

ACUTE CARE HOSPITALS

NATIONAL

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

↓ 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.

10% 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.

12% 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.

8% 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.

6% 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.

8% Among the 2,051 U.S. hospitals with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.98, the value of the national SIR.

C. difficile Infections

↓ 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.

■ U.S. hospitals reported a significant increase in *C. difficile* infections between 2013 and 2014.

11% 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.

* Statistically significant



NATIONAL

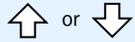
HEALTHCARE ASSOCIATED INFECTIONS PROGRESS



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

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

ACUTE CARE HOSPITALS

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

HAI TYPE	# OF U.S. HOSPITALS THAT REPORTED DATA TO CDC'S NHSN, 2014 ⁺	2014 NAT'L SIR vs. 2013 Nat'l SIR	2014 NAT'L SIR vs. Nat'l Baseline [‡]	2014 NAT'L SIR
CLABSI Nat'l Baseline: 2008	3,655	8%	50%	0.50
CAUTI Nat'l Baseline: 2009	3,791	5%	0%	1.00
SSI, Abdominal Hysterectomy Nat'l Baseline: 2008	3,225	5%	17%	0.83
SSI, Colon Surgery Nat'l Baseline: 2008	3,377	5%	2%	0.98
MRSA Bacteremia Nat'l Baseline: 2011	3,949	4%	13%	0.87
C. difficile Infections Nat'l Baseline: 2011	3,994	4%	8%	0.92

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

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

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

WHAT DOES THE STANDARDIZED INFECTION RATIO (SIR) MEAN?

IF THE NATIONAL SIR IS:

MORE THAN 1

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

1

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

LESS THAN 1

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





NATIONAL SSIs BY PROCEDURE TYPE

ACUTE CARE HOSPITALS

SURGICAL SITE INFECTIONS

SSIs: 10 SELECT PROCEDURES

17% LOWER COMPARED TO NAT'L BASELINE*

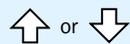
- U.S. hospitals reported a significant increase in SSIs from 10 select procedures between 2013 and 2014.
- 8% Among the 2,580 U.S. hospitals with enough data to calculate an SIR, 8% had an SIR significantly higher (worse) than 0.83, the value of the national SIR.
- Almost all U.S. hospitals report SSI data following colon surgeries and abdominal hysterectomies to NHSN.

PROCEDURE CATEGORY	# HOSPITALS REPORTING	# PROCEDURES REPORTED	2014 NAT'L SIR VS. NAT'L BASELINE	2014 NAT'L SIR
Hip arthroplasty	1,928	291,628	22%	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	17%	0.83
Vaginal hysterectomy	822	30,961	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	30%	0.70
Abdominal aortic aneurysm repair	273	2,121	72%	0.28
These 10 procedures combined	3,618	1,528,822	17%	0.83

LEGEND

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

2014 national SIR is significantly higher (worse) than 2008 SSI national baseline



Change in 2014 national SIR compared to the 2008 SSI national baseline is not statistically significant



* Statistically significant



NATIONAL SSIs BY PROCEDURE TYPE

SURGICAL SITE INFECTIONS, ACUTE CARE HOSPITALS

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- Preventing HAIs: www.cdc.gov/hai

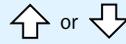
SURGICAL SITE INFECTIONS

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	↓ 6%	0.94
2	Appendix surgery	412	51,057	↑ 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	↓ 24%	0.76
9	Cesarean section	437	211,468	↓ 73%	0.27
10	Spinal fusion	506	110,975	↓ 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	↓ 32%	0.68
14	Heart transplant	28	622	↓ 47%	0.53
15	Kidney transplant	34	3,142	↓ 37%	0.63

LEGEND

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



Change in 2014 national SIR compared to the 2008 SSI national baseline is not statistically significant



2014 national SIR is significantly higher (worse) than 2008 SSI national baseline





NATIONAL SSIs BY PROCEDURE TYPE

SURGICAL SITE INFECTIONS, ACUTE CARE HOSPITALS

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- NHSN: www.cdc.gov/nhsn
- Preventing HAIs: www.cdc.gov/hai

	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	↔ 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	↔ 21%	0.79
23	Refusion of spine	300	5,740	↓ 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	↔ 71%	0.29
28	Ventricular shunt	105	7,399	↓ 43%	0.57
29	Abdominal surgery	408	56,754	↓ 32%	0.68

LEGEND

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

↔ or ↔ Change in 2014 national SIR compared to the 2008 SSI national baseline is not statistically significant

↑ 2014 national SIR is significantly higher (worse) than 2008 SSI national baseline

