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Illinois Statewide Report of Methicillin-resistant *Staphylococcus aureus* (MRSA) Bloodstream Infections in Acute Care Hospitals, NHSN Surveillance Reporting January 1, 2015 – December 31, 2015

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 Organizm (MDRO) Laboratory-identified (LabID) Event module. (http://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf)

NHSN reporting enables a facility to rely almost exclusively on data obtained from the laboratory and allows the calculation of proxy measures of MRSA bloodstream events, exposures and healthcare acquisition. This is the first annual Illinois Department of Public Health report for hospital-onset MRSA positive blood cultures, using data submitted by hospitals to NHSN expressed as Standardized Infection Ratio (SIR).

Standardized Infection Ratio

The standardized infection ratio (SIR) and corresponding 95% confidence intervals for each LabID event type is calculated for facilities reporting Healthcare Facility Onset (HO) Incidence Rate of MRSA data to NHSN. The SIRs use risk models to determine the predicted number of MRSA infections based on the baseline data (referent population, 2010-2011 Inpatient facility-wide NHSN surveillance data), adjusting for significant risk factors. A comparison of the actual number of HO incident cases with the predicted number of infections is the SIR for that hospital. Three factors were found to be significant in predicting HO MRSA bacteremia LabID incidence: medical school affiliation, facility bedsize, and CO MRSA bacteremia prevalence rate.

This data represents reporting of MRSA infections in Acute Care Hospitals from January 1, 2015 to December 31, 2015.

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

						95% Confidence Interval ^d		
Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
Abraham Lincoln Memorial Hospital	Lincoln	0	4927	0.18				Not Available
Advocate BroMenn Medical Center	Normal	0	37553	1.41	0.00		2.13	Similar
Advocate Christ Medical Center	Oak Lawn	3	197285	14.82	0.20	0.05	0.55	Lower
Advocate Condell Medical Center	Libertyville	6	83611	3.07	1.95	0.79	4.06	Similar
Advocate Eureka Hospital	Eureka	0	1195	0.04				Not Available
Advocate Good Samaritan Hospital	Downers Grove	0	80141	3.03	0.00		0.99	Lower
Advocate Good Shepherd Hospital	Barrington	0	48182	1.83	0.00		1.64	Similar
Advocate Illinois Masonic Medical Center	Chicago	0	72688	3.68	0.00		0.82	Lower
Advocate Lutheran General Hospital	Park Ridge	5	157929	8.40	0.60	0.22	1.32	Similar
Advocate Sherman Hospital	Elgin	0	63450	2.61	0.00		1.15	Similar
Advocate South Suburban Hospital	Hazel Crest	2	53657	2.03	0.99	0.17	3.26	Similar
Advocate Trinity Hospital	Chicago	2	43793	1.64	1.22	0.20	4.02	Similar
Alton Memorial Hospital	Alton	1	25214	1.01	0.99	0.05	4.89	Similar
AMITA Health Bolingbrook	Bolingbrook	1	22091	1.03	0.97	0.05	4.79	Similar
AMITA Health Elk Grove Village	Elk Grove Village	0	86856	3.19	0.00		0.94	Lower
AMITA Health GlenOaks	Glendale Heights	0	24910	1.19	0.00		2.51	Similar
AMITA Health Hinsdale	Hinsdale	0	51054	2.26	0.00		1.32	Similar
AMITA Health Hoffman Estates	Hoffman Estates	0	91810	3.36	0.00		0.89	Lower
AMITA Health La Grange	La Grange	3	32155	1.42	2.11	0.54	5.75	Similar
Anderson Hospital	Maryville	1	23133	0.89				Not Available
Ann & Robert H Lurie Children's Hospital of Chicago	Chicago	2	70031	3.68	0.54	0.09	1.80	Similar

						95% Confidence Interval ^d		
Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
Blessing Hospital	Quincy	2	60942	2.33	0.86	0.14	2.84	Similar
Carle Foundation Hospital	Urbana	11	102677	9.41	1.17	0.62	2.03	Similar
Carle Hoopeston Regional Hospital	Hoopeston	0	985	0.04		•		Not Available
Carlinville Area Hospital	Carlinville	0	2844	0.10		•		Not Available
Centegra Hospital	Woodstock	1	16276	0.67		•		Not Available
Centegra Hospital	McHenry	0	39302	1.53	0.00		1.96	Similar
CGH Medical Center	Sterling	0	15475	0.97	•			Not Available
Clay County Hospital	Flora	0	4621	0.17				Not Available
Community First Medical Center	Chicago	5	48606	2.38	2.10	0.77	4.66	Similar
Community Memorial Hospital	Staunton	0	843	0.03	•	•		Not Available
Crawford Memorial Hospital	Robinson	1	3513	0.13				Not Available
Crossroads Community Hospital	Mount Vernon	0	3747	0.20				Not Available
Decatur Memorial Hospital	Decatur	5	39093	1.87	2.67	0.98	5.92	Similar
Dr John Warner Hospital	Clinton	0	688	0.02				Not Available
Edward Hospital	Naperville	2	103552	5.61	0.36	0.06	1.18	Similar
Elmhurst Memorial Hospital	Elmhurst	0	37431	1.78	0.00		1.68	Similar
Fairfield Memorial Hospital	Fairfield	0	3713	0.13				Not Available
Fayette County Hospital	Vandalia	0	1640	0.06				Not Available
Ferrell Hospital	Eldorado	0	2914	0.17				Not Available
FHN Memorial Hospital	Freeport	1	20557	0.76				Not Available
Franciscan St. James Health	Chicago Heights	3	52302	2.15	1.39	0.36	3.80	Similar
Franciscan St. James Health	Olympia Fields	3	52302	2.15	1.39	0.36	3.80	Similar

						95% Cor Inte		Statistical Interpretation
Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	
Franklin Hospital	Benton	0	1391	0.05				Not Available
Galesburg Cottage Hospital	Galesburg	0	9287	0.74				Not Available
Gateway Regional Medical Center	Granite City	1	22014	0.97		•		Not Available
Genesis Medical Center - Aledo	Aledo	0	1581	0.06		•		Not Available
Genesis Medical Center-Silvis	Silvis	0	12507	0.45				Not Available
Gibson Area Hospital & Health Services	Gibson City	0	3293	0.16				Not Available
Graham Hospital	Canton	0	8276	0.40				Not Available
Hamilton Memorial Hospital District	Mcleansboro	0	3195	0.11				Not Available
Hammond-Henry Hospital	Geneseo	0	4558	0.16				Not Available
Hardin County General Hospital	Rosiclare	2	1473	0.05				Not Available
Harrisburg Medical Center	Harrisburg	0	6073	0.22				Not Available
Heartland Regional Medical Center	Marion	0	12204	0.44				Not Available
Herrin Hospital	Herrin	0	20105	0.78				Not Available
Hillsboro Area Hospital	Hillsboro	0	1929	0.20				Not Available
Holy Cross Hospital	Chicago	0	55368	3.23	0.00		0.93	Lower
Hopedale Hospital	Hopedale	0	2550	0.09				Not Available
Greenville Regional Hospital	Greenville	0	4076	0.15				Not Available
HSHS St Anthony's Memorial Hospital	Effingham	0	21916	0.92				Not Available
HSHS St Elizabeth's Hospital	Belleville	2	42297	2.61	0.77	0.13	2.54	Similar
HSHS St Francis Hospital	Litchfield	1	5360	0.19				Not Available
HSHS St John's Hospital	Springfield	7	89147	7.15	0.98	0.43	1.94	Similar
HSHS St Joseph's Hospital	Highland	0	6978	0.25		•		Not Available

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Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
HSHS St Joseph's Hospital	Breese	0	5577	0.29	•	•		Not Available
HSHS St Mary's Hospital	Decatur	1	29606	1.24	0.81	0.04	3.99	Similar
Illini Community Hospital	Pittsfield	0	1496	0.05	•	•		Not Available
Illinois Valley Community Hospital	Peru	0	6460	0.33	•	•		Not Available
Ingalls Memorial Hospital	Harvey	0	61658	2.86	0.00	•	1.05	Similar
Jackson Park Hospital & Medical Center	Chicago	0	26273	0.94	•	•		Not Available
Jersey Community Hospital	Jerseyville	0	2947	0.25				Not Available
John H Stroger Jr Hospital of Cook County	Chicago	14	109072	9.00	1.56	0.89	2.55	Similar
Katherine Shaw Bethea Hospital	Dixon	1	11297	0.50	•	•		Not Available
Kirby Medical Center	Monticello	0	1999	0.07	•	•		Not Available
Lawrence County Memorial Hospital	Lawrenceville	0	2437	0.09		•		Not Available
Little Company of Mary Hospital	Evergreen Park	2	59352	2.30	0.87	0.15	2.88	Similar
Loretto Hospital	Chicago	0	25197	1.23	0.00	•	2.44	Similar
Loyola Gottlieb Memorial Hospital	Melrose Park	2	27781	1.47	1.36	0.23	4.51	Similar
Loyola University Medical Center	Maywood	9	130535	11.18	0.81	0.39	1.48	Similar
MacNeal Hospital	Berwyn	0	54557	2.69	0.00	•	1.11	Similar
Marshall Browning Hospital	Du Quoin	0	1707	0.06		•		Not Available
Mason District Hospital	Havana	0	664	0.02		•		Not Available
Massac Memorial Hospital	Metropolis	0	1221	0.04		•		Not Available
McDonough District Hospital	Macomb	0	7139	0.29		•		Not Available
Memorial Hospital	Belleville	3	74444	2.94	1.02	0.26	2.78	Similar
Memorial Hospital	Carthage	0	2449	0.09		•		Not Available

						95% Confidence Interval ^d		
Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
Memorial Hospital	Chester	0	2848	0.10	•	•		Not Available
Memorial Hospital of Carbondale	Carbondale	3	36548	1.59	1.88	0.48	5.13	Similar
Memorial Medical Center	Springfield	7	109262	10.72	0.65	0.29	1.29	Similar
Mendota Community Hospital	Mendota	0	2280	0.15	•			Not Available
Mercy Harvard Hospital	Harvard	0	1258	0.05				Not Available
Mercy Hospital & Medical Center	Chicago	1	58980	4.08	0.25	0.01	1.21	Similar
Methodist Hospital of Chicago	Chicago	0	23069	0.83	•			Not Available
MetroSouth Medical Center	Blue Island	0	32814	1.47	0.00		2.03	Similar
Midwest Medical Center	Galena	0	1780	0.06				Not Available
Morris Hospital & Healthcare Centers	Morris	0	16551	0.70				Not Available
Morrison Community Hospital	Morrison	1	3232	0.12				Not Available
Mount Sinai Hospital	Chicago	4	69679	4.33	0.93	0.29	2.23	Similar
Northshore Univ HS Evanston Hospital	Evanston	1	77669	4.01	0.25	0.01	1.23	Similar
Northshore Univ HS Glenbrook Hospital	Glenview	2	42388	2.30	0.87	0.15	2.88	Similar
Northshore Univ HS Highland Park Hospital	Highland Park	3	40950	1.49	2.01	0.51	5.48	Similar
Northshore Univ HS Skokie Hospital	Skokie	1	34601	1.76	0.57	0.03	2.81	Similar
Northwest Community Healthcare Hospital	Arlington Heights	4	89759	3.87	1.03	0.33	2.49	Similar
Northwestern Medicine Central DuPage Hospital	Winfield	0	96492	3.53	0.00		0.85	Lower
Northwestern Medicine Delnor Hospital	Geneva	0	34219	1.29	0.00		2.32	Similar
Northwestern Medicine Kishwaukee Hospital	De Kalb	0	23308	0.94				Not Available
Northwestern Medicine Lake Forest Hospital	Lake Forest	2	25889	0.93				Not Available
Northwestern Medicine Valley West Hospital	Sandwich	0	2932	0.13				Not Available

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Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
Northwestern Memorial Hospital	Chicago	16	262079	15.09	1.06	0.63	1.69	Similar
Norwegian-American Hospital	Chicago	1	41646	2.43	0.41	0.02	2.03	Similar
OSF Holy Family Medical Center	Monmouth	0	1965	0.07				Not Available
OSF Saint Anthony Medical Center	Rockford	7	54545	2.48	2.82	1.23	5.57	Higher
OSF Saint Anthony's Health Center	Alton	0	11169	0.50				Not Available
OSF Saint Elizabeth Medical Center	Ottawa	1	13854	0.52				Not Available
OSF Saint Francis Medical Center	Peoria	19	178346	15.95	1.19	0.74	1.83	Similar
OSF Saint James-John W Albrecht Medical Center	Pontiac	0	5519	0.20				Not Available
OSF Saint Luke Medical Center	Kewanee	0	1863	0.07				Not Available
OSF St Joseph Medical Center	Bloomington	1	25645	1.07	0.93	0.05	4.61	Similar
OSF St Mary Medical Center	Galesburg	0	12929	0.48				Not Available
Palos Community Hospital	Palos Heights	2	93115	6.27	0.32	0.05	1.05	Similar
Pana Community Hospital	Pana	0	1125	0.04				Not Available
Paris Community Hospital	Paris	0	2385	0.09				Not Available
Passavant Area Hospital	Jacksonville	0	10555	0.41				Not Available
Pekin Hospital	Pekin	2	16306	0.76				Not Available
Perry Memorial Hospital	Princeton	0	2002	0.18				Not Available
Pinckneyville Community Hospital	Pinckneyville	0	999	0.04				Not Available
Presence Covenant Medical Center	Urbana	0	26680	1.87	0.00		1.61	Similar
Presence Mercy Medical Center	Aurora	0	31722	1.28	0.00		2.33	Similar
Presence Resurrection Medical Center	Chicago	3	55104	3.40	0.88	0.23	2.40	Similar
Presence Saint Francis Hospital	Evanston	1	40251	2.46	0.41	0.02	2.01	Similar

						95% Cor Inte		
Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
Presence Saint Joseph Hospital	Elgin	2	24680	1.17	1.71	0.29	5.64	Similar
Presence Saint Joseph Hospital	Chicago	0	56231	2.01	0.00		1.49	Similar
Presence Saint Joseph Medical Center	Joliet	3	97945	6.37	0.47	0.12	1.28	Similar
Presence Saints Mary and Elizabeth Medical Center	Chicago	2	91951	3.48	0.58	0.10	1.90	Similar
Presence St Mary's Hospital	Kankakee	0	18993	0.86	•			Not Available
Presence United Samaritans Medical Center	Danville	3	21708	0.97				Not Available
Provident Hospital of Cook County	Chicago	0	2899	0.10	•			Not Available
Red Bud Regional Hospital	Red Bud	0	2251	0.08				Not Available
Richland Memorial Hospital	Olney	0	5847	0.24				Not Available
Riverside Medical Center	Kankakee	2	52531	3.22	0.62	0.10	2.05	Similar
Rochelle Community Hospital	Rochelle	0	1093	0.04	•			Not Available
Rockford Memorial Hospital	Rockford	1	64616	3.12	0.32	0.02	1.58	Similar
Roseland Community Hospital	Chicago	2	17602	0.67				Not Available
Rush Oak Park Hospital	Oak Park	1	18036	0.69				Not Available
Rush University Medical Center	Chicago	8	163565	12.22	0.66	0.30	1.24	Similar
Rush-Copley Medical Center	Aurora	0	52030	2.80	0.00		1.07	Similar
Salem Township Hospital	Salem	0	1870	0.07				Not Available
Sarah Bush Lincoln Health Center	Mattoon	2	33547	1.38	1.45	0.24	4.78	Similar
Sarah D Culbertson Memorial Hospital	Rushville	0	1485	0.05				Not Available
Shelby Memorial Hospital	Shelbyville	0	1758	0.06				Not Available
Shriners Hospital For Children	Chicago	0	2979	0.15				Not Available
Silver Cross Hospital	New Lenox	3	71079	2.94	1.02	0.26	2.78	Similar

						95% Confidence Interval ^d		
Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
South Shore Hospital	Chicago	6	21729	1.24	4.86	1.97	10.10	Higher
Sparta Community Hospital	Sparta	0	2572	0.12				Not Available
SSM Health Good Samaritan Hospital	Mount Vernon	0	31841	1.23	0.00		2.43	Similar
SSM Health St Mary's Hospital	Centralia	2	19722	0.74	•			Not Available
St Anthony Hospital	Chicago	0	15768	0.70				Not Available
St Bernard Hospital & Health Care Center	Chicago	2	37857	1.78	1.12	0.19	3.70	Similar
St Joseph Memorial Hospital	Murphysboro	0	4405	0.16				Not Available
St Margaret's Health	Spring Valley	1	6374	0.23				Not Available
Swedish Covenant Hospital	Chicago	4	69433	4.42	0.91	0.29	2.18	Similar
Swedish American Hospital	Rockford	3	69106	3.17	0.95	0.24	2.57	Similar
Taylorville Memorial Hospital	Taylorville	0	6245	0.28				Not Available
Thomas H Boyd Memorial Hospital	Carrollton	0	1111	0.04				Not Available
Thorek Hospital & Medical Center	Chicago	0	11090	0.40				Not Available
Touchette Regional Hospital	Centreville	0	9577	0.38				Not Available
Union County Hospital	Anna	0	3720	0.13				Not Available
UnityPoint Health - Methodist	Peoria	3	42512	2.33	1.29	0.33	3.51	Similar
UnityPoint Health - Proctor	Peoria	0	14529	0.77				Not Available
UnityPoint Health - Trinity - Moline	Moline	0	9064	0.35				Not Available
UnityPoint Health - Trinity - Rock Island	Rock Island	1	60435	2.58	0.39	0.02	1.91	Similar
University of Chicago Medicine	Chicago	16	185216	17.48	0.92	0.54	1.46	Similar
niversity of Illinois Hospital & Health Sciences System	Chicago	7	116831	8.97	0.78	0.34	1.54	Similar
Vista Medical Center East	Waukegan	4	42304	1.98	2.02	0.64	4.86	Similar

Methicillin-resistant Staphylococcus aureus (MRSA)

Hospital Name	Hospital City	Observed [O] Number of MRSA	Number of Patient Days	Statistically Expected [E] Number of MRSA ^b	Unit-Specific SIR ^c = O/E	Lower Bound ^e	Upper Bound	Statistical Interpretation
Wabash General Hospital	Mount Carmel	0	1620	0.11		•		Not Available
Washington County Hospital	Nashville	0	219	0.01				Not Available
Weiss Memorial Hospital	Chicago	2	27188	1.61	1.25	0.21	4.12	Similar
West Suburban Medical Center	Oak Park	0	31408	3.36	0.00		0.89	Lower
Westlake Hospital	Melrose Park	0	27897	1.12	0.00		2.68	Similar

NHSN Data contained in this report were last generated on June 20, 2016

Interpretation of the SIR:

- If the 95% confidence interval includes 1.00, the hospital's infection rate is similar (not significantly different) from expected (predicted)
- If the SIR is greater than 1.00 and the 95% confidence interval does not include 1.00, the hospital's infection rate is significantly higher than expected (predicted)
- If the SIR is less than 1.00 and the 95% confidence interval does not include 1.00, the hospital's infection rate is significantly lower than expected(predicted)

NOTE: All conclusions are based on the assumption that the hospital's patient population is similar to the referent population (NHSN 2010-2011 pooled patient population)

^a The Standardized Infection Ratio (SIR) is a summary measure used to compare the actual number of MDRO events reported with the standard 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 1.00,the SIR is not calculated because it does not meet the minimum requirement for precision.

^d The 95% confidence interval for a hospital's standardized infection ratio (SIR) is the range of possible SIRs within which there is 95% confidence that the real SIR for that hospital lies. If the number of observed infections is 0 and the number predicted is greater than or equal to 1.00, a 95% confidence interval is reported

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