NATIONAL AND STATE HEALTHCARE ASSOCIATED INFECTIONS

PROGRESS REPORT



Centers for Disease Control and Prevention National Center for Emerging and Zoonotic Infectious Diseases

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016

#### THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016.

#### **TABLE OF CONTENTS**

Executive Summary
State Progress Landscape, Acute Care Hospitals
Central Line-associated Bloodstream Infections
Catheter-associated Urinary Tract Infections
Surgical Site Infections
Hospital-onset <i>Clostridium difficile</i> Infections
Hospital-onset Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) Bacteremia (bloodstream infections)
National Progress, Acute Care Hospitals
National Progress, Long-term Acute Care Hospitals and Inpatient Rehabilitation Facilities
Individual State Progress, Acute Care Hospitals

	Alabama	Hawaii	Michigan	North Carolina	Texas
	Alaska	Idaho	Minnesota	North Dakota	Utah
	Arizona	Illinois	Mississippi	Ohio	Vermont
	Arkansas	Indiana	Missouri	Oklahoma	Virginia
	California	Iowa	Montana	Oregon	Washington
	Colorado	Kansas	Nebraska	Pennsylvania	West Virginia
	Connecticut	Kentucky	Nevada	Puerto Rico	Wisconsin
	Delaware	Louisiana	New Hampshire	Rhode Island	Wyoming
	District of Columbia	Maine	New Jersey	South Carolina	
	Florida	Maryland	New Mexico	South Dakota	
	Georgia	Massachusetts	New York	Tennessee	
Call	to Action				
Tec	hnical Appendix				
Glos	sary				

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 goldstandard 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 infectionspecific 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 healthcareassociated 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.

## **STATE PROGRESS LANDSCAPE**

Acute Care Hospitals

**INFECTIONS** 

PROGRESS

Maryland

Michigan

Minnesota

Mississippi

Missouri

Massachusetts

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

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

	CLABSIS: CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS									
STATE		2014 Re	201	2014 State CLABSI SIR						
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review ≢	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2008 Nat'l Baseline		
Alabama	70	$\checkmark$	$\checkmark$	$\checkmark$	~	仑				
Alaska	11		$\checkmark$				$\hat{\mathbf{C}}$			
Arizona	60		$\checkmark$			₽	· 순	₽		
Arkansas	47	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\hat{\mathbf{C}}$	$\hat{\mathbf{C}}$	₽		
California	358	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Ŷ	· 순	₽		
Colorado	53	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\overline{\nabla}$	₽	₽		
Connecticut	31	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	Ŷ	₽		
D.C.	8	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$		₽		
Delaware	8	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	· 순	₽		
Florida	194					₽	$\hat{\mathbf{v}}$	₽		
Georgia	108	$\checkmark$	$\checkmark$			Ŷ		₽		
Hawaii	16	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$	₽	₽		
Idaho	15		$\checkmark$			Ŷ	Ŷ	₽		
Illinois	150	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	₽	₽		
Indiana	101	$\checkmark$	$\checkmark$	$\checkmark$		₽		₽		
lowa	61		$\checkmark$	$\checkmark$	$\checkmark$	$\overline{\nabla}$	$\overline{\nabla}$	₽		
Kansas	48		$\checkmark$	$\checkmark$		仑		₽		
Kentucky	70		$\checkmark$			$\mathbf{r}$	$\hat{\mathbf{t}}$	₽		
Louisiana	80		$\checkmark$	$\checkmark$		Ŷ		₽		
Maine	21	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{Q}}$		Ū. ₽		

V

V

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

V

↔ or 🖓

THIS

+The number of hospitals that reported to NHSN and are included in the SIR calculation. **‡**State Health Department

 $\checkmark$ 

48

69

98

48

49

76

<sup>‡</sup>State analyzed 2014 data for quality and completeness. <sup>‡</sup>State reviewed medical records to determine 2014 data accuracy.

ፊ

分

Л

ዏ

分

Љ

 $\mathcal{T}$ 

 $\hat{\mathbf{G}}$ 

 $\mathcal{P}$ 

 $\wedge$ 

 $\checkmark$ 



# HEALTHCARE ASSOCIATED

**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

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

		CLABSIS: CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS										
STATE		2014 Re	eporting and Va	alidation		2014 State CLABSI SIR						
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2008 Nat'l Baseline				
Montana	16				$\checkmark$	¢	仑	₽				
Nebraska	27					$\Diamond$		₽				
Nevada	24	$\checkmark$	$\checkmark$			¢		₽				
New Hampshire	24	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{C}}$	$\hat{\mathbf{v}}$	₽				
New Jersey	72	$\checkmark$	$\checkmark$	$\checkmark$		¢		₽				
New Mexico	34	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$	$\hat{\mathbf{v}}$	₽				
New York	168	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	➡	Ŷ	₽				
North Carolina	98	$\checkmark$	$\checkmark$	$\checkmark$		➡	-₽-	₽				
North Dakota	8					Ŷ	Ŷ	₽				
Ohio	137					ţ	Ŷ	₽				
Oklahoma	58	$\checkmark$	$\checkmark$			Ŷ	Ŷ	₽				
Oregon	50	$\checkmark$	$\checkmark$	$\checkmark$			Ŷ	₽				
Pennsylvania	176	$\checkmark$	$\checkmark$	$\checkmark$		Ţ.	₽	₽				
Puerto Rico	16					Ċ	$\hat{\mathbf{t}}$	-₽-				
Rhode Island	11		$\checkmark$			¢ ₽	仑	₽				
South Carolina	67	$\checkmark$	$\checkmark$	$\checkmark$		Ţ.	Ŷ	₽				
South Dakota	13		$\checkmark$	$\checkmark$	$\checkmark$	仑	Ŷ	-₽-				
Tennessee	105	$\checkmark$	$\checkmark$	$\checkmark$			$\overline{\mathbf{v}}$	-₽-				
Texas	289	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	₽ ₽	₽	₽				
Utah	27	$\checkmark$	$\checkmark$	$\checkmark$		↓	$\hat{\nabla}$	₽				
Vermont	7	$\checkmark$		$\checkmark$		Ŷ	$\hat{\nabla}$	-₽-				
Virginia	83	$\checkmark$	$\checkmark$	$\checkmark$		ţ	Ŷ	₽				
Washington	86	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\hat{\nabla}$	仑	-₽-				
West Virginia	43	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{C}}$	÷	-₽				
Wisconsin	96		$\checkmark$	$\checkmark$		$\mathbf{r}$	÷	₽				
Wyoming	22					Ŷ	Ŷ	•				

↔ or ₽

+The number of hospitals that reported to NHSN and are included in the SIR calculation. <sup>‡</sup>State Health Department

<sup>‡</sup>State analyzed 2014 data for quality and completeness. <sup>‡</sup>State reviewed medical records to determine 2014 data accuracy.



**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

or  $\checkmark$  Change in 2014 state SIR compared to group in column header is not statistically significant

LEGEND

than comparison group in column header
2014 state SIR is significantly higher (worse) than comparison group in column header

2014 state SIR is significantly lower (better)

		CA	UTIS: CATH	HETER-ASSOCIA	TED URINARY T	RACT INFECTIO	NS	
STATE		2014 R	eporting and V	201	2014 State CAUTI SIR			
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>≢</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2009 Nat'l Baseline
Alabama	86	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$	-₽-	₽
Alaska	11		$\checkmark$			$\overline{\mathbf{v}}$	Ŷ	- ₽
Arizona	60		$\checkmark$			Ŷ	- ↓	<u>₽</u>
Arkansas	49	$\checkmark$	$\checkmark$	$\checkmark$		₽	-₽	₽
California	349					仑	₽	₽
Colorado	52					-₽-	₽	₽
Connecticut	31	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ		
D.C.	7		$\checkmark$	$\checkmark$		-₽-	$\overline{\mathbf{v}}$	-₽
Delaware	8	$\checkmark$	$\checkmark$	$\checkmark$		仑		
Florida	192					$\mathbf{\hat{C}}$	-₽	₽
Georgia	111	$\checkmark$	$\checkmark$			-₽-		
Hawaii	16	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$	-₽	₽
Idaho	18		$\checkmark$			$\mathbf{r}$	- ↓	
Illinois	150					₽	- ↓	-₽
Indiana	106	$\checkmark$	$\checkmark$	$\checkmark$		-₽-	· 순	<b></b>
lowa	81		$\checkmark$	$\checkmark$	$\checkmark$	Ŷ	- ↓	₽
Kansas	52		$\checkmark$	$\checkmark$		Ŷ	· 순	<b></b>
Kentucky	71		$\checkmark$			-₽	Ŷ	<b>₽</b>
Louisiana	79		$\checkmark$	$\checkmark$		$\mathbf{r}$	- ↓	
Maine	21		$\checkmark$	$\checkmark$	$\checkmark$	$\overline{\mathbf{v}}$		
Maryland	48	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{r}$		
Massachusetts	69	$\checkmark$	$\checkmark$			-₽-		
Michigan	102		$\checkmark$	$\checkmark$		Ŷ		
Minnesota	85	$\checkmark$	$\checkmark$			$\mathbf{r}$		
Mississippi	49	$\checkmark$	$\checkmark$			$\mathbf{r}$	仑	
Missouri	79					$\hat{\mathbf{A}}$		

\*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.



2014 state SIR cannot be calculated

**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

↔ or ↓ Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

LEGEND

than comparison group in column header 2014 state SIR is significantly higher (worse) than comparison group in column header

2014 state SIR is significantly lower (better)

		CA	UTIS: CATH	IETER-ASSOCIA	TED URINARY TI	RACT INFECTIO	NS	
STATE		2014 R	eporting and V	alidation		201	L4 State CAUT	I SIR
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'i SIR	vs. 2009 Nat'l Baseline
Montana	17				$\checkmark$	仑	<b>₽</b>	<b>心</b>
Nebraska	27					$\mathbf{\hat{C}}$		
Nevada	24					¢	<b></b>	<sup></sup>
New Hampshire	24	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$		
New Jersey	72	$\checkmark$	$\checkmark$	$\checkmark$		仑		
New Mexico	34							
New York	170		$\checkmark$	$\checkmark$		₽		
North Carolina	99	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$		
North Dakota	9		$\checkmark$	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>	Ċ>	₽	
Ohio	136					Ţ	₽	
Oklahoma	62		$\checkmark$			仑	₽	
Oregon	51	$\checkmark$	$\checkmark$	$\checkmark$		₽	$\overline{\mathbf{v}}$	<b>₽</b>
Pennsylvania	183	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	<b>₽</b>	<u>₽</u>
Puerto Rico	17					₽	₽	₽
Rhode Island	11		$\checkmark$			仑		
South Carolina	65					-		
South Dakota	18		$\checkmark$	$\checkmark$		仑	<b>₽</b>	<b></b>
Tennessee	106	$\checkmark$	$\checkmark$	$\checkmark$		₽	企	
Texas	297	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	仑	企	<b></b>
Utah	28	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Ţ		
Vermont	5					仑		
Virginia	82					$\overline{\nabla}$	-	- ↓
Washington	78					₽	₽	
West Virginia	50	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{C}}$	₽	₽
Wisconsin	118		$\checkmark$	$\checkmark$		Ŷ	₽	₽
Wyoming	26					$\overline{\mathbf{v}}$	₽	

\*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.



**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## ACUTE CARE HOSPITALS

↔ or ↓ Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

LEGEND

than comparison group in column header 2014 state SIR is significantly higher (worse)

than comparison group in column header

2014 state SIR is significantly lower (better)

		SSI	S: SURGICA	L SITE INFECTIO	NS, ABDOMINA	L HYSTERECTO	MY	
STATE		2014 R	eporting and Va	alidation		2014	State SSI: HY	ST SIR
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2008 Nat'l Baseline
Alabama	58	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	<b>₽</b>	
Alaska	9		$\checkmark$			$\mathbf{\hat{C}}$	$\neg$	<b>₽</b>
Arizona	53		$\checkmark$			$\mathbf{r}$	企	<b>₽</b>
Arkansas	37	$\checkmark$	$\checkmark$	$\checkmark$		Ţ.		Ŀ →
California	314	$\checkmark$	$\checkmark$	$\checkmark$		仑	- ↓	-
Colorado	57	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$		$\overline{\nabla}$
Connecticut	29	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{r}$	· 순	- ↓
D.C.	7		$\checkmark$	$\checkmark$		$\overline{\mathbf{v}}$	企	<b>₽</b>
Delaware	7	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{r}$	<b></b>	
Florida	167					$\mathbf{r}$	- ₽	↓
Georgia	91	$\checkmark$	$\checkmark$			Ŷ	· 순	<u>₽</u>
Hawaii	13	$\checkmark$	$\checkmark$	$\checkmark$			Ŷ	<u>↓</u>
Idaho	14		$\checkmark$			Ŷ	· 슈	<b></b>
Illinois	134					$\mathbf{\hat{C}}$	Ŷ	
Indiana	98	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	- ↓	
lowa	40					$\overline{\nabla}$	企	<b>₽</b>
Kansas	43		$\checkmark$	$\checkmark$		仑	· 순	<b>₽</b>
Kentucky	59		$\checkmark$			$\mathbf{\hat{C}}$	仑	Ŷ
Louisiana	73		$\checkmark$	$\checkmark$		$\overline{\mathbf{v}}$	<b>₽</b>	<b>₽</b>
Maine	19		$\checkmark$	$\checkmark$	$\checkmark$	$\overline{\mathbf{v}}$	企	<b>₽</b>
Maryland	41	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ		· 순
Massachusetts	58	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$	仑	Ŷ
Michigan	86		$\checkmark$	$\checkmark$		$\mathbf{r}$		· 순
Minnesota	50	$\checkmark$	$\checkmark$			$\hat{\mathbf{t}}$		
Mississippi	43	$\checkmark$	$\checkmark$			Ŷ	Ŷ	₽
Missouri	70						- ₽	<b>↓</b>

\*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.



# HEALTHCARE ASSOCIATED

INFECTIONS

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

LEGEND

Texas

Utah

Vermont

Virginia

Washington

West Virginia

Wisconsin

Wyoming

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

	<b>SSIS:</b> surgical site infections, abdominal hysterectomy									
STATE		2014 Re	2014 State SSI: HYST SIR							
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2008 Nat'l Baseline		
Montana	15					$\hat{\nabla}$	Ŷ	<u>₽</u>		
Nebraska	21					Ŷ	₽	Ū. ₽		
Nevada	20					仑	Ŷ	Ŷ		
New Hampshire	23	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	$\overline{\mathbf{v}}$	₽		
New Jersey	66	$\checkmark$	$\checkmark$	$\checkmark$		仑	仑	· 순		
New Mexico	26					$\hat{\mathbf{C}}$	$\hat{\mathbf{C}}$	仑		
New York	152	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	₽		<u>₽</u>		
North Carolina	88	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$	$\hat{\mathbf{t}}$	Ŷ		
North Dakota	6					Ŷ	· 순	· 순		
Ohio	128					Ŷ	₽	₽		
Oklahoma	63		$\checkmark$			仑	Ŷ	<b>₽</b>		
Oregon	44	<ul> <li>✓</li> </ul>	$\checkmark$	$\checkmark$		Ŷ	$\hat{\mathbf{t}}$	<u>₽</u>		
Pennsylvania	143	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	<b></b>	Ŷ		
Puerto Rico	0									
Rhode Island	11		$\checkmark$			仑	<b>₽</b>	<u>₽</u>		
South Carolina	52	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$	$\widehat{\mathbf{t}}$			
South Dakota	15		$\checkmark$	$\checkmark$	$\checkmark$	$\hat{\nabla}$	Ŷ	<u>₽</u>		
Tennessee	84		$\checkmark$			Ŷ	Ŷ	<u>₽</u>		

V

V

 $\checkmark$ 

Change in 2014 state SIR compared to group in column header is not statistically significant 介。少

2014 state SIR cannot be calculated



Ĵ

 $\overline{\mathbf{v}}$ 

 $\hat{\Gamma}$ 

Љ

 $\mathcal{T}$ 

 $\widehat{}$ 

᠕

᠕

+The number of hospitals that reported to NHSN and are included in the SIR calculation. **‡**State Health Department

288

32

12

71

68

33

81

13

V

V

V

 $\checkmark$ 

<sup>‡</sup>State analyzed 2014 data for quality and completeness. <sup>‡</sup>State reviewed medical records to determine 2014 data accuracy.

Л

ᡗ

 $\langle 
angle$ 

刅

 $\mathcal{T}$ 

 $\bigcirc$ 

 $\mathcal{P}$ 

ዏ

Ъ

 $\mathcal{T}$ 

 $\bigcirc$ 

 $\bigcirc$ 

 $\mathcal{T}$ 

 $\wedge$ 

٢Ì ዏ

 $\checkmark$ 

**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## ACUTE CARE HOSPITALS

Or 
 Or 
 Or 
 Or 
 Or 
 Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

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

		SSIS: surgical site infections, colon surgery									
STATE		2014 R	eporting and V	2014	State SSI: CO	LON SIR					
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2008 Nat'l Baseline			
Alabama	70	$\checkmark$	$\checkmark$	$\checkmark$			₽	₽			
Alaska	9		$\checkmark$			$\hat{\mathbf{U}}$	<b>₽</b>	<b>₽</b>			
Arizona	56		$\checkmark$			$\checkmark$		·			
Arkansas	41	$\checkmark$	$\checkmark$	$\checkmark$		$\uparrow$	<b>₽</b>	-₽			
California	326	$\checkmark$	$\checkmark$	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>			· 산			
Colorado	57	$\checkmark$	$\checkmark$	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>	∽	- ↓				
Connecticut	30	$\checkmark$	$\checkmark$	$\checkmark$		<del></del> 仑					
D.C.	7		$\checkmark$	$\checkmark$		$\uparrow$	<b>↓</b>	<b>₽</b>			
Delaware	7	$\checkmark$	$\checkmark$	$\checkmark$							
Florida	184					¢	- ↓	-↓			
Georgia	96	$\checkmark$	$\checkmark$			Ç∕-		-			
Hawaii	14	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$					
Idaho	16		$\checkmark$			$\hat{\mathbf{U}}$		<b></b>			
Illinois	137					$\mathbf{\hat{C}}$	$\overline{\mathbf{v}}$	₽			
Indiana	101	$\checkmark$	$\checkmark$	$\checkmark$		¢		· 순			
Iowa	42					∽		$\bigcirc$			
Kansas	44		$\checkmark$	$\checkmark$		<del></del> 仑					
Kentucky	66		$\checkmark$								
Louisiana	74		$\checkmark$	$\checkmark$		¢	<b>₽</b>	Ŷ			
Maine	22		$\checkmark$	$\checkmark$	$\checkmark$	$\diamond$		$\bigcirc$			
Maryland	45	$\checkmark$	$\checkmark$	$\checkmark$		<del></del> 个	<b>₽</b>	Ŷ			
Massachusetts	62	$\checkmark$	$\checkmark$			$\overline{\mathbf{v}}$					
Michigan	93		$\checkmark$	$\checkmark$							
Minnesota	49	$\checkmark$	$\checkmark$			$\widehat{\mathbf{t}}$					
Mississippi	43	$\checkmark$	$\checkmark$			$\hat{\nabla}$	-				
Missouri	72						- - -	₽			

\*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.



**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

Or 
 Or 
 Or 
 Or 
 Or 
 Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

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

SSIS: SURGICAL SITE INFECTIONS, COLON SURGERY									
STATE		2014 Re	eporting and Va	alidation		2014 State SSI: COLON SIR			
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2008 Nat'l Baseline	
Montana	16					$\mathbf{r}$	<b>₽</b>	<b>₽</b>	
Nebraska	21					$\overline{\mathbf{v}}$	企	仑	
Nevada	22					仑			
New Hampshire	25	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$	- ₽	- ₽	
New Jersey	71	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$			
New Mexico	26								
New York	166	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\mathbf{r}$			
North Carolina	94	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\mathbf{v}}$			
North Dakota	6					$\mathbf{r}$	<b></b>	仑	
Ohio	129					$\mathbf{r}$			
Oklahoma	57		$\checkmark$			-₽-	Ŷ	公	
Oregon	48	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$	Ŷ	Ŷ	
Pennsylvania	158	$\checkmark$	$\checkmark$	$\checkmark$		仑	Ŷ	Ŷ	
Puerto Rico	0								
Rhode Island	11		$\checkmark$			$\overline{\nabla}$	<b></b>	仑	
South Carolina	56	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$		仑	
South Dakota	16		$\checkmark$	$\checkmark$	$\checkmark$	仑			
Tennessee	92	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\mathbf{v}}$	Ŷ	Ŷ	
Texas	280	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	仑			
Utah	32	$\checkmark$	$\checkmark$	$\checkmark$		$\mathbf{\hat{C}}$			
Vermont	6					<b>₽</b>			
Virginia	77					$\bigcirc$			
Washington	67	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	仑	Ŷ	Ŷ	
West Virginia	35	$\checkmark$	$\checkmark$	$\checkmark$		$\widehat{\mathbf{t}}$			
Wisconsin	90		$\checkmark$	$\checkmark$		仑	<b>₽</b>	Ŷ	
Wyoming	13					$\widehat{\mathbf{t}}$			

\*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.



**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

Change in 2014 state SIR compared to group in

column header is not statistically significant

2014 state SIR cannot be calculated

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

	MRS	MRSA Bacteremia: LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS										
STATE		2014 R	2014 Sta	2014 State MRSA Bacteremia SIR								
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'i SIR	vs. 2011 Nat'l Baselin				
Alabama	91					-						
Alaska	11		$\checkmark$			$\diamond$	₽	₽				
Arizona	68		$\checkmark$			<del></del> 仑	<b></b>	<u>₽</u>				
Arkansas	48	$\checkmark$	$\checkmark$	$\checkmark$		ţ						
California	369	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	仑	₽	₽				
Colorado	60	$\checkmark$	$\checkmark$			➡	₽	₽				
Connecticut	32	$\checkmark$	$\checkmark$	$\checkmark$		¢	₽	₽				
D.C.	8	$\checkmark$	$\checkmark$	$\checkmark$		₽ ₽	仑	-₽				
Delaware	8	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	¢	· 순	<u> </u>				
Florida	191					¢						
Georgia	111	$\checkmark$	$\checkmark$					<u> </u>				
Hawaii	15	$\checkmark$	$\checkmark$	$\checkmark$		$\diamond$	Ŷ	₽				
Idaho	21		$\checkmark$			¢	₽	₽				
Illinois	183	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{C}}$	₽	₽				
Indiana	107					¢	<b>₽</b>	₽				
lowa	48		$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	₽				
Kansas	67		$\checkmark$	$\checkmark$		Ŷ	₽	₽				
Kentucky	72		$\checkmark$			$\hat{\mathbf{C}}$						
Louisiana	97		$\checkmark$	$\checkmark$		¢		<b></b>				
Maine	35	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	¢	Ŷ	₽				
Maryland	47	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	仑						
Massachusetts	73	$\checkmark$	$\checkmark$			Ŷ	•	- ↓				
Michigan	102		$\checkmark$	$\checkmark$		仑		-∿				
Minnesota	54	$\checkmark$	$\checkmark$			Ŷ	-₽	₽				
Mississippi	64	$\checkmark$	<ul> <li>✓</li> </ul>			₽	<u>₽</u>	•				
Missouri	83					Ţ	<b>.</b>					

分。少

nalyzed 2014 data for quality an

\*The number of hospitals that reported to NHSN and are included in the SIR calculation.
 \$State Health Department



**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## ACUTE CARE HOSPITALS

Yes

 $\textcircled{} \text{or} ~ \bigtriangledown ~ \r{} ~$ 

2014 state SIR cannot be calculated

LEGEND

than comparison group in column header

2014 state SIR is significantly lower (better)

2014 state SIR is significantly higher (worse) than comparison group in column header

	MRS	MRSA Bacteremia: LABORATORY IDENTIFIED HOSPITAL-ONSET BLOODSTREAM INFECTIONS									
STATE		2014 R	eporting and V	2014 Sta	2014 State MRSA Bacteremia SIR						
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'i SIR	vs. 2011 Nat'l Baseline			
Montana	15					· 순	<b>₽</b>	<b>₽</b>			
Nebraska	28					Ŷ	-				
Nevada	23	$\checkmark$	$\checkmark$				· 순	<u> </u>			
New Hampshire	21					$\hat{\mathbf{t}}$	₽	₽			
New Jersey	72	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ		<b></b>			
New Mexico	37					仑	₽	₽			
New York	179		$\checkmark$	$\checkmark$		Ŷ		₽			
North Carolina	105	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$	Ŷ	₽			
North Dakota	12		$\checkmark$	$\checkmark$	$\checkmark$	Ŷ	<b>₽</b>	- ₽			
Ohio	140		$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$		₽			
Oklahoma	91		$\checkmark$			· 순		<b></b>			
Oregon	57	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$	₽	₽			
Pennsylvania	175	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	$\checkmark$		₽	₽	₽			
Puerto Rico	2										
Rhode Island	11		$\checkmark$			Ŷ	<u>₽</u>	- ₽			
South Carolina	68	$\checkmark$	$\checkmark$			仑	$\hat{\mathbf{C}}$	₽			
South Dakota	23		$\checkmark$	$\checkmark$		Ŷ	Ŷ	₽			
Tennessee	114	$\checkmark$	<ul> <li>✓</li> </ul>	$\checkmark$		Ŷ					
Texas	372					Ŷ	Ŷ	₽			
Utah	37	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$	₽	₽			
Vermont	10					Ŷ	₽	₽			
Virginia	86					Ŷ	Ŷ	₽			
Washington	65					仑	<u>₽</u>	- - -			
West Virginia	38	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ	Ŷ	₽			
Wisconsin	89		<ul> <li>✓</li> </ul>	$\checkmark$		<b>₽</b>	₽	₽			
Wyoming	14					ۍ ا	- - -	- - -			

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

# HEALTHCARE ASSOCIATED

INFECTIONS

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

Change in 2014 state SIR compared to group in column header is not statistically significant

2014 state SIR cannot be calculated

LEGEND

Maryland

Michigan

Minnesota

Mississippi

Missouri

Massachusetts

Maine

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

liffiaila Infaatia

	C. um	C. UNITICITE INTEGUOTIS. LABORATORY IDENTIFIED HOSPITAL-ONSET C. DIFFICILE INFECTIONS							
STATE		2014 Re	eporting and Va	alidation		<b>2014 St</b>	ate C. diff Infe	ction SIR	
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review≢	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2011 Nat'l Baseline	
Alabama	89					仑	₽	₽	
Alaska	11		<ul> <li>✓</li> </ul>			$\hat{\mathbf{C}}$	Ŷ	Ŷ	
Arizona	68		$\checkmark$			ţ	仑	₽	
Arkansas	50	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{v}}$	₽	₽	
California	365	$\checkmark$	<ul> <li>✓</li> </ul>	$\checkmark$	<ul> <li>✓</li> </ul>				
Colorado	58	$\checkmark$	<ul> <li>✓</li> </ul>	$\checkmark$					
Connecticut	32	$\checkmark$	$\checkmark$	$\checkmark$		Ŷ			
D.C.	7		<ul> <li>✓</li> </ul>	$\checkmark$		$\hat{\mathbf{v}}$	Ŷ	₽	
Delaware	8	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	Ŷ		仑	
Florida	191					$\hat{\mathbf{C}}$	₽	₽	
Georgia	112	$\checkmark$	$\checkmark$				Ŷ	₽	
Hawaii	14	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{C}}$	₽	₽	
Idaho	19		$\checkmark$			Ŷ	₽	₽	
Illinois	183	$\checkmark$	$\checkmark$	$\checkmark$					
Indiana	104					Ŷ	· 순	₽	
lowa	59		$\checkmark$	$\checkmark$	$\checkmark$		仑	Ŷ	
Kansas	66		$\checkmark$	$\checkmark$		仑	Ŷ	₽	
Kentucky	72		$\checkmark$			Ŷ	Ŷ	₽	
Louisiana	96			$\checkmark$			₽	₽	

介。少

+The number of hospitals that reported to NHSN and are included in the SIR calculation. **‡**State Health Department

35

47

72

101

54

63

81

V

 $\checkmark$ 

<sup>‡</sup>State analyzed 2014 data for quality and completeness. <sup>‡</sup>State reviewed medical records to determine 2014 data accuracy.

刅

1 1

分 ᠕

刅

 $\overline{\mathbf{v}}$ 

刅

V

 $\checkmark$ 

 $\checkmark$ 

V

 $\checkmark$ 

 $\checkmark$ 

٢

Љ

 $\bigcirc$ 

₽

 $\bigcirc$ 



IONS

<u>ҧ</u>

刅

Љ

刅

刅

Л

**INFECTIONS** 

PROGRESS

## STATE HAI PROGRESS

## **ACUTE CARE HOSPITALS**

Change in 2014 state SIR compared to group in column header is not statistically significant

Yes

2014 state SIR cannot be calculated

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

	<b>C. difficile Infections:</b> LABORATORY IDENTIFIED HOSPITAL-ONSET <i>C. DIFFICILE</i> INFECTIONS							
STATE		2014 R	eporting and V	alidation		2014 State C. diff Infection SIR		
	# Hospitals Reporting to NHSN <sup>+</sup>	State Reporting Mandate	State HD <sup>‡</sup> has Access to Data	Data Checked for Quality≢	Additional In-Depth Data Review <sup>‡</sup>	vs. 2013 State SIR	vs. 2014 Nat'l SIR	vs. 2011 Nat'i Baseline
Montana	16					Ŷ	<b>₽</b>	₽
Nebraska	30					仑	₽	₽
Nevada	23					Ŷ		
New Hampshire	21						仑	$\overline{\nabla}$
New Jersey	72					Ŷ		<b>₽</b>
New Mexico	39	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$		
New York	182	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	₽	₽	Ŷ
North Carolina	104	$\checkmark$	$\checkmark$	$\checkmark$			₽	Ŷ
North Dakota	11		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	$\checkmark$	· 순	Ŷ	<b>₽</b>
Ohio	139		$\checkmark$	$\checkmark$			仑	₽
Oklahoma	90		<ul> <li>✓</li> </ul>			<u> </u>	企	₽
Oregon	58	$\checkmark$	$\checkmark$	<ul> <li>✓</li> </ul>		Ŷ	-₽	₽
Pennsylvania	174	$\checkmark$	<ul> <li>✓</li> </ul>	$\checkmark$		· 순	Ŷ	₽
Puerto Rico	4							
Rhode Island	11		$\checkmark$			Ŷ		
South Carolina	66						-₽	₽
South Dakota	23		$\checkmark$	$\checkmark$				仑
Tennessee	114	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$	-₽	₽
Texas	371						仑	₽
Utah	37	$\checkmark$	$\checkmark$	$\checkmark$		$\hat{\mathbf{t}}$	-₽	₽
Vermont	9					Ŷ	-₽	₽
Virginia	86					Ŷ		$\overline{\mathbf{v}}$
Washington	91	$\checkmark$	$\checkmark$			仑		
West Virginia	41	$\checkmark$	$\checkmark$	$\checkmark$		$\overline{\nabla}$	企	$\overline{\mathbf{v}}$
Wisconsin	99		$\checkmark$	$\checkmark$		· 순	<b>₽</b>	₽
Wyoming	26					ۍ ۲	<b>.</b>	<b>.</b>

↔ or ₽

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016

\*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.

## **NATIONAL FACTSHEETS**

Acute Care Hospitals



INFECTIONS

**PROGRESS** 

## NATIONAL

## **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**

#### ₽ 50% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.

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

### 0% NO CHANGE 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.

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 🕂 13% LOWER 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.

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

See pages 3-5 for additional procedures

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

### 17% LOWER COMPARED TO NAT'L BASELINE\*

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

↓ 2% LOWER COMPARED TO NAT'L BASELINE\*

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.

<mark>√</mark>8%

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE\*

#### 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.





LEGEND

2014 Nat'l SIR is significantly lower (better) than comparison group in column header Change in 2014 Nat'l SIR compared to group in column header is not statistically significant

2014 Nat'l SIR is significantly higher (worse) than comparison group in column header

## NATIONAL

#### **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
- Preventing HAIs: www.cdc.gov/hai

HAITYPE	# OF U.S. HOSPITALS That reported data to CDC'S NHSN, 2014 <sup>+</sup>	2014 NAT'L SIR vs. 2013 Nat'l SIR	2014 NAT'L SIR vs. Nat'l Baseline <sup>‡</sup>	2014 NAT'L SIR
CLABSI Nat'l Baseline: 2008	3,655	₽ 8%	50%	0.50
<b>CAUTI</b> Nat'l Baseline: 2009	3,791	5%	0%	1.00
<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	3,225	J 5%	17%	0.83
SSI, Colon Surgery Nat'l Baseline: 2008	3,377	<b>1</b> 5%	₽ 2%	0.98
MRSA Bacteremia Nat'l Baseline: 2011	3,949	4%	➡ 13%	0.87
<b>C. difficile Infections</b> Nat'l Baseline: 2011	3,994	4%	₽ 8%	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 DOES THE STANDARDIZED INFECTION RATIO (SIR) MEAN?

#### IF THE NATIONAL SIR IS:



There was an increase in the number of infections reported in the nation in 2014 compared to the national baseline.



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



There was a decrease in the number of infections reported in the nation in 2014 compared to the national baseline.



Page 2 of 5



## NATIONAL SSIs **BY PROCEDURE TYPE**

## **ACUTE CARE HOSPITALS**

Page 3 of 5

SURGICAL SITE INFECTIONS

**SSIS:** 10 SELECT PROCEDURES

+17% lower compared to nat'l 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 8% 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.

PROCEDURE CATEGORY	# HOSPITALS REPORTING	# PROCEDURES REPORTED	2014 NAT'L SIR VS. NAT'L BASELINE	2014 NAT'L SIR
Hip arthroplasty	1,928	291,628		0.78
Knee arthroplasty	1,907	417,937	41%	0.59
Colon surgery	3,377	300,526	- 2%	0.98
Rectal surgery	329	6,561	40%	0.60
Abdominal hysterectomy	3,225	307,648	<b>1</b> 7%	0.83
Vaginal hysterectomy	822	30,961	<b>↓</b> 14%	0.86
Coronary artery bypass graft	755	117,972	45%	0.55
Other cardiac surgery	379	44,713	58%	0.42
Peripheral vascular bypass surgery	295	8,755		0.70
Abdominal aortic aneurysm repair	273	2,121	72%	0.28
These 10 procedures combined	3,618	1,528,822	17%	0.83



2014 national SIR is significantly lower (better) than the 2008 SSI national baseline

than 2008 SSI national baseline

2014 national SIR is significantly higher (worse)



 Or 
 Or 
 Or 
 Or 
 Or 
 Or 
 Change in 2014 national SIR compared to the 2008 SSI national baseline is not
 to the 2008 SSI national baseline is not
 or
 Or

O
 Or
 Or statistically significant



\* Statistically significant



## **NATIONAL SSIs BY PROCEDURE TYPE**

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
- Preventing HAIs: www.cdc.gov/hai

SURGICAL SITE INFECTIONS, ACUTE CARE HOSPITALS

SURGICAL SITE INFECTIONS

### **SSIS:** ADDITIONAL PROCEDURES

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



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  $\checkmark$  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



## **NATIONAL SSIs BY PROCEDURE TYPE**

Page 5 of 5

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
- Preventing HAIs: www.cdc.gov/hai

SURGICAL SITE INFECTIONS, ACUTE CARE HOSPITALS

PROCEDURE CATEGORY		# HOSPITALS REPORTING	# PROCEDURES REPORTED	2014 NAT'L SIR VS. NAT'L BASELINE	2014 NAT'L SIR
16	Laminectomy	477	100,750	47%	0.53
17	Liver transplant	21	1,307	63%	0.37
18	Neck surgery	62	1,080	<b>↓</b> 32%	0.68
19	Kidney surgery	276	9,157	68%	0.32
20	Ovarian surgery	371	32,082	16%	1.16
21	Pacemaker surgery	328	24,347	☆ 5%	1.05
22	Prostate surgery	86	2,384	J 21%	0.79
23	Refusion of spine	300	5,740	<b>4</b> 39%	0.61
24	Small bowel surgery	396	22,058	40%	0.60
25	Spleen surgery	249	2,488	74%	0.26
26	Thoracic surgery	307	18,993	48%	0.52
27	Thyroid and/or parathyroid surgery	109	3,820	J- 71%	0.29
28	Ventricular shunt	105	7,399	43%	0.57
29	Abdominal surgery	408	56,754	<b>↓</b> 32%	0.68



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



 $\bigcirc$  or  $\checkmark$  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



#### 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)

<mark>√</mark>9%

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.



ASSOCIATED

INFECTIONS

**PROGRESS** 

LOWER COMPARED TO NAT'L BASELINE\*

#### 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**

11% LOWER 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.

Among the 482 U.S. LTACHs with enough data to calculate an SIR, 17% had an SIR significantly higher (worse) than 0.89, 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

▶ 14% LOWER 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.

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.



17



LEGEND

Љ 2014 Nat'l SIR is significantly lower (better) than the 2013 Nat'l Baseline A or ₽ Change in the 2014 Nat'l SIR compared to the 2013 Nat'l Baseline is

## NATIONAL

#### LTACHs AND IRFs

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

#### For additional information:

- 2014 HAI Progress Report: www.cdc.gov/hai/progress-report/
- NHSN: www.cdc.gov/nhsn
- Preventing HAIs: www.cdc.gov/hai

LONG-TERM ACUTE CARE HOSPITALS						
HAI TYPE	# OF U.S. LTACHs THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup>	2014 NAT'L SIR vs. Nat'l Baseline	2014 NAT'L SIR			
CLABSI Nat'l Baseline: 2013	501	9%	0.91			
CAUTI Nat'l Baseline: 2013	501	11%	0.89			

not statistically significant	INPATIENT REHABILITATION FACILITIES						
2014 Nat'l SIR is significantly higher (worse) than the 2013 Nat'l Baseline	HAI TYPE	# OF U.S. IRFs THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup>	2014 NAT'L SIR vs. Nat'l Baseline	2014 NAT'L SIR			
	CAUTI Nat'l Baseline: 2013	1,135	14%	0.86			

<sup>+</sup>The number of facilities that reported to NHSN and are included in the SIR calculation.

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

#### WHAT DOES THE STANDARDIZED INFECTION RATIO (SIR) MEAN?

#### **IF THE NATIONAL SIR IS:**



There was an increase in the number of infections reported in the nation in 2014 compared to the national baseline.



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



There was a decrease in the number of infections reported in the nation in 2014 compared to the national baseline.





## **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### ₽ 29% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

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**

► 13% LOWER 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	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 15% 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.

Alabama hospitals reported a significant decrease in MRSA bacteremia between 2013 and 2014.

**14**<sup>w</sup> 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.

## 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

## 10% LOWER COMPARED

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

0% 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

LOWER COMPARED

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

3%

-→ 33% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.







## 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.

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 Alabama: www.adph.org/hai/
- Alabama validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF ALABAMA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Alabama: 108	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	<b>CLABSI</b> Nat'l Baseline: 2008	70	合 6%	45%	29%	0.71	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	86	√ 7%	13%	13%	0.87	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	58	<b>√</b> 13%	<b>4</b> 34%	45%	0.55	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	70	<b>6</b> 3%	<b>1</b> 21%	<b>4</b> 22%	0.78	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	91	19%	<b>1</b> 34%	15%	1.15	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	89	습 <b>4</b> %	<b>V</b> 28%	4 33%	0.67	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 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.



## **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

HEALTHCARE

ASSOCIATED

INFECTIONS

#### ₽ 35% LOWER COMPARED TO NAT'L BASELINE\*

#### **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**

#### ↓ 10% LOWER 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	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 🕂 71% LOWER COMPARED

#### 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

J 36% LOWER COMPARED TO NAT'L BASELINE

- 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

LOWER COMPARED TO NAT'L BASELINE

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

**₽**6%

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

↓ 15% LOWER COMPARED TO NAT'L BASELINE

#### 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.







## ALASKA

#### **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 Alaska: www.epi.hss.state.ak.us/id/hai/default.htm
- Alaska validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND	HAI TYPE	# OF ALASKA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Alaska: 26	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	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	11	129%	合 31%	4 35%	0.65	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	11	14%	<b>√</b> 11%	10%	0.90	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	9	<b>☆ 42%</b>	<b>\[</b>	<b>小 36%</b>	0.64	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	9	10%	<b>√</b> 3%	✓ 6%	0.94	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	11	☆ 43%	66%	71%	0.29	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	11	<b>① 31%</b>	√ 8%	<b>5%</b> 15%	0.85	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 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.

## **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** 

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### LOWER COMPARED TO NAT'L BASELINE\*

#### 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

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** 

LOWER COMPARED 1% TO NAT'L BASELINE

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	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.

#### LOWER COMPARED MRSA Bacteremia **4**1%

#### 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.

SSI: Abdominal Hysterectomy

LOWER COMPARED **↓**13% TO NAT'L BASELINE

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 0% an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

SSI: Colon Surgery

**HIGHER COMPARED** TO NAT'I BASFLINF

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

Among the 39 hospitals in Arizona with enough data to calculate 159 an SIR, 15% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**-**7%

### C. difficile Infections

LOWER COMPARED **TO NAT'L BASELINE\*** 

#### 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



## ARIZONA

#### **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 Arizona: www.azdhs.gov/phs/oids/hai/
- Arizona validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF ARIZONA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Arizona: 92	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	<b>CLABSI</b> Nat'l Baseline: 2008	60	18%	分 7%	47%	0.53	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	60	<b>↓</b> 3%	<b>√</b> 2%	<b>↓</b> 1%	0.99	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	53	<b>小 25%</b>	合 5%	<b>小 13%</b>	0.87	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	56	<b>↓</b> 1%	<b>介 13%</b>	10%	1.10	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	68	<b>企 1%</b>	14%	<b>↓</b> 1%	0.99	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	68	7%	ᠿ<1%	7%	0.93	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 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.



ASSOCIATED

INFECTIONS

**PROGRESS** 

## ARKANSAS

## **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** 

### ↓ 44% LOWER COMPARED TO NAT'L BASELINE\*

#### **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.

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

➡ 16% LOWER 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.

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 12% 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.

	Arkansas hospitals reported no significant change in MRSA bacterem
_	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

#### 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

### 12% LOWER COMPARED

- 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

#### ↓ 16% LOWER COMPARED TO NAT'L BASELINE

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

0% 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

#### → 33% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.

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.




# ARKANSAS

### **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 Arkansas:

www.healthy.arkansas.gov/programsServices/epidemiology/Pages/HAI.aspx

Arkansas validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



2014 NAT'L SIR
0.50
1.00
0.83
0.98
0.87
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 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

### **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.

# **PROGRESS**

**SSIs** 



### **CLABSIs**

HEALTHCARE

ASSOCIATED

INFECTIONS

### LOWER COMPARED TO NAT'L BASELINE\*

### 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**

LOWER 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	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 -23% LOWER 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.

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.



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 4% calculate an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

SSI: Colon Surgery

**HIGHER COMPARED** TO NAT'L BASELINE

California hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.

☆6%

**1**9%

Among the 210 hospitals in California with enough data to 109 calculate an SIR, 10% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

### C. difficile Infections

**HIGHER COMPARED TO NAT'L BASELINE\*** 

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.





# CALIFORNIA

### **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 California: www.cdph.ca.gov/programs/hai/Pages/default.aspx
- California validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF CALIFORNIA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in California: 392	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	358	<b>↓</b> 1%	合 4%	49%	0.51	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	349	<b>☆ 2</b> %	9%	8%	0.92	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	314	<b>企 10%</b>	<b>√</b> 3%	₽ 20%	0.80	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	326	<b>1</b> 28%	10%	6%	1.06	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	369	<b>☆ 4</b> %	12%	23%	0.77	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	365	1%	<b>1</b> 20%	<b>1</b> 9%	1.09	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 CALIFORNIA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS? www.cdph.ca.gov/programs/hai

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





HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# COLORADO ACI

## **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**

#### ₽ 59% LOWER COMPARED TO NAT'L BASELINE\*

### **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

→ 32% LOWER 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.

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 451% LOWER 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.

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.

# 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

#### 

- 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.

### SSI: Colon Surgery

LOWER COMPARED

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.

### C. difficile Infections

3%

+ 11% HIGHER COMPARED TO NAT'L BASELINE\*

### 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.
- 8% 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.



\* Statistically significant

Page 1 of 2



# COLORADO

### **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 Colorado:

www.colorado.gov/pacific/cdphe/health-care-associated-infections-hai

Colorado validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF COLORADO HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Colorado: 85	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	<b>CLABSI</b> Nat'l Baseline: 2008	53	<b>16%</b>	17%	59%	0.41	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	52	20%	<b>J</b> 32%	<b>4</b> 32%	0.68	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	57	合 6%	介 19%	<b>₹</b> 2%	0.98	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	57	<b>小 10%</b>	<b>4</b> 21%	<b>4</b> 22%	0.78	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	60	♣ 33%	44%	51%	0.49	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	58	11%	<b>1</b> 21%	11%	1.11	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 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)

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



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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### LOWER COMPARED TO NAT'L BASELINE\* **↓**55%

#### 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**

✤ 57% 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	Connecticut hospitals reported no significant change in CAUT
	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 -35% LOWER 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.

	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.

# **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

#### J 15% LOWER COMPARED TO NAT'L BASELINE

- 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 0% calculate an SIR, 0% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

### SSI: Colon Surgery

**HIGHER COMPARED 40**% TO NAT'L BASELINE\*

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 30% calculate an SIR, 30% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**1**8%

### C. difficile Infections

**HIGHER COMPARED TO NAT'L BASELINE\*** 

#### 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.





# CONNECTICUT

### **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 Connecticut: www.ct.gov/dph/cwp/view.asp?a=3136&g=417318
- Connecticut validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF CONNECTICUT HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Connecticut: 41	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column header	<b>CLABSI</b> Nat'l Baseline: 2008	31	√ 20%	<b>10%</b>	55%	0.45	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	31	5%	<b>1</b> 58%	<b>1</b> 57%	1.57	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	29	<b>\[</b>	分 3%	<b>15%</b>	0.85	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	30	<b>☆ 24%</b>	44%	40%	1.40	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	32	√ 13%	<b>4</b> 26%	4 35%	0.65	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	32	☆ 5%	17%	1 8%	1.08	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 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.

Prevention efforts to reduce specific HAIs:

Multidrug-resistant infections (MRSA, C. difficile)

- Long-term care facilities
- Antibiotic stewardship





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** 

#### LOWER COMPARED TO NAT'L BASELINE\* 40%

#### CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

D.C

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** 

LOWER 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.

	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.

#### LOWER COMPARED MRSA Bacteremia **4**5%

### 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.

- 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.

## **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

#### LOWER COMPARED **↓** 10% TO NAT'L BASELINE

- 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 NAT'L BASELINE

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

₽6%

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

#### LOWER COMPARED **↓**11% TO NAT'I BASFLINF\*

#### 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



Љ 2014 state SIR is significantly lower (better)

than comparison group

in column header

A 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

# D.C

C. difficile Infections

Nat'l Baseline: 2011

Nat'l Baseline: 2011

### **ACUTE CARE HOSPITALS**

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to de and evaluate HAI prevent

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 D.C.: doh.dc.gov/page/healthcare-associated-infections
- D.C. validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

gencies knowledge to design, im nd evaluate HAI prevention effor	plement, ts.					
HAI TYPE	# OF D.C. HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in D.C.: 12	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
<b>CLABSI</b> Nat'l Baseline: 2008	8	√ 15%	<b>1</b> 22%	40%	0.60	0.50
<b>CAUTI</b> Nat'l Baseline: 2009	7	26%	<b>√</b> 2%	<b>↓</b> 2%	0.98	1.00
<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	7	J 22%	合 9%	√ 10%	0.90	0.83
SSI, Colon Surgery Nat'l Baseline: 2008	7	<b>企 34%</b>	√ 3%	<b>√</b> 6%	0.94	0.98
MRSA Bacteremia	8	41%	分 9%	5%	0.95	0.87

2014 state SIR cannot be calculated

> <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.

7

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

0.92

0.89

<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 D.C. DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

√ 4%

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

Prevention efforts to reduce specific HAIs:

☆ 2%

- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Multidrug-resistant infections (CRE)

- Long-term care facilities
- Hand hygiene

11%

Antibiotic stewardship





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** 

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### -45% 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.

- 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.

### **CAUTIS**

25% HIGHER COMPARED

#### 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.

### MRSA Bacteremia 🛧 1%

#### 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.

- 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.

## 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

#### 0% NO CHANGE COMPARED TO NAT'L BASELINE

- 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.

### 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.

**↑**6%

### C. difficile Infections

HIGHER COMPARED TO NAT'L BASELINE

#### 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.





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

# DELAWARE

### 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 Delaware: dhss.delaware.gov/dph/epi/haihomepage.html
- Delaware validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

HAI TYPE	# OF DELAWARE HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Delaware: 11	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
<b>CLABSI</b> Nat'l Baseline: 2008	8	√ 23%	<b>企 12%</b>	45%	0.55	0.50
<b>CAUTI</b> Nat'l Baseline: 2009	8	合 10%	<b>1</b> 25%	<b>1</b> 25%	1.25	1.00
<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	7	√ 13%	<b>1</b> 21%	0%	1.00	0.83
<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	7	<b>1</b> 90%	<b>1</b> 59%	<b>1</b> 55%	1.55	0.98
MRSA Bacteremia Nat'l Baseline: 2011	8	√ 16%	合 16%	合 1%	1.01	0.87
<b>C. difficile Infections</b> Nat'l Baseline: 2011	8	合 3%	15%	合 6%	1.06	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 DELAWARE DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

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.

Page 2 of 2



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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### LOWER COMPARED TO NAT'L BASELINE\*

#### 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** 

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**

LOWER 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	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 14%

### **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.

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

#### LOWER COMPARED TO NAT'L BASELINE\*

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 4% an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

### SSI: Colon Surgery

LOWER COMPARED **↓**26% TO NAT'L BASELINE\*

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

3%

LOWER COMPARED TO NAT'I BASFLINF\*

### 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.







# **FLORIDA**

### **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 Florida:

www.floridahealth.gov/diseases-and-conditions/health-care-associated-infections/index.html

Florida validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF FLORIDA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Florida: 221	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	<b>CLABSI</b> Nat'l Baseline: 2008	194	14%	合 3%	49%	0.51	0.50
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	<b>CAUTI</b> Nat'l Baseline: 2009	192	<b>☆ 2</b> %	6%	6%	0.94	1.00
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	167	<b>小 19%</b>	<b>12%</b>	27%	0.73	0.83
	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	184	<b>↓</b> 7%	<b>4</b> 26%	4 26%	0.74	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	191	√ 5%	<b>1</b> 22%	<b>企 4</b> %	1.04	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	191	<b>☆ 2%</b>	5%	12%	0.88	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 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.

Page 2 of 2



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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### LOWER COMPARED TO NAT'L BASELINE\* <u>↓36%</u>

### 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**

14% HIGHER COMPARED TO NAT'L BASELINE\*

**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.

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 15%

### 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.

# **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



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 13% an SIR, 13% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

### SSI: Colon Surgery

LOWER COMPARED **↓**18% TO NAT'L BASELINE\*

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.

**√**8%

### C. difficile Infections

2%

LOWER COMPARED **TO NAT'L BASELINE\*** 

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.



Page 1 of 2

\* Statistically significant



# GEORGIA

HAI TYPE

SSI, Abdominal Hysterectomy

### ACUTE CARE HOSPITALS

CLABSI

CAUTI

Nat'l Baseline: 2008

Nat'l Baseline: 2009

Nat'l Baseline: 2008

SSI, Colon Surgery Nat'l Baseline: 2008

MRSA Bacteremia

C. difficile Infections

Nat'l Baseline: 2011

Nat'l Baseline: 2011

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 Georgia: dph.georgia.gov/healthcare-associated-infection

Georgia validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf ent,						
# OF GEORGIA HOSPITALS THAT REPORTED ATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Georgia: 157	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 STATE SIR	2014 NAT'L SIR	
108	%و 🖓	<b>1</b> 30%	➡ 36%	0.64	0.50	
111	13%	<b>1</b> 4%	14%	1.14	1.00	
91	5%	<b>企 13%</b>	√ 7%	0.93	0.83	
96	<b>↓</b> 6%	16%	18%	0.82	0.98	

significantly lower (better) than comparison group in column header Change in 2014 state

LEGEND

2014 state SIR is

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

<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.

111

112

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

0.87

0.92

<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 GEORGIA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

21%

小 1%

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:

0%

12%

- Catheter-associated urinary tract infections
- Surgical site infection

- Multidrug-resistant infections (CRE)
- Long-term care facilities
- Hand hygiene

√> 5%

8%

- Antibiotic stewardship
- Targeted Assessment for Prevention (TAP) strategy

1.05

0.92







HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# **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** 

#### ₽ 77% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

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**

► 24% LOWER 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	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 + 29% LOWER 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.

- 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

### 18% LOWER COMPARED

- 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

#### → 31% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.





# HAWAII

### **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 Hawaii:

health.hawaii.gov/docd/dib/healthcare-associated-infections-hais/

Hawaii validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF HAWAII HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Hawaii: 26	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 Change in 2014 state SIR compared to group in column header is not statistically significant	<b>CLABSI</b> Nat'l Baseline: 2008	16	√ 8%	54%	77%	0.23	0.50
	<b>CAUTI</b> Nat'l Baseline: 2009	16	19%	<b>4</b> 24%	24%	0.76	1.00
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	13	<b>^</b> > 100%	<b>√</b> 1%	√ 18%	0.82	0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	14	<b>☆ 30%</b>	<b>介 35%</b>	<b>☆ 32%</b>	1.32	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	15	<b>☆ 21%</b>	<b>J</b> 19%	<b>小 29%</b>	0.71	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	14	<b>☆ 3</b> %	4 25%	4 31%	0.69	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 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



HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# **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** 

#### ₽ 65% LOWER COMPARED TO NAT'L BASELINE\*

#### **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** 

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.

### **CAUTIs**

₽ 27% LOWER 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	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.

### MRSA Bacteremia -65% LOWER 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.

- 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.

## SSIs



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

ho 5% Higher compared to nat'l baseline

- 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.

### SSI: Colon Surgery

- 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.

### C. difficile Infections

↓ 29% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.

Among the 14 hospitals in Idaho 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

Page 1 of 2



# IDAHO

### **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 Idaho:

healthandwelfare.idaho.gov/Health/DiseasesConditions/MethicillinresistantStaphylococcusaureus(MRSA)/tabid/203/Default.aspx

Idaho validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF IDAHO HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Idaho: 48	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	<b>CLABSI</b> Nat'l Baseline: 2008	15	☆ 34%	<b>√</b> 30%	65%	0.35	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	18	15%	27%	27%	0.73	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	14	<b>J</b> 18%	<b>企 27%</b>	<b>企 5%</b>	1.05	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	16	☆ 40%	<b>企 20%</b>	17%	1.17	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	21	<b>J</b> 14%	59%	65%	0.35	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	19	15%	<b>4</b> 23%	4 29%	0.71	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 IDAHO DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?



\* Statistically significant

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**

INFECTIONS

**PROGRESS** 

#### ↓ 57% LOWER COMPARED TO NAT'L BASELINE\*

### **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** 

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

➡ 13% LOWER 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.

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 4 29% LOWER 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.

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.

# 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

### 24% LOWER COMPARED

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

0% 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

#### ↓ 11% LOWER COMPARED TO NAT'L BASELINE\*

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

**10%** 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.

0%

### C. difficile Infections

NO CHANGE COMPARED TO NAT'L BASELINE

### 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.

- Illinois hospitals reported a significant increase in C. difficile infections between 2013 and 2014.
- 6% 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.









# **ILLINOIS**

### **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 Illinois:

www.dph.illinois.gov/topics-services/prevention-wellness/patient-safety-quality

Illinois validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF ILLINOIS HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Illinois: 201	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	150	%و گ	14%	57%	0.43	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	150	10%	14%	13%	0.87	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	134	<b>企 28%</b>	√ 8%	24%	0.76	0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	SSI, Colon Surgery Nat'l Baseline: 2008	137	<del></del> والله الم	<b>∲</b> 9%	4 11%	0.89	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	183	<b>☆ &lt; 1%</b>	19%	<b>4</b> 29%	0.71	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	183	11%	8%	0%	1.00	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 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.

Page 2 of 2



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**

#### ✓ 39% LOWER COMPARED TO NAT'L BASELINE\*

### **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

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.

### CAUTIS

3% 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.

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.

## MRSA Bacteremia - 23% LOWER 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.

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.

# 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

### 30% LOWER COMPARED

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

5% 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.

<u>↑</u>6%

**√**6%

SSI: Colon Surgery

#### HIGHER COMPARED TO NAT'L BASELINE

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.

### C. difficile Infections

6%

LOWER COMPARED TO NAT'L BASELINE\*

### 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.





# INDIANA

### **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 Indiana: www.in.gov/isdh/25479.htm
- Indiana validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND     HAI TYPE     # OF INDIANA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Indiana: 147     2014 STATE SIR VS.     2014 STATE SIR     2014 STATE SIR VS.	2014 NAT'L SIR
▼ I I I I I I I I I I I I I I I I I I I	
2014 state SIR is significantly lower (better) than comparison group in column header	0.50
∩ r ↓ Change in 2014 state               CAUTI Nat'l Baseline: 2009               106               ↓ 16%               ∴ 3%               1.03	1.00
SIR compared to group in column header is not statistically significantSSI, Abdominal Hysterectomy Nat'l Baseline: 200898Image: Compared to group Image: Compare	0.83
SSI, Colon Surgery 2014 state SIR is significantly higher (worse)     Nat'l Baseline: 2008     101     1/2     1%     1/2     6%     1.06	0.98
than comparison group in column header MRSA Bacteremia Nat'l Baseline: 2011 107 $\checkmark 6\%$ $\checkmark 12\%$ $\checkmark 23\%$ 0.77	0.87
C. difficile Infections       104       5%       2%       6%       0.94         2014 state SIR cannot be calculated       Nat'l Baseline: 2011       104	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 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 HAIs:

- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Surgical site infections

- Multidrug-resistant infections (CRE)
- Long-term care facilities
- Antibiotic stewardship



Page 1 of 2



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**

#### ₽54% LOWER COMPARED TO NAT'L BASELINE\*

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

**IOWA** 

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.

lowa 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**

↓ 17% LOWER 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	lowa 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 - 27% LOWER 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.

Iowa hospitals reported a significant increase in MRSA bacteremia between 2013 and 2014.

6% 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.

# 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

#### ↓ 10% LOWER COMPARED TO NAT'L BASELINE

- lowa 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

#### ☆ 6% HIGHER COMPARED TO NAT'L BASELINE

lowa 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.

₽5%

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE

#### 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.





# IOWA

### **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 Iowa: idph.iowa.gov/hai-prevention/information
- Iowa validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF IOWA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Iowa: 124	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	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	61	<b>\[</b>	√ 7%	54%	0.46	0.50
Change in 2014 state SIR compared to group in column header is not statistically significant	<b>CAUTI</b> Nat'l Baseline: 2009	81	₫ 7%	18%	17%	0.83	1.00
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	40	√ 4%	合 9%	√ 10%	0.90	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	42	للله وللله ولي	合 9%	<b>6%</b>	1.06	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	48	<b>6</b> 6%	<b>16%</b>	27%	0.73	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	59	18%	合 3%	5%	0.95	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 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



HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# **KANSAS** 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** 

#### ▶ 39% LOWER COMPARED TO NAT'L BASELINE\*

#### **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**

1% 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	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 45% LOWER 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.

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

0% 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

### 14% LOWER COMPARED

- Kansas 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

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.

**√**8%

### C. difficile Infections

22

LOWER COMPARED TO NAT'L BASELINE\*

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.



Page 1 of 2

\* Statistically significant



# **KANSAS**

### **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 Kansas: www.kdheks.gov/epi/hai.htm
- Kansas validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF KANSAS HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Kansas: 146	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	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	合 6%	<b>1</b> 24%	39%	0.61	0.50
Change in 2014 state SIR compared to group in column header is not statistically significant	<b>CAUTI</b> Nat'l Baseline: 2009	52	10%	1%	1%	1.01	1.00
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	43	107%	☆ 4%	<b>14%</b>	0.86	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	44	<b>☆ 3</b> %	46%	42%	1.42	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	67	<b>企 15%</b>	<b>4</b> 37%	45%	0.55	0.87
2014 state SIR cannot be calculated	C. difficile Infections Nat'l Baseline: 2011	66	<b>企 1%</b>	<b>√</b> < 1%	8%	0.92	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 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

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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ↓ 45% LOWER COMPARED TO NAT'L BASELINE\*

### **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.

**KENTUCKY** 

### **CAUTIs**

- 3% LOWER 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.

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 125% 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.

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.

# 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

#### ↓ 5% LOWER COMPARED TO NAT'L BASELINE

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

☆6%

**√**8%

**13%** 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.

SSI: Colon Surgery

HIGHER COMPARED TO NAT'L BASELINE

Kentucky hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.

**14**% 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.

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE\*

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.
- **14**% 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.



Page 1 of 2



# KENTUCKY

### **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 Kentucky: chfs.ky.gov/dph/epi/hai
- Kentucky validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

the second se							
LEGEND	HAI TYPE	# OF KENTUCKY HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Kentucky: 116	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	70	<b>J6%</b>	<b>企 12%</b>	45%	0.55	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	71	18%	<b>√</b> 4%	<b>↓</b> 3%	0.97	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	59	<b>☆ 4</b> %	15%	5%	0.95	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	66	<b>1</b> 36%	合 9%	☆ 6%	1.06	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	72	<b>企 1%</b>	45%	<b>1</b> 25%	1.25	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	72	<b>↓</b> 1%	<b>√</b> < 1%	₽ 8%	0.92	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 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 (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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ₽40% LOWER COMPARED TO NAT'L BASELINE\*

### **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

➡ 20% LOWER 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	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 🛧 8%

#### 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.

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

### 25% LOWER COMPARED

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

√5%

8% 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

#### LOWER COMPARED TO NAT'L BASELINE

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

3%

↓ 32% LOWER COMPARED TO NAT'L BASELINE\*

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.



Page 1 of 2

\* Statistically significant



# LOUISIANA

### **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 Louisiana: new.dhh.louisiana.gov/index.cfm/page/824
- Louisiana validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND	HAITYPE	# OF LOUISIANA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Louisiana: 160	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	<b>CLABSI</b> Nat'l Baseline: 2008	80	<b>J</b> 12%	<b>1</b> 22%	40%	0.60	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	79	<b>√</b> < 1%	20%	20%	0.80	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	73	√ 15%	√ 10%	<b>小 25%</b>	0.75	0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	74	<b>小 13%</b>	<b>√</b> 3%	5%	0.95	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	97	<b>小 10%</b>	<b>1</b> 25%	合 8%	1.08	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	96	10%	<b>4</b> 27%	<b>4</b> 32%	0.68	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 LOUISIANA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Prevention efforts to reduce specific HAIs:

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



HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# 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** 

#### ↓ 13% LOWER COMPARED TO NAT'L BASELINE

#### **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

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**

54% HIGHER COMPARED

#### 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	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 - 40% LOWER 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.

- 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.

## 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

#### ↓ 15% LOWER COMPARED TO NAT'L BASELINE

- 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.

**10%** 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

#### ↓ 41% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.



Page 1 of 2



# MAINE

### **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 Maine: www.maine.gov/dhhs/boh/ddc/hai/index.shtml
- Maine validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF MAINE HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup>	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column beader	CLABSI Nat'l Baseline: 2008	21	分 33%	76%	⊕ 13%	0.87	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	21	<b>J 10%</b>	<b>1</b> 54%	<b>1</b> 54%	1.54	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	19	<b>√</b> 3%	合 3%	√ 15%	0.85	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	22	10%	<b>4</b> 34%	ᠿ 31%	1.31	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	35	√ 17%	√ 31%	40%	0.60	0.87
2014 state SIR cannot be calculated	C. difficile Infections Nat'l Baseline: 2011	35	<b>☆ %</b>	<b>-</b> 36%	41%	0.59	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 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



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**

### ▶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



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

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

3%

#### 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.



\* Statistically significant

Page 1 of 2



# 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



Page 2 of 2

LEGEND 2014 state SIR is significantly lower (better) than comparison group in column header	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‡	2014 State Sir	2014 NAT'L SIR
	CLABSI Nat'l Baseline: 2008	48	<b>企 2%</b>	分 7%	47%	0.53	0.50
Change in 2014 state SIR compared to group in column header is not statistically significant	<b>CAUTI</b> Nat'l Baseline: 2009	48		<b>1</b> 36%	<b>1</b> 35%	1.35	1.00
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	41	<b>↓ 1%</b>	44%	18%	1.18	0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	45	15%	<b>√ 1</b> %	<b>↓</b> 4%	0.96	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	47	<b>1</b> 48%	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	6%	<b>1</b> %	<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



# MASSACHUSETTS

# ACUTE CARE HOSPITALS

Page 1 of 2



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**

#### ₽ 50% LOWER COMPARED TO NAT'L BASELINE\*

### **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

► 28% 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.

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 48% LOWER 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.

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.

## 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

### ↑ 11% HIGHER COMPARED TO NAT'L BASELINE

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

0% 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

↑ 18% HIGHER COMPARED TO NAT'L BASELINE\*

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

**14**% 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.

+4%

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE\*

### 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.




**PROGRESS** 

# MASSACHUSETTS

#### **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 Massachusetts:

www.mass.gov/eohhs/gov/departments/dph/programs/hcq/healthcare-quality/health-care-facilities/hospitals/

Massachusetts validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF MASSACHUSETTS HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Massachusetts: 85	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	<b>CLABSI</b> Nat'l Baseline: 2008	69	<b>₹</b> 2%	合 1%	50%	0.50	0.50
Change in 2014 state	CAUTI 69 Nat'l Baseline: 2009		18%	<b>1</b> 29%	<b>1</b> 28%	1.28	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	58	13%	<b>分 36%</b>	<b>企 11%</b>	1.11	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	62	<b>↓</b> 2%	<b>1</b> 22%	18%	1.18	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	73	<b>J</b> 14%	41%	48%	0.52	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	72	J~ 1%	<b>企 4</b> %	4%	0.96	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 MASSACHUSETTS DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Massachusetts 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





HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# MICHIGAN 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**

### GO% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

15% 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	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 + 3% LOWER 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.

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.

# 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



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

**15%** 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.

#### SSI: Colon Surgery

Michigan hospitals reported a significant increase in SSIs related to colon surgery between 2013 and 2014.

**18**% 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.

**₽**9%

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE\*

#### 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.



Page 1 of 2



# MICHIGAN

#### **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 Michigan: www.michigan.gov/hai
- Michigan validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF MICHIGAN HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Michigan: 149	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	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	98	<₽ 6%	19%	60%	0.40	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	102	<₽ 6%	16%	15%	1.15	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	86	<b>\[</b>	<b>1</b> 32%	合 8%	1.08	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	93	16%	<b>1</b> 26%	<b>1</b> 22%	1.22	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	102	<b>☆&lt;1</b> %	12%	<b>₹</b> 3%	0.97	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	101	∱ 2%	J 1%	9%	0.91	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 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



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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ₽ 55% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

24% 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.

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 4 63% LOWER 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.

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.

# 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

#### 

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

<u></u>4%

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

#### HIGHER COMPARED TO NAT'L BASELINE

Minnesota hospitals reported no significant change in SSIs related tocolon 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.

### C. difficile Infections

8%

#### ↓ 19% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.

**12%** 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.





# MINNESOTA

#### **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 Minnesota:
  - www.health.state.mn.us/divs/idepc/dtopics/hai/index.html
- Minnesota validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	ΗΑΙ ΤΥΡΕ	# OF MINNESOTA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Minnesota: 143	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	分 3%	∿9%	55%	0.45	0.50			
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	85	<b>↓</b> 1%	<b>1</b> 25%	<b>1</b> 24%	1.24	1.00			
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	50	<b>① 13%</b>	40%	15%	1.15	0.83			
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	49	☆ 5%	合 6%	<b>☆ 4</b> %	1.04	0.98			
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	54	<b>J6%</b>	➡ 58%	63%	0.37	0.87			
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	54	<b>∛</b> 3%	12%	19%	0.81	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 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



## **ACUTE CARE HOSPITALS**

\* Statistically significant

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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ↓ 24% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

7% 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	Mississippi hospitals reported no significant change in CAUTIs
	between 2013 and 2014.

**17%** 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 🕂 17% LOWER COMPARED

#### 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.

**13%** 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.

# 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

#### 10% LOWER COMPARED TO NAT'L BASELINE\*

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

Among the 13 hospitals in Mississippi 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

### UNTER COMPARED

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

Among the 21 hospitals in Mississippi 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

0%

### Uower compared to nat'l baseline\*

#### 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.



Page 1 of 2



# MISSISSIPPI

#### **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 Mississippi: www.msdh.ms.gov/HAI
- Mississippi validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF MISSISSIPPI HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Mississippi: 106	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	49	<b>∛</b> 2%	<b>1</b> 54%	<b>4</b> 24%	0.76	0.50
↔ or ↔ Change in 2014 state	CAUTI Nat'l Baseline: 2009	49	<b>↓</b> 1%	分 7%	☆ 7%	1.07	1.00
SIR compared to group in column header is not statistically significant	SSI, Abdominal Hysterectomy Nat'l Baseline: 2008	43	√ 40%	√ 36%	47%	0.53	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	43	<b>()</b> 23%	4 37%	4 38%	0.62	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	64	<b>4</b> 26%	√ 4%	17%	0.83	0.87
2014 state SIR cannot be calculated	C. difficile Infections Nat'l Baseline: 2011	63	<b>1</b> 24%	<b>4</b> 24%	4 30%	0.70	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 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

# **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ↓ 52% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

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

12% 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	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 4 25% LOWER 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.

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

5% 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.

#### SSI: Abdominal Hysterectomy

### 3% LOWER COMPARED

Page 1 of 2

- Missouri hospitals reported no significant change in SSIs related to abdominal hysterectomy surgery between 2013 and 2014.
- 6% 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.

#### SSI: Colon Surgery

## 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.

### C. difficile Infections

2%

\* Statistically significant

#### ↓ 12% LOWER COMPARED TO NAT'L BASELINE\*

LOWER COMPARED

TO NAT'L BASELINE\*

#### 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.









∿ 2014 state SI significantly lower

2014 state SI significantly higher than comparison

# MISSOURI

#### **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 Missouri: health.mo.gov/data/hai/
- Missouri validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF MISSOURI HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Missouri: 136	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
2014 state SIR is ignificantly lower (better) than comparison group in column header	CLABSI Nat'l Baseline: 2008	76	14%	<b>√</b> 3%	52%	0.48	0.50
or Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	79	6%	12%	12%	1.12	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	70	分 3%	<b>14%</b>	28%	0.72	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	72	<b>☆ 23%</b>	<b>12%</b>	4%	0.86	0.98
han comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	83	<₽ 6%	14%	25%	0.75	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	81	<b>☆ 4</b> %	5%	12%	0.88	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 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

# **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### UOWER 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.

MONTANA

- 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**

17% 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	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 + 20% LOWER 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.

- 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.

# 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

#### ↓ 55% LOWER COMPARED TO NAT'L BASELINE

- 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.

#### SSI: Colon Surgery

#### ↓ 18% LOWER COMPARED TO NAT'L BASELINE

- 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.

### C. difficile Infections

### ↓ 16% LOWER COMPARED

#### 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.
- **21%** 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.







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

# MONTANA

#### 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 Montana: dphhs.mt.gov/publichealth/cdepi/haiprevention
- Montana validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

HAI TYPE	# OF MONTANA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Montana: 63	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
CLABSI Nat'l Baseline: 2008	16	<b>14%</b>	合 13%	44%	0.56	0.50
<b>CAUTI</b> Nat'l Baseline: 2009	17	<b>1</b> 21%	17%	合 17%	0.83	1.00
<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	15	√ 55%	√ 46%	√ 55%	0.45	0.83
SSI, Colon Surgery Nat'l Baseline: 2008	16	<b>↓ 8</b> %	√ 16%	√ 18%	0.82	0.98
MRSA Bacteremia Nat'l Baseline: 2011	15	合 49%	√ <b>5 8</b> %	√ 20%	0.80	0.87
<b>C. difficile Infections</b> Nat'l Baseline: 2011	16	<b>↓</b> 1%	₽ 9%	16%	0.84	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 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





HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# NEBRASKA A

## **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.



#### ↓ 28% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

7% 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	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, 10% had an SIR significantly higher (worse) than 1.00, the value of the national SIR.

### MRSA Bacteremia 49% LOWER 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.

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

0% 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.

# 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

#### J 39% LOWER COMPARED TO NAT'L BASELINE

- 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

0%

### Uower compared to nat'l baseline∗

#### 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.





# NEBRASKA

#### **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 Nebraska: dhhs.ne.gov/Pages/default.aspx
- Nebraska validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND	ΗΑΙ ΤΥΡΕ	# OF NEBRASKA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Nebraska: 93	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	<b>CLABSI</b> Nat'l Baseline: 2008	27	合 1%	46%	28%	0.72	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	27	13%	<b>介 7</b> %	☆ 7%	1.07	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	21	<b>₹</b> 3%	<b>~ 26%</b>	<b>小 39%</b>	0.61	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	21	<b>小</b> 7%	<b>企 23%</b>	<b>☆ 20%</b>	1.20	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	28	<b>小 20</b> %	42%	49%	0.51	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	30	11%	<b>4</b> 24%		0.70	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 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



## **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### LOWER COMPARED TO NAT'L BASELINE\*

#### 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**

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.

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 18%

#### **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.

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.

# **SSIs**



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

#### LOWER COMPARED TO NAT'L BASELINE

- 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

**HIGHER COMPARED** 40%TO NAT'L BASELINE\*

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 20% calculate an SIR, 20% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

**1**8%

### C. difficile Infections

**HIGHER COMPARED TO NAT'L BASELINE\*** 

#### 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.

\* Statistically significant

- 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.



Page 1 of 2



# NEVADA

#### **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 Nevada:

dpbh.nv.gov/Programs/HAI/Healthcare\_Associated\_Infection\_Prevention\_and\_Control\_(HAI)-Home/

Nevada validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF NEVADA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Nevada: 47	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column header	<b>CLABSI</b> Nat'l Baseline: 2008	24	<b>₹</b> 7%	18%	42%	0.58	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	24	5%	<b>☆ 2</b> %	<b>☆ 2</b> %	1.02	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	20	<b>☆ &lt; 1%</b>	√ 6%	<b>J</b> 22%	0.78	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	22	<b>☆ 31%</b>	44%	40%	1.40	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	23	43%	<b>企 24</b> %	合 8%	1.08	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	23	5%	17%	8%	1.08	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 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.

Page 2 of 2





# **NEW HAMPSHIRE**

# **ACUTE CARE HOSPITALS**

Page 1 of 2



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**

#### ▶45% LOWER COMPARED TO NAT'L BASELINE\*

#### **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**

3% 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.

New Hampshire hospitals reported no significant chang
 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 - 45% LOWER 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.

- 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.

## 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 Hampshire 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

#### ↓ 12% LOWER COMPARED TO NAT'L BASELINE

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.

**↓**1%

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE

#### 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.





# NEW HAMPSHIRE

#### **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 New Hampshire: www.dhhs.nh.gov/dphs/cdcs/hai/index.htm
- New Hampshire validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF NEW HAMPSHIRE HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in New Hampshire: 28	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State sir	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column header	<b>CLABSI</b> Nat'l Baseline: 2008	24	☆ 60%	合 11%	45%	0.55	0.50
<pre></pre>	<b>CAUTI</b> Nat'l Baseline: 2009	24	13%	☆ 3%	☆ 3%	1.03	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	23	54%	√ 58%	65%	0.35	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	25	<b>企 26%</b>	√ 10%	<b>12%</b>	0.88	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	21	10%	4 36%	45%	0.55	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	21	<b>22%</b>	合 8%	<b>√</b> 1%	0.99	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 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:

- 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



**NEW JERSEY** 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**

#### LOWER COMPARED TO NAT'L BASELINE\* <u>↓</u>41%

#### 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 15% calculate an SIR, 15% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### **CAUTIS**

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	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 16%

#### **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.

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 13% calculate an SIR, 13% had an SIR significantly higher (worse) than 0.87, the value of the national SIR.

## **SSIs**



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

#### **HIGHER COMPARED** ♠ 4% TO NAT'L BASELINE

- 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 10% calculate an SIR, 10% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

#### SSI: Colon Surgery

LOWER COMPARED ↓ 23% TO NAT'L BASELINE\*

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.

**₽**3%

### C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE

#### 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.

8%

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.







 $\overline{\mathbf{v}}$ 2014 state SI significantly lower

2014 state SI significantly higher than comparison

# **NEW JERSEY**

#### **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 New Jersey: www.state.nj.us/health/hais/index.shtml
- New Jersey validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND	HAI TYPE	# OF NEW JERSEY HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in New Jersey: 81	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	<b>CLABSI</b> Nat'l Baseline: 2008	72	<b>∛</b> 4%	19%	41%	0.59	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	72	6%	<b>1</b> 8%	8%	1.08	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	66	19%	<b>企 27%</b>	<b>☆ 4</b> %	1.04	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	71	<b>小 10%</b>	<b>4</b> 21%	4 23%	0.77	0.98
han comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	72	5%	<b>1</b> 23%	合 %	1.06	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	72	<b>∛</b> 3%	<b>1</b> 5%	<b>√</b> 3%	0.97	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 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



## **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**

#### ▶45% LOWER COMPARED TO NAT'L BASELINE\*

#### **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.

**18**% 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

22% 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.

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 🕹 58% LOWER 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.

- 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.

## 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 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.

#### SSI: Colon Surgery

### HIGHER COMPARED TO NAT'L BASELINE\*

- 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.

### C. difficile Infections

### HIGHER COMPARED TO NAT'L BASELINE\* TO NAT'L BASELINE\* ■

#### 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.
- **16%** 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.





HEALTHCARE

ASSOCIATED



# **NEW MEXICO**

#### **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 New Mexico: archive.nmhealth.org/HAI/
- New Mexico validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF NEW MEXICO HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in New Mexico: 49	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	<b>CLABSI</b> Nat'l Baseline: 2008	34	<b>企 12%</b>	<b>企 12%</b>	45%	0.55	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	34	48%	<b>1</b> 22%	<b>1</b> 22%	1.22	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	26		<b>企 44%</b>	<b>① 19%</b>	1.19	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	26	<b>1</b> 99%	<b>1</b> 52%	48%	1.48	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	37	<b>① 35%</b>	52%	58%	0.42	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	39	11%	<b>1</b> 23%	14%	1.14	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 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:

- 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

#### NEW YORK **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### LOWER COMPARED TO NAT'L BASELINE\* **↓**50%

#### 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**

15% 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.

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 -7%

#### LOWER 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.

- 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 11% calculate an SIR, 11% 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

#### LOWER COMPARED ₽3% TO NAT'L BASELINE

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 4% calculate an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

#### SSI: Colon Surgery

**HIGHER COMPARED** TO NAT'L BASELINE\*

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.

### C. difficile Infections

12

LOWER COMPARED **↓**11% TO NAT'I BASFLINF\*

#### 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.





Page 1 of 2

\* Statistically significant



∿ 2014 state SI significantly lower than comparison

A or √ Change in 2014 SIR compared to in column heade statistically sign

2014 state SI significantly higher than comparison column head

2014 state SIR ( be calculate

# NEW YORK

#### **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 New York:

www.health.ny.gov/statistics/facilities/hospital/hospital\_acquired\_infections/

New York validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF NEW YORK HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in New York: 217	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 hificantly lower (better) an comparison group in column header	CLABSI Nat'l Baseline: 2008	168	12%	ᠿ< 1%	50%	0.50	0.50
or U	<b>CAUTI</b> Nat'l Baseline: 2009	170	₽ 8%	16%	15%	1.15	1.00
R compared to group column header is not atistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	152	4 24%	<b>1</b> 20%	∽ 3%	0.97	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	166	<b>∛ 8%</b>	<b>1</b> 29%	<b>1</b> 24%	1.24	0.98
n comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	179		<b>1</b> 8%	7%	0.93	0.87
014 state SIR cannot be calculated	C. difficile Infections Nat'l Baseline: 2011	182	6%	4%	11%	0.89	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 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:

- 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
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

# NORTH CAROLINA

# **ACUTE CARE HOSPITALS**

HEALTHCARE ASSOCIATED INFECTIONS PROGRESS

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**

#### ₽ 58% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

22% 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	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 🕂 14% LOWER COMPARED

#### 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.

SSI: Abdominal Hysterectomy

#### ↓ 9% LOWER COMPARED TO NAT'L BASELINE

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

8% 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.

#### SSI: Colon Surgery

#### ↓ 16% LOWER COMPARED TO NAT'L BASELINE\*

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

2%

↓ 12% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.





# NORTH CAROLINA

#### **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 North Carolina: epi.publichealth.nc.gov/cd/diseases/hai.html
- North Carolina validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF NORTH CAROLINA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in North Carolina: 129	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	98	21%	16%	58%	0.42	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	99	☆ 7%	<b>1</b> 22%	<b>1</b> 22%	1.22	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	88	<b>\[</b>	合 11%	%و 🖓	0.91	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	94	<b>√</b> 8%	15%	16%	0.84	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	105	<b>\$</b> 10%	<b>↓</b> 1%	14%	0.86	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	104	<b>1</b> 9%	5%	12%	0.88	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 NORTH CAROLINA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

North Carolina 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)

- Long-term care facilities
- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy

For prevention effort details, see glossary.

Page 2 of 2

# **NORTH DAKOTA**

# **ACUTE CARE HOSPITALS**

Page 1 of 2



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**

### G1% LOWER COMPARED TO NAT'L BASELINE\*

#### **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**

26% LOWER 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	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 + 31% LOWER 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.

- 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.

## 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

### → 31% HIGHER COMPARED TO NAT'L BASELINE

- 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.

<u>↑</u> 5%

#### SSI: Colon Surgery

#### HIGHER COMPARED TO NAT'L BASELINE

- 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.

### C. difficile Infections

#### ↓ 10% LOWER COMPARED TO NAT'L BASELINE

#### 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.





# NORTH DAKOTA

#### **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 North Dakota: www.ndhealth.gov/disease/hai/
- North Dakota validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF NORTH DAKOTA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in North Dakota: 47	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	8	分 3%	<b>1</b> 21%	61%	0.39	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	9	<b>√</b> < 1%	26%	26%	0.74	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	6	J7%		1%	1.31	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	6	J6%	<b>企 7%</b>	☆ 5%	1.05	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	12	<b>5</b> 42%	<b>~ 20%</b>	<b>J</b> 31%	0.69	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	11		<b>√</b> 2%	<ul><li>↓ 10%</li></ul>	0.90	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.

THIS REPORT IS BASED ON 2014 DATA, PUBLISHED IN 2016

<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 NORTH DAKOTA 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, other)
- Long-term care facilities

- Hand hygiene
- Antibiotic stewardship
- Healthcare personnel influenza vaccination

# OHIO

## **ACUTE CARE HOSPITALS**

Page 1 of 2



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**

#### LOWER COMPARED TO NAT'L BASELINE\* **↓**60%

#### 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**

13% lower 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	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 -10% LOWER 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.

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.

SSI: Abdominal Hysterectomy

LOWER COMPARED **TO NAT'L BASELINE\*** 

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 119 an SIR, 11% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

SSI: Colon Surgery

LOWER COMPARED ↓ 19% TO NAT'L BASELINE\*

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.

**√**8%

### C. difficile Infections

LOWER COMPARED **TO NAT'L BASELINE\*** 

#### 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.

3%

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.



\* Statistically significant



# OHIO

#### **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 Ohio:
  - www.odh.ohio.gov/odhprograms/bid/hai/haimain.aspx
- Ohio validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	ΗΑΙ ΤΥΡΕ	# OF OHIO HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Ohio: 186	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	<b>CLABSI</b> Nat'l Baseline: 2008	137	<b>∛</b> 4%	₽ 20%	60%	0.40	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	136	5%	13%	13%	0.87	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	128	√ 3%	<b>4</b> 26%	38%	0.62	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	129	<b>小 12%</b>	18%	19%	0.81	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	140	<b>企 7%</b>	企 4%	10%	0.90	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	139	0%	- ☆< 1%	₿%	0.92	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 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



## **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### LOWER COMPARED TO NAT'L BASELINE\* **↓**57%

#### 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 11% calculate an SIR, 11% had an SIR significantly higher (worse) than 0.50, the value of the national SIR.

### **CAUTIS**

15% LOWER 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	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 18%

#### **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.

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.

# **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

#### 46% LOWER COMPARED **TO NAT'L BASELINE\***

- Oklahoma 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 **↓** 15% TO NAT'I BASELINE

Oklahoma hospitals reported a significant decrease in SSIs related to colon 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.

**√**6%

### C. difficile Infections

3%

LOWER COMPARED **TO NAT'L BASELINE\*** 

#### 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.



\* Statistically significant



# OKLAHOMA

#### **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 Oklahoma:

www.ok.gov/health/Protective\_Health/Medical\_Facilities\_Service/Quality\_Initiatives/Healthcare-Associated\_Infections\_Prevention\_Program/

Oklahoma validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF OKLAHOMA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Oklahoma: 143	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	<b>CLABSI</b> Nat'l Baseline: 2008	58	16%	13%	57%	0.43	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	62	10%	16%	15%	0.85	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	63	<b>企 7</b> %	<b>小 35%</b>	46%	0.54	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	57	<b>4</b> 27%	<b>- 13%</b>	<b>小 15%</b>	0.85	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	91	<b>企 2%</b>	<b>1</b> 24%	合 8%	1.08	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	90	<b>☆ 4</b> %	<b>☆ 2%</b>	6%	0.94	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 OKLAHOMA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

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

# OREGON

## **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ↓ 52% LOWER COMPARED TO NAT'L BASELINE\*

#### **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.

6% 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

5% LOWER COMPARED

#### 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 - 35% LOWER 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.

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

0% 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.

# 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

#### ↓ 9% LOWER COMPARED TO NAT'L BASELINE

- Oregon 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

## ↓ 16% LOWER COMPARED

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.

### C. difficile Infections

↓ 27% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.







# OREGON

#### **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 Oregon:

public.health.oregon.gov/DiseasesConditions/CommunicableDisease/HAI/Pages/index.aspx

Oregon validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF OREGON HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Oregon: 63	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	<b>CLABSI</b> Nat'l Baseline: 2008	50	40%	√ 3%	52%	0.48	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	51	17%	5%	5%	0.95	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	44	<b>\$</b> 20%	<b>企 10%</b>	%و 🖓	0.91	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	48	10%	<b>14%</b>	<b>小 16%</b>	0.84	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	57	合 %	<b>4</b> 26%	4 35%	0.65	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	58	<b>↓</b> 4%	<b>4</b> 22%	4 27%	0.73	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 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





# PENNSYLVANIA

## **ACUTE CARE HOSPITALS**

Page 1 of 2



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**

### ₽ 59% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

3% LOWER COMPARED

#### 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	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 - 21% LOWER 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.

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.

# SSIs



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.

₽8%

**√**8%

SSI: Colon Surgery

LOWER COMPARED TO NAT'L BASELINE

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.

### C. difficile Infections

8%

LOWER COMPARED TO NAT'L BASELINE\*

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.
- 5% 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.





# PENNSYLVANIA

#### **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 Pennsylvania:
- http://www.health.pa.gov/facilities/Consumers/Healthcare%20Associated%20Infection%20(HAI)/Pages/default.aspx#.Vo2COHZOncv
- Pennsylvania validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF PENNSYLVANIA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Pennsylvania: 206	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	<b>CLABSI</b> Nat'l Baseline: 2008	176	17%	19%	59%	0.41	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	183	<b>↓</b> 3%	<b>√</b> 3%	<b>↓</b> 3%	0.97	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	143	↓ 1%	<b>介 13%</b>	√ 7%	0.93	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	158	☆ 3%	∲ 6%	<b>∛</b> 8%	0.92	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	175	13%	10%	<b>4</b> 21%	0.79	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	174	<b>1%</b>	<b>√</b> < 1%	♣ 8%	0.92	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 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





## **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** 

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ↓ 41% LOWER COMPARED TO NAT'L BASELINE\*

#### 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

↓48% LOWER 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.

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**

#### NOT ENOUGH DATA 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.

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

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

#### NOT ENOUGH DATA COMPARED TO NAT'L BASELINE

#### 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.




# **PUERTO RICO**

#### **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 Puerto Rico: www.salud.gov.pr/Pages/Home.aspx
- Puerto Rico validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF PUERTO RICO HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Puerto Rico: 57	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	16	√ 25%	18%	41%	0.59	0.50
<pre></pre>	<b>CAUTI</b> Nat'l Baseline: 2009	17	4 34%	48%	48%	0.52	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	0					0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	0					0.98
	MRSA Bacteremia Nat'l Baseline: 2011	2					0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	4					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.

<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 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.

Page 2 of 2

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



# ACUTE CARE HOSPITALS

Page 1 of 2



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**

#### ▶39% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

☆ 37% 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.

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 - 35% LOWER 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.

- 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.

#### SSI: Abdominal Hysterectomy

### 18% LOWER COMPARED

- 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.

### SSI: Colon Surgery

#### 

- 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.
- 7% 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.





# **RHODE ISLAND**

### **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 Rhode Island: www.health.ri.gov/diseases/healthcareacquiredinfections/
- Rhode Island validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF RHODE ISLAND HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Rhode Island: 14	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	11	للا ي	<b>企 24</b> %	₽ 39%	0.61	0.50	
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	11	☆ 8%	<b>1</b> 37%	<b>1</b> 37%	1.37	1.00	
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	11	<b>① 21%</b>	<b>↓ 1%</b>	<b>J</b> 18%	0.82	0.83	
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	11	<b>小 14%</b>	17%	14%	1.14	0.98	
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	11	J 28%	√ 25%	4 35%	0.65	0.87	
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	11	J%	<b>1</b> 27%	17%	1.17	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 RHODE ISLAND 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)
- Long-term care facilities
- Hand hygiene

- Antibiotic stewardship
- Healthcare personnel influenza vaccination

# SOUTH CAROLINA

# **ACUTE CARE HOSPITALS**

HEALTHCARE ASSOCIATED INFECTIONS PROGRESS

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**

#### ↓ 51% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

7% HIGHER COMPARED TO NAT'L BASELINE

LOWER 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.

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 🕹 1%

### 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 MRS/
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.

# 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

HIGHER COMPARED TO NAT'L BASELINE

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

<u>↑</u> 4%

7% 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.

### SSI: Colon Surgery

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

**16%** 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.

### C. difficile Infections

↓ 15% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.





# SOUTH CAROLINA

#### 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 South Carolina: www.scdhec.gov/hai/
- South Carolina validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF SOUTH CAROLINA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in South Carolina: 75	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	67	14%	J~ 1%	51%	0.49	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	65	17%	☆ 7%	☆ 7%	1.07	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	52	<b>企 25%</b>	<b>企 26%</b>	<b>☆ 4</b> %	1.04	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	56	16%	<b>① 13%</b>	10%	1.10	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	68	合 %	14%	√ 1%	0.99	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	66	14%	<b>-</b> 9%	15%	0.85	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 SOUTH CAROLINA DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

South Carolina 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)
- Healthcare personnel influenza vaccination



HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# SOUTH DAKOTA

# **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**

### ₽ 75% LOWER COMPARED TO NAT'L BASELINE\*

#### **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.

## **CAUTIs**

# 16% 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	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.

# MRSA Bacteremia 47% LOWER 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.

- 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.

# 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

## J 31% LOWER COMPARED TO NAT'L BASELINE

- 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.

### SSI: Colon Surgery



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

**↑** 4%

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

HIGHER COMPARED TO NAT'L BASELINE

#### 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.

**13%** 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.



Page 1 of 2



∿ 2014 state SI significantly lower

2014 state SI significantly higher than comparison

# SOUTH DAKOTA

#### **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 South Dakota: doh.sd.gov/diseases/hai/
- South Dakota validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF SOUTH DAKOTA Hospitals that reported Data to CDC's NHSN, 2014 <sup>+</sup>	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 STATE SIR	2014 NAT'L SIR
2014 state SIR is		Total Hospitals in South Dakota: 63					
than comparison group in column header	CLABSI Nat'l Baseline: 2008	13	<u> </u>	49%	75%	0.25	0.50
or 🖓 Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	18	16%	16%	16%	0.84	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	15	<ul><li>✓ 56%</li></ul>	<b>J</b> 16%	<b>()</b> 31%	0.69	0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	16	<b>☆ 48</b> %	45%	41%	1.41	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	23	<b>J</b> 27%	<b>~ 39%</b>	47%	0.53	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	23	44%	12%	<b>☆ 4</b> %	1.04	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 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



# **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ₽52% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

 ↑ 1% 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.

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 1%

#### 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.

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

#### ↓ 20% LOWER COMPARED TO NAT'L BASELINE

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

₽9%

6% 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

LOWER COMPARED TO NAT'L BASELINE

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

6%

W LOWER COMPARED

#### 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

Page 1 of 2



2014 state S significantly lowe than compariso in column he

Change in 201. SIR compared to in column head statistically sign

2014 state S significantly higher than comparison column hea

> 2014 state SIR be calculat

# 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. 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 Tennessee: tn.gov/health/topic/hai
- Tennessee validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

<u>)</u>	HAI TYPE	# OF TENNESSEE HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Tennessee: 131	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
IR is r (better) n group ader	CLABSI Nat'l Baseline: 2008	105	0%	√ 4%	52%	0.48	0.50
4 state	<b>CAUTI</b> Nat'l Baseline: 2009	106	17%	合 1%	<b>① 1%</b>	1.01	1.00
o group er is not nificant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	84	<b>∿ 9%</b>	√ 3%	<b>小 20%</b>	0.80	0.83
IR is	SSI, Colon Surgery Nat'l Baseline: 2008	92	<b>↓</b> 2%	√ 7%	<del>ل</del> هو ب	0.91	0.98
r (worse) group in der	MRSA Bacteremia Nat'l Baseline: 2011	114	<b>∛ 8%</b>	<b>1</b> 7%	合 1%	1.01	0.87
cannot ed	<b>C. difficile Infections</b> Nat'l Baseline: 2011	114	∱ <u>3%</u>	16%	4 22%	0.78	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 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:

- 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
- Antibiotic stewardship
- Healthcare personnel influenza vaccination
- Targeted Assessment for Prevention (TAP) strategy



HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# **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** 

#### LOWER COMPARED TO NAT'L BASELINE\* +53%

#### CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

TEXAS

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.

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**

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.

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

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 -17% LOWER 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.

	Texas hospitals reported no significant change in MRSA bacteremia
_	between 2013 and 2014.

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.

SSI: Abdominal Hysterectomy



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 4% an SIR, 4% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.

### SSI: Colon Surgery

LOWER COMPARED **15**% TO NAT'L BASELINE\*

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.

**√**8%

### C. difficile Infections

LOWER COMPARED **TO NAT'L BASELINE\*** 

#### 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.

3%

Texas hospitals reported a significant increase in C. difficile infections between 2013 and 2014.

Among the 296 hospitals in Texas with enough data 11% to calculate an SIR, 11% had an SIR significantly higher (worse) than 0.92, the value of the national SIR.





# TEXAS

#### **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 Texas: www.texashai.org
- Texas validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND     HAI TYPE     # OF TEXAS HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Texas: 477     2014 STATE SIR vs. 2013 State SIR     2014 STATE SIR vs. 2014 Nat'l SIR     2014 STATE SIR vs. 2014 Nat'l SIR     2014 STATE SIR vs. 2014 Nat'l SIR     2014 STATE SIR vs. Nat'l Baseline <sup>‡</sup> 2014 STATE SIR STATE SIR	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column header	0.50
	1.00
SIR compared to group in column header is not statistically significantSSI, Abdominal Hysterectomy Nat'l Baseline: 2008288Image: Compared to group 13%Image: Compared to group Image: Compared to group 	0.83
SSI, Colon Surgery 2014 state SIR is significantly higher (worse)     SSI, Colon Surgery Nat'l Baseline: 2008     280     10%     14%     15%     0.85	0.98
than comparison group in column header MRSA Bacteremia Nat'l Baseline: 2011 372 $\sqrt{4\%}$ $\sqrt{4\%}$ $\sqrt{17\%}$ 0.83	0.87
2014 state SIR cannot be calculated       C. difficile Infections Nat'l Baseline: 2011       371       16%       1%       8%       0.92	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 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



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**

#### ↓ 55% LOWER COMPARED TO NAT'L BASELINE\*

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

UTAH

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

55% 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.

	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 - 37% LOWER 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.

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

### W LOWER COMPARED

- 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.

**17%** 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 -17%

LOWER COMPARED TO NAT'L BASELINE\*

#### 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.





HEALTHCARE

ASSOCIATED



 $\overline{\mathbf{U}}$ 2014 state 3 significantly lowe

2014 state \$ significantly high than comparisor column hea

# UTAH

#### **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 Utah: health.utah.gov/epi/diseases/HAI/
- Utah validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



Page 2 of 2

LEGEND	HAI TYPE	# OF UTAH HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Utah: 51	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State Sir	2014 NAT'L SIR
2014 state SIR is significantly lower (better) than comparison group in column header	<b>CLABSI</b> Nat'l Baseline: 2008	27	<b>4</b> 32%	%و گ	55%	0.45	0.50
or 🗸 Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	28	<ul><li>✓ 5%</li></ul>	<b>1</b> 56%	<b>1</b> 55%	1.55	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	32	√ 46%	<b>J</b> 29%	42%	0.58	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	32	16%	<b>1</b> 39%	<b>1</b> 35%	1.35	0.98
column header	MRSA Bacteremia Nat'l Baseline: 2011	37	合 4%	<b>V</b> 28%	<b>4</b> 37%	0.63	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	37	<b>企 10%</b>	10%	17%	0.83	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 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

# **VERMONT** 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**

#### ↓ 55% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

► 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	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 -79% Lower 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.

- 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

#### 

- Vermont 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

# HIGHER COMPARED TO NAT'L BASELINE\*

- Vermont 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

## ↓ 45% LOWER COMPARED TO NAT'L BASELINE\*

#### 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.







# VERMONT

#### **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 Vermont: www.healthvermont.gov/prevent/HAI/index.aspx
- Vermont validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF VERMONT HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Vermont: 16	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	7	ᠿ 79%	%و 🖓	55%	0.45	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	5		<b>1</b> 35%	<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	12	<b>企102%</b>	<b>介 58%</b>	<b>分 30%</b>	1.30	0.83
2014 state SIR is	SSI, Colon Surgery Nat'l Baseline: 2008	6	<b>小 16%</b>	<b>1</b> 94%	<b>1</b> 89%	1.89	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	10	<b>小 23%</b>	76%	79%	0.21	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	9	<b>↓</b> 1%	40%	45%	0.55	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 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



# **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ↓ 61% LOWER COMPARED TO NAT'L BASELINE\*

#### **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

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**

3% LOWER COMPARED

#### 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	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 🕂 16% LOWER 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.

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

#### ↓ 19% LOWER COMPARED TO NAT'L BASELINE

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

HIGHER COMPARED TO NAT'L BASELINE

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

<u>↑</u>2%

**↓**1%

Ommon 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

LOWER COMPARED TO NAT'L BASELINE

#### 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.





# VIRGINIA

#### **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 Virginia: www.vdh.virginia.gov/Epidemiology/Surveillance/HAI/
- Virginia validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF VIRGINIA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Virginia: 106	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	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	83	22%	<b>1</b> 21%	<b>61%</b>	0.39	0.50
<pre></pre>	<b>CAUTI</b> Nat'l Baseline: 2009	82	<b>↓</b> 7%	<b>√</b> 3%	<b>↓</b> 3%	0.97	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	71	<b>☆ &lt; 1</b> %	<b>√</b> 2%	<b>()</b> 19%	0.81	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	77	12%	<b>企 5%</b>	<b>☆ 2%</b>	1.02	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	86	✓ 5%	√ 3%	16%	0.84	0.87
2014 state SIR cannot be calculated	<b>C. difficile Infections</b> Nat'l Baseline: 2011	86	<b>☆ 2</b> %	7%	<b>↓</b> 1%	0.99	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 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





HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

# WASHINGTON

# **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.

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

➡ 11% LOWER 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.

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 4 16% LOWER 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.

Washington hospitals reported no significant change in MRS
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.

# SSIs



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



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

₽6%

0%

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

LOWER COMPARED TO NAT'L BASELINE

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

**10%** 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.

## C. difficile Infections

NO CHANGE COMPARED TO NAT'L BASELINE

#### 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.

**13%** 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.



Page 1 of 2

\* Statistically significant



# WASHINGTON

### **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 Washington:

www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HealthcareAssociatedInfections

Washington validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

LEGEND	HAI TYPE	# OF WASHINGTON HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Washington: 105	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	<b>CLABSI</b> Nat'l Baseline: 2008	86	5%	合 3%	49%	0.51	0.50
Change in 2014 state	<b>CAUTI</b> Nat'l Baseline: 2009	78	11%	11%	11%	0.89	1.00
SIR compared to group in column header is not statistically significant	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	68	<b>₹</b> 3%	√ 5%	<b>小 22%</b>	0.78	0.83
2014 state SIR is	<b>SSI, Colon Surgery</b> Nat'l Baseline: 2008	67	☆ 3%	<b>↓</b> 3%	∲ 6%	0.94	0.98
than comparison group in column header	MRSA Bacteremia Nat'l Baseline: 2011	65	<b>企 7%</b>	√ 3%	<b>小 16%</b>	0.84	0.87
2014 state SIR cannot be calculated	C. difficile Infections Nat'l Baseline: 2011	91	<b>☆ 4</b> %	<b>1</b> 9%	0%	1.00	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 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



# WEST VIRGINIA

# **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

### G2% LOWER COMPARED TO NAT'L BASELINE\*

#### **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.

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**

→ 36% LOWER 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.

West Virginia hospitals reported no significant change in
CAUTIs between 2013 and 2014.

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 + 16% LOWER 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.

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.

# SSIs



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

#### 

- West Virginia 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

22

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

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.

**₽**4%

## C. difficile Infections

LOWER COMPARED TO NAT'L BASELINE

#### 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.

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.





# WEST VIRGINIA

### **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 West Virginia:

www.dhhr.wv.gov/oeps/disease/HAI/Pages/default.aspx

West Virginia validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

ANS SERVIC		
A REAL		CAC
* <	<u></u>	

LEGEND	HAI TYPE	# OF WEST VIRGINIA HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in West Virginia: 59	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	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	43	合 %	<b>4</b> 24%	<b>62</b> %	0.38	0.50	
Change in 2014 state SIR compared to group in column header is not statistically significant	CAUTI Nat'l Baseline: 2009	50	<b>☆ 8</b> %	<b>-</b> 36%	36%	0.64	1.00	
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	33	☆ 38%	<b>介 29%</b>	6%	1.06	0.83	
2014 state SIR is significantly higher (worse) than comparison group in column header	SSI, Colon Surgery Nat'l Baseline: 2008	35	<b>① 39%</b>	<b>1</b> 36%	<b>1</b> 32%	1.32	0.98	
	MRSA Bacteremia Nat'l Baseline: 2011	38	<b>\$</b> 10%	<b>√</b> 3%	<b>J</b> 16%	0.84	0.87	
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	41	J 2%	<b>企 4</b> %	<b>↓</b> 4%	0.96	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 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

# WISCONSIN ACUTE C

**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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ₽ 65% LOWER COMPARED TO NAT'L BASELINE\*

#### **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 CLABSIsbetween 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

 ↓ 21% LOWER 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	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 4 51% LOWER 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.

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

0% 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.

# 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

## 3% LOWER COMPARED

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

√5%

6% 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

#### LOWER COMPARED TO NAT'L BASELINE

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

UOWER COMPARED

#### 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.







# WISCONSIN

### **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 Wisconsin:
  - www.dhs.wisconsin.gov/communicable/HAI/index.htm
- Wisconsin validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf



LEGEND	HAI TYPE	# OF WISCONSIN HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Wisconsin: 144	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	96	₽ 28%	₽ 30%	<b>4</b> 65%	0.35	0.50
Change in 2014 state SIR compared to group in column header is not statistically significant	CAUTI Nat'l Baseline: 2009	118	<b>↓</b> 3%	<b>4</b> 22%	<b>1</b> 21%	0.79	1.00
	<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	81	15%	<b>12%</b>	√ 28%	0.72	0.83
2014 state SIR is significantly higher (worse) than comparison group in column header	SSI, Colon Surgery Nat'l Baseline: 2008	90	<b>☆ 2</b> %	<b>√</b> 2%	5%	0.95	0.98
	MRSA Bacteremia Nat'l Baseline: 2011	89	<₽ 7%	44%	51%	0.49	0.87
2014 state SIR cannot be calculated	<i>C. difficile</i> Infections Nat'l Baseline: 2011	99	☆ 3%	<b>√</b> 3%	10%	0.90	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 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.

Page 2 of 2

# WYOMING

# **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**

HEALTHCARE

ASSOCIATED

INFECTIONS

**PROGRESS** 

#### ₽ 63% LOWER COMPARED TO NAT'L BASELINE\*

#### **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**

↓ 50% LOWER 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	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 + 64% LOWER 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.

- 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.

### SSI: Abdominal Hysterectomy

#### ↓ 100% LOWER COMPARED TO NAT'L BASELINE

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

<u>↑</u>6%

**√**33%

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

#### HIGHER COMPARED TO NAT'L BASELINE

- 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

#### LOWER COMPARED TO NAT'L BASELINE\*

#### 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.



\* Statistically significant



Љ 2014 state SIR is significantly lower (better)

than comparison group

in column header

A 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

# WYOMING

#### **ACUTE CARE HOSPITALS**

C. difficile Infections

Nat'l Baseline: 2011

Healthcare-associated infection (HAI) data give healthcare facilities and public health agencies knowledge to and evaluate HAI preve

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 Wyoming: www.health.wyo.gov/phsd/epiid/HAIgeneral.html
- Wyoming validation efforts: www.cdc.gov/hai/pdfs/state-progress-landscape.pdf

ancies knowledge to design, implement, and a second s						
HAI TYPE	# OF WYOMING HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 <sup>+</sup> Total Hospitals in Wyoming: 31	2014 STATE SIR vs. 2013 State SIR	2014 STATE SIR vs. 2014 Nat'l SIR	2014 STATE SIR vs. Nat'l Baseline‡	2014 State sir	2014 NAT'L SIR
CLABSI Nat'l Baseline: 2008	22	√ 30%	√ 25%	63%	0.37	0.50
<b>CAUTI</b> Nat'l Baseline: 2009	26	<b>↓</b> 6%	50%	50%	0.50	1.00
<b>SSI, Abdominal Hysterectomy</b> Nat'l Baseline: 2008	13	√>100%	√-100%	√-100%	0.00	0.83
SSI, Colon Surgery Nat'l Baseline: 2008	13	介176%	合 9%	合 6%	1.06	0.98
MRSA Bacteremia	14	<b>49%</b>	59%	√ 64%	0.36	0.87

2014 state SIR cannot be calculated

> <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.

26

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

0.92

0.67

<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 WYOMING DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

33%

28%

Prevention efforts to reduce specific HAIs:

√ 17%

- Multidrug-resistant infections (C. difficile)
- Hand hygiene
- Antibiotic stewardship



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. CDCrecommended 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<sup>1-4</sup> for central line-associated bloodstream infections (CLABSIs), catheterassociated urinary tract infections (CAUTIs), surgical site infections (SSIs), and laboratory-identified (LabID) methicillinresistant 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), longterm 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 CLABSI and CAUTI data shown in this report are inclusive of data reported from all eligible locations within hospitals; however, CLABSI 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<sup>5</sup> – 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). Communityacquired 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<sup>6,7</sup> 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.<sup>8,9</sup> 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

	NATIONAL BASELINE				
HAI TYPE	Acute Care Hospitals	LTACHs and IRFs			
CLABSI	2006-200810	201312			
CAUTI	200911	201312			
MRSA, C. difficile	2010–2011				
SSI	2006–2008				

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 statespecific 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 indepth 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).<sup>9,13</sup> For complete data tables and a glossary of terms, please visit CDC's HAI Progress Report website at www.cdc.gov/hai/progress-report.

### REFERENCES

- 1. Centers for Disease Control and Prevention. Acute care hospital surveillance for central line-associated bloodstream infections. http://www.cdc.gov/nhsn/acute-care-hospital/ clabsi/index.html. Accessed December 3, 2015.
- Centers for Disease Control and Prevention. Acute care hospital surveillance for catheter-associated urinary tract infections. Available at http://www.cdc.gov/nhsn/acutecare-hospital/cauti/index.html. Accessed December 3, 2015.
- Centers for Disease Control and Prevention. Acute care hospital surveillance for surgical site infections. Available at http://www.cdc.gov/nhsn/acute-care-hospital/ssi/index. html. Accessed December 3, 2015.
- Centers for Disease Control and Prevention. Acute care hospital surveillance for *C. difficile*, MRSA, and other drugresistant infections. Available at http://www.cdc.gov/ nhsn/acute-care-hospital/cdiff-mrsa/index.html. Accessed December 3, 2015.

- Centers for Medicare and Medicaid Services. Hospital Inpatient Quality Reporting Program. Available at https://www.cms.gov/medicare/quality-initiativespatient-assessment-instruments/hospitalqualityinits/ hospitalrhqdapu.html. Accessed December 8, 2015.
- Centers for Disease Control and Prevention. National and State Healthcare-Associated Infections Progress Report (2012). Available at http://www.cdc.gov/hai/surveillance/ nhsn\_nationalreports.html. Accessed December 3, 2015.
- Centers for Disease Control and Prevention. National and State Healthcare-Associated Infections Progress Report (2013). Available at http://www.cdc.gov/hai/surveillance/ nhsn\_nationalreports.html. Accessed December 3, 2015.
- Mu Y, Edwards JR, Horan TC, et al. Improving risk-adjusted measures of surgical site infection for the National Healthcare Safety Network. Infect Control Hosp Epidemiol 2011; 32(10):970-986.
- Dudeck MA, Weiner LM, Malpiedi PJ, et al. Risk adjustment for healthcare-facility onset *C. difficile* and MRSA bacteremia Laboratory-Identified Event reporting in NHSN. Available at http://www.cdc.gov/nhsn/PDFs/mrsa-cdi/RiskAdjustment-MRSA-CDI.pdf. Accessed December 3, 2015.

- Edwards JR, Peterson KD, Mu Y, et al. National Healthcare Safety Network (NHSN) report: data summary for 2006 through 2008, issued December 2009. Am J Infect Control 2009; 37:783-805.
- Dudeck MA, Horan TC, Peterson KP, et al. National Healthcare Safety Network (NHSN) report, data summary for 2009, Device-associated module. Am J Infect Control 2011;39:349-367.
- Dudeck MA, Edwards JR, Bridson KA, et al. National Healthcare Safety Network (NHSN) report, data summary for 2013, Device-associated module. Am J Infect Control 2015;43:206-221.
- Centers for Disease Control and Prevention. NHSN E-news: your guide to the standardized infection ratio (SIR). Available at http://www.cdc.gov/nhsn/pdfs/newsletters/nhsn\_nl\_ oct\_2010se\_final.pdf. Accessed December 8, 2015.

### **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 Medicarecertified 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 longterm 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 hospitalonset 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:

	NATIONAL BASELINE				
HAI TYPE	Acute Care Hospitals	LTACHs and IRFs			
CLABSI	2006–2008	2013			
CAUTI	2009	2013			
MRSA, C. difficile	2010–2011				
SSI	2006–2008				

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.

## NATIONAL AND STATE HEALTHCARE-ASSOCIATED INFECTIONS PROGRESS REPORT

**Suggested citation:** Centers for Disease Control and Prevention. 2014 National and State Healthcare-Associated Infections Progress Report. Published March, 2016. Available at www.cdc.gov/hai/progress-report/index.html.