

**2013 National and State HAI Progress Report**  
**Full series of tables for all national and state-specific data**

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risk adjustment

Table 1a

Table 1. Characteristics of facilities reporting to NHSN by State <sup>1</sup> , 2012 and 2013: 1a. Central line-associated bloodstream infections (CLABSI) <sup>2</sup>															
State	Number of Facilities in State <sup>3</sup>	2012							2013						
		Any State Mandate <sup>4</sup>	Any Validation <sup>5</sup>	Number of Facilities Reporting	NHSN Reporting In State				Number of Facilities Reporting	NHSN Reporting In State					
					Locations (n) <sup>2</sup>					Total	ICU	Total	ICU		
					Total	ICU	Wards <sup>2</sup>	NICU <sup>6</sup>						Total	ICU
Alaska	26	No	No	11	31	11	18	2	No	No	10	32	10	20	2
Alabama	118	Yes	Yes	76	220	134	74	12	Yes	Yes	75	244	133	97	14
Arkansas	87	Yes	Yes	49	124	66	49	9	Yes	Yes <sup>A</sup>	48	133	66	59	8
Arizona	97	No	No	58	182	98	71	13	No	No	56	223	89	119	15
California	417	Yes	Yes	353	2,292	548	1,609	135	Yes	Yes	351	2,304	542	1,618	144
Colorado	94	Yes	Yes	51	145	67	60	18	M		52	151	69	63	19
Connecticut	41	Yes	Yes <sup>A</sup>	30	63	48	2	13	Yes	Yes	30	66	48	6	12
D.C.	12	Yes	Yes	8	40	21	13	6	Yes	Yes	8	45	20	19	6
Delaware	13	Yes	Yes	8	22	13	7	2	Yes	Yes	8	39	15	22	2
Florida	237	No	No	187	634	393	191	50	No	No	191	733	399	278	56
Georgia	166	No		105	331	184	113	34	Yes	No	103	367	176	158	33
Hawaii	27	Yes	Yes	16	40	23	15	2	Yes	Yes	15	38	23	13	2
Iowa	122	No	Yes	48	83	49	23	11	No	Yes	50	94	51	31	12
Idaho	47	No	No	12	28	17	4	7	No	No	16	35	19	8	8
Illinois	207	Yes	Yes	146	527	227	255	45	Yes	Yes	148	530	225	259	46
Indiana	148	M	Yes	102	286	148	110	28	Yes	No	104	320	146	144	30
Kansas	149	No	Yes	46	93	63	20	10	No	Yes	49	130	62	58	10
Kentucky	116	No	No	71	194	123	58	13	No	No	72	200	124	61	15
Louisiana	172	No	Yes	76	218	116	77	25	No	Yes	80	256	116	111	29
Massachusetts	95	Yes		69	200	131	59	10	Yes	Yes	71	204	124	70	10
Maryland	59	Yes		47	183	79	87	17	Yes	Yes	47	233	81	134	18
Maine	41	No		22	59	30	26	3	Yes	Yes	21	55	27	25	3
Michigan	157	No	Yes	95	278	179	79	20	No	Yes	97	277	180	77	20
Minnesota	144	No	No	50	94	75	11	8	Yes	No	48	163	73	80	10
Missouri	135	No	No	75	178	119	37	22	No	No	75	209	124	65	20
Mississippi	111	No	No	46	159	69	76	14	No	No	47	198	73	112	13
Montana	64	No		12	36	14	17	5	No		14	45	14	26	5
North Carolina	133	M	Yes	96	370	174	172	24	Yes	Yes	98	402	177	201	24
North Dakota	48	No	No	6	21	11	4	6	No	No	6	22	11	5	6
Nebraska	95	No	No	19	83	27	50	6	No	No	20	82	26	49	7
New Hampshire	29	Yes	Yes	24	47	27	17	3	Yes	Yes	24	48	27	18	3
New Jersey	94	Yes	Yes	72	239	144	71	24	Yes	Yes	72	250	142	84	24
New Mexico	48	M	Yes	34	71	36	29	6	Yes		36	78	37	36	5
Nevada	46	Yes	No	23	150	45	96	9	Yes	No	23	161	45	107	9
New York	251	Yes		174	838	359	426	53	Yes		172	879	357	469	53
Ohio	203	No	No	136	396	252	117	27	No	No	138	426	261	139	26
Oklahoma	144	Yes		55	132	79	45	8	Yes	Yes	54	135	79	49	7
Oregon	64	Yes		48	110	59	44	7	Yes	Yes	50	122	69	46	7

Table 1a

Pennsylvania	221	Yes	Yes	176	1,384	301	1,036	47	Yes	Yes	173	1,375	288	1,041	46
Puerto Rico	59	No	No	18	94	36	53	5	No	No	18	81	34	42	5
Rhode Island	14	No	No	11	53	18	34	1	Yes	No	11	57	18	38	1
South Carolina	81	Yes		66	420	106	307	7	Yes		66	420	107	304	9
South Dakota	64	No		14	48	21	24	3	No		16	52	19	29	4
Tennessee	154	Yes	Yes	94	341	174	143	24	Yes	Yes	95	353	174	155	24
Texas	506	Yes		277	776	429	223	124	Yes	Yes	281	859	419	321	119
Utah	53	M		26	50	37	0	13	Yes	Yes	26	52	38	1	13
Virginia	109	Yes	Yes	81	257	145	87	25	Yes	Yes	81	277	143	110	24
Vermont	16	Yes	Yes	7	10	9	0	1	Yes	Yes	7	11	9	1	1
Washington	103	Yes		63	135	79	39	17	Yes		84	397	84	297	16
Wisconsin	144	No	No	78	262	101	141	20	No	Yes	90	303	104	181	18
West Virginia	58	Yes	No	40	114	59	51	4	Yes	Yes	43	136	59	73	4
Wyoming	31	No	No	20	28	13	15	0	No	No	21	32	13	19	0

Table 1b

1b. Catheter-associated urinary tract infections (CAUTI) <sup>2</sup>													
State	2012								2013				
				NHSN Reporting In State						NHSN Reporting In State			
				Number of Facilities Reporting	Total	ICU				Number of Facilities Reporting	Total	ICU	
Alaska	26	No	No	12	29	11	18	No	No	10	32	10	22
Alabama	118	Yes		90	362	135	227	Yes		86	379	134	245
Arkansas	87	M	Yes	51	115	68	47	Yes	Yes	49	122	67	55
Arizona	97	No	No	58	157	96	61	No	No	55	203	87	116
California	417	No	No	338	1,257	533	724	No	No	341	1,500	529	971
Colorado	94	No	No	50	130	66	64	No	No	52	138	69	69
Connecticut	41	M		30	49	49	0	Yes	Yes	31	53	48	5
D.C.	12	No	No	7	33	19	14	No	Yes	7	40	18	22
Delaware	13	M	Yes	8	30	12	18	Yes	Yes	8	35	15	20
Florida	237	No	No	187	580	390	190	No	No	190	671	396	275
Georgia	166	No	No	107	274	182	92	Yes	No	106	315	176	139
Hawaii	27	M	Yes	15	47	23	24	Yes	Yes	15	45	23	22
Iowa	122	No	Yes	68	108	49	59	No	Yes	68	124	53	71
Idaho	47	No	No	15	25	17	8	No		17	29	19	10
Illinois	207	No	No	147	437	224	213	No	No	148	497	224	273
Indiana	148	M	Yes	104	307	150	157	Yes	No	110	333	148	185
Kansas	149	No	Yes	52	103	66	37	No	Yes	53	140	63	77
Kentucky	116	No	No	72	222	123	99	No	No	73	212	125	87
Louisiana	172	No	Yes	78	193	113	80	No	Yes	81	235	114	121
Massachusetts	95	No	No	68	181	131	50	No	No	71	185	124	61
Maryland	59	No	No	38	136	60	76	No	No	39	197	63	134
Maine	41	No	No	22	52	30	22	No	Yes	21	50	27	23
Michigan	157	No	Yes	97	269	178	91	No	Yes	99	268	179	89
Minnesota	144	No	No	51	82	74	8	Yes	No	51	153	73	80
Missouri	135	No	No	75	164	120	44	No	No	76	203	126	77
Mississippi	111	No	No	46	146	69	77	No	No	48	180	73	107
Montana	64	No		14	47	14	33	No		15	47	13	34
North Carolina	133	M	Yes	100	327	175	152	Yes	Yes	98	384	177	207
North Dakota	48	No	No	6	15	11	4	No	No	6	16	11	5
Nebraska	95	No	No	20	86	26	60	No	No	20	83	25	58
New Hampshire	29	Yes	Yes	23	49	26	23	Yes	Yes	23	45	26	19
New Jersey	94	Yes	Yes	72	236	144	92	Yes	Yes	72	243	142	101
New Mexico	48	No	No	34	54	36	18	No	No	35	62	37	25
Nevada	46	No	No	24	131	45	86	No	No	24	147	45	102
New York	251	No	No	175	756	357	399	No	No	172	834	357	477

Table 1b

Ohio	203	No	No	136	383	250	133	No	No	137	411	259	152
Oklahoma	144	No	No	61	122	79	43	No	No	59	131	79	52
Oregon	64	No	No	47	104	58	46	No	No	51	124	69	55
Pennsylvania	221	Yes	Yes	190	1,440	302	1,138	Yes	Yes	185	1,416	289	1127
Puerto Rico	59	No	No	18	92	35	57	No	No	18	80	34	46
Rhode Island	14	No	No	10	55	18	37	No	No	10	57	18	39
South Carolina	81	No	No	64	241	102	139	No	No	64	255	101	154
South Dakota	64	No	No	18	50	21	29	No	No	18	49	18	31
Tennessee	154	Yes	Yes	95	266	174	92	Yes	Yes	95	279	174	105
Texas	506	No	No	285	669	427	242	No	Yes	290	754	416	338
Utah	53	M	Yes	26	41	37	4	Yes		26	44	38	6
Virginia	109	No	No	81	238	145	93	No	No	81	259	143	116
Vermont	16	No	No	5	7	7	0	No	No	5	7	7	0
Washington	103	No	No	61	127	77	50	No	No	70	342	84	258
Wisconsin	144	No	No	85	250	95	155	No	Yes	102	300	102	198
West Virginia	58	M	No	43	118	60	58	Yes	Yes	47	135	59	76
Wyoming	31	No	No	24	32	13	19	No	No	24	36	13	23



Table 1. Characteristics of facilities reporting to NHSN by State<sup>1</sup>, 2012 and 2013:1c. Surgical site infections<sup>7</sup>

State		2012		NHSN Reporting in State		2013		NHSN Reporting in State	
		Any State Mandate <sup>4</sup>	Any Validation <sup>5</sup>	Number of Facilities Reporting	No. of Procedures Reported <sup>7</sup>			Number of Facilities Reporting	
Alaska	26	No	No	10	1,911	No	No	9	2,064
Alabama	118	Yes	Yes	76	15,870	Yes	Yes	74	16,369
Arkansas	87	No	No	44	7,035	Yes	Yes	44	7,797
Arizona	97	No	No	58	19,817	No	No	55	23,906
California	417	M		333	198,966	Yes		329	204,139
Colorado	94	Yes		62	34,023	Yes	Yes	62	34,187
Connecticut	41	No	No	30	9,653	Yes	Yes	30	8,672
D.C.	12	No	No	7	2,812	No	No	7	3,060
Delaware	13	Yes	No	7	4,466	Yes	Yes	7	4,753
Florida	237	No	No	180	50,002	No	No	183	57,076
Georgia	166	No	No	103	28,872	Yes	No	99	31,801
Hawaii	27	No	No	13	1,998	Yes	Yes	14	2,677
Iowa	122	No	No	34	6,944	No	No	37	6,706
Idaho	47	No		16	3,300	No		19	4,370
Illinois	207	Yes		154	61,527	Yes	Yes	156	62,525
Indiana	148	No	No	111	21,776	Yes	No	111	26,048
Kansas	149	No	Yes	50	11,171	No	Yes	48	13,271
Kentucky	116	No	No	66	11,683	No	No	67	13,181
Louisiana	172	No	No	83	11,916	No	Yes	84	15,694
Massachusetts	95	Yes	Yes	67	45,371	Yes	Yes	65	46,492
Maryland	59	Yes	Yes	45	26,193	Yes	Yes	44	25,694
Maine	41	No	No	24	5,260	No	Yes	21	5,297
Michigan	157	No	No	93	36,024	No	Yes	93	37,817
Minnesota	144	No	No	50	13,164	Yes	No	51	20,234
Missouri	135	No	No	73	26,798	No	No	75	30,780
Mississippi	111	No	No	44	10,279	No	No	45	11,918
Montana	64	No	No	15	5,928	No	No	16	4,920
North Carolina	133	No	No	93	26,951	Yes	Yes	94	27,843
North Dakota	48	No	No	6	1,426	No	No	6	1,487
Nebraska	95	No	No	21	4,917	No	No	19	5,956
New Hampshire	29	Yes	Yes	26	8,215	Yes	Yes	25	8,017
New Jersey	94	Yes	Yes	72	38,494	Yes	Yes	72	40,729
New Mexico	48	No	No	27	3,135	No	No	29	3,412
Nevada	46	Yes	No	22	10,940	Yes	No	22	12,940
New York	251	Yes		178	85,427	Yes		175	89,968
Ohio	203	No	No	133	33,497	No	No	135	37,312
Oklahoma	144	No	No	67	11,259	No	No	67	11,498
Oregon	64	Yes	No	52	27,848	Yes	Yes	53	28,847
Pennsylvania	221	Yes	No	171	114,765	Yes	Yes	169	117,163
Puerto Rico	59	No	No	0	0	No	No	0	0
Rhode Island	14	No	No	11	2,418	No	No	11	3,051
South Carolina	81	Yes		61	31,413	Yes		62	32,104
South Dakota	64	No	No	16	1,766	No	No	16	1,984
Tennessee	154	Yes	No	96	29,643	Yes	Yes	98	30,102
Texas	506	M	No	332	136,592	Yes	Yes	340	156,763
Utah	53	No	No	31	4,647	Yes	Yes	31	4,676
Virginia	109	No	No	78	18,077	No	No	78	20,952
Vermont	16	No	Yes	12	3,358	Yes	Yes	12	3,315
Washington	103	No	No	71	45,184	Yes	Yes	76	50,174
Wisconsin	144	No	Yes	86	33,049	No	Yes	96	35,136
West Virginia	58	No	No	36	6,248	Yes	Yes	36	6,999
Wyoming	31	No	No	13	683	No	No	14	605

**Table 1. Characteristics of facilities reporting to NHSN by State<sup>1</sup>, 2013:  
1d. Hospital-onset methicillin-resistant *Staphylococcus aureus* bacteremia**

State	2013			
		NHSN Reporting in State		
				Number of Facilities Reporting
Alaska	26	No	No	11
Alabama	118	No	No	93
Arkansas	87	Yes	Yes	47
Arizona	97	No	No	63
California	417	Yes	Yes	359
Colorado	94	No	No	56
Connecticut	41	Yes		32
D.C.	12	Yes	Yes	9
Delaware	13	Yes	No	8
Florida	237	No	No	190
Georgia	166	Yes	No	111
Hawaii	27	Yes	Yes	13
Iowa	122	No	Yes	41
Idaho	47	No		21
Illinois	207	Yes	Yes	183
Indiana	148	No	No	102
Kansas	149	No	Yes	59
Kentucky	116	No	No	71
Louisiana	172	No	Yes	101
Massachusetts	95	No	No	71
Maryland	59	No	No	13
Maine	41	No	Yes	25
Michigan	157	No	Yes	104
Minnesota	144	Yes	No	53
Missouri	135	No	No	82
Mississippi	111	No	No	64
Montana	64	No	No	15
North Carolina	133	Yes	Yes	100
North Dakota	48	No	No	11
Nebraska	95	No	No	24
New Hampshire	29	No	No	21
New Jersey	94	Yes	No	72
New Mexico	48	No	No	37
Nevada	46	Yes	No	23
New York	251	No	No	179
Ohio	203	Yes	No	144
Oklahoma	144	No	No	91
Oregon	64	No	No	49
Pennsylvania	221	Yes	Yes	168
Puerto Rico	59	No	No	3
Rhode Island	14	No	No	11
South Carolina	81	Yes		66
South Dakota	64	No	No	23
Tennessee	154	Yes	Yes	115
Texas	506	No	No	359

Utah	53	Yes	Yes	37
Virginia	109	No	No	84
Vermont	16	No	No	13
Washington	103	No	No	59
Wisconsin	144	No	Yes	88
West Virginia	58	Yes	Yes	39
Wyoming	31	No	No	14

**1e. Hospital-onset *Clostridium difficile* Infection**

State	2013			
		NHSN Reporting in State		
				Number of Facilities Reporting
Alaska	26	No	No	11
Alabama	118	No	No	93
Arkansas	87	Yes	Yes	47
Arizona	97	No	No	62
California	417	Yes	Yes	359
Colorado	94	No	No	55
Connecticut	41	Yes	Yes	32
D.C.	12	No	Yes	7
Delaware	13	Yes	No	8
Florida	237	No	No	190
Georgia	166	Yes	No	111
Hawaii	27	Yes	Yes	13
Iowa	122	No	Yes	57
Idaho	47	No		20
Illinois	207	Yes	Yes	183
Indiana	148	No	No	102
Kansas	149	No	Yes	64
Kentucky	116	No		71
Louisiana	172	No	Yes	101
Massachusetts	95	No	No	71
Maryland	59	M		46
Maine	41	Yes	Yes	36
Michigan	157	No	Yes	104
Minnesota	144	Yes	No	55
Missouri	135	No	No	82
Mississippi	111	No	No	65
Montana	64	No	No	16
North Carolina	133	Yes	Yes	100
North Dakota	48	No	No	11
Nebraska	95	No	No	24
New Hampshire	29	No	No	22
New Jersey	94	No	No	72
New Mexico	48	Yes	Yes	39
Nevada	46	No	No	22
New York	251	Yes		180
Ohio	203	Yes	No	144
Oklahoma	144	No	No	91
Oregon	64	Yes	Yes	59
Pennsylvania	221	Yes	Yes	167
Puerto Rico	59	No	No	4
Rhode Island	14	Yes	No	11
South Carolina	81	No	No	64
South Dakota	64	No	No	23
Tennessee	154	Yes	Yes	115
Texas	506	No	No	359

Utah	53	Yes	Yes	35
Virginia	109	No	No	84
Vermont	16	No	No	13
Washington	103	No	No	61
Wisconsin	144	No	Yes	95
West Virginia	58	Yes	Yes	41
Wyoming	31	No	No	27

**Footnotes for Tables 1a-1e:**

1. United States, Washington, D.C., and Puerto Rico

2. Data included in this report are from 2012 and 2013 from acute care facility ICUs (critical care units), NICUs (CLABSI only, see footnote 6), and wards (for this report wards also include step-down and specialty care areas [hematology/oncology, bone marrow transplant]). Long term acute care facilities and locations, inpatient rehabilitation facilities and locations, dialysis facilities and locations, and long term care facilities (skilled nursing facilities) are not included in this report.

3. The number of acute care facilities in a state was obtained using a list of facilities with Centers for Medicare and Medicaid Services Certification Numbers (CCNs) which was last updated on June 1, 2012. Acute care facilities for which data is included in this report (children's, women's, women's and children's, critical access, psychiatric, surgical, orthopedic, oncology, and acute short stay hospitals) were identified in the file and counted. Facilities sharing the same CCN in the NHSN database were identified and added to the count from the CCN file. Military and VA hospitals were identified using the 2009 American Hospital Association survey of healthcare facilities and added to the count from the CCN file. Long term acute care facilities, inpatient rehabilitation facilities, and long term care facilities (skilled nursing facilities) were excluded from the count. Because of this methodology, this count may differ slightly from counts provided by state regulatory authorities.

4. Yes indicates that a legislative or regulatory requirement ("state mandate") for acute care hospitals to report data to the state health department or hospital association via NHSN for the given HAI type at the beginning of the reporting period. No indicates that a state mandate did not exist at the beginning of a reporting period. If no state mandate existed at the beginning of the reporting period, but was implemented during the reporting period, the value of this column is "M" for midyear implementation. The number of facilities reporting data to NHSN may be lower than the number of facilities in the state identified in footnote 3, as some hospitals in a state may not be included in the state mandate (e.g., facilities do not have units or perform procedures covered by the mandate, or the mandate covers only facilities above a certain bed size).

5. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014, and state health department contacted identified facilities.

Yes<sup>A</sup> indicates that the state also conducted an audit of facility medical or laboratory records prior to July 1, 2014 to confirm proper case ascertainment (although intensity of auditing activities varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

6. NICU locations included are those classified by NHSN CDC location codes as Level II/III and Level III neonatal critical care areas. A Level II/III neonatal critical care area is defined by NHSN as a combined nursery housing both Level II and III newborns and infants. A Level III neonatal critical care area is defined by NHSN as a hospital NICU organized with personnel and equipment to provide continuous life support and comprehensive care for extremely high-risk newborn infants and those with complex and critical illness.

7. SSIs included are those following select inpatient surgical procedures approximating procedures covered by SCIP, using NHSN-defined SSIs that were classified as deep incisional or organ/space, and were detected during admission or upon readmission. The SCIP procedures and their affiliated NHSN procedure categories are listed in Appendix A.



**Facility-specific summary SIRs using HAI data reported from all NHSN facilities reporting during 2013 by HAI and predicted urinary tract infections (CAUTIs), methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia, and surgical site infections (SSIs) following Surgical Care Improvement Project (SCIP) procedures**

SIR	95% CI for SIR		Facility-specific SIRs at Key Percentiles <sup>1</sup>					No. Facilities with ≥1 Predicted Infection
	Lower	Upper	10%	25%	Median (50%)	75%	90%	
0.538	0.530	0.546	0.000	0.180	0.438	0.736	1.129	2,389
0.500	0.489	0.510	0.000	0.108	0.416	0.750	1.175	2,154
0.608	0.594	0.622	0.000	0.169	0.464	0.814	1.212	1,008
0.499	0.476	0.524	0.000	0.162	0.441	0.806	1.209	583
1.057	1.046	1.068	0.000	0.310	0.762	1.305	1.938	2,781
1.180	1.165	1.194	0.000	0.359	0.886	1.491	2.225	2,467
0.802	0.785	0.819	0.000	0.188	0.570	1.027	1.642	1,219
0.917	0.899	0.936	0.000	0.383	0.785	1.310	1.940	2,002
0.904	0.898	0.909	0.000	0.406	0.746	1.074	1.424	3,557
0.807	0.795	0.820	0.000	0.318	0.686	1.122	1.663	2,543
0.734	0.700	0.770	0.000	0.000	0.579	0.977	1.608	692
0.600	0.570	0.632	0.000	0.000	0.479	0.901	1.526	763
0.601	0.562	0.643	0.000	0.000	0.476	0.925	1.391	481
0.557	0.481	0.642	0.000	0.000	0.420	0.919	1.695	95
0.573	0.490	0.666	0.000	0.000	0.496	0.945	2.044	101
0.297	0.169	0.487	.	.	.	.	.	6
0.919	0.899	0.939	0.000	0.315	0.745	1.301	1.921	2,030
0.794	0.673	0.932	0.000	0.000	0.356	1.090	2.114	37
0.862	0.826	0.900	0.000	0.000	0.732	1.377	2.029	765
0.814	0.691	0.952	0.000	0.000	0.581	1.321	2.067	31

facility's predicted number of HAIs was <1.0, a facility-specific SIR was neither calculated nor included in the distribution in 2013.

the national SIR for the given HAI type.

facilities) and inpatient rehabilitation locations (or facilities).

and inpatient rehabilitation locations (or facilities).

(oncology, bone marrow transplant]). This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities). Surgical site infections (SSIs) and central line-associated bloodstream infections are considered CLABSIs.

facilities) and inpatient rehabilitation locations (or facilities).

ere detected during the same admission as the procedure or upon readmission to the same facility. Eligible procedures



atient population:  
*Clostridium difficile* infections,

<b>Facility-specific SIRs<sup>2</sup></b>			
<b>No. Facilities with SIR Significantly &gt; National SIR</b>		<b>No. Facilities with SIR Significantly &lt; National SIR</b>	
<b>N</b>	<b>%<sup>3</sup></b>	<b>N</b>	
216	9%	198	8%
187	9%	115	5%
93	9%	88	9%
41	7%	19	3%
332	12%	500	18%
284	12%	355	14%
130	11%	149	12%
150	7%	93	5%
472	13%	681	19%
222	9%	330	13%
25	4%	14	2%
21	3%	13	2%
16	3%	5	1%
4	4%	1	1%
5	5%	0	0%
.	.	.	.
151	7%	108	5%
3	8%	8	22%
44	6%	7	1%
1	3%	0	0%

tribution of facility-specific SIRs.

ations (or facilities).

cedures and their NHSN/SCIP categories are listed in Appendix A.

**Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013  
3a. Central line-associated bloodstream infections (CLABSI), all locations<sup>1</sup>**

State	State NHSN Mandate <sup>2</sup>	Any Validation <sup>3</sup>	Number of Facilities Reporting	No. of Infections		95% CI for SIR			Facility-specific SIRs			Facility-specific SIRs at Key Percentiles <sup>5</sup>					
				Observed	Predicted	SIR	Lower	Upper	No. of facs with at least 1 predicted CLABSI	% of facs with SIR sig higher than national SIR <sup>4</sup>	% of facs with SIR sig lower than national SIR <sup>4</sup>	10%	25%	Median (50%)	75%	90%	
Alaska	No	No	10	13	46.684	0.278	0.155	0.464	6	.	.	.	.	.	.	.	.
Alabama	Yes	Yes	75	399	597.831	0.667	0.604	0.735	39	13%	5%	0.000	0.132	0.412	0.816	1.091	
Arkansas	Yes		48	192	350.805	0.547	0.474	0.629	24	13%	4%	0.000	0.262	0.618	0.757	1.244	
Arizona	No	No	56	404	632.596	0.639	0.579	0.703	43	7%	2%	0.000	0.284	0.429	0.695	0.934	
California	Yes	Yes	350	2,482	4,804.903	0.517	0.497	0.537	290	12%	12%	0.000	0.185	0.423	0.732	1.270	
Colorado	M		52	204	413.219	0.494	0.429	0.565	32	3%	9%	0.000	0.179	0.263	0.539	0.806	
Connecticut	Yes	Yes	30	138	246.909	0.559	0.471	0.658	25	8%	4%	0.000	0.139	0.446	0.694	1.076	
D.C.	Yes	Yes	8	120	171.561	0.699	0.582	0.833	8	.	.	.	.	.	.	.	.
Delaware	Yes	Yes	8	76	107.267	0.709	0.562	0.882	8	.	.	.	.	.	.	.	.
Florida	No	No	191	1,295	2,190.473	0.591	0.560	0.624	170	8%	6%	0.000	0.224	0.511	0.781	1.164	
Georgia	Yes	No	102	703	979.231	0.718	0.666	0.772	65	15%	3%	0.000	0.230	0.616	0.818	1.163	
Hawaii	Yes	Yes	15	27	109.284	0.247	0.166	0.354	13	0%	15%	.	.	.	.	.	.
Iowa	No	Yes	50	86	160.144	0.537	0.432	0.660	18	6%	0%	.	.	.	.	.	.
Idaho	No	No	16	17	59.285	0.287	0.173	0.450	8	.	.	.	.	.	.	.	.
Illinois	Yes	Yes	148	589	1,254.234	0.470	0.433	0.509	106	7%	8%	0.000	0.000	0.329	0.763	1.048	
Indiana	Yes	No	104	517	746.663	0.692	0.635	0.754	58	12%	5%	0.000	0.000	0.498	0.799	1.316	
Kansas	No	Yes	49	158	274.166	0.576	0.492	0.672	20	10%	0%	0.000	0.000	0.387	0.556	0.762	
Kentucky	No	No	72	279	419.485	0.665	0.590	0.747	38	8%	5%	0.000	0.000	0.401	0.590	0.966	
Louisiana	No	Yes	79	345	502.249	0.687	0.617	0.762	47	15%	2%	0.000	0.221	0.607	0.884	1.391	
Massachusetts	Yes	Yes	69	311	607.440	0.512	0.457	0.571	48	2%	8%	0.000	0.000	0.321	0.655	0.956	
Maryland	Yes	Yes	47	269	523.454	0.514	0.455	0.578	39	5%	3%	0.000	0.172	0.407	0.619	0.948	
Maine	Yes	Yes	21	59	88.918	0.664	0.510	0.850	7	.	.	.	.	.	.	.	.
Michigan	No	Yes	97	396	907.800	0.436	0.395	0.481	59	5%	14%	0.000	0.176	0.448	0.696	0.962	
Minnesota	Yes	No	47	197	446.117	0.442	0.383	0.507	19	0%	16%	.	.	.	.	.	.
Missouri	No	No	74	237	565.404	0.419	0.368	0.475	47	9%	19%	0.000	0.162	0.368	0.777	1.509	
Mississippi	No	No	47	261	337.733	0.773	0.683	0.871	26	35%	4%	0.261	0.395	0.636	1.253	2.123	
Montana	No		14	44	69.616	0.632	0.465	0.841	9	.	.	.	.	.	.	.	.
North Carolina	Yes	Yes	98	462	869.439	0.531	0.485	0.582	60	7%	5%	0.000	0.000	0.287	0.590	0.815	
North Dakota	No	No	6	24	64.138	0.374	0.245	0.548	6	.	.	.	.	.	.	.	.
Nebraska	No	No	20	164	230.992	0.710	0.607	0.825	16	13%	0%	.	.	.	.	.	.
New Hampshire	Yes	Yes	24	18	52.102	0.345	0.211	0.535	8	.	.	.	.	.	.	.	.
New Jersey	Yes	Yes	72	387	631.728	0.613	0.554	0.676	68	18%	6%	0.000	0.265	0.524	0.856	1.334	
New Mexico	Yes		36	69	141.961	0.486	0.381	0.611	14	0%	7%	.	.	.	.	.	.
Nevada	Yes	No	23	318	501.685	0.634	0.567	0.706	19	26%	26%	.	.	.	.	.	.
New York	Yes		172	1,139	2,018.055	0.564	0.532	0.598	141	13%	8%	0.000	0.275	0.518	0.865	1.399	
Ohio	No	No	137	501	1,199.277	0.418	0.382	0.456	92	3%	14%	0.000	0.143	0.391	0.566	0.761	
Oklahoma	Yes	Yes	53	149	377.835	0.394	0.335	0.462	27	4%	15%	0.000	0.000	0.288	0.613	0.924	
Oregon	Yes	Yes	49	66	219.051	0.301	0.235	0.381	23	4%	13%	0.000	0.000	0.331	0.542	0.971	
Pennsylvania	Yes	Yes	172	1,212	2,453.939	0.494	0.467	0.522	127	6%	12%	0.000	0.258	0.458	0.671	0.931	
Puerto Rico	No	No	18	108	138.307	0.781	0.644	0.939	12	8%	8%	.	.	.	.	.	.
Rhode Island	Yes	No	11	73	108.941	0.670	0.529	0.838	8	.	.	.	.	.	.	.	.
South Carolina	Yes		65	428	744.035	0.575	0.523	0.632	41	12%	5%	0.000	0.128	0.467	0.846	1.189	
South Dakota	No		16	14	72.145	0.194	0.110	0.318	7	.	.	.	.	.	.	.	.
Tennessee	Yes	Yes	95	427	880.793	0.485	0.440	0.532	56	5%	9%	0.000	0.135	0.492	0.752	1.013	
Texas	Yes	Yes	281	1,295	2,521.007	0.514	0.486	0.542	204	8%	7%	0.000	0.187	0.434	0.726	1.123	
Utah	Yes	Yes	26	88	133.428	0.660	0.532	0.809	14	7%	0%	.	.	.	.	.	.
Virginia	Yes	Yes	81	351	701.042	0.501	0.450	0.555	50	4%	10%	0.000	0.000	0.316	0.578	0.970	
Vermont	Yes	Yes	7	6	23.814	0.252	0.102	0.524	2	.	.	.	.	.	.	.	.
Washington	Yes		83	332	618.184	0.537	0.482	0.597	45	11%	4%	0.000	0.184	0.413	0.619	0.760	

Wisconsin	No	Yes	90	253	526.220	0.481	0.424	0.543	50	4%	6%	0.000	0.000	0.356	0.665	0.877
West Virginia	Yes	Yes	43	91	258.042	0.353	0.286	0.431	24	0%	4%	0.000	0.000	0.396	0.613	0.860
Wyoming	No	No	21	6	11.337	0.529	0.215	1.101	3							
<b>All US</b>			<b>3,578</b>	<b>17,799</b>	<b>33,110.965</b>	<b>0.538</b>	<b>0.530</b>	<b>0.546</b>	<b>2,389</b>	<b>9%</b>	<b>8%</b>	<b>0.000</b>	<b>0.180</b>	<b>0.438</b>	<b>0.736</b>	<b>1.129</b>

1. Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).
2. Yes indicates the presence of a state mandate to report CLABSI data from any location to NHSN at the beginning of 2013. M indicates midyear implementation of a mandate.
3. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014, and state health department contacted identified facilities.

varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

4. Percent of facilities with at least one predicted CLABSI that had an SIR significantly greater or less than the 2013 national overall CLABSI SIR of 0.538. This is only calculated if at least 10 facilities had at least one predicted CLABSI in 2013.
5. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted CLABSI in 2013. If a facility's predicted number of CLABSI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures, NHSN facilities reporting during 2013**

**3b. Central line-associated bloodstream infections (CLABSI), critical care locations<sup>1</sup>**

State	No. of Infections	No. of Infections		95% CI for SIR			Facility-specific SIRs			Facility-specific SIRs at Key Percentiles <sup>3</sup>				
		Observed	Predicted	SIR	Lower	Upper	% of facs with SIR sig higher than national SIR <sup>2</sup>	% of facs with SIR sig lower than national SIR <sup>2</sup>		10%	25%	75%	90%	
Alaska	8	6	14.136	0.424	0.172	0.883	3							
Alabama	72	190	374.861	0.507	0.439	0.583	36	17%	11%	0.000	0.172	0.294	0.718	1.185
Arkansas	42	125	208.793	0.599	0.500	0.711	24	17%	0%	0.000	0.330	0.545	0.865	1.320
Arizona	53	188	373.958	0.503	0.435	0.579	43	2%	2%	0.000	0.197	0.393	0.620	0.890
California	317	900	1,860.463	0.484	0.453	0.516	247	10%	8%	0.000	0.000	0.377	0.763	1.245
Colorado	49	92	216.950	0.424	0.344	0.518	28	4%	14%	0.000	0.000	0.205	0.576	0.834
Connecticut	30	87	182.964	0.476	0.383	0.584	25	4%	0%	0.000	0.031	0.387	0.592	0.840
D.C.	8	74	118.204	0.626	0.495	0.781	8							
Delaware	8	34	64.484	0.527	0.371	0.728	8							
Florida	184	806	1,456.158	0.554	0.516	0.593	164	9%	5%	0.000	0.185	0.503	0.793	1.209
Georgia	98	397	600.566	0.661	0.598	0.729	62	15%	2%	0.000	0.143	0.566	0.843	1.287
Hawaii	15	18	69.759	0.258	0.158	0.400	11	0%	9%					
Iowa	36	62	111.057	0.558	0.432	0.711	16	6%	6%					
Idaho	12	12	44.923	0.267	0.145	0.454	8							
Illinois	139	275	625.253	0.440	0.390	0.494	99	6%	4%	0.000	0.000	0.294	0.764	1.087
Indiana	90	238	399.334	0.596	0.524	0.675	49	12%	4%	0.000	0.000	0.438	0.771	1.256
Kansas	41	53	147.245	0.360	0.272	0.467	17	6%	0%					
Kentucky	70	171	290.077	0.589	0.506	0.683	37	11%	5%	0.000	0.025	0.386	0.637	0.972
Louisiana	72	206	310.338	0.664	0.578	0.759	41	17%	2%	0.000	0.229	0.496	0.922	1.327
Massachusetts	66	157	399.353	0.393	0.335	0.458	47	0%	2%	0.000	0.000	0.321	0.626	0.863
Maryland	46	155	320.092	0.484	0.412	0.565	38	3%	0%	0.000	0.000	0.373	0.583	0.822
Maine	19	25	39.283	0.636	0.421	0.926	6							
Michigan	95	271	682.698	0.397	0.352	0.446	55	4%	7%	0.000	0.154	0.368	0.628	1.014
Minnesota	46	77	209.224	0.368	0.292	0.457	19	0%	5%					
Missouri	73	171	418.494	0.409	0.351	0.473	46	7%	11%	0.000	0.133	0.370	0.860	1.517
Mississippi	45	125	173.762	0.719	0.601	0.854	23	30%	4%	0.095	0.373	0.560	1.150	1.371
Montana	11	23	27.578	0.834	0.542	1.232	9							
North Carolina	89	274	520.123	0.527	0.467	0.592	52	10%	4%	0.000	0.000	0.400	0.745	1.004
North Dakota	6	15	44.905	0.334	0.194	0.539	6							
Nebraska	19	45	89.081	0.505	0.373	0.670	15	0%	0%					
New Hampshire	23	12	38.802	0.309	0.168	0.526	8							
New Jersey	72	282	468.964	0.601	0.534	0.675	64	17%	5%	0.000	0.281	0.531	0.858	1.409
New Mexico	30	32	80.928	0.395	0.275	0.552	10	0%	0%					
Nevada	21	141	223.193	0.632	0.534	0.743	16	19%	13%					
New York	169	545	1,112.480	0.490	0.450	0.532	125	12%	6%	0.000	0.220	0.446	0.871	1.477
Ohio	134	332	819.951	0.405	0.363	0.450	88	5%	7%	0.000	0.122	0.418	0.586	0.876
Oklahoma	49	107	256.082	0.418	0.344	0.503	26	4%	4%	0.000	0.000	0.309	0.558	0.927
Oregon	46	42	153.620	0.273	0.200	0.366	22	5%	9%	0.000	0.000	0.174	0.448	0.964
Pennsylvania	152	471	1,036.320	0.454	0.415	0.497	102	9%	8%	0.000	0.169	0.427	0.718	1.396
Puerto Rico	17	60	82.435	0.728	0.560	0.930	11	9%	9%					
Rhode Island	10	28	51.784	0.541	0.366	0.771	7							
South Carolina	56	146	273.319	0.534	0.453	0.626	28	7%	0%	0.000	0.333	0.526	0.930	1.251
South Dakota	12	5	30.349	0.165	0.060	0.365	4							
Tennessee	91	244	491.722	0.496	0.437	0.561	50	12%	12%	0.000	0.103	0.492	0.808	1.130
Texas	269	821	1,512.676	0.543	0.507	0.581	191	8%	4%	0.000	0.176	0.479	0.778	1.164
Utah	26	56	96.978	0.577	0.440	0.744	14	21%	0%					
Virginia	81	202	381.694	0.529	0.460	0.606	44	7%	5%	0.000	0.093	0.335	0.632	1.156

Vermont	7	3	20.462	0.147	0.037	0.399	2								
Washington	63	116	263.109	0.441	0.366	0.527	39	3%	5%	0.000	0.000	0.375	0.635	0.954	
Wisconsin	73	122	268.496	0.454	0.379	0.541	39	8%	3%	0.000	0.000	0.370	0.589	0.939	
West Virginia	38	62	159.350	0.389	0.301	0.495	20	0%	5%	0.000	0.000	0.337	0.645	0.943	
Wyoming	13	5	7.569	0.661	0.242	1.464	2								
<b>All US</b>	<b>3,311</b>	<b>9,106</b>	<b>18,224.392</b>	<b>0.500</b>	<b>0.489</b>	<b>0.510</b>	<b>2,154</b>	<b>9%</b>	<b>5%</b>	<b>0.000</b>	<b>0.108</b>	<b>0.416</b>	<b>0.750</b>	<b>1.175</b>	

1. Data from all ICUs; excludes wards (and other non-critical care locations), NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
2. Percent of facilities with at least one predicted ICU CLABSI that had an SIR significantly greater or less than the 2013 national ICU CLABSI SIR of 0.500. This is only calculated if at least 10 facilities had at least one predicted ICU CLABSI in 2013.
3. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted ICU CLABSI in 2013. If a facility's predicted number of ICU CLABSI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures, NHSN facilities reporting during 2013**

**3c. Central line-associated bloodstream infections (CLABSI), ward (non-critical care) locations<sup>1</sup>**

State	No. of Infections			95% CI for SIR		Facility-specific SIRs			Facility-specific SIRs at Key Percentiles <sup>4</sup>					
	Observed	Predicted	SIR <sup>2</sup>	Lower	Upper	% of facs with SIR sig higher than national SIR <sup>3</sup>	% of facs with SIR sig lower than national SIR <sup>3</sup>	10%	25%	75%	90%			
Alaska	7	6	25.619	0.234	0.095	0.487	4	.	.	.	.	.		
Alabama	24	130	140.182	0.927	0.778	1.097	12	25%	8%	.	.	.	.	
Arkansas	15	54	90.990	0.593	0.450	0.769	7	.	.	.	.	.	.	
Arizona	20	185	209.965	0.881	0.761	1.015	13	31%	0%	.	.	.	.	
California	338	1,427	2,572.238	0.555	0.527	0.584	245	7%	10%	0.000	0.185	0.430	0.785	1.122
Colorado	13	88	150.327	0.585	0.472	0.718	6	.	.	.	.	.	.	.
Connecticut	2	.	.	.	.	.	.	.	.	.	.	.	.	.
D.C.	3	.	.	.	.	.	.	.	.	.	.	.	.	.
Delaware	5	31	33.528	0.925	0.639	1.296	4	25%	0%	.	.	.	.	.
Florida	56	395	543.013	0.727	0.658	0.802	40	15%	5%	0.087	0.390	0.608	0.821	1.374
Georgia	33	216	249.315	0.866	0.756	0.988	19	32%	0%	.	.	.	.	.
Hawaii	5	6	21.693	0.277	0.112	0.575	5	.	.	.	.	.	.	.
Iowa	22	10	19.131	0.523	0.266	0.932	3	.	.	.	.	.	.	.
Idaho	5	0	3.726	0.000	.	0.804	1	.	.	.	.	.	.	.
Illinois	51	257	486.475	0.528	0.467	0.596	33	12%	21%	0.000	0.040	0.276	0.629	1.116
Indiana	35	228	285.874	0.798	0.699	0.906	15	20%	7%	.	.	.	.	.
Kansas	18	91	102.119	0.891	0.722	1.089	8	.	.	.	.	.	.	.
Kentucky	13	94	96.660	0.972	0.790	1.185	5	.	.	.	.	.	.	.
Louisiana	29	95	126.557	0.751	0.611	0.913	13	8%	0%	.	.	.	.	.
Massachusetts	12	131	166.167	0.788	0.662	0.932	6	.	.	.	.	.	.	.
Maryland	19	80	144.181	0.555	0.443	0.687	16	6%	6%	.	.	.	.	.
Maine	6	30	43.523	0.689	0.474	0.972	3	.	.	.	.	.	.	.
Michigan	31	66	118.486	0.557	0.434	0.704	12	0%	17%	.	.	.	.	.
Minnesota	10	111	213.933	0.519	0.429	0.622	4	.	.	.	.	.	.	.
Missouri	14	34	56.539	0.601	0.423	0.831	10	10%	0%	.	.	.	.	.
Mississippi	20	109	132.683	0.822	0.678	0.987	10	20%	0%	.	.	.	.	.
Montana	10	19	36.751	0.517	0.320	0.792	5	.	.	.	.	.	.	.
North Carolina	43	146	252.990	0.577	0.489	0.677	22	0%	5%	0.000	0.000	0.308	0.649	0.909
North Dakota	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Nebraska	12	109	129.077	0.844	0.697	1.015	10	20%	0%	.	.	.	.	.
New Hampshire	7	3	7.487	0.401	0.102	1.091	2	.	.	.	.	.	.	.
New Jersey	17	61	90.089	0.677	0.522	0.864	15	13%	0%	.	.	.	.	.
New Mexico	19	31	49.804	0.622	0.430	0.873	6	.	.	.	.	.	.	.
Nevada	21	169	232.902	0.726	0.622	0.841	19	16%	16%	.	.	.	.	.
New York	93	503	716.721	0.702	0.642	0.765	73	16%	5%	0.000	0.269	0.602	1.076	1.637
Ohio	31	127	245.476	0.517	0.433	0.613	20	5%	10%	0.000	0.000	0.385	0.498	0.835
Oklahoma	16	18	66.768	0.270	0.165	0.418	5	.	.	.	.	.	.	.
Oregon	17	18	45.119	0.399	0.244	0.618	6	.	.	.	.	.	.	.
Pennsylvania	170	673	1,293.531	0.520	0.482	0.561	117	5%	12%	0.000	0.140	0.437	0.699	1.031
Puerto Rico	9	41	51.289	0.799	0.581	1.074	7	.	.	.	.	.	.	.
Rhode Island	3	.	.	.	.	.	.	.	.	.	.	.	.	.
South Carolina	64	258	422.763	0.610	0.539	0.688	37	5%	5%	0.000	0.237	0.530	0.827	1.245
South Dakota	14	5	29.488	0.170	0.062	0.376	6	.	.	.	.	.	.	.
Tennessee	28	131	288.396	0.454	0.381	0.537	19	0%	16%	.	.	.	.	.
Texas	79	292	642.074	0.455	0.405	0.509	45	2%	11%	0.000	0.000	0.221	0.640	0.826
Utah	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Virginia	17	116	235.835	0.492	0.408	0.588	14	0%	21%	.	.	.	.	.

Vermont	1													
Washington	82	194	307.843	0.630	0.546	0.724	41	5%	0%	0.000	0.182	0.501	0.791	1.067
Wisconsin	60	110	215.547	0.510	0.421	0.613	27	7%	11%	0.000	0.000	0.356	0.654	0.909
West Virginia	24	20	79.019	0.253	0.159	0.384	7							
Wyoming	17	1	3.768	0.265	0.013	1.309	1							
<b>All US</b>	<b>1,662</b>	<b>7,045</b>	<b>11,587.264</b>	<b>0.608</b>	<b>0.594</b>	<b>0.622</b>	<b>1,008</b>	<b>9%</b>	<b>9%</b>	<b>0.000</b>	<b>0.169</b>	<b>0.464</b>	<b>0.814</b>	<b>1.212</b>

1. Data from all wards (for this table wards also include step-down and specialty care areas [including hematology/oncology, bone marrow transplant]). This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).
2. An SIR is only calculated for states in which at least 5 facilities reported CLABSI data from at least one ward in 2013.
3. Percent of facilities with at least one predicted ward CLABSI that had an SIR significantly greater or less than the 2013 national ward CLABSI SIR of 0.608. This is only calculated if at least 10 facilities had at least one predicted ward CLABSI in 2013.
4. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted ward CLABSI in 2013. If a facility's predicted number of ward CLABSI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 3. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013  
3d. Central line-associated bloodstream infections (CLABSI), neonatal critical care locations<sup>1</sup>**

State	No. of Infections		95% CI for SIR		Facility-specific SIRs									
	Observed	Predicted	Lower	Upper	10%	25%	75%	90%						
Alaska	2	.	.	.	.	.	.	.						
Alabama	13	79	82.789	0.954	0.761	1.183	11	36%	0%	.	.	.	.	.
Arkansas	8	13	51.022	0.255	0.142	0.425	4	.	.	.	.	.	.	.
Arizona	15	31	48.673	0.637	0.440	0.893	10	10%	0%	.	.	.	.	.
California	135	155	372.202	0.416	0.355	0.486	76	8%	3%	0.000	0.000	0.335	0.627	1.382
Colorado	18	24	45.943	0.522	0.342	0.765	10	0%	0%	.	.	.	.	.
Connecticut	12	12	29.663	0.405	0.219	0.688	4	.	.	.	.	.	.	.
D.C.	6	6	31.442	0.191	0.077	0.397	5	.	.	.	.	.	.	.
Delaware	2	.	.	.	.	.	.	.	.	.	.	.	.	.
Florida	52	94	191.302	0.491	0.399	0.599	24	4%	0%	0.000	0.223	0.308	0.593	0.859
Georgia	30	90	129.350	0.696	0.563	0.851	21	14%	0%	0.027	0.294	0.638	0.961	1.116
Hawaii	2	.	.	.	.	.	.	.	.	.	.	.	.	.
Iowa	10	14	29.956	0.467	0.266	0.766	4	.	.	.	.	.	.	.
Idaho	8	5	10.637	0.470	0.172	1.042	3	.	.	.	.	.	.	.
Illinois	44	57	142.506	0.400	0.306	0.514	24	4%	0%	0.000	0.186	0.334	0.585	1.272
Indiana	27	51	61.454	0.830	0.624	1.083	13	23%	0%	.	.	.	.	.
Kansas	10	14	24.803	0.564	0.321	0.925	5	.	.	.	.	.	.	.
Kentucky	14	14	32.749	0.427	0.243	0.700	4	.	.	.	.	.	.	.
Louisiana	28	44	65.354	0.673	0.495	0.896	16	13%	0%	.	.	.	.	.
Massachusetts	10	23	41.921	0.549	0.356	0.810	9	.	.	.	.	.	.	.
Maryland	17	34	59.180	0.575	0.404	0.794	13	8%	0%	.	.	.	.	.
Maine	3	.	.	.	.	.	.	.	.	.	.	.	.	.
Michigan	20	59	106.616	0.553	0.425	0.709	18	11%	6%	.	.	.	.	.
Minnesota	10	9	22.960	0.392	0.191	0.719	5	.	.	.	.	.	.	.
Missouri	19	32	90.372	0.354	0.246	0.494	10	0%	10%	.	.	.	.	.
Mississippi	13	27	31.288	0.863	0.580	1.238	4	.	.	.	.	.	.	.
Montana	5	2	5.288	0.378	0.063	1.250	2	.	.	.	.	.	.	.
North Carolina	24	42	96.326	0.436	0.318	0.584	13	8%	0%	.	.	.	.	.
North Dakota	6	6	12.527	0.479	0.194	0.996	5	.	.	.	.	.	.	.
Nebraska	6	10	12.834	0.779	0.396	1.389	5	.	.	.	.	.	.	.
New Hampshire	3	.	.	.	.	.	.	.	.	.	.	.	.	.
New Jersey	24	44	72.674	0.605	0.445	0.805	16	6%	6%	.	.	.	.	.
New Mexico	5	6	11.230	0.534	0.217	1.111	3	.	.	.	.	.	.	.
Nevada	9	8	45.590	0.175	0.081	0.333	8	.	.	.	.	.	.	.
New York	53	91	188.854	0.482	0.390	0.589	41	2%	5%	0.000	0.049	0.401	0.778	1.086
Ohio	18	42	133.850	0.314	0.229	0.420	16	0%	13%	.	.	.	.	.
Oklahoma	7	24	54.985	0.436	0.286	0.640	7	.	.	.	.	.	.	.
Oregon	7	6	20.312	0.295	0.120	0.614	4	.	.	.	.	.	.	.
Pennsylvania	43	68	124.088	0.548	0.429	0.690	24	0%	0%	0.000	0.282	0.531	0.716	0.986
Puerto Rico	5	7	4.583	1.527	0.668	3.021	3	.	.	.	.	.	.	.
Rhode Island	1	.	.	.	.	.	.	.	.	.	.	.	.	.
South Carolina	9	24	47.953	0.500	0.328	0.733	7	.	.	.	.	.	.	.
South Dakota	3	.	.	.	.	.	.	.	.	.	.	.	.	.
Tennessee	24	52	100.676	0.517	0.390	0.672	13	8%	0%	.	.	.	.	.
Texas	116	182	366.258	0.497	0.429	0.573	63	8%	3%	0.000	0.032	0.401	0.802	1.196
Utah	13	32	36.447	0.878	0.611	1.225	6	.	.	.	.	.	.	.
Virginia	23	33	83.513	0.395	0.277	0.548	15	0%	7%	.	.	.	.	.
Vermont	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Washington	16	22	47.232	0.466	0.299	0.694	10	0%	0%	.	.	.	.	.
Wisconsin	16	21	42.177	0.498	0.316	0.748	12	8%	0%	.	.	.	.	.



West Virginia	4.													
Wyoming	0.													
<b>All US</b>	<b>969</b>	<b>1,648</b>	<b>3,299.309</b>	<b>0.499</b>	<b>0.476</b>	<b>0.524</b>	<b>583</b>	<b>7%</b>	<b>3%</b>	<b>0.000</b>	<b>0.162</b>	<b>0.441</b>	<b>0.806</b>	<b>1.209</b>

1. Data from all neonatal critical care units (NICU) including Level II/III and Level III nurseries. For purposes of this report, both umbilical-line and central-line associated bloodstream infections are considered CLABSIs.
2. An SIR is only calculated for states in which at least 5 facilities reported CLABSI data from at least one NICU in 2013.
3. Percent of facilities with at least one predicted NICU CLABSI that had an SIR significantly greater or less than the 2013 national NICU CLABSI SIR of 0.499. This is only calculated if at least 10 facilities had at least one predicted NICU CLABSI in 2013.
4. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted NICU CLABSI in 2013. If a facility's predicted number of NICU CLABSI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 4. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013  
4a. Catheter-associated urinary tract infections (CAUTI), all locations<sup>1</sup>**

State			No. of Infections		95% CI for SIR			Facility-specific SIRs								
	Observed	Predicted	SIR	Lower	Upper	No. of facs with at least 1 predicted CAUTI	10%	25%	75%	90%						
Alaska	No	No	10	49	48.251	1.016	0.760	1.332	6							
Alabama	Yes		86	910	974.971	0.933	0.874	0.995	70	6%	27%	0.000	0.000	0.471	0.899	1.550
Arkansas	Yes	Yes	49	349	335.698	1.040	0.935	1.153	33	12%	12%	0.000	0.445	0.783	1.204	1.683
Arizona	No	No	55	559	545.891	1.024	0.942	1.112	45	11%	22%	0.000	0.199	0.598	1.099	1.373
California	No	No	341	3,358	3,717.782	0.903	0.873	0.934	296	11%	30%	0.000	0.260	0.665	1.230	1.957
Colorado	No	No	52	301	380.126	0.792	0.706	0.885	33	3%	12%	0.410	0.550	0.749	1.232	1.655
Connecticut	Yes	Yes	31	423	255.753	1.654	1.502	1.817	26	35%	4%	0.375	1.080	1.565	2.091	2.441
D.C.	No	Yes	7	175	134.982	1.296	1.115	1.500	7							
Delaware	Yes	Yes	8	124	95.283	1.301	1.087	1.546	8							
Florida	No	No	190	2,111	2,252.723	0.937	0.898	0.978	180	9%	23%	0.000	0.274	0.758	1.237	1.852
Georgia	Yes	No	105	1,288	947.983	1.359	1.286	1.434	75	24%	11%	0.000	0.486	0.916	1.737	2.243
Hawaii	Yes	Yes	15	65	104.095	0.624	0.486	0.791	13	0%	31%					
Iowa	No	Yes	68	177	200.321	0.884	0.760	1.021	34	6%	9%	0.000	0.000	0.427	0.898	1.500
Idaho	No		17	65	64.800	1.003	0.780	1.270	10	10%	10%					
Illinois	No	No	148	1,202	1,243.049	0.967	0.913	1.023	114	7%	15%	0.000	0.289	0.610	1.397	1.838
Indiana	Yes	No	110	888	724.461	1.226	1.147	1.308	70	9%	11%	0.000	0.000	0.807	1.211	1.918
Kansas	No	Yes	53	328	292.760	1.120	1.004	1.247	28	14%	11%	0.000	0.558	0.830	1.225	1.913
Kentucky	No	No	73	597	492.615	1.212	1.118	1.312	54	11%	15%	0.000	0.258	0.779	1.224	1.820
Louisiana	No	Yes	81	487	602.242	0.809	0.739	0.883	60	8%	23%	0.000	0.309	0.686	1.050	1.788
Massachusetts	No	No	69	979	618.872	1.582	1.485	1.683	55	20%	7%	0.000	0.608	1.197	1.793	2.652
Maryland	No	No	39	620	449.538	1.379	1.274	1.491	36	19%	17%	0.000	0.352	0.747	1.318	2.518
Maine	No	Yes	21	136	79.165	1.718	1.447	2.026	13	23%	0%					
Michigan	No	Yes	98	1,205	965.453	1.248	1.179	1.320	75	20%	17%	0.000	0.106	0.858	1.222	1.971
Minnesota	Yes	No	51	413	327.687	1.260	1.143	1.386	26	19%	4%	0.000	0.574	0.944	1.554	2.132
Missouri	No	No	76	638	600.877	1.062	0.982	1.147	54	17%	15%	0.000	0.497	0.763	1.469	2.183
Mississippi	No	No	48	434	402.412	1.078	0.981	1.184	33	15%	21%	0.000	0.000	0.713	1.276	1.818
Montana	No		14	65	95.117	0.683	0.532	0.865	10	0%	20%					
North Carolina	Yes	Yes	98	1,091	957.475	1.139	1.073	1.209	77	13%	10%	0.000	0.394	0.766	1.297	1.806
North Dakota	No	No	6	45	64.358	0.699	0.516	0.927	6							
Nebraska	No	No	20	187	202.241	0.925	0.799	1.065	19	11%	26%					
New Hampshire	Yes	Yes	23	73	79.529	0.918	0.725	1.148	16	0%	0%					
New Jersey	Yes	Yes	72	829	813.144	1.019	0.952	1.091	71	13%	18%	0.179	0.434	0.913	1.360	1.913
New Mexico	No	No	35	100	120.503	0.830	0.679	1.005	19	0%	11%					
Nevada	No	No	24	489	452.554	1.081	0.988	1.180	20	15%	25%	0.000	0.178	0.856	1.078	2.152
New York	No	No	172	2,785	2,207.511	1.262	1.215	1.309	153	20%	14%	0.128	0.455	0.998	1.607	2.177
Ohio	No	No	136	1,208	1,316.300	0.918	0.867	0.971	105	9%	22%	0.000	0.231	0.601	1.215	1.561
Oklahoma	No	No	58	281	366.562	0.767	0.681	0.860	37	5%	16%	0.000	0.000	0.432	0.672	1.300
Oregon	No	No	50	298	257.820	1.156	1.030	1.293	28	14%	4%	0.000	0.000	0.656	1.435	1.882
Pennsylvania	Yes	Yes	184	2,676	2,633.048	1.016	0.978	1.055	153	9%	24%	0.000	0.432	0.756	1.076	1.760
Puerto Rico	No	No	18	172	217.660	0.790	0.679	0.915	17	6%	29%					
Rhode Island	No	No	10	154	121.402	1.269	1.080	1.481	10	10%	10%					
South Carolina	No	No	64	737	577.517	1.276	1.186	1.371	51	16%	16%	0.000	0.218	0.668	1.559	2.321
South Dakota	No	No	18	61	82.628	0.738	0.570	0.942	11	0%	9%					
Tennessee	Yes	Yes	94	1,044	845.165	1.235	1.162	1.312	69	19%	17%	0.000	0.234	0.806	1.537	2.082
Texas	No	Yes	289	2,282	2,220.648	1.028	0.986	1.070	230	10%	19%	0.000	0.260	0.718	1.252	1.856
Utah	Yes		26	205	125.018	1.640	1.427	1.876	16	25%	0%					
Virginia	No	No	81	721	685.852	1.051	0.977	1.130	62	8%	11%	0.000	0.313	0.764	1.291	1.634
Vermont	No	No	5	23	26.591	0.865	0.562	1.277	3							

Washington	No	No	69	579	571.926	1.012	0.932	1.097	47	11%	11%	0.000	0.449	0.790	1.253	1.836
Wisconsin	No	Yes	102	447	541.095	0.826	0.752	0.905	61	5%	15%	0.000	0.229	0.579	0.944	1.486
West Virginia	Yes	Yes	47	182	308.895	0.589	0.508	0.680	27	0%	30%	0.000	0.000	0.421	0.836	1.125
Wyoming	No	No	24	12	22.629	0.530	0.287	0.902	9							
<b>All US</b>			<b>3,640</b>	<b>34,627</b>	<b>32,770.978</b>	<b>1.057</b>	<b>1.046</b>	<b>1.068</b>	<b>2,781</b>	<b>12%</b>	<b>18%</b>	<b>0.000</b>	<b>0.310</b>	<b>0.762</b>	<b>1.305</b>	<b>1.938</b>

1. Data from all ICUs and wards (and other non-critical care locations). This excludes NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
2. Yes indicates the presence of a state mandate to report CAUTI data from any location to NHSN at the beginning of 2013. M indicates midyear implementation of a mandate.
3. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014, and state health department contacted identified facilities.

varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

4. Percent of facilities with at least one predicted CAUTI that had an SIR significantly greater or less than the 2013 national CAUTI SIR of 1.057. This is only calculated if at least 10 facilities had at least one predicted CAUTI in 2013.
5. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted CAUTI in 2013. If a facility's predicted number of CAUTI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 4. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013  
4b. Catheter-associated urinary tract infections (CAUTI), critical care locations<sup>1</sup>**

State	No. of Infections			95% CI for SIR		Facility-specific SIRs				10%	25%	75%	90%	
	Observed	Predicted	SIR	Lower	Upper									
Alaska	8	17	16.787	1.013	0.610	1.588	3							
Alabama	72	596	567.988	1.049	0.968	1.136	49	10%	24%	0.000	0.232	0.768	1.140	2.102
Arkansas	43	254	235.915	1.077	0.950	1.215	27	7%	15%	0.145	0.424	0.921	1.408	1.817
Arizona	52	480	410.444	1.169	1.068	1.278	43	7%	14%	0.000	0.286	0.598	1.256	1.465
California	312	2,388	2,049.501	1.165	1.119	1.213	265	12%	16%	0.000	0.309	0.906	1.505	2.309
Colorado	49	227	267.837	0.848	0.743	0.963	32	0%	13%	0.347	0.550	0.752	1.296	1.744
Connecticut	30	423	254.130	1.665	1.511	1.829	26	35%	4%	0.375	1.127	1.565	2.091	2.441
D.C.	7	136	106.044	1.282	1.080	1.512	7							
Delaware	8	80	53.128	1.506	1.202	1.864	8							
Florida	184	1,701	1,773.828	0.959	0.914	1.005	173	9%	23%	0.000	0.309	0.875	1.264	2.151
Georgia	99	997	720.628	1.384	1.300	1.471	72	19%	10%	0.000	0.492	0.918	1.808	2.282
Hawaii	15	50	77.482	0.645	0.484	0.844	12	0%	25%					
Iowa	38	138	139.439	0.990	0.835	1.166	21	5%	14%	0.000	0.000	0.442	0.836	1.626
Idaho	12	61	53.324	1.144	0.883	1.460	10	0%	0%					
Illinois	137	849	759.013	1.119	1.045	1.196	105	8%	10%	0.000	0.364	0.762	1.477	2.031
Indiana	91	667	474.723	1.405	1.301	1.515	55	9%	9%	0.000	0.450	0.927	1.514	2.062
Kansas	42	221	193.358	1.143	1.000	1.301	20	10%	10%	0.000	0.264	0.964	1.311	2.785
Kentucky	71	495	384.404	1.288	1.178	1.405	50	10%	18%	0.000	0.235	0.808	1.388	2.226
Louisiana	72	384	417.309	0.920	0.832	1.016	54	9%	20%	0.000	0.351	0.750	1.077	1.800
Massachusetts	66	903	507.551	1.779	1.666	1.898	54	17%	9%	0.000	0.585	1.222	1.868	2.664
Maryland	37	459	270.616	1.696	1.546	1.857	33	18%	18%	0.000	0.356	0.780	1.834	2.871
Maine	19	96	51.613	1.860	1.515	2.261	10	20%	0%					
Michigan	95	1,106	854.672	1.294	1.219	1.372	64	19%	22%	0.000	0.164	0.953	1.362	2.087
Minnesota	46	320	233.773	1.369	1.225	1.525	25	16%	0%	0.000	0.536	0.991	1.815	2.303
Missouri	74	546	505.024	1.081	0.993	1.175	52	12%	15%	0.000	0.515	0.829	1.626	2.522
Mississippi	45	271	246.441	1.100	0.974	1.237	29	17%	21%	0.000	0.000	0.713	1.318	2.261
Montana	11	29	33.119	0.876	0.598	1.241	9							
North Carolina	89	832	689.633	1.206	1.127	1.291	70	11%	11%	0.000	0.387	0.814	1.706	2.373
North Dakota	6	39	51.328	0.760	0.548	1.028	6							
Nebraska	18	114	85.855	1.328	1.100	1.589	15	7%	0%					
New Hampshire	22	56	53.768	1.042	0.794	1.343	12	0%	0%					
New Jersey	72	692	623.206	1.110	1.030	1.195	70	13%	14%	0.177	0.521	0.961	1.465	2.180
New Mexico	30	87	98.674	0.882	0.710	1.082	16	0%	6%					
Nevada	21	271	225.736	1.201	1.064	1.350	16	13%	25%					
New York	169	2,007	1,486.626	1.350	1.292	1.410	140	19%	12%	0.000	0.537	1.107	1.703	2.401
Ohio	133	1,054	1,061.150	0.993	0.935	1.055	100	9%	22%	0.000	0.246	0.579	1.245	1.564
Oklahoma	49	230	285.438	0.806	0.707	0.915	34	6%	21%	0.000	0.000	0.495	0.842	1.668
Oregon	46	205	173.966	1.178	1.025	1.348	23	4%	9%	0.000	0.363	0.975	1.497	2.120
Pennsylvania	153	1,406	1,187.589	1.184	1.123	1.247	116	13%	12%	0.000	0.354	0.841	1.339	1.956
Puerto Rico	17	100	119.317	0.838	0.685	1.015	17	0%	24%					
Rhode Island	10	89	64.612	1.377	1.113	1.687	10	10%	0%					
South Carolina	56	562	346.632	1.621	1.491	1.760	42	19%	5%	0.000	0.345	1.280	1.911	2.420
South Dakota	11	32	34.109	0.938	0.653	1.309	4							
Tennessee	91	930	675.380	1.377	1.291	1.468	66	15%	15%	0.000	0.302	0.860	1.621	2.582
Texas	268	1,875	1,745.698	1.074	1.026	1.124	210	10%	18%	0.000	0.306	0.782	1.388	1.999
Utah	26	204	121.923	1.673	1.455	1.915	16	25%	0%					
Virginia	81	569	483.737	1.176	1.083	1.276	58	3%	5%	0.000	0.408	0.789	1.351	1.655
Vermont	5	23	26.591	0.865	0.562	1.277	3							
Washington	63	338	288.638	1.171	1.051	1.301	42	19%	5%	0.000	0.408	0.892	2.039	2.792

Wisconsin	73	320	285.960	1.119	1.001	1.247	46	7%	7%	0.000	0.351	0.779	1.466	2.167
West Virginia	38	136	216.098	0.629	0.530	0.742	25	0%	24%	0.000	0.000	0.347	0.982	1.201
Wyoming	13	4	9.064	0.441	0.140	1.065	2							
<b>All US</b>	<b>3,295</b>	<b>26,069</b>	<b>22,098.817</b>	<b>1.180</b>	<b>1.165</b>	<b>1.194</b>	<b>2,467</b>	<b>12%</b>	<b>14%</b>	<b>0.000</b>	<b>0.359</b>	<b>0.886</b>	<b>1.491</b>	<b>2.225</b>

1. Data from all ICUs; excludes wards (and other non-critical care locations), NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
2. Percent of facilities with at least one predicted ICU CAUTI that had an SIR significantly greater or less than the 2013 national ICU CAUTI SIR of 1.180. This is only calculated if at least 10 facilities had at least one predicted ICU CAUTI in 2013.
3. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted ICU CAUTI in 2013. If a facility's predicted number of ICU CAUTI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 4. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013  
4c. Catheter-associated urinary tract infections (CAUTI), ward (non-critical care) locations<sup>1</sup>**

State	No. of Infections		95% CI for SIR			Facility-specific SIRs			10%	25%	75%	90%		
	Observed	Predicted	Lower	Upper										
Alaska	7	32	31.464	1.017	0.708	1.419	4							
Alabama	85	314	406.982	0.772	0.690	0.861	62	11%	15%	0.000	0.000	0.460	0.684	1.625
Arkansas	17	95	99.784	0.952	0.775	1.159	14	7%	0%					
Arizona	21	79	135.447	0.583	0.465	0.723	16	6%	31%					
California	210	970	1,668.281	0.581	0.546	0.619	172	6%	22%	0.000	0.153	0.443	0.817	1.279
Colorado	17	74	112.289	0.659	0.521	0.823	9							
Connecticut	2													
D.C.	4													
Delaware	7	44	42.155	1.044	0.768	1.389	7							
Florida	54	410	478.895	0.856	0.776	0.942	48	13%	4%	0.000	0.216	0.509	1.003	1.588
Georgia	31	291	227.356	1.280	1.139	1.434	20	30%	0%	0.000	0.431	0.811	1.155	1.931
Hawaii	7	15	26.613	0.564	0.328	0.909	6							
Iowa	50	39	60.882	0.641	0.462	0.867	18	0%	0%					
Idaho	7	4	11.476	0.349	0.111	0.841	1							
Illinois	53	353	484.036	0.729	0.656	0.808	36	8%	25%	0.000	0.218	0.510	0.984	1.496
Indiana	50	221	249.738	0.885	0.774	1.008	29	10%	10%	0.000	0.000	0.556	0.972	1.644
Kansas	29	107	99.402	1.076	0.887	1.296	17	12%	12%					
Kentucky	22	102	108.211	0.943	0.773	1.139	15	7%	0%					
Louisiana	31	103	184.933	0.557	0.457	0.673	22	5%	18%	0.000	0.000	0.337	0.539	1.134
Massachusetts	9	76	111.321	0.683	0.542	0.850	6							
Maryland	22	161	178.922	0.900	0.769	1.047	18	11%	22%					
Maine	6	40	27.552	1.452	1.051	1.958	3							
Michigan	35	99	110.781	0.894	0.730	1.083	21	14%	10%	0.000	0.000	0.534	1.237	1.838
Minnesota	13	93	93.915	0.990	0.804	1.208	5							
Missouri	19	92	95.853	0.960	0.778	1.172	14	0%	0%					
Mississippi	22	163	155.971	1.045	0.894	1.215	15	13%	0%					
Montana	12	36	61.998	0.581	0.413	0.795	6							
North Carolina	46	259	267.842	0.967	0.854	1.090	32	13%	9%	0.000	0.347	0.665	1.107	1.682
North Dakota	1													
Nebraska	18	73	116.386	0.627	0.495	0.784	16	13%	13%					
New Hampshire	7	17	25.761	0.660	0.397	1.035	6							
New Jersey	23	137	189.939	0.721	0.608	0.850	21	10%	14%	0.018	0.242	0.640	0.894	1.951
New Mexico	18	13	21.829	0.596	0.331	0.993	6							
Nevada	20	218	226.818	0.961	0.840	1.095	17	18%	29%					
New York	100	778	720.885	1.079	1.005	1.157	89	25%	8%	0.000	0.396	0.805	1.302	2.204
Ohio	36	154	255.150	0.604	0.514	0.705	25	12%	28%	0.000	0.029	0.447	0.917	1.775
Oklahoma	21	51	81.124	0.629	0.473	0.820	12	8%	8%					
Oregon	21	93	83.854	1.109	0.900	1.352	11	9%	0%					
Pennsylvania	183	1,270	1,445.460	0.879	0.831	0.928	146	11%	11%	0.000	0.293	0.656	1.076	1.577
Puerto Rico	9	72	98.343	0.732	0.577	0.917	8							
Rhode Island	4													
South Carolina	43	175	230.885	0.758	0.652	0.877	33	9%	12%	0.000	0.000	0.309	0.843	1.363
South Dakota	16	29	48.519	0.598	0.408	0.847	10	0%	0%					
Tennessee	18	114	169.785	0.671	0.556	0.804	14	14%	21%					
Texas	96	407	474.950	0.857	0.777	0.943	65	14%	6%	0.000	0.000	0.446	0.937	1.678
Utah	1													
Virginia	18	152	202.115	0.752	0.639	0.879	16	13%	13%					
Vermont	0													
Washington	60	241	283.289	0.851	0.748	0.963	37	11%	11%	0.000	0.245	0.727	1.185	1.599
Wisconsin	73	127	255.136	0.498	0.417	0.590	41	0%	2%	0.000	0.000	0.363	0.696	0.824

West Virginia	27	46	92.797	0.496	0.367	0.655	14	0%	21%					
Wyoming	20	8	13.566	0.590	0.274	1.120	5							
<b>All US</b>	<b>1,721</b>	<b>8,558</b>	<b>10,672.161</b>	<b>0.802</b>	<b>0.785</b>	<b>0.819</b>	<b>1,219</b>	<b>11%</b>	<b>12%</b>	<b>0.000</b>	<b>0.188</b>	<b>0.570</b>	<b>1.027</b>	<b>1.642</b>

1. Data from all wards (for this table wards also include stepdown and specialty care areas [including hematology/oncology, bone marrow transplant]). This excludes NICU, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).
2. An SIR is only calculated for states in which at least 5 facilities reported CAUTI data from at least one ward in 2013.
3. Percent of facilities with at least one predicted ward CAUTI that had an SIR significantly greater or less than the 2013 national ward CAUTI SIR of 0.802. This is only calculated if at least 10 facilities had at least one predicted ward CAUTI in 2013.
4. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted ward CAUTI in 2013. If a facility's predicted number of ward CAUTI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 5. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013  
5a. Surgical site infections (SSI) following colon surgery<sup>1</sup>**

State		Number of Facilities Reporting	Number of Procedures	No. of Infections		95% CI for SIR		Facility-specific SIRs				10%	25%	75%	90%		
				Observed	Predicted	SIR	Lower	Upper	No. of facs with at least 1 predicted SSI								
Alaska	No	No	9	626	15	17.874	0.839	0.488	1.353	5							
Alabama	Yes	Yes	72	5,755	83	176.594	0.470	0.377	0.580	35	0%	23%	0.000	0.000	0.326	0.839	1.325
Arkansas	Yes	Yes	39	2,975	69	89.093	0.774	0.607	0.974	25	0%	4%	0.000	0.475	0.721	1.117	1.689
Arizona	No	No	51	6,014	207	186.225	1.112	0.968	1.271	39	13%	0%	0.362	0.591	0.953	1.466	1.973
California	Yes		318	27,387	702	854.345	0.822	0.763	0.884	204	5%	6%	0.000	0.095	0.713	1.172	1.689
Colorado	Yes	Yes	57	4,475	94	131.730	0.714	0.580	0.869	31	6%	3%	0.000	0.405	0.664	0.923	1.175
Connecticut	Yes	Yes	30	3,651	117	103.636	1.129	0.938	1.348	24	8%	4%	0.000	0.583	1.005	1.679	2.266
D.C.	No	No	7	947	24	34.054	0.705	0.462	1.033	6							
Delaware	Yes	Yes	7	1,125	27	33.445	0.807	0.543	1.158	6							
Florida	No	No	183	22,118	517	656.749	0.787	0.722	0.857	150	5%	7%	0.000	0.000	0.577	1.049	1.676
Georgia	Yes	No	96	9,206	241	278.668	0.865	0.761	0.979	55	11%	15%	0.000	0.213	0.825	1.266	1.984
Hawaii	Yes	Yes	13	957	28	27.283	1.026	0.695	1.463	7							
Iowa	No	No	36	2,959	90	79.654	1.130	0.914	1.382	22	5%	5%	0.000	0.377	0.776	1.630	1.937
Idaho	No		18	1,188	29	36.372	0.797	0.544	1.130	8							
Illinois	No	No	138	11,701	294	361.753	0.813	0.724	0.910	90	4%	7%	0.000	0.445	0.788	1.218	1.859
Indiana	Yes	No	101	6,733	220	205.326	1.071	0.937	1.220	53	9%	2%	0.000	0.256	0.862	1.532	2.175
Kansas	No	Yes	43	2,722	112	81.242	1.379	1.140	1.652	16	31%	0%					
Kentucky	No	No	66	5,213	124	162.866	0.761	0.636	0.905	36	6%	6%	0.000	0.136	0.634	1.021	1.667
Louisiana	No	Yes	78	4,592	146	134.212	1.088	0.922	1.275	33	6%	0%	0.000	0.505	1.029	1.604	1.948
Massachusetts	No	No	62	6,905	252	205.844	1.224	1.080	1.383	42	19%	2%	0.000	0.569	0.883	1.647	1.959
Maryland	No	No	22	2,145	56	65.583	0.854	0.651	1.101	15	13%	7%					
Maine	No	Yes	21	1,380	48	40.117	1.197	0.892	1.573	10	10%	0%					
Michigan	No	Yes	92	10,391	319	304.368	1.048	0.938	1.168	57	14%	2%	0.000	0.421	0.646	1.251	1.966
Minnesota	Yes	No	51	5,282	160	162.757	0.983	0.839	1.145	28	7%	7%	0.385	0.703	0.897	1.741	2.322
Missouri	No	No	74	7,560	155	224.897	0.689	0.587	0.804	47	4%	15%	0.000	0.000	0.626	1.021	1.797
Mississippi	No	No	43	2,802	65	80.412	0.808	0.629	1.024	22	0%	9%	0.000	0.000	0.674	1.035	1.212
Montana	No	No	14	862	20	23.776	0.841	0.528	1.276	7							
North Carolina	Yes	Yes	93	9,275	256	281.465	0.910	0.803	1.026	55	9%	2%	0.000	0.374	0.808	1.169	1.949
North Dakota	No	No	6	737	23	19.197	1.198	0.778	1.769	6							
Nebraska	No	No	19	1,742	68	52.322	1.300	1.017	1.638	12	25%	0%					
New Hampshire	Yes	Yes	25	1,329	30	43.399	0.691	0.475	0.974	12	0%	0%					
New Jersey	Yes	Yes	72	8,349	216	250.979	0.861	0.751	0.981	57	5%	7%	0.000	0.365	0.601	1.098	1.602
New Mexico	No	No	27	1,274	28	38.072	0.735	0.498	1.049	8							
Nevada	No	No	22	1,960	60	56.192	1.068	0.822	1.365	14	14%	0%					
New York	Yes		171	17,742	723	550.174	1.314	1.221	1.413	120	16%	2%	0.203	0.605	1.112	1.839	2.341
Ohio	No	No	131	13,914	395	434.051	0.910	0.824	1.003	89	8%	6%	0.000	0.344	0.653	1.341	2.150
Oklahoma	No	No	56	3,903	126	109.335	1.152	0.964	1.367	25	12%	4%	0.000	0.493	0.919	1.697	2.177
Oregon	Yes	Yes	50	4,067	93	124.354	0.748	0.607	0.912	23	0%	0%	0.000	0.000	0.529	0.949	1.349
Pennsylvania	Yes	Yes	160	16,232	450	507.164	0.887	0.808	0.972	111	5%	5%	0.000	0.340	0.632	1.263	1.762
Puerto Rico	No	No	0	0													
Rhode Island	No	No	11	1,035	38	28.766	1.321	0.948	1.794	8							
South Carolina	Yes		57	4,478	129	134.594	0.958	0.803	1.135	28	7%	7%	0.000	0.123	0.671	1.352	1.756
South Dakota	No	No	14	994	25	25.460	0.982	0.650	1.428	6							
Tennessee	Yes	Yes	95	7,314	209	228.549	0.914	0.797	1.045	50	10%	4%	0.000	0.000	0.613	1.323	1.717
Texas	Yes	Yes	285	20,958	494	637.562	0.775	0.709	0.845	166	5%	5%	0.000	0.225	0.677	1.119	1.745
Utah	Yes	Yes	30	2,141	75	64.658	1.160	0.919	1.446	15	13%	0%					
Virginia	No	No	75	7,112	196	217.245	0.902	0.782	1.035	43	7%	9%	0.000	0.349	0.791	1.177	1.591
Vermont	No	No	6	434	26	11.768	2.209	1.474	3.191	4							
Washington	M	Yes	70	5,694	158	167.186	0.945	0.806	1.101	38	0%	3%	0.000	0.453	0.922	1.605	1.882
Wisconsin	No	Yes	84	5,870	156	171.291	0.911	0.776	1.062	48	2%	4%	0.000	0.000	0.667	1.243	1.818
West Virginia	Yes	Yes	36	2,096	60	62.088	0.966	0.744	1.235	17	12%	6%					



Wyoming	No	No	12	302	3	6.948	0.432	0.110	1.175	2.								
<b>All US</b>			<b>3,348</b>	<b>296,623</b>	<b>8,251</b>	<b>8,981.692</b>	<b>0.919</b>	<b>0.899</b>	<b>0.939</b>	<b>2,030</b>	<b>7%</b>	<b>5%</b>	<b>0.000</b>	<b>0.315</b>	<b>0.745</b>	<b>1.301</b>	<b>1.921</b>	

1. SSIs included are those classified as deep incisional or organ/space infections following NHSN-defined inpatient colon surgery, detected during the same admission as the surgical procedure or upon readmission to the same facility.
2. Yes indicates the presence of a state mandate to report SSIs following colon surgery to NHSN at the beginning of 2013. M indicates midyear implementation of a mandate.
3. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014, and state health department contacted identified facilities.

varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

4. Percent of facilities with at least one predicted colon surgery SSI that had an SIR significantly greater or less than the 2013 national colon surgery SIR of 0.919. This is only calculated if at least 10 facilities had at least one predicted colon surgery SSI in 2013.
5. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted colon surgery SSI in 2013. If a facility's predicted number of colon surgery SSI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 5. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013**

**5b. Surgical site infections (SSI) following abdominal hysterectomy surgery<sup>1</sup>**

State			Number of		No. of Infections			95% CI for SIR		Facility-specific SIRs							
	Facilities Reporting	Number of Procedures	Observed	Predicted	SIR	Lower	Upper	10%	25%	75%	90%						
Alaska	No	No	8	450	2	4.436	0.451	0.076	1.490	1.							
Alabama	Yes	Yes	60	7,028	33	54.088	0.610	0.427	0.847	14	7%	7%					
Arkansas	Yes	Yes	39	2,982	21	22.419	0.937	0.595	1.407	5.							
Arizona	No	No	52	6,342	60	50.528	1.187	0.914	1.518	17	6%	0%					
California	Yes		303	26,443	159	219.570	0.724	0.618	0.843	77	1%	3%	0.000	0.000	0.594	1.037	1.736
Colorado	Yes	Yes	56	3,390	25	27.976	0.894	0.591	1.300	10	0%	0%					
Connecticut	Yes	Yes	29	4,020	33	31.110	1.061	0.742	1.472	9.							
D.C.	No	No	7	840	9	7.807	1.153	0.562	2.116	4.							
Delaware	Yes	Yes	7	1,198	10	8.728	1.146	0.582	2.042	3.							
Florida	No	No	172	18,393	124	138.171	0.897	0.750	1.066	47	6%	0%	0.000	0.000	0.793	1.534	2.214
Georgia	Yes	No	90	12,208	88	88.869	0.990	0.799	1.214	32	19%	3%	0.000	0.101	0.854	1.846	2.760
Hawaii	Yes	Yes	13	755	0	5.917	0.000		0.506	2.							
Iowa	No	No	33	2,514	16	17.094	0.936	0.554	1.488	6.							
Idaho	No		17	782	7	5.489	1.275	0.558	2.523	1.							
Illinois	No	No	135	11,655	57	97.934	0.582	0.445	0.749	38	0%	3%	0.000	0.000	0.458	0.970	1.483
Indiana	Yes	No	98	6,746	47	56.020	0.839	0.624	1.106	17	0%	0%					
Kansas	No	Yes	41	2,553	8	19.249	0.416	0.193	0.789	4.							
Kentucky	No	No	60	5,481	43	48.037	0.895	0.656	1.195	13	8%	0%					
Louisiana	No	Yes	79	5,858	39	44.377	0.879	0.634	1.189	12	8%	0%					
Massachusetts	Yes	Yes	57	5,641	47	42.482	1.106	0.822	1.459	11	18%	0%					
Maryland	No	No	12	1,665	18	13.960	1.289	0.788	1.998	3.							
Maine	No	Yes	19	875	5	5.718	0.874	0.320	1.938	1.							
Michigan	No	Yes	88	8,715	88	71.114	1.237	0.998	1.517	24	21%	0%	0.000	0.238	0.929	2.088	3.596
Minnesota	Yes	No	50	4,648	37	36.354	1.018	0.727	1.388	10	10%	0%					
Missouri	No	No	67	7,594	39	57.207	0.682	0.492	0.923	18	0%	0%					
Mississippi	No	No	42	4,437	28	33.177	0.844	0.572	1.203	11	9%	0%					
Montana	No	No	14	663	5	4.991	1.002	0.367	2.221	2.							
North Carolina	Yes	Yes	89	9,562	77	75.767	1.016	0.808	1.263	23	13%	0%	0.000	0.000	0.818	1.300	2.250
North Dakota	No	No	6	750	9	5.712	1.576	0.768	2.891	3.							
Nebraska	No	No	19	1,972	10	15.808	0.633	0.321	1.128	5.							
New Hampshire	Yes	Yes	22	946	6	7.907	0.759	0.308	1.578	2.							
New Jersey	Yes	Yes	66	8,586	55	66.453	0.828	0.630	1.069	21	5%	0%	0.000	0.000	0.606	1.266	2.388
New Mexico	No	No	26	1,487	8	10.468	0.764	0.355	1.451	3.							
Nevada	No	No	20	2,420	14	18.033	0.776	0.442	1.272	7.							
New York	Yes		158	19,059	189	155.553	1.215	1.051	1.398	51	10%	0%	0.000	0.527	0.987	1.569	2.134
Ohio	No	No	128	12,855	68	106.784	0.637	0.498	0.802	39	3%	0%	0.000	0.000	0.608	0.901	1.846
Oklahoma	No	No	62	4,000	15	29.846	0.503	0.292	0.810	7.							
Oregon	Yes	Yes	46	3,034	28	25.080	1.116	0.756	1.592	6.							
Pennsylvania	Yes	Yes	146	14,148	107	115.544	0.926	0.763	1.115	35	6%	0%	0.000	0.000	0.759	1.799	2.083
Puerto Rico	No	No	0	0													
Rhode Island	No	No	11	1,343	7	10.325	0.678	0.297	1.341	1.							
South Carolina	Yes		51	5,877	36	44.187	0.815	0.579	1.116	15	0%	0%					
South Dakota	No	No	14	807	10	6.270	1.595	0.810	2.843	2.							
Tennessee	Yes	Yes	87	8,516	57	64.363	0.886	0.677	1.139	20	5%	0%	0.000	0.417	0.849	1.496	1.871
Texas	Yes	Yes	290	28,194	163	224.980	0.725	0.620	0.842	75	4%	1%	0.000	0.000	0.530	0.999	1.880
Utah	Yes	Yes	29	2,535	21	19.378	1.084	0.689	1.628	9.							
Virginia	No	No	66	7,876	50	62.184	0.804	0.603	1.052	19	0%	0%	0.000	0.000	0.786	1.008	1.339
Vermont	Yes	Yes	12	498	3	4.650	0.645	0.164	1.756	1.							
Washington	Yes	Yes	64	6,035	35	43.093	0.812	0.575	1.117	11	0%	0%					
Wisconsin	No	Yes	75	5,382	28	45.191	0.620	0.420	0.884	12	8%	0%					
West Virginia	Yes	Yes	34	2,189	15	18.893	0.794	0.461	1.280	6.							
Wyoming	No	No	13	303	3	2.342	1.281	0.326	3.487	0.							

All US	3,182	302,250	2,062	2,391.632	0.862	0.826	0.900	765	6%	1%	0.000	0.000	0.732	1.377	2.029
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1. SSIs included are those classified as deep incisional or organ/space infections following NHSN-defined inpatient abdominal hysterectomy surgery, detected during the same admission as the surgical procedure or upon readmission to the same facility.

2. Yes indicates the presence of a state mandate to report SSIs following abdominal hysterectomy surgery to NHSN at the beginning of 2013. M indicates midyear implementation of a mandate.

3. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014, and state health department contacted identified facilities.

varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

4. Percent of facilities with at least one predicted abdominal hysterectomy SSI that had an SIR significantly greater or less than the 2013 national abdominal hysterectomy SIR of 0.862. This is only calculated if at least 10 facilities had at least one predicted abdominal hysterectomy SSI in 2013.

5. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted abdominal hysterectomy SSI in 2013. If a facility's predicted number of abdominal hysterectomy SSI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 6. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures, NHSN facilities reporting during 2013**

**Hospital-onset (HO) methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia, facility-wide**

State	State NHSN Mandate <sup>1</sup>	Any Validation <sup>2</sup>	No. of Infections		95% CI for SIR			Facility-specific SIRs				10%	25%	75%	90%	
			Observed	Predicted	SIR <sup>3</sup>	Lower	Upper	No. of facs with at least 1 predicted HO MRSA bacteremia								
Alaska	No	No	11	2	9.857	0.203	0.034	0.670	3							
Alabama	No	No	93	294	207.703	1.415	1.260	1.584	38	26%	0%	0.000	0.665	1.124	1.613	2.587
Arkansas	Yes	Yes	47	105	90.650	1.158	0.952	1.366	21	5%	0%	0.380	0.627	1.164	1.512	1.866
Arizona	No	No	63	188	194.000	0.969	0.838	1.115	35	9%	3%	0.000	0.577	0.956	1.476	1.945
California	Yes	Yes	359	701	954.100	0.735	0.682	0.791	225	2%	6%	0.000	0.335	0.715	1.135	1.628
Colorado	No	No	56	71	95.372	0.744	0.586	0.934	27	0%	4%	0.000	0.000	0.528	1.006	1.200
Connecticut	Yes		32	110	147.868	0.744	0.614	0.893	23	4%	9%	0.000	0.356	0.533	1.232	1.462
D.C.	Yes	Yes	9	91	57.621	1.579	1.279	1.930	8							
Delaware	Yes	No	8	43	35.759	1.202	0.881	1.605	7							
Florida	No	No	190	853	767.622	1.111	1.039	1.188	150	11%	4%	0.000	0.481	0.946	1.593	2.182
Georgia	Yes	No	111	334	315.068	1.060	0.951	1.178	57	11%	0%	0.000	0.688	1.010	1.500	1.921
Hawaii	Yes	Yes	13	20	34.940	0.572	0.359	0.868	9							
Iowa	No	Yes	41	39	88.992	0.438	0.316	0.593	21	0%	14%	0.000	0.000	0.085	0.618	1.339
Idaho	No		21	10	22.130	0.452	0.230	0.805	6							
Illinois	Yes	Yes	183	292	408.636	0.715	0.636	0.800	95	2%	5%	0.000	0.000	0.520	1.030	1.498
Indiana	No	No	102	176	217.385	0.810	0.696	0.936	43	5%	2%	0.000	0.000	0.760	1.104	1.772
Kansas	No	Yes	59	44	91.586	0.480	0.353	0.639	14	0%	14%					
Kentucky	No	No	71	198	155.459	1.274	1.105	1.461	33	18%	3%	0.224	0.496	1.015	1.921	2.739
Louisiana	No	Yes	101	239	195.922	1.220	1.072	1.382	35	17%	0%	0.000	0.645	1.191	1.550	2.279
Massachusetts	No	No	71	147	245.414	0.599	0.508	0.702	50	2%	10%	0.000	0.235	0.613	0.854	1.239
Maryland	No	No	13	23	27.992	0.822	0.534	1.213	10	0%	0%					
Maine	No	Yes	25	24	33.398	0.719	0.471	1.053	7							
Michigan	No	Yes	104	398	402.310	0.989	0.896	1.090	57	14%	7%	0.000	0.294	0.870	1.366	2.181
Minnesota	Yes	No	53	61	134.702	0.453	0.349	0.578	23	0%	13%	0.000	0.000	0.346	0.665	0.884
Missouri	No	No	82	192	241.317	0.796	0.689	0.914	43	5%	5%	0.000	0.267	0.788	1.142	1.805
Mississippi	No	No	64	136	120.408	1.129	0.951	1.332	23	22%	0%	0.458	0.803	1.168	1.873	2.866
Montana	No	No	15	9	17.883	0.503	0.245	0.924	7							
North Carolina	Yes	Yes	100	341	362.685	0.940	0.844	1.044	57	2%	4%	0.000	0.000	0.734	1.251	1.821
North Dakota	No	No	11	28	24.075	1.163	0.788	1.658	6							
Nebraska	No	No	24	37	59.472	0.622	0.444	0.849	10	0%	0%					
New Hampshire	No	No	21	15	29.946	0.501	0.291	0.808	8							
New Jersey	Yes	No	72	367	321.702	1.141	1.029	1.262	65	20%	5%	0.260	0.497	0.952	1.798	2.640
New Mexico	No	No	37	15	48.671	0.308	0.179	0.497	9							
Nevada	Yes	No	23	53	66.965	0.791	0.599	1.027	16	6%	13%					
New York	No	No	179	939	929.843	1.010	0.947	1.076	133	11%	5%	0.000	0.504	0.887	1.401	2.019
Ohio	Yes	No	144	396	469.979	0.843	0.763	0.929	87	3%	5%	0.000	0.406	0.742	1.074	1.626
Oklahoma	No	No	91	150	143.586	1.045	0.887	1.222	21	10%	0%	0.000	0.449	0.847	1.382	2.163
Oregon	No	No	49	52	83.782	0.621	0.468	0.808	19	0%	16%					
Pennsylvania	Yes	Yes	168	564	524.462	1.075	0.989	1.167	105	12%	6%	0.000	0.435	0.826	1.471	2.331
Puerto Rico	No	No	3													
Rhode Island	No	No	11	33	36.462	0.905	0.633	1.256	9							
South Carolina	Yes		66	170	182.522	0.931	0.799	1.080	32	9%	6%	0.000	0.490	0.824	1.344	1.776
South Dakota	No	No	23	18	22.487	0.800	0.489	1.241	3							
Tennessee	Yes	Yes	115	343	304.129	1.128	1.013	1.252	50	12%	0%	0.000	0.493	0.886	1.548	2.020
Texas	No	No	359	648	744.098	0.871	0.806	0.940	159	5%	4%	0.000	0.392	0.804	1.375	1.953
Utah	Yes	Yes	37	33	54.844	0.602	0.421	0.835	10	0%	0%					
Virginia	No	No	84	204	224.820	0.907	0.789	1.039	47	9%	0%	0.000	0.368	0.790	1.336	1.856
Vermont	No	No	13	4	14.929	0.268	0.085	0.646	2							
Washington	No	No	59	109	139.553	0.781	0.644	0.938	33	6%	6%	0.000	0.343	0.700	1.059	1.324
Wisconsin	No	Yes	88	65	116.445	0.558	0.434	0.707	29	0%	0%	0.000	0.000	0.493	0.813	1.282
West Virginia	Yes	Yes	39	81	87.029	0.931	0.744	1.151	18	6%	0%					
Wyoming	No	No	14	4	5.683	0.704	0.224	1.698	2							
<b>All US</b>			<b>3,827</b>	<b>9,471</b>	<b>10,326.394</b>	<b>0.917</b>	<b>0.899</b>	<b>0.936</b>	<b>2,002</b>	<b>7%</b>	<b>5%</b>	<b>0.000</b>	<b>0.383</b>	<b>0.785</b>	<b>1.310</b>	<b>1.940</b>

1. Yes indicates the presence of a state mandate to report facility-wide MRSA bacteremia data to NHSN at the beginning of 2013. M indicates midyear implementation of a mandate.

2. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014 , and state health department contacted identified facilities.

varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

3. An SIR is only calculated for states in which at least 5 facilities reported MRSA bacteremia data in 2013.

4. Percent of facilities with at least one predicted hospital-onset MRSA bacteremia that had an SIR significantly greater or less than the 2013 national hospital-onset MRSA bacteremia SIR of 0.917. This is only calculated if at least 10 facilities had at least one predicted hospital-onset MRSA bacteremia in 2013.

5. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted hospital-onset MRSA bacteremia in 2013. If a facility's predicted number of hospital-onset MRSA bacteremia was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 7. State-specific standardized infection ratios (SIRs) and facility-specific SIR summary measures,  
NHSN facilities reporting during 2013**

**Hospital-onset (HO) *Clostridium difficile* infection (CDI), facility-wide**

State			No. of Infections		95% CI for SIR			Facility-specific SIRs								
	Observed	Predicted	Lower	Upper	No. of facs with at least 1 predicted HO CDI	10%	25%	75%	90%							
Alaska	No	No	11	105	142.820	0.735	0.604	0.886	11	0%	36%					
Alabama	No	No	93	1,326	2,091.730	0.634	0.601	0.669	83	1%	40%	0.000	0.000	0.452	0.762	0.918
Arkansas	Yes	Yes	47	578	919.330	0.629	0.579	0.682	46	0%	35%	0.000	0.185	0.402	0.836	1.156
Arizona	No	No	62	2,126	2,120.400	1.003	0.961	1.046	54	26%	20%	0.000	0.542	0.896	1.157	1.656
California	Yes	Yes	359	10,543	10,050.130	1.049	1.029	1.069	325	25%	11%	0.219	0.638	0.935	1.275	1.649
Colorado	No	No	55	1,201	1,144.650	1.049	0.991	1.110	48	27%	13%	0.312	0.463	0.891	1.293	1.771
Connecticut	Yes	Yes	32	1,461	1,442.300	1.013	0.962	1.066	32	25%	13%	0.305	0.706	1.025	1.171	1.460
D.C.	No	Yes	7	432	492.390	0.877	0.797	0.963	7							
Delaware	Yes	No	8	378	361.380	1.046	0.944	1.156	8							
Florida	No	No	190	7,280	8,204.120	0.887	0.867	0.908	184	16%	20%	0.382	0.595	0.859	1.101	1.416
Georgia	Yes	No	111	2,530	3,064.500	0.826	0.794	0.858	105	9%	21%	0.000	0.375	0.602	0.925	1.306
Hawaii	Yes	Yes	13	252	390.980	0.645	0.569	0.728	13	8%	46%					
Iowa	No	Yes	57	803	1,034.770	0.776	0.724	0.831	45	0%	16%	0.000	0.269	0.676	0.845	1.056
Idaho	No	No	20	198	297.250	0.666	0.578	0.764	15	0%	13%					
Illinois	Yes	Yes	183	4,466	4,922.450	0.907	0.881	0.934	163	11%	17%	0.000	0.498	0.748	1.158	1.464
Indiana	No	No	102	2,157	2,356.910	0.915	0.877	0.954	94	13%	17%	0.000	0.302	0.624	1.099	1.382
Kansas	No	Yes	64	827	899.020	0.920	0.859	0.984	51	8%	10%	0.000	0.000	0.563	1.047	1.253
Kentucky	No	No	71	1,660	1,717.520	0.967	0.921	1.014	69	12%	14%	0.000	0.390	0.843	1.149	1.475
Louisiana	No	Yes	101	1,047	1,663.070	0.630	0.592	0.669	83	4%	30%	0.000	0.158	0.470	0.789	1.280
Massachusetts	No	No	71	2,643	2,612.910	1.012	0.974	1.051	68	25%	13%	0.404	0.714	0.887	1.265	1.517
Maryland	M		46	1,829	1,582.470	1.156	1.104	1.210	44	39%	16%	0.303	0.593	1.041	1.363	1.784
Maine	Yes	Yes	36	235	443.290	0.530	0.466	0.601	36	0%	28%	0.000	0.000	0.427	0.865	1.142
Michigan	No	Yes	104	3,815	4,193.620	0.910	0.881	0.939	100	7%	23%	0.000	0.413	0.757	0.975	1.174
Minnesota	Yes	No	55	1,434	1,727.210	0.830	0.788	0.874	53	13%	19%	0.205	0.379	0.639	0.969	1.257
Missouri	No	No	82	2,109	2,456.190	0.859	0.823	0.896	78	8%	22%	0.204	0.449	0.710	0.995	1.237
Mississippi	No	No	65	672	1,125.290	0.597	0.553	0.644	56	0%	30%	0.000	0.222	0.457	0.697	1.070
Montana	No	No	16	213	258.100	0.825	0.720	0.942	13	8%	15%					
North Carolina	Yes	Yes	100	2,852	3,506.940	0.813	0.784	0.843	96	6%	25%	0.000	0.317	0.713	0.932	1.202
North Dakota	No	No	11	229	282.090	0.812	0.712	0.922	7							
Nebraska	No	No	24	332	541.900	0.613	0.549	0.681	24	4%	29%	0.000	0.000	0.370	0.576	0.948
New Hampshire	No	No	22	299	353.430	0.846	0.754	0.946	21	5%	5%	0.000	0.074	0.674	0.904	1.040
New Jersey	No	No	72	3,330	3,255.200	1.023	0.989	1.058	72	33%	14%	0.561	0.791	1.037	1.400	1.739
New Mexico	Yes	Yes	39	565	544.810	1.037	0.954	1.125	31	13%	6%	0.016	0.535	0.818	1.060	1.527
Nevada	No	No	22	866	739.670	1.171	1.095	1.251	21	38%	10%	0.255	0.579	1.099	1.414	1.582
New York	Yes	Yes	180	9,379	9,625.560	0.974	0.955	0.994	176	23%	23%	0.310	0.539	0.897	1.221	1.488
Ohio	Yes	No	144	4,579	4,922.520	0.930	0.904	0.957	135	16%	22%	0.000	0.449	0.717	1.145	1.474
Oklahoma	No	No	91	1,208	1,355.460	0.891	0.842	0.943	70	9%	13%	0.000	0.000	0.645	0.955	1.125
Oregon	Yes	Yes	59	718	944.300	0.760	0.706	0.818	49	10%	24%	0.000	0.284	0.473	0.920	1.416
Pennsylvania	Yes	Yes	167	5,275	5,572.800	0.947	0.921	0.972	158	15%	18%	0.242	0.537	0.800	1.065	1.488
Puerto Rico	No	No	4													
Rhode Island	Yes	No	11	571	483.220	1.182	1.088	1.282	11	45%	9%					
South Carolina	No	No	64	1,325	1,797.890	0.737	0.698	0.777	63	5%	27%	0.000	0.175	0.599	0.871	1.188
South Dakota	No	No	23	219	303.680	0.721	0.630	0.822	16	6%	13%					
Tennessee	Yes	Yes	115	2,088	2,724.690	0.766	0.734	0.800	106	9%	28%	0.000	0.289	0.520	0.971	1.459
Texas	No	No	359	6,258	7,744.460	0.808	0.788	0.828	299	6%	19%	0.000	0.305	0.653	0.947	1.213
Utah	Yes	Yes	35	468	557.440	0.840	0.766	0.918	29	0%	10%	0.000	0.367	0.672	1.012	1.108
Virginia	No	No	84	2,468	2,529.000	0.976	0.938	1.015	79	16%	16%	0.148	0.513	0.857	1.070	1.479
Vermont	No	No	13	89	153.780	0.579	0.468	0.709	11	0%	9%					
Washington	No	No	61	1,681	1,772.230	0.949	0.904	0.995	58	16%	12%	0.000	0.560	0.685	1.074	1.507
Wisconsin	No	Yes	95	1,426	1,639.510	0.870	0.825	0.916	82	7%	13%	0.000	0.415	0.653	0.971	1.281
West Virginia	Yes	Yes	41	880	863.110	1.020	0.954	1.089	36	14%	11%	0.129	0.367	0.747	1.069	1.311
Wyoming	No	No	27	73	90.200	0.809	0.639	1.012	19	0%	5%					

All US	3,924	99,550	110,169.850	0.904	0.898	0.909	3,557	13%	19%	0.000	0.406	0.746	1.074	1.424
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1. Yes indicates the presence of a state mandate to report facility-wide CDI data to NHSN at the beginning of 2013. M indicates midyear implementation of a mandate.

2. Yes indicates that the state health department reported the completion of all of the following validation activities: state health department had access to 2013 NHSN data, state health department performed an assessment of missing or implausible values on at least six months of 2013 NHSN data prior to July 1, 2014, and state health department contacted identified facilities.

varies by state). Information on validation efforts was requested from all states, regardless of the presence of a legislative mandate for the particular HAI type. Some states without mandatory

3. An SIR is only calculated for states in which at least 5 facilities reported CDI data in 2013.

reporting of a given HAI to the state health department have performed validation on NHSN data that is voluntarily shared with them by facilities in their jurisdiction.

4. Percent of facilities with at least one predicted hospital-onset CDI that had an SIR significantly greater or less than the 2013 national hospital-onset CDI SIR of 0.904. This is only calculated if at least 10 facilities had at least one predicted hospital-onset CDI in 2013.

5. Facility-specific key percentiles were only calculated if at least 20 facilities had  $\geq 1.0$  predicted hospital-onset CDI in 2013. If a facility's predicted number of hospital-onset CDI was  $< 1.0$ , a facility-specific SIR was neither calculated nor included in the distribution of facility-specific SIRs.

**Table 8. Changes in national standardized infection ratios (SIRs) using HAI data reported from all NHSN facilities reporting during 2013 by HAI and patient population: central line-associated bloodstream infections (CLABSIs) catheter-associated urinary tract infections (CAUTIs), Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia, *Clostridium difficile* infections, and surgical site infections (SSIs) following Surgical Care Improvement Project (SCIP) procedures, 2012 compared to 2013**

	SIR 2012	SIR 2013	Percent Change	Direction of Change	p-value
<b>CLABSI, all locations<sup>1</sup></b>	0.562	0.538	4%	Decrease*	0.0000
CLABSI, ICU <sup>2</sup>	0.541	0.500	8%	Decrease*	0.0000
CLABSI, Ward <sup>3</sup>	0.600	0.608	1%	Increase	0.4677
CLABSI, NICU <sup>4</sup>	0.560	0.499	11%	Decrease*	0.0008
<b>CAUTI, all locations<sup>5</sup></b>	1.023	1.057	3%	Increase*	0.0000
CAUTI, ICU <sup>2</sup>	1.089	1.180	8%	Increase*	0.0000
CAUTI, Ward <sup>3</sup>	0.863	0.802	7%	Decrease*	0.0000
<b>Hospital-onset MRSA bacteremia, facility-wide</b>	0.962	0.917	5%	Decrease*	0.0324
	0.966	0.904	6%	Decrease*	0.0000
<b>SSI, combined SCIP procedures<sup>6</sup></b>	0.811	0.807	< 1 %	Decrease	0.7120
SSI, Hip arthroplasty	0.847	0.734	13%	Decrease*	0.0000
SSI, Knee arthroplasty	0.801	0.600	25%	Decrease*	0.0000
SSI, Coronary artery bypass graft <sup>7</sup>	0.710	0.601	15%	Decrease*	0.0005
SSI, Cardiac surgery	0.678	0.557	18%	Decrease	0.0581
SSI, Peripheral vascular bypass surgery	0.750	0.573	24%	Decrease*	0.0391
SSI, Abdominal aortic aneurysm repair	0.316	0.297	6%	Decrease	0.8722
SSI, Colon surgery <sup>8</sup>	0.804	0.919	14%	Increase*	0.0000
SSI, Rectal surgery	0.782	0.794	2%	Increase	0.8986
SSI, Abdominal hysterectomy	0.894	0.862	4%	Decrease	0.2356
SSI, Vaginal hysterectomy	0.894	0.814	9%	Decrease	0.4243

\* statistically significant, p < 0.05

1. Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

2. Data from all ICUs; excludes wards (and other non-critical care locations), NICUs, LTAC locations (or facilities), and inpatient rehabilitation locations (or facilities).

3. Data from all wards (for this table wards also include step-down and specialty care areas [including hematology/oncology, bone marrow transplant]. This excludes LTAC locations [or facilities] and inpatient rehabilitation locations [or facilities]).

4. Data from all NICU locations, including Level II/III and Level III nurseries. For purposes of this report, both umbilical line and central line-associated bloodstream infections are considered CLABSIs.

5. Data from all ICUs and wards (and other non-critical care locations). This excludes NICUs, LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

6. SSIs included are those following select inpatient surgical procedures approximating procedures covered by SCIP, using NHSN surgical procedure categorizations that were classified as deep incisional or organ/space, and were detected upon admission or readmission. Specific NHSN procedures and the corresponding SCIP procedures are listed in Appendix A

7. Coronary artery bypass graft includes procedures with either chest only or chest and donor site incisions.

8. Several changes to the NHSN 2013 SSI protocol likely contributed to an increase in the national and some state-specific colon surgery 2013 SIRs compared to 2012.



**Table 9. Changes in state-specific standardized infection ratios (SIRs), 2012 compared to 2013**  
**9a. Central line-associated bloodstream infections (CLABSI), all locations<sup>1</sup>**

State	All Facilities Reporting to NHSN				
	2012 SIR	2013 SIR	Percent Change	Direction of Change	p-value
Alaska	1.109	0.278	75%	Decrease*	0.0000
Alabama	0.656	0.667	2%	Increase	0.8137
Arkansas	0.557	0.547	2%	Decrease	0.8625
Arizona	0.633	0.639	1%	Decrease	0.9094
California	0.531	0.517	3%	Decrease	0.3357
Colorado	0.471	0.494	5%	Increase	0.6435
Connecticut	0.716	0.559	22%	Decrease*	0.0282
D.C.	0.772	0.699	9%	Decrease	0.4380
Delaware	0.431	0.709	65%	Increase*	0.0104
Florida	0.556	0.591	6%	Increase	0.1324
Georgia	0.672	0.718	7%	Increase	0.2313
Hawaii	0.195	0.247	27%	Increase	0.4184
Iowa	0.459	0.537	17%	Increase	0.3328
Idaho	0.322	0.287	11%	Decrease	0.7357
Illinois	0.568	0.470	17%	Decrease*	0.0007
Indiana	0.660	0.692	5%	Increase	0.4492
Kansas	0.506	0.576	14%	Increase	0.2921
Kentucky	0.893	0.665	26%	Decrease*	0.0003
Louisiana	0.689	0.687	< 1%	Decrease	0.9698
Massachusetts	0.532	0.512	4%	Decrease	0.6341
Maryland	0.546	0.514	6%	Decrease	0.4866
Maine	0.944	0.664	30%	Decrease*	0.0329
Michigan	0.425	0.436	3%	Increase	0.7167
Minnesota	0.475	0.442	7%	Decrease	0.5306
Missouri	0.460	0.419	9%	Decrease	0.3040
Mississippi	0.937	0.773	18%	Decrease*	0.0251
Montana	0.487	0.632	30%	Increase	0.2601
North Carolina	0.510	0.531	4%	Increase	0.5410
North Dakota	0.368	0.374	2%	Increase	0.9573
Nebraska	0.739	0.710	4%	Decrease	0.7128
New Hampshire	0.433	0.345	20%	Decrease	0.4769
New Jersey	0.708	0.613	13%	Decrease*	0.0373
New Mexico	0.613	0.486	21%	Decrease	0.1473
Nevada	0.600	0.634	6%	Increase	0.4933
New York	0.635	0.564	11%	Decrease*	0.0043
Ohio	0.438	0.418	5%	Decrease	0.4569
Oklahoma	0.480	0.394	18%	Decrease	0.0761
Oregon	0.390	0.301	23%	Decrease	0.1211
Pennsylvania	0.490	0.494	1%	Increase	0.8311
Puerto Rico	1.034	0.781	24%	Decrease*	0.0252
Rhode Island	0.622	0.670	8%	Increase	0.6780
South Carolina	0.617	0.575	7%	Decrease	0.2911
South Dakota	0.275	0.194	29%	Decrease	0.3155
Tennessee	0.567	0.485	14%	Decrease*	0.0165
Texas	0.553	0.514	7%	Decrease	0.0643
Utah	0.650	0.660	2%	Increase	0.9195
Virginia	0.578	0.501	13%	Decrease	0.0540
Vermont	0.249	0.252	1%	Increase	0.9863
Washington	0.566	0.537	5%	Decrease	0.5634
Wisconsin	0.439	0.481	10%	Increase	0.3313
West Virginia	0.384	0.353	8%	Decrease	0.5588
Wyoming	0.163	0.529	225%	Increase	0.1466
<b>All US</b>	<b>0.562</b>	<b>0.538</b>	<b>4%</b>	<b>Decrease*</b>	<b>0.0000</b>

\* Statistically significant change, p < 0.05

1. Data from all ICUs, wards (and other non-critical care locations), and NICUs. This excludes LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

**Table 9. Changes in state-specific standardized infection ratios (SIRs), 2012 compared to 2013**  
**9b. Catheter-associated urinary tract infections (CAUTI), all locations<sup>1</sup>**

State	All Facilities Reporting to NHSN				
	2012 SIR	2013 SIR	Percent Change	Direction of Change	p-value
Alaska	1.326	1.016	23%	Decrease	0.2074
Alabama	0.745	0.933	25%	Increase*	0.0000
Arkansas	1.099	1.040	5%	Decrease	0.4579
Arizona	1.092	1.024	6%	Decrease	0.2732
California	0.846	0.903	7%	Increase*	0.0095
Colorado	0.915	0.792	13%	Decrease	0.0683
Connecticut	1.868	1.654	11%	Decrease	0.0637
D.C.	1.314	1.296	1%	Decrease	0.9010
Delaware	1.051	1.301	24%	Increase	0.1132
Florida	0.846	0.937	11%	Increase*	0.0013
Georgia	1.028	1.359	32%	Increase*	0.0000
Hawaii	0.986	0.624	37%	Decrease*	0.0030
Iowa	0.943	0.884	6%	Decrease	0.5377
Idaho	1.145	1.003	12%	Decrease	0.4421
Illinois	1.039	0.967	7%	Decrease	0.0794
Indiana	1.053	1.226	16%	Increase*	0.0020
Kansas	0.956	1.120	17%	Increase	0.0643
Kentucky	1.175	1.212	3%	Increase	0.5955
Louisiana	0.816	0.809	1%	Decrease	0.8897
Massachusetts	1.453	1.582	9%	Increase	0.0645
Maryland	1.876	1.379	26%	Decrease*	0.0000
Maine	1.906	1.718	10%	Decrease	0.3609
Michigan	0.998	1.248	25%	Increase*	0.0000
Minnesota	1.473	1.260	14%	Decrease*	0.0257
Missouri	0.965	1.062	10%	Increase	0.0990
Mississippi	1.192	1.078	10%	Decrease	0.1458
Montana	0.866	0.683	21%	Decrease	0.1619
North Carolina	1.090	1.139	4%	Increase	0.3034
North Dakota	0.627	0.699	11%	Increase	0.6109
Nebraska	0.975	0.925	5%	Decrease	0.5998
New Hampshire	0.956	0.918	4%	Decrease	0.7976
New Jersey	0.875	1.019	16%	Increase*	0.0029
New Mexico	0.970	0.830	14%	Decrease	0.2527
Nevada	0.996	1.081	9%	Increase	0.2020
New York	1.352	1.262	7%	Decrease*	0.0095
Ohio	0.902	0.918	2%	Increase	0.6747
Oklahoma	0.620	0.767	24%	Increase*	0.0174
Oregon	1.414	1.156	18%	Decrease*	0.0106
Pennsylvania	0.898	1.016	13%	Increase*	0.0000
Puerto Rico	0.992	0.790	20%	Decrease*	0.0219
Rhode Island	1.349	1.269	6%	Decrease	0.5914
South Carolina	1.454	1.276	12%	Decrease*	0.0102
South Dakota	0.643	0.738	15%	Increase	0.4581
Tennessee	1.369	1.235	10%	Decrease*	0.0159
Texas	0.942	1.028	9%	Increase*	0.0048
Utah	1.839	1.640	11%	Decrease	0.2204
Virginia	0.895	1.051	17%	Increase*	0.0033
Vermont	1.212	0.865	29%	Decrease	0.2189
Washington	1.074	1.012	6%	Decrease	0.3658
Wisconsin	0.790	0.826	5%	Increase	0.5158
West Virginia	0.689	0.589	15%	Decrease	0.1234
Wyoming	0.900	0.530	41%	Decrease	0.1434
<b>All US</b>	<b>1.023</b>	<b>1.057</b>	<b>3%</b>	<b>Increase*</b>	<b>0.0000</b>

\* Statistically significant change, p < 0.05

1. Data from all ICUs and wards (and other non-critical care locations). This excludes NICUs, LTAC locations (or facilities) and inpatient rehabilitation locations (or facilities).

**Table 9. Changes in state-specific standardized infection ratios (SIRs), 2012 compared to 2013**  
**9c. Surgical site infections (SSI) following colon surgery<sup>1,2</sup>**

State	All Facilities Reporting to NHSN				
	2012 SIR	2013 SIR	Percent Change	Direction of Change	p-value
Alaska	1.571	0.839	47%	Decrease	0.0585
Alabama	0.586	0.470	20%	Decrease	0.1353
Arkansas	0.981	0.774	21%	Decrease	0.1502
Arizona	1.121	1.112	1%	Decrease	0.9338
California	0.706	0.822	16%	Increase*	0.0061
Colorado	0.733	0.714	3%	Decrease	0.8545
Connecticut	1.058	1.129	7%	Increase	0.6272
D.C.	0.481	0.705	47%	Increase	0.2382
Delaware	0.670	0.807	20%	Increase	0.5261
Florida	0.722	0.787	9%	Increase	0.1805
Georgia	0.827	0.865	5%	Increase	0.6343
Hawaii	0.971	1.026	6%	Increase	0.8392
Iowa	1.006	1.130	12%	Increase	0.4581
Idaho	0.718	0.797	11%	Increase	0.6988
Illinois	0.616	0.813	32%	Increase*	0.0019
Indiana	1.047	1.071	2%	Increase	0.8111
Kansas	0.938	1.379	47%	Increase*	0.0084
Kentucky	0.789	0.761	4%	Decrease	0.7807
Louisiana	0.992	1.088	10%	Increase	0.4438
Massachusetts	0.824	1.224	49%	Increase*	0.0001
Maryland	0.875	0.854	2%	Decrease	0.9082
Maine	1.319	1.197	9%	Decrease	0.6312
Michigan	0.865	1.048	21%	Increase*	0.0222
Minnesota	0.681	0.983	44%	Increase*	0.0031
Missouri	0.652	0.689	6%	Increase	0.6335
Mississippi	0.814	0.808	1%	Decrease	0.9686
Montana	0.460	0.841	83%	Increase	0.1065
North Carolina	0.772	0.910	18%	Increase	0.0790
North Dakota	1.575	1.198	24%	Decrease	0.3162
Nebraska	1.227	1.300	6%	Increase	0.7385
New Hampshire	0.614	0.691	13%	Increase	0.6616
New Jersey	0.629	0.861	37%	Increase*	0.0029
New Mexico	0.585	0.735	26%	Increase	0.4155
Nevada	1.113	1.068	4%	Decrease	0.8201
New York	0.863	1.314	52%	Increase*	0.0000
Ohio	0.724	0.910	26%	Increase*	0.0028
Oklahoma	0.829	1.152	39%	Increase*	0.0164
Oregon	0.785	0.748	5%	Decrease	0.7418
Pennsylvania	0.786	0.887	13%	Increase	0.0828
Puerto Rico	.	.	.	.	.
Rhode Island	1.371	1.321	4%	Decrease	0.8695
South Carolina	1.062	0.958	10%	Decrease	0.4034
South Dakota	1.076	0.982	9%	Decrease	0.7453
Tennessee	0.898	0.914	2%	Increase	0.8580
Texas	0.752	0.775	3%	Increase	0.6481
Utah	1.502	1.160	23%	Decrease	0.1025
Virginia	0.774	0.902	17%	Increase	0.1541
Vermont	1.893	2.209	17%	Increase	0.5933
Washington	0.681	0.945	39%	Increase*	0.0079
Wisconsin	0.815	0.911	12%	Increase	0.3458
West Virginia	0.956	0.966	1%	Increase	0.9539
Wyoming	1.261	0.432	66%	Decrease	0.1013
<b>All US</b>	<b>0.804</b>	<b>0.919</b>	<b>14%</b>	<b>Increase*</b>	<b>0.0000</b>

\* Statistically significant change, p < 0.05

1. SSIs included are those classified as deep incisional or organ/space infections following NHSN-defined inpatient colon surgery, detected during the same
2. Several changes to the NHSN 2013 SSI protocol likely contributed to an increase in the national and some state-specific colon surgery 2013 SIRs compared

e admission as the surgical procedure or upon readmission to the same facility.  
ared to 2012.

**Table 9. Changes in state-specific standardized infection ratios (SIRs), 2012 compared to 2013**  
**9d. Surgical site infections (SSI) following abdominal hysterectomy surgery<sup>1</sup>**

State	All Facilities Reporting to NHSN				
	2012 SIR	2013 SIR	Percent Change <sup>2</sup>	Direction of Change	p-value
Alaska	0.377	0.451	20%	Increase	0.8667
Alabama	0.508	0.610	20%	Increase	0.4747
Arkansas	0.805	0.937	16%	Increase	0.6350
Arizona	1.221	1.187	3%	Decrease	0.8790
California	0.778	0.724	7%	Decrease	0.5198
Colorado	0.822	0.894	9%	Increase	0.7712
Connecticut	1.036	1.061	2%	Increase	0.9264
D.C.	1.394	1.153	17%	Decrease	0.6813
Delaware	1.056	1.146	9%	Increase	0.8715
Florida	0.964	0.897	7%	Decrease	0.5729
Georgia	0.877	0.990	13%	Increase	0.4463
Hawaii	1.101	0.000	100%	Decrease*	0.0154
Iowa	1.200	0.936	22%	Decrease	0.4601
Idaho	0.000	1.275	> 100%	Increase*	0.0390
Illinois	0.915	0.582	36%	Decrease*	0.0074
Indiana	0.520	0.839	61%	Increase*	0.0434
Kansas	0.646	0.416	36%	Decrease	0.3418
Kentucky	0.797	0.895	12%	Increase	0.6208
Louisiana	1.095	0.879	20%	Decrease	0.3140
Massachusetts	0.761	1.106	45%	Increase	0.0987
Maryland	2.134	1.289	40%	Decrease	0.0951
Maine	0.763	0.874	15%	Increase	0.8522
Michigan	1.079	1.237	15%	Increase	0.3790
Minnesota	1.076	1.018	5%	Decrease	0.8063
Missouri	0.718	0.682	5%	Decrease	0.8172
Mississippi	1.325	0.844	36%	Decrease	0.0669
Montana	0.810	1.002	24%	Increase	0.7430
North Carolina	0.762	1.016	33%	Increase	0.0978
North Dakota	1.049	1.576	50%	Increase	0.4824
Nebraska	1.035	0.633	39%	Decrease	0.2320
New Hampshire	0.542	0.759	40%	Increase	0.5916
New Jersey	1.009	0.828	18%	Decrease	0.2780
New Mexico	0.711	0.764	7%	Increase	0.8809
Nevada	0.633	0.776	23%	Increase	0.6448
New York	1.338	1.215	9%	Decrease	0.3430
Ohio	0.871	0.637	27%	Decrease	0.0516
Oklahoma	0.686	0.503	27%	Decrease	0.3663
Oregon	0.422	1.116	164%	Increase*	0.0035
Pennsylvania	0.961	0.926	4%	Decrease	0.7838
Puerto Rico	.	.	.	.	.
Rhode Island	1.657	0.678	59%	Decrease*	0.0475
South Carolina	1.134	0.815	28%	Decrease	0.1274
South Dakota	0.623	1.595	156%	Increase	0.1089
Tennessee	0.871	0.886	2%	Increase	0.9268
Texas	0.751	0.725	3%	Decrease	0.7476
Utah	0.924	1.084	17%	Increase	0.6185
Virginia	0.867	0.804	7%	Decrease	0.7080
Vermont	0.959	0.645	33%	Decrease	0.6124
Washington	0.616	0.812	32%	Increase	0.2840
Wisconsin	0.920	0.620	33%	Decrease	0.1067
West Virginia	0.486	0.794	63%	Increase	0.2339
Wyoming	0.692	1.281	85%	Increase	0.5315
<b>All US</b>	<b>0.894</b>	<b>0.862</b>	<b>4%</b>	<b>Decrease</b>	<b>0.2356</b>

\* Statistically significant change, p < 0.05

1. SSIs included are those classified as deep incisional or organ/space infections following NHSN-defined inpatient abdominal hysterectomy surgery, detect  
2. For any state with a referent SIR of 0, the percent change was reflected as greater than 100 percent.

ed during the same admission as the surgical procedure or upon readmission to the same facility

**Appendix A. List of procedures included in the Surgical Care Improvement Project (SCIP) and equivalent NHSN procedures, along with risk factors used in NHSN risk adjustment**

SCIP Procedure	NHSN Procedure	Validated Parameters for Risk Model
Vascular*	Abdominal aortic aneurysm repair	duration of procedure, wound class
	Peripheral vascular bypass surgery	age, ASA, duration of procedure, medical school affiliation
Coronary artery bypass graft	Coronary artery bypass graft with both chest and donor site incisions; Coronary artery bypass graft with chest incision only	age, ASA, duration of procedure, gender, medical school affiliation, age gender (interaction)
Other cardiac	Cardiac surgery	age, duration of procedure, emergency
Colon surgery	Colon surgery	age, ASA, duration, endoscope, medical school affiliation, hospital bed size, wound class
	Rectal surgery	duration of procedure, gender, hospital bed size
Hip arthroplasty	Hip arthroplasty	total/partial/revision, age, anesthesia, ASA, duration of procedure, medical school affiliation, hospital bed size, trauma
Abdominal hysterectomy	Abdominal hysterectomy	age, ASA, duration of procedure, hospital bed size
Knee arthroplasty	Knee arthroplasty	age, ASA, duration of procedure, gender, medical school affiliation, hospital bed size, trauma, revision
Vaginal hysterectomy	Vaginal hysterectomy	age, duration of procedure, medical school affiliation

\*This report does not include the carotid endarterectomy NHSN procedure category, which is included in the SCIP Vascular category.