

Illinois Statewide Report of Methicillin-resistant *Staphylococcus aureus* (MRSA) Bloodstream Infections in Acute Care and Critical Access Hospitals, NHSN LabID Event Reporting, January 1, 2016 – December 31, 2016

As of January 1, 2012, all Illinois hospitals began mandated reporting of blood cultures positive for MRSA using the Center for Disease Control and Prevention's National Healthcare Safety Network (NHSN), Multidrug-Resistant Organism (MDRO) Laboratory-identified (LabID) Event module (http://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf). NHSN LabID reporting enables a facility to rely almost exclusively on data obtained from the laboratory and allows the calculation of proxy measures of MRSA events, exposures and healthcare acquisition. Positive lab results (LabID Events) are categorized as healthcare facility-onset (HO) or community onset (CO) based on when an individual is admitted to a hospital as a patient and when the lab specimen was obtained. LabID Events are categorized as HO if the specimen was collected on or after the fourth day of an inpatient hospital stay. Events are categorized as CO if the specimen was collected during the first 3 days of an inpatient stay. This report shows HO MRSA bloodstream data submitted to NHSN by acute care and critical access hospitals across Illinois from January 1, 2016 to December 31, 2016.

Standardized Infection Ratio and 95% Confidence Interval

The standardized infection ratio (SIR) is a measure that compares the HO MRSA bloodstream infection burden at a facility to that of the national referent population (2015 NHSN inpatient, facility-wide aggregate data). NHSN uses risk models that determine the predicted number of MRSA infections based on the national baseline data, adjusting for statistically significant risk factors (e.g., facility bed size and CO MRSA bacteremia prevalence rate). 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 HO incident cases reported by the facility divided by the predicted number of infections.

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

Additional information regarding these MRSA risk models and SIR calculations can be found at: http://www.cdc.gov/nhsn/PDFs/mrsa-cdi/RiskAdjustment-MRSA-CDI.pdf

		Observed [O]	Number of	Statistically Predicted [P]		95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
Abraham Lincoln Memorial Hospital	Lincoln	0	3813	0.08	•			Not Available
Advocate BroMenn Medical Center	Normal	1	36070	1.41	0.71	0.04	3.51	Similar
Advocate Christ Medical Center	Oak Lawn	9	215359	11.36	0.79	0.39	1.45	Similar
Advocate Condell Medical Center	Libertyville	0	81786	3.17	0.00		0.94	Lower
Advocate Eureka Hospital	Eureka	0	1250	0.03				Not Available
Advocate Good Samaritan Hospital	Downers Grove	1	79718	3.28	0.31	0.02	1.51	Similar
Advocate Good Shepherd Hospital	Barrington	0	48636	1.73	0.00	•	1.74	Similar
Advocate Illinois Masonic Medical Center	Chicago	2	70010	3.69	0.54	0.09	1.79	Similar
Advocate Lutheran General Hospital	Park Ridge	4	148079	7.63	0.53	0.17	1.27	Similar
Advocate Sherman Hospital	Elgin	1	61687	2.57	0.39	0.02	1.92	Similar
Advocate South Suburban Hospital	Hazel Crest	0	59220	2.00	0.00		1.50	Similar
Advocate Trinity Hospital	Chicago	2	41414	1.27	1.58	0.27	5.22	Similar
Alton Memorial Hospital	Alton	2	24964	1.06	1.89	0.32	6.23	Similar
AMITA Health Adventist Med Ctr Bolingbrook	Bolingbrook	1	25748	1.27	0.78	0.04	3.87	Similar
AMITA Health Adventist Med Ctr GlenOaks	Glendale Heights	0	27008	1.26	0.00		2.38	Similar
AMITA Health Adventist Med Ctr Hinsdale	Hinsdale	1	54134	2.73	0.37	0.02	1.81	Similar
AMITA Health Adventist Med Ctr La Grange	La Grange	2	37955	1.48	1.35	0.23	4.46	Similar
AMITA Health Alexian Brothers Med Ctr Elk Grove Village	Elk Grove Village	0	83525	2.65	0.00		1.13	Similar
AMITA Health St. Alexius Med Ctr Hoffman Estates	Hoffman Estates	2	93505	4.00	0.50	0.08	1.65	Similar

		Observed [O]	Number of	Statistically Predicted [P]		95% Conf		
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
Anderson Hospital	Maryville	0	33262	1.35	0.00	•	2.23	Similar
Ann & Robert H Lurie Children's Hospital of Chicago	Chicago	1	78096	2.92	0.34	0.02	1.69	Similar
Blessing Hospital	Quincy	4	51017	3.34	1.20	0.38	2.89	Similar
Carle Foundation Hospital	Urbana	7	103909	7.74	0.90	0.40	1.79	Similar
Carle Hoopeston Regional Hospital	Hoopeston	0	778	0.02				Not Available
Carlinville Area Hospital	Carlinville	0	3584	0.07	•			Not Available
Centegra Hospital - McHenry	McHenry	1	40178	2.25	0.44	0.02	2.19	Similar
Centegra Hospital - Woodstock	Woodstock	0	15211	0.54	•			Not Available
CGH Medical Center	Sterling	1	14301	0.56	•			Not Available
Clay County Hospital	Flora	0	3705	0.07				Not Available
Community First Medical Center	Chicago	1	48742	2.17	0.46	0.02	2.27	Similar
Community Memorial Hospital	Staunton	0	27992	0.58	•			Not Available
Crawford Memorial Hospital	Robinson	0	3014	0.06	•			Not Available
Crossroads Community Hospital	Mount Vernon	0	2720	0.08	•			Not Available
Decatur Memorial Hospital	Decatur	1	35689	1.66	0.60	0.03	2.97	Similar
Edward Hospital	Naperville	4	103229	4.02	1.00	0.32	2.40	Similar
Elmhurst Memorial Hospital	Elmhurst	0	72448	2.26	0		1.33	Similar
Fairfield Memorial Hospital	Fairfield	0	3018	0.06	•	•		Not Available
Fayette County Hospital	Vandalia	0	1086	0.02	•	•	•	Not Available
Ferrell Hospital	Eldorado	0	3314	0.07	•	•	•	Not Available

		Observed [O]	Number of	Statistically Predicted [P]		95% Con Inter			
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation	
FHN Memorial Hospital	Freeport	0	18706	0.75	•			Not Available	
Franciscan St. James Health	Chicago Heights	3	49639	2.25	1.33	0.34	3.62	Similar	
Franciscan St. James Health	Olympia Fields	3	49639	2.25	1.33	0.34	3.62	Similar	
Franklin Hospital	Benton	0	1089	0.02	•			Not Available	
Galesburg Cottage Hospital	Galesburg	0	7471	0.26				Not Available	
Gateway Regional Medical Center	Granite City	1	32249	1.06	0.94	0.05	4.65	Similar	
Genesis Medical Center - Aledo	Aledo	0	936	0.02				Not Available	
Genesis Medical Center-Silvis	Silvis	0	11991	0.28				Not Available	
Gibson Area Hospital & Health Services	Gibson City	0	2642	0.06				Not Available	
Graham Hospital	Canton	0	8443	0.21				Not Available	
Hamilton Memorial Hospital District	McLeansboro	0	3935	0.07				Not Available	
Hammond-Henry Hospital	Geneseo	0	3942	0.08				Not Available	
Hardin County General Hospital	Rosiclare	0	1580	0.03				Not Available	
Harrisburg Medical Center	Harrisburg	0	15456	0.33				Not Available	
Heartland Regional Medical Center	Marion	0	11294	0.32				Not Available	
Herrin Hospital	Herrin	0	24905	1.28	0.00		2.34	Similar	
Hillsboro Area Hospital	Hillsboro	0	2098	0.04				Not Available	
Holy Cross Hospital	Chicago	3	51762	2.59	1.16	0.29	3.15	Similar	
Hopedale Hospital	Hopedale	0	2492	0.05				Not Available	
HSHS Good Shepherd Hospital	Shelbyville	0	1728	0.03	•	•		Not Available	

		Observed [O]	Number of	Statistically Predicted [P]		95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
HSHS Holy Family Hospital	Greenville	0	3778	0.07				Not Available
HSHS St Anthony's Memorial Hospital	Effingham	1	17005	0.67				Not Available
HSHS St Elizabeth's Hospital	Belleville	0	33226	1.94	0.00		1.55	Similar
HSHS St Francis Hospital	Litchfield	0	5763	0.12				Not Available
HSHS St John's Hospital	Springfield	7	87801	6.69	1.05	0.46	2.07	Similar
HSHS St Joseph's Hospital	Highland	0	6809	0.14				Not Available
HSHS St Joseph's Hospital	Breese	0	5294	0.15				Not Available
HSHS St Mary's Hospital	Decatur	0	29919	1.39	0.00	٠	2.16	Similar
Illini Community Hospital	Pittsfield	0	2197	0.05		٠		Not Available
Illinois Valley Community Hospital	Peru	0	7308	0.19		٠		Not Available
Ingalls Memorial Hospital	Harvey	3	64357	2.56	1.17	0.30	3.19	Similar
Iroquois Memorial Hospital & Resident Home	Watseka	0	1788	0.03				Not Available
Jackson Park Hospital & Medical Center	Chicago	0	32488	1.04	0.00		2.89	Similar
Jersey Community Hospital	Jerseyville	0	2954	0.06				Not Available
John H Stroger Jr Hospital of Cook County	Chicago	8	109464	7.01	1.14	0.53	2.17	Similar
Katherine Shaw Bethea Hospital	Dixon	0	10844	0.24		٠		Not Available
Kirby Medical Center	Monticello	0	2440	0.05	•	•		Not Available
Lawrence County Memorial Hospital	Lawrenceville	0	2622	0.05	•	•		Not Available
Little Company of Mary Hospital	Evergreen Park	1	58523	3.23	0.31	0.02	1.53	Similar
Loretto Hospital	Chicago	0	23312	0.65	•	•		Not Available

		Observed [O]	Number of			95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days		SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
Loyola Gottlieb Memorial Hospital	Melrose Park	1	28670	1.37	0.73	0.04	3.60	Similar
Loyola University Medical Center	Maywood	6	129534	11.90	0.50	0.20	1.05	Similar
MacNeal Hospital	Berwyn	2	54110	2.21	0.91	0.15	2.99	Similar
Marshall Browning Hospital	Du Quoin	0	2655	0.06	•	•	•	Not Available
Mason District Hospital	Havana	0	1102	0.02	·	•		Not Available
Massac Memorial Hospital	Metropolis	0	7138	0.15				Not Available
McDonough District Hospital	Macomb	0	5891	0.21	•	•	•	Not Available
Memorial Hospital	Belleville	2	65887	2.79	0.72	0.12	2.37	Similar
Memorial Hospital	Carthage	0	2412	0.05	•	•	•	Not Available
Memorial Hospital	Chester	0	2254	0.05	•			Not Available
Memorial Hospital of Carbondale	Carbondale	3	36972	1.95	1.54	0.39	4.20	Similar
Memorial Medical Center	Springfield	8	115036	10.42	0.77	0.36	1.46	Similar
Mercy Harvard Hospital	Harvard	0	1175	0.02	•	•	•	Not Available
Mercy Hospital & Medical Center	Chicago	2	52153	2.95	0.68	0.11	2.24	Similar
Methodist Hospital of Chicago	Chicago	0	21930	0.43				Not Available
MetroSouth Medical Center	Blue Island	0	33366	1.50	0.00		2.00	Similar
Midwest Medical Center	Galena	0	2165	0.05	•	•		Not Available
Morris Hospital & Healthcare Centers	Morris	0	17889	0.60	•	•		Not Available
Morrison Community Hospital	Morrison	0	2892	0.06	•		•	Not Available
Mount Sinai Hospital	Chicago	2	65020	2.96	0.68	0.11	2.23	Similar

		Observed [O]	Number of			95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days		SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
Northshore Univ HS Evanston Hospital	Evanston	3	74061	4.46	0.67	0.17	1.83	Similar
Northshore Univ HS Glenbrook Hospital	Glenview	0	43061	2.24	0.00	•	1.34	Similar
Northshore Univ HS Highland Park Hospital	Highland Park	0	33998	1.17	0.00	•	2.55	Similar
Northshore Univ HS Skokie Hospital	Skokie	2	34072	1.39	1.44	0.24	4.76	Similar
Northwest Community Healthcare Hospital	Arlington Heights	3	81422	3.00	1.00	0.25	2.72	Similar
Northwestern Medicine Central DuPage Hospital	Winfield	3	100765	3.49	0.86	0.22	2.34	Similar
Northwestern Medicine Delnor Hospital	Geneva	0	32284	1.09	0.00	•	2.76	Similar
Northwestern Medicine Kishwaukee Hospital	De Kalb	1	23338	0.84	•	•		Not Available
Northwestern Medicine Lake Forest Hospital	Lake Forest	2	26909	0.87	•	•		Not Available
Northwestern Medicine Valley West Hospital	Sandwich	0	2308	0.05	•			Not Available
Northwestern Memorial Hospital	Chicago	7	267091	12.87	0.54	0.24	1.08	Similar
Norwegian-American Hospital	Chicago	1	41387	1.79	0.56	0.03	2.76	Similar
OSF Holy Family Medical Center	Monmouth	0	2087	0.04	•	•		Not Available
OSF Saint Anthony Medical Center	Rockford	4	55962	2.23	1.79	0.57	4.32	Similar
OSF Saint Anthony's Health Center	Alton	1	11948	0.27	•	•		Not Available
OSF Saint Elizabeth Medical Center	Ottawa	0	16367	0.37	•			Not Available
OSF Saint Francis Medical Center	Peoria	9	175603	13.32	0.68	0.33	1.24	Similar
OSF Saint James-John W Albrecht Medical Center	Pontiac	0	7218	0.16	•	•		Not Available
OSF Saint Luke Medical Center	Kewanee	0	1569	0.03	٠	•		Not Available
OSF St Joseph Medical Center	Bloomington	0	26357	0.77	•	•		Not Available

		Observed [O]	Number of	Statistically Predicted [P]		95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
OSF St Mary Medical Center	Galesburg	0	13438	0.37				Not Available
OSF St Paul Medical Center	Mendota	0	2407	0.05	•	•		Not Available
Palos Community Hospital	Palos Heights	4	93973	5.88	0.68	0.22	1.64	Similar
Pana Community Hospital	Pana	0	1183	0.02	•			Not Available
Paris Community Hospital	Paris	0	2482	0.05				Not Available
Passavant Area Hospital	Jacksonville	0	10968	0.40	•	•		Not Available
Perry Memorial Hospital	Princeton	0	3002	0.06	•			Not Available
Pinckneyville Community Hospital	Pinckneyville	0	755	0.02	•			Not Available
Presence Covenant Medical Center	Urbana	1	25961	1.49	0.67	0.03	3.31	Similar
Presence Mercy Medical Center	Aurora	2	30187	1.14	1.75	0.29	5.77	Similar
Presence Resurrection Medical Center	Chicago	3	63155	4.89	0.61	0.16	1.67	Similar
Presence Saint Francis Hospital	Evanston	0	38176	1.54	0.00		1.95	Similar
Presence Saint Joseph Hospital	Elgin	1	22723	0.75				Not Available
Presence Saint Joseph Hospital	Chicago	0	49426	1.56	0.00		1.92	Similar
Presence Saint Joseph Medical Center	Joliet	4	103759	7.52	0.53	0.17	1.28	Similar
Presence Saints Mary and Elizabeth Medical Center	Chicago	4	85429	3.69	1.08	0.35	2.62	Similar
Presence St Mary's Hospital	Kankakee	2	21990	1.32	1.51	0.25	4.99	Similar
Presence United Samaritans Medical Center	Danville	0	17557	0.54		•		Not Available
Provident Hospital of Cook County	Chicago	0	3092	0.05		•		Not Available
Red Bud Regional Hospital	Red Bud	1	5971	0.12	•	•		Not Available

		Observed [O]	Number of			95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days		SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
Richland Memorial Hospital	Olney	1	6517	0.22	•	•		Not Available
Riverside Medical Center	Kankakee	1	61050	2.71	0.37	0.02	1.82	Similar
Rochelle Community Hospital	Rochelle	0	1484	0.03	•	•		Not Available
Rockford Memorial Hospital	Rockford	1	63435	4.46	0.22	0.01	1.11	Similar
Roseland Community Hospital	Chicago	0	16472	0.57	·	•		Not Available
Rush Oak Park Hospital	Oak Park	1	17985	0.79				Not Available
Rush University Medical Center	Chicago	4	158229	7.64	0.52	0.17	1.26	Similar
Rush-Copley Medical Center	Aurora	1	52736	2.46	0.41	0.02	2.00	Similar
Salem Township Hospital	Salem	0	1690	0.04	•	•		Not Available
Sarah Bush Lincoln Health Center	Mattoon	3	30295	1.31	2.28	0.58	6.22	Similar
Sarah D Culbertson Memorial Hospital	Rushville	0	1710	0.04	•	•		Not Available
Shriners Hospital For Children	Chicago	0	3348	0.07	•			Not Available
Silver Cross Hospital	New Lenox	3	76677	2.65	1.13	0.29	3.08	Similar
South Shore Hospital	Chicago	4	19556	1.15	3.47	1.10	8.38	Higher
Sparta Community Hospital	Sparta	0	2128	0.04	•			Not Available
SSM Health Good Samaritan Hospital	Mount Vernon	0	30743	1.39	0.00		2.15	Similar
SSM Health St Mary's Hospital	Centralia	0	17001	0.58	•	•		Not Available
St Anthony Hospital	Chicago	1	15438	0.62	•	•		Not Available
St Bernard Hospital & Health Care Center	Chicago	0	30712	1.27	0.00	•	2.36	Similar
St Joseph Memorial Hospital	Murphysboro	0	3937	0.08	•	•		Not Available

		Observed [O]	Number of	Statistically Predicted [P]		95% Con Inter		
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
St Margaret's Health	Spring Valley	1	6839	0.12	•	•		Not Available
Swedish Covenant Hospital	Chicago	2	67140	3.35	0.60	0.10	1.97	Similar
SwedishAmerican Hospital	Rockford	4	62231	2.69	1.49	0.47	3.59	Similar
Taylorville Memorial Hospital	Taylorville	0	6223	0.13	•	•		Not Available
Thomas H Boyd Memorial Hospital	Carrollton	0	1240	0.03	·	•		Not Available
Thorek Hospital & Medical Center	Chicago	1	12104	0.45	•			Not Available
Touchette Regional Hospital	Centreville	0	10298	0.37	•	•		Not Available
Union County Hospital	Anna	0	3379	0.07	•	•		Not Available
UnityPoint Health - Methodist	Peoria	5	42351	2.12	2.36	0.87	5.23	Similar
UnityPoint Health - Pekin	Pekin	0	14291	0.59	•			Not Available
UnityPoint Health - Proctor	Peoria	0	13012	0.59	•	•		Not Available
UnityPoint Health - Trinity Moline	Moline	0	8264	0.29	•	•		Not Available
UnityPoint Health - Trinity Rock Island	Rock Island	1	58156	3.47	0.29	0.01	1.42	Similar
University of Chicago Medicine	Chicago	7	197279	16.84	0.42	0.18	0.82	Lower
University of Illinois Hospital & Health Sciences System	Chicago	6	114603	9.16	0.66	0.27	1.36	Similar
Vista Medical Center East	Waukegan	0	43167	1.61	0.00		1.86	Similar
Wabash General Hospital	Mount Carmel	0	2559	0.05	•	•		Not Available
Warner Hospital and Health Services	Clinton	0	417	0.01	•	•		Not Available
Washington County Hospital	Nashville	0	251	0.01	•	•		Not Available
Weiss Memorial Hospital	Chicago	3	28261	1.81	1.66	0.42	4.52	Similar

		Observed [O]	Number of	Statistically Predicted [P]		95% Confidence Interval ^d		
Hospital Name	Hospital City	Number of MRSA	Patient Days	Number of MRSA ^b	SIR ^c = O/P	Lower Bound ^e	Upper Bound	Statistical Interpretation
West Suburban Medical Center	Oak Park	0	29141	2.20	0.00		1.36	Similar
Westlake Hospital	Melrose Park	0	28695	1.29	0.00	•	2.33	Similar

NHSN Data contained in this report were last generated on June 1, 2017.

NOTE: All conclusions are based on the assumption that the hospital's patient population is similar to the referent population (NHSN 2015 national aggregate data).

^a The SIR is a summary measure used to compare the actual number of MDRO events reported at a facility with a predicted number based on the NHSN referent population. It is the observed number of infections divided by the predicted number of infections.

^b Please note that the predicted number of infections does not mean that you expect to get an infection when you are hospitalized.

^c If the predicted number of infections is less than 1,the SIR is not calculated because it does not meet the minimum requirement for precision.

^d If the 95% confidence interval (CI) includes 1, then the SIR is not statistically significant. See cover page for more details.

If the number of observed infections is 0 and the number predicted is greater than or equal to 1, a 95% CI is reported.

^e The lower bound of the CI is calculated only if the observed infection count is greater than 0.