Nat'l Baseline: 2008	48	<b>☆ 2%</b>	合 7%	47%	0.53	0.50
↔ or ↔ Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	48	√ 2%	<b>1</b> 36%	<b>1</b> 35%	1.35	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	41	↓ 1%	44%	18%	1.18	0.83
2014 state SIR is significantly higher (worse)	SSI, Colon Surgery Nat'l Baseline: 2008	45	15%	<b>↓</b> 1%	<b>↓</b> 4%	0.96	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	47	<b>☆ 48</b> %	41%	<b>1</b> 22%	1.22	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	47	<b>6</b> %	<b>1</b> 31%	<b>1</b> 20%	1.20	0.92

<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.

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

<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 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.