



**Illinois Statewide Report of Pediatric and Neonatal ICU Central Line-associated Blood Stream Infections (CLABSI)
Acute Care and Critical Access Hospitals - NHSN Event Reporting
January 1, 2016 – December 31, 2016**

The Hospital Report Card Act (Illinois Public Act 93-563) requires Illinois hospitals to report central line associated bloodstream infections (CLABSIs) occurring in critical care units, also known as intensive care units (ICUs). Illinois hospitals have been reporting CLABSI data from both pediatric (PICU) and neonatal Level II/III and Level III (NICU) intensive care units to the Illinois Department of Public Health (IDPH) using the CDC's National Healthcare Safety Network (NHSN) since October, 2009. Comparison summary data for CLABSIs, expressed as a Standardized Infection Ratio (SIR), are presented by hospital for each ICU type (ex. Medical, Surgical and Medical/Surgical). Interpretation of these summary measures is provided. This data represents reporting of CLABSI in Pediatric and Neonatal ICU from January 1, 2016 to December 31, 2016.

Standardized Infection Ratio and 95% Confidence Interval

The SIR is a measure that compares the CLABSI burden in pediatric and neonatal ICUs at a facility to that of the national referent population (2015 NHSN inpatient data). NHSN uses risk models that determine the predicted number of CLABSIs based on the national baseline data, adjusting for statistically significant risk factors. The model and factors used for risk adjustment depend on the facility type (e.g., acute care hospital or critical access hospital). A facility's SIR is calculated as the actual, or observed number of healthcare-associated incident cases reported by the facility divided by the predicted number of infections.

The corresponding 95% confidence interval (CI) is statistical measure that shows a range of estimated possible values for the SIR. The upper and lower bounds of the interval are used to determine the statistical significance and precision of the SIR. The SIR and 95% CI are interpreted as follows:

- If the 95% CI includes 1 (i.e., the lower bound is <1.00 and the upper bound is >1.00), the hospital's number of infections is similar to (not significantly different from) the predicted number.
- If the SIR is >1.0 and the 95% CI does not include 1, the hospital had a significantly higher number of infections than predicted.
- If the SIR is <1.0 and the 95% CI does not include 1, the hospital had a significantly lower number of infections than predicted.

Additional information regarding CLABSI risk models and SIR calculations can be found at: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Pediatric Cardiothoracic Intensive Care Unit

Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	95% Confidence Interval		Statistical Interpretation ^e
						Lower Limit ^d	Upper Limit	
Advocate Christ Medical Center	Oak Lawn	1	2241	3.23	0.31	0.02	1.53	Similar
Ann & Robert H Lurie Children's Hospital of Chicago	Chicago	12	6249	10.38	1.16	0.63	1.97	Similar
University of Chicago Medicine	Chicago	1	348	0.50	.	.	.	Not Available

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Pediatric Medical Intensive Care Unit

Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	95% Confidence Interval		Statistical Interpretation ^e
						Lower Limit ^d	Upper Limit	
Advocate Christ Medical Center	Oak Lawn	6	1948	2.80	2.14	0.87	4.45	Similar
Presence Saint Joseph Medical Center *	Joliet	.	.	.	.	.	.	Not Available

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Pediatric Medical/Surgical Intensive Care Unit

Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	95% Confidence Interval		Statistical Interpretation ^e
						Lower Limit ^d	Upper Limit	
AMITA Health Adventist Medical Center Hinsdale *	Hinsdale	.	.	.	.	.	.	Not Available
AMITA Health St.Alexius Medical Center Hoffman Estates	Hoffman Estates	0	190	0.21	.	.	.	Not Available
Advocate Lutheran General Hospital	Park Ridge	0	1161	1.49	0.00	.	2.01	Similar
Ann & Robert H Lurie Children's Hospital of Chicago	Chicago	0	1322	2.20	0.00	.	1.36	Similar
Ann & Robert H Lurie Children's Hospital of Chicago	Chicago	6	4021	6.68	0.90	0.36	1.87	Similar
HSHS St John's Hospital	Springfield	0	448	0.64	.	.	.	Not Available
John H Stroger Jr Hospital of Cook County	Chicago	0	330	0.48	.	.	.	Not Available
Loyola University Medical Center	Maywood	0	1167	1.68	0.00	.	1.78	Similar
Mercyhealth Hospital-Rockton Avenue	Rockford	0	493	0.55	.	.	.	Not Available
Mount Sinai Hospital	Chicago	0	139	0.18	.	.	.	Not Available
Northwestern Medicine Central DuPage Hospital	Winfield	1	291	0.32	.	.	.	Not Available
OSF Saint Francis Medical Center	Peoria	4	3377	4.86	0.82	0.26	1.99	Similar
Rush University Medical Center	Chicago	1	1917	2.76	0.36	0.02	1.79	Similar
University of Chicago Medicine	Chicago	3	2899	4.17	0.72	0.18	1.96	Similar
University of Illinois Hospital & Health Sci System	Chicago	1	827	1.19	0.84	0.04	4.14	Similar

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Pediatric Surgical Intensive Care Unit

						95% Confidence Interval		
Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	Lower Limit ^d	Upper Limit	Statistical Interpretation ^e
Shriners Hospital For Children *	Chicago	.	.	.	.	.	.	Not Available

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Neonatal Intensive Care Unit - Level II/III

Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	95% Confidence Interval		Statistical Interpretation ^e
						Lower Limit ^d	Upper Limit	
AMITA Health Adventist Medical Center Hinsdale	Hinsdale	0	1174	1.63	0.00	.	1.84	Similar
Advocate Christ Medical Center	Oak Lawn	3	3448	4.59	0.65	0.17	1.78	Similar
Advocate Lutheran General Hospital	Park Ridge	0	2656	3.70	0.00	.	0.81	Lower
Ann & Robert H Lurie Children's Hospital of Chicago	Chicago	4	6727	8.52	0.47	0.15	1.13	Similar
HSHS St John's Hospital	Springfield	0	1191	2.31	0.00	.	1.30	Similar
John H Stroger Jr Hospital of Cook County	Chicago	1	2228	3.45	0.29	0.02	1.43	Similar
Loyola University Medical Center	Maywood	5	2371	3.61	1.39	0.51	3.07	Similar
Mercyhealth Hospital-Rockton Avenue	Rockford	2	2721	3.77	0.53	0.09	1.76	Similar
Northshore Univ HS Evanston Hospital	Evanston	3	1730	2.53	1.19	0.30	3.23	Similar
Northwestern Medicine Central DuPage Hospital	Winfield	5	1049	1.32	3.78	1.39	8.39	Higher
Northwestern Memorial Hospital	Chicago	2	2081	2.71	0.74	0.12	2.44	Similar
OSF Saint Francis Medical Center	Peoria	3	3559	4.70	0.64	0.16	1.74	Similar
Rush University Medical Center	Chicago	3	3920	5.62	0.53	0.14	1.45	Similar
University of Chicago Medicine	Chicago	6	9094	12.88	0.47	0.19	0.97	Lower
University of Illinois Hospital & Health Sci System	Chicago	3	2175	3.19	0.94	0.24	2.56	Similar

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Neonatal Intensive Care Unit - Level III

Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	95% Confidence Interval		Statistical Interpretation ^e
						Lower Limit ^d	Upper Limit	
AMITA Health St.Alexius Medical Center Hoffman Estates	Hoffman Estates	1	2050	2.75	0.36	0.02	1.79	Similar
Advocate Condell Medical Center *	Libertyville	.	.	.	.	.	.	Not Available
Advocate Good Samaritan Hospital	Downers Grove	0	400	0.53	.	.	.	Not Available
Advocate Good Shepherd Hospital *	Barrington	.	.	.	.	.	.	Not Available
Advocate Illinois Masonic Medical Center	Chicago	1	1505	2.47	0.41	0.02	2.00	Similar
Advocate Sherman Hospital	Elgin	1	440	0.36	.	.	.	Not Available
Carle Foundation Hospital	Urbana	0	812	1.07	0.00	.	2.81	Similar
Edward Hospital	Naperville	1	1144	1.72	0.58	0.03	2.87	Similar
Elmhurst Memorial Hospital *	Elmhurst	.	.	.	.	.	.	Not Available
Franciscan St. James Health	Chicago Heights	0	60	0.05	.	.	.	Not Available
Ingalls Memorial Hospital	Harvey	0	85	0.07	.	.	.	Not Available
Little Company of Mary Hospital *	Evergreen Park	.	.	.	.	.	.	Not Available
Memorial Hospital East *	Shiloh	.	.	.	.	.	.	Not Available
Memorial Hospital of Carbondale	Carbondale	0	76	0.06	.	.	.	Not Available
Metrosouth Medical Center *	Blue Island	.	.	.	.	.	.	Not Available
Mount Sinai Hospital	Chicago	1	1330	1.82	0.55	0.03	2.71	Similar
Northwest Community Healthcare Hospital	Arlington Heights	1	403	0.43	.	.	.	Not Available
Northwestern Medicine Lake Forest Hospital *	Lake Forest	.	.	.	.	.	.	Not Available
Presence Covenant Medical Center *	Urbana	.	.	.	.	.	.	Not Available
Presence Resurrection Medical Center *	Chicago	.	.	.	.	.	.	Not Available
Presence Saint Francis Hospital *	Evanston	.	.	.	.	.	.	Not Available
Presence Saint Joseph Hospital	Chicago	0	520	0.67	.	.	.	Not Available
Presence Saint Joseph Medical Center	Joliet	0	65	0.07	.	.	.	Not Available
Presence Saints Mary and Elizabeth Medical Center *	Chicago	.	.	.	.	.	.	Not Available

Central Line Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR ^a)
Reportable Period: January 1, 2016 - December 31, 2016
STATEWIDE

Location: Neonatal Intensive Care Unit - Level III

Hospital Name	Hospital City	Observed Number of CLABSIs	Number of Central Line Days ^b	Statistically Predicted Number of CLABSIs	Standardized Infection Ratio (SIR) ^c	95% Confidence Interval		Statistical Interpretation ^e
						Lower Limit ^d	Upper Limit	
Rush-Copley Medical Center	Aurora	1	1111	1.89	0.53	0.03	2.61	Similar
SwedishAmerican Hospital *	Rockford	.	.	.	.	.	.	Not Available
Unitypoint Health - Trinity Moline *	Moline	.	.	.	.	.	.	Not Available
University of Chicago Medicine	Chicago	0	562	0.53	.	.	.	Not Available

NHSN Data contained in this report were last generated on November 14, 2017

* Hospital with 50 or fewer central line days

^a The Standardized Infection Ratio (SIR) is a summary measure used to compare central line associated bloodstream infection (CLABSI) experience among a group of reported locations to that of a standard population. It is the observed number of infections divided by the predicted number of infections.

^b Too few central line days. Reporting on too few procedures is a risk to patient confidentiality. If there are fifty (50) or fewer central line days, the report for the number of infections will be deferred until there are more central line days.

^c If the predicted number of infections is less than 1.0, the SIR is not calculated because it does not meet the minimum requirement for precision.

If the number of observed infections is 0 and the number predicted is greater than or equal to 1.0, a 95% confidence interval is reported

^d The lower bound of the confidence interval is calculated only if the infection count greater than 0.

^e **Statistical Interpretation of SIR:**

- If the 95% confidence interval includes 1.00, the hospital's infection rate is 'Similar' (not significantly different) from predicted.

- If the SIR is greater than 1.0 and the 95% confidence interval does not include 1, the hospital's infection rate is significantly 'Higher' than predicted.

- If the SIR is less than 1.0 and the 95% confidence interval does not include 1, the hospital's infection rate is significantly 'Lower' than predicted.

NOTE: All conclusions are based on the assumption that the hospital's patient population is similar to the NHSN pooled patient population