



MASSACHUSETTS

LONG TERM ACUTE CARE HOSPITALS

HEALTHCARE
ASSOCIATED
INFECTIONS

2015

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). Long Term Acute Care Hospitals (LTACHs) are acute care hospitals that provide services and treatment for patients who are generally very sick and stay, on average, more than 25 days. **This report is based on 2015 data, published in 2017 and uses the 2015 Baseline and risk-adjusted models.**



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.

- Among the 15 LTACHs with enough data to calculate an SIR:
 - 20% had an SIR significantly higher (worse) than 0.995, the value of the national SIR.
 - 7% had an SIR significantly lower (better) than 0.995, the value of the national SIR.
- Massachusetts reported higher (worse) SIR compared to the value of the national SIR.

CAUTIs

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

When a urinary catheter is not put in correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and infect the bladder and kidneys.

- Among the 15 LTACHs with enough data to calculate an SIR:
 - 27% had an SIR significantly higher (worse) than 0.992, the value of the national SIR.
 - 13% had an SIR significantly lower (better) than 0.992, the value of the national SIR.
- Massachusetts reported higher (worse) SIR compared to the value of the national SIR.

VAEs

VENTILATOR-ASSOCIATED EVENTS

When a medical problem makes it hard or impossible for a patient to breathe on their own, they may be placed on a special breathing machine called a ventilator to save their life. This usually involves placing a tube in the patient's airway, and attaching the tube to the ventilator. Patients on ventilators are usually very sick, and they can develop problems related to their illness or related to being on a ventilator. This includes infections such as pneumonia or other problems such as fluid buildup in the lungs.

- Not enough data to calculate percent of LTACHs with SIRs better or worse than the value of the national SIR.
- Massachusetts reported lower (better) SIR compared to the value of the national SIR.

C. DIFFICILE EVENTS

LABORATORY-IDENTIFIED HOSPITAL-ONSET C. DIFFICILE EVENTS

When a person takes antibiotics, good bacteria that protect against infection are destroyed for several months. During this time, patients can get sick from *Clostridium difficile* (*C. difficile*), bacteria that cause potentially deadly diarrhea, which can be spread in healthcare settings.

- Among the 16 LTACHs with enough data to calculate an SIR:
 - 19% had an SIR significantly higher (worse) than 0.944, the value of the national SIR.
 - 19% had an SIR significantly lower (better) than 0.944, the value of the national SIR.
- Massachusetts reported lower (better) SIR compared to the value of the national SIR.

MRSA BACTEREMIA

LABORATORY-IDENTIFIED HOSPITAL-ONSET BLOODSTREAM EVENTS

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 events.

- Among the 13 LTACHs with enough data to calculate an SIR:
 - 8% had an SIR significantly higher (worse) than 0.965, the value of the national SIR.
 - 23% had an SIR significantly lower (better) than 0.965, the value of the national SIR.
- Massachusetts reported lower (better) SIR compared to the value of the national SIR.





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

2015 DATA						
HAI TYPE	# LTACHs REPORTING ⁺	2015 SIR DISTRIBUTION [‡]			2015 STATE SIR	2015 NAT'L SIR
		MINIMUM	MEDIAN	MAXIMUM		
CLABSI	16	—	—	—	1.018	0.995
CAUTI	16	—	—	—	1.250	0.992
VAE	5	—	—	—	0.420	0.984
<i>C. difficile</i> Events	16	—	—	—	0.839	0.944
MRSA Bacteremia	16	—	—	—	0.422	0.965

⁺The number of LTACHs 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 ventilators. States with less than 5 facilities are suppressed.

[‡]These data represent the distribution of all hospital SIRs for each HAI type. The lowest facility SIR is represented by the “minimum”, and the highest facility SIR is the “maximum”. The median represents the middle of the distribution; half of all facilities fall below (and above) this SIR value. Distributions are only calculated when at least 20 hospitals had enough data to calculate an SIR.

For additional data points, refer to the technical data tables at www.cdc.gov/hai/progress-report/

LEARN HOW YOUR HOSPITAL IS PERFORMING:

<https://www.medicare.gov/longtermcarehospitalcompare/>

FOR ADDITIONAL INFORMATION:

- 2015 HAI Data Report: www.cdc.gov/hai/progress-report
- NHSN: www.cdc.gov/nhsn
- Preventing HAIs: www.cdc.gov/hai
- For more information on the 2015 Baseline and risk adjustment calculation, please visit: <https://www.cdc.gov/nhsn/2015rebaseline/index.html>
- The new SIR Guide: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>
- Massachusetts website: www.mass.gov/eohhs/gov/departments/dph/programs/hcq/healthcare-quality/health-care-facilities/hospitals/



THIS REPORT IS BASED ON 2015 DATA, PUBLISHED IN 2017, AND USES THE 2015 BASELINE AND RISK-ADJUSTED MODELS