

Hospital-Acquired Infections in New York State, 2017

Part 1: Summary for Consumers

Contents

Introduction	3
Surgical Site Infections (SSIs)	4
Catheter-Associated Infections	5
Laboratory-identified (LabID) infections.....	6
<i>Clostridium difficile Infections (CDI)</i>	<i>7</i>
<i>Carbapenem-resistant Enterobacteriaceae (CRE) Infections</i>	<i>8</i>
<i>Methicillin-resistant Staphylococcus aureus (MRSA) Infections</i>	<i>9</i>
Hospital Performance	10
Role of the State Health Department	27
What Patients Can do to Prevent Infections	28

Acknowledgements:

Cover Images (from left to right): Acinetobacter, methicillin-resistant *Staphylococcus aureus*, carbapenem-resistant Enterobacteriaceae, Candida. From the Centers for Disease Control and Prevention Newsroom Image Library, <http://www.cdc.gov/media/subtopic/images.htm>.

Introduction

What is the purpose of this report?

Hospital-acquired infections (HAIs) are infections that patients can get as a result of receiving treatment in a hospital. New York State (NYS) monitors HAI rates to ensure patient safety and provide the public with data to compare hospital infection rates. This report describes the HAIs that occurred in NYS hospitals in 2017.

This report provides information on six types of HAIs:

1. Surgical site infections (SSIs) following colon, coronary artery bypass graft, hip replacement, and hysterectomy procedures
2. Central line-associated bloodstream infections (CLABSIs)
3. Catheter-associated urinary tract infections (CAUTIs)
4. *Clostridium difficile* infections (CDIs)
5. Carbapenem-resistant Enterobacteriaceae infections (CREs)
6. Methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections (BSIs)

These HAIs do not represent all possible HAIs, but they were selected because they are common, may have severe complications, can be compared between facilities, and are largely preventable when healthcare providers use infection prevention steps recommended by the Centers for Disease Control and Prevention (CDC).

Where do the numbers come from?

Hospitals report to the NYS Department of Health (DOH) using the CDC's National Healthcare Safety Network (NHSN). This online system allows hospitals in NYS and CDC to concurrently monitor the same data. All hospitals follow the same surveillance methods. Additional information about the NHSN can be found at <http://www.cdc.gov/nhsn/>.

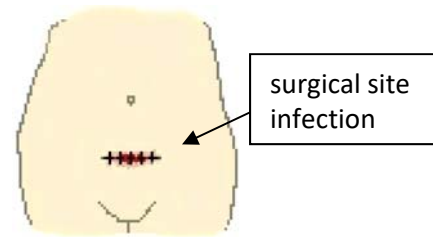
In accordance with NYS Public Health Law 2819, NYS acute care hospitals have been reporting HAIs since 2007. In 2017, NYS required hospitals to report SSIs, CLABSIs, CDIs, and CRE infections. In addition, hospitals report data to NHSN to participate in programs offered by the Centers for Medicare and Medicaid Services (CMS). Data on CAUTIs and MRSA-BSIs are available as a result of a data use agreement (DUA) that allows NYS HAI staff to see NHSN data and use it for surveillance or prevention purposes. NYS measures are reported by specific hospital, while DUA measures are only summarized at the state level because the DUA prohibits the use of the data for public reporting of facility-specific data. Data from Federal (e.g. Veterans) hospitals are not available either under Public Health Law or the DUA.

Surgical Site Infections (SSIs)

SSIs are infections that occur after surgery in the part of the body where the surgery took place. They may only involve the skin, or they may be more serious and involve tissue and organs. NYS requires hospitals to report SSIs associated with four types of surgery:

- **Colon:** Colon surgery is a procedure performed on the lower part of the digestive tract, called the large intestine or colon.
- **Hip:** Hip replacement or revision surgery involves removing damaged cartilage and bone from the hip joint and replacing or resurfacing them with new parts.
- **Abdominal hysterectomy:** Abdominal hysterectomy is the surgical removal of a woman’s uterus through an incision in the abdominal wall.
- **Coronary artery bypass graft (CABG):** CABG surgery is a procedure performed for heart disease in which a vein or artery from the chest or another part of the body (termed the “donor site”) is used to create an alternate path for blood to flow to the heart, bypassing a blocked artery.

SSIs can occur if bacteria enter the body at the incision site. Symptoms may include fever, pain, redness, and drainage.



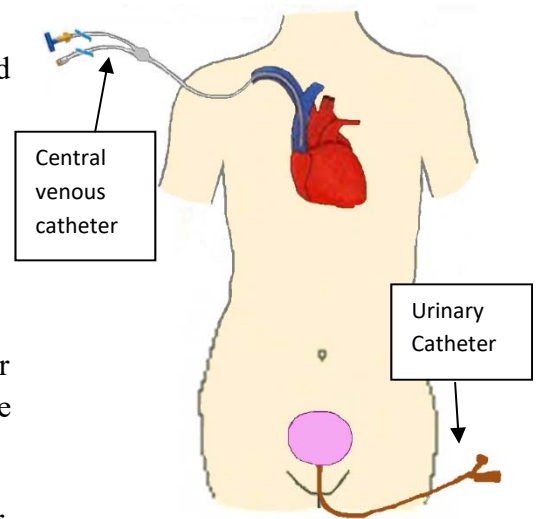
The infection rate is the number of SSIs divided by the number of procedures. Results from 2017 for all NYS hospitals are summarized below. SSIs were most frequent after colon surgery. Colon SSIs may be more difficult to prevent because the colon naturally contains a lot of bacteria.

Type of Surgery	Number of Infections	Number of Procedures	Infection Rate	2017 rate compared to 2015
Colon	863	19,527	4.4/100 procedures	improved 21%
Hip	315	34,862	0.9/100 procedures	improved 5%
Abdominal hysterectomy	203	16,915	1.2/100 procedures	improved 2%
Coronary artery bypass graft ¹	168	10,849	1.5/100 procedures	improved 15%

2017 New York State data reported as of June 25, 2018. ¹chest-site SSIs.

Catheter-Associated Infections

A central venous catheter (CVC) is a tube that is placed into a large vein, usually in the neck, chest, arm, or groin, that is used to give fluids and medications, withdraw blood, and monitor the patient’s condition. A CVC is different from a standard intravenous (IV) line because it goes farther into the body, ending near the heart, and because it may be used for weeks or even months.



A urinary catheter is a thin tube that is inserted into the bladder through the urethra to drain urine when a patient cannot urinate on his/her own.

Infections can sometimes occur when bacteria travel around or through the tube and enter the urinary tract or blood stream.

NYS monitors blood stream infections associated with CVC use. In addition, CMS monitors urinary tract infections associated with urinary catheter use. These infections are monitored in intensive care units and a few other medical/surgical units with less critical patients.

The risk of infection increases with the number of days a catheter is used. For this reason, infection rates are based on the total number of days catheters are used, rather than simply the number of patients. To calculate “catheter days” a daily count of patients with each type of catheter is performed at the same time each day. The daily counts are added up for the entire year to give the catheter days for that year.

Type of Catheter	Number of Infections	Number of Catheter Days	Infection Rate	2017 rate compared to 2015
Central venous	1,226	1,325,611	0.9/1,000 CVC days	improved 18%
Urinary	1,568	1,285,437	1.2/1,000 UC days	improved 6%

2017 NYS data reported as of June 25, 2018 (venous) and May 31, 2018 (urinary).

Laboratory-identified (LabID) infections

LabID infections are identified based on laboratory testing and hospital admission and discharge data, rather than by clinical chart review. LabID cases are separated into reporting categories based on the time between hospital admission and specimen collection.

Admission Prevalent			Hospital onset			
Day 1 (Admission)	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7+

- Cases termed “admission prevalent”, or “community onset” are cases in which the specimen was obtained during the first three days of the patient’s inpatient stay. These cases are presumed to be unrelated to the patient’s stay in that hospital.
- Cases termed “hospital-onset (HO)” are cases in which the specimen was obtained on day four or later during the hospital stay.

HO rates are the primary focus for this report because HO cases can be prevented or reduced in the hospital by appropriate antibiotic prescribing and following infection prevention guidelines for hand washing, use of gowns and gloves, and equipment/environmental cleaning.

NYS requires that hospitals report two types of LabID infections: *Clostridium difficile* infections (CDIs) and carbapenem-resistant Enterobacteriaceae (CRE). Hospitals report methicillin-resistant *Staphylococcus aureus* (MRSA) BSIs to participate in CMS reporting programs. These infections are described on the following pages.

***Clostridium difficile* Infections (CDI)**

Clostridium difficile is a type of bacteria that can cause diarrhea and intestinal damage. The elderly and those who have recently taken antibiotics are at the greatest risk for developing CDI. When people take antibiotics, good bacteria that protect against infection may be destroyed along with the bad bacteria. The types of bacteria in the intestines might be altered for several months. During this time, patients can get sick from *Clostridium difficile* acquired from contaminated surfaces or health care providers' hands.



Colon infected by *Clostridium difficile*, ©Samir 2009, https://commons.wikimedia.org/wiki/File:Pseudomembranous_colitis_1.jpg.

CDI is the most common HAI of all indicators in this report. In 2017, 5,449 cases were detected after the third day of hospitalization, implying that the bacteria that caused the infection were acquired during that hospital visit or that medical interventions during that hospital visit led to infection in a colonized person. Over 10,000 additional cases were detected in the emergency department or early in the hospital stay; these cases are likely related to previous healthcare exposures.

The longer a person stays in the hospital, the higher the total risk of acquiring an infection in the hospital, so the HO rate is reported using a denominator of patient days. To calculate “patient days” a daily count of patients is performed at the same time each day. The daily counts are added up for the entire year to give the patient days for that year. The HO rate is defined as the number of new infections identified more than three days after hospital admission, per 10,000 patient days.

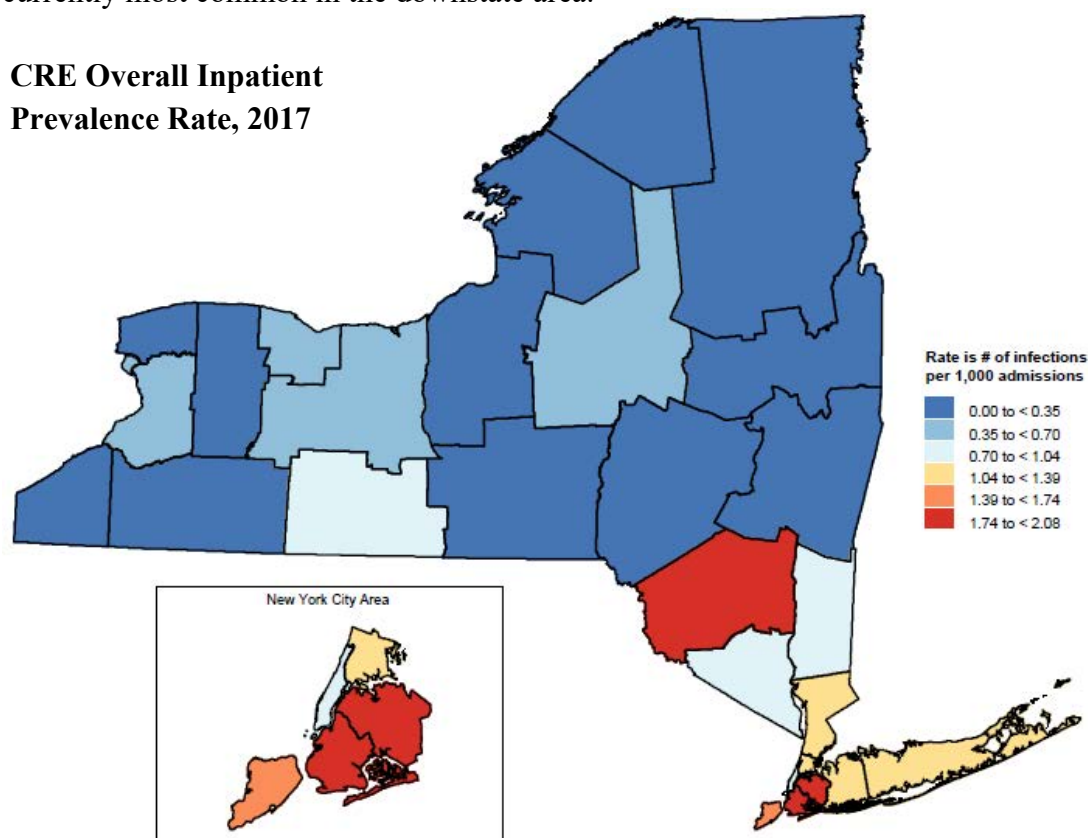
<i>Clostridium difficile</i> rate	Number of Infections	Number of Patient Days	Infection Rate	2017 rate compared to 2015
Hospital Onset	5,449	10,455,614	5.2/10,000 patient days	improved 30%

2017 NYS data reported as of July 31, 2018.

Carbapenem-resistant Enterobacteriaceae (CRE) Infections

Enterobacteriaceae are a family of bacteria that are normally found in the intestines. They cause infections if they spread to other locations in the body (e.g. through surgery or trauma), or are introduced into other body sites by contact with an infected person or contaminated surfaces. They are called carbapenem-resistant Enterobacteriaceae (CRE) when they become highly resistant to most antibiotics, including a type of antibiotics called carbapenems. Infections with CRE are difficult to treat because most antibiotics do not work against them. Healthy people usually do not get CRE infections. CRE are more likely to affect patients with compromised immune systems and those who use invasive devices like ventilators and catheters. CRE is currently most common in the downstate area.

CRE Overall Inpatient Prevalence Rate, 2017



CRE is most deadly when it enters the bloodstream. Rates of new bloodstream infections and the overall infection rate at all body sites are summarized below. CRE that is identified in non-sterile body sites like skin or urine may represent colonization (present but not causing symptoms of illness), but these events are counted as infections for this report.

Carbapenem resistant Enterobacteriaceae rates	Number of New Infections	Number of Patient Days	Infection Rate	2017 rate compared to 2015
Hospital onset – BSI	208	11,333,990	0.18/10,000 patient days	improved 8%
Hospital onset – all sites	1,054	11,333,990	0.93/10,000 patient days	improved 19%

NYS data reported as of June 25, 2018. BSI: bloodstream infection

Methicillin-resistant *Staphylococcus aureus* (MRSA) Infections

Staphylococcus aureus (*S. aureus*) is a common type of bacteria normally found on the skin or in the nose of 20 to 30 percent of healthy individuals. When *S. aureus* is resistant to the antibiotics oxacillin, cefoxitin, or methicillin, it is called MRSA. MRSA infections can cause a broad range of symptoms depending on the patient's health and the part of the body that is infected. One of the most serious types of infection occurs in the blood, called a bloodstream infection (MRSA-BSI).

MRSA has been present in NYS and the rest of the country for many years. In 2017, 694 cases of MRSA-BSI were detected after the third day of hospitalization, implying that the bacteria that caused the infection were acquired during that hospital visit or that medical interventions during that hospital visit led to infection in a colonized person. An additional 3,114 positive blood samples were detected in the emergency department or early in the hospital stay; these cases are not likely related to that hospital admission. Rates of new hospital onset infections are summarized below.

MRSA Infection rate	Number of New Bloodstream Infections	Number of Patient Days	Infection Rate	2017 rate compared to 2015
Hospital Onset	694	11,228,920	0.62/10,000 patient days	improved 9%

NYS data reported as of May 31, 2018.

Hospital Performance

To evaluate hospital performance, NYS asks the question,

“How did each hospital perform in 2017 compared to the NYS 2017 average?”

This comparison is performed separately by type of HAI (i.e. SSI, CLABSI, CDI). The comparison takes into account differences in patient populations related to severity of illness and other factors that may affect the risk of developing an HAI. A hospital that performs many complex procedures on very sick patients would be expected to have a higher infection rate than a hospital that performs more routine procedures on healthier patients. Therefore, before comparing the infection rates of hospitals, it is important to adjust for the proportion of high and low risk patients. DOH predicts the number of infections based on the NYS average infection rate for similar patients, then divides the number of observed infections by the number of predicted infections. This is called the standardized infection ratio (SIR).

- A SIR above 1.0 means that the infection rate at the hospital is worse than the state average, even after adjusting for differences in that hospital’s patient population. The difference above 1.0 is the percentage by which the infection rate exceeds that of the state average. If the SIR is significantly higher than 1, the result is highlighted in red.
- A SIR below 1.0 means that the infection rate is better than the state average after adjusting for differences in that hospital’s patient population. The difference below 1.0 is the percentage by which the infection rate is lower than that of the state average. If the SIR is significantly lower than 1, the result is highlighted in blue.
- A SIR of 1.0 means the observed number of infections is equal to the number of predicted infections. If the SIR is not significantly different from the state average, the result is highlighted in grey.
- No SIR was calculated when there was not enough data for a hospital.

More detailed information on the risk adjustment method and hospital performance is available in Part 2: Technical Report.

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
AO Fox Memorial	2016	0	1.3	0.00	Same	0	0.9	0.00	Same	4	3.4	1.17	Same
	2017	1	1.4	0.74	Same	0	0.8	0.00	Same	3	5.7	0.53	Same
Adirondack Medical	2016	1	2.2	0.45	Same	0	0.7	0.00	Same	12	3.3	3.61	^ Worse
	2017	2	2.2	0.91	Same	1	0.8	1.32	Same	3	2.5	1.18	Same
Albany Med Ctr	2016	33	36.3	0.91	Same	40	48.7	0.82	Same	131	148.2	0.88	Same
	2017	44	35.3	1.25	Same	51	45.9	1.11	Same	105	113.0	0.93	Same
Albany Memorial	2016	1	3.2	0.31	Same	3	1.6	1.93	Same	8	4.1	1.95	Same
	2017	2	2.3	0.89	Same	2	1.0	2.10	Same	3	3.8	0.80	Same
Alice Hyde Med Ctr	2016	0	1.2	0.00	Same	0	0.3	0.00	Same	0	1.9	0.00	Same
	2017	1	1.2	0.84	Same	1	0.3	3.30	Same	0	1.1	0.00	Same
Arnot Ogden Med Ctr	2016	8	9.1	0.88	Same	12	10.3	1.16	Same	48	38.5	1.25	Same
	2017	8	8.6	0.93	Same	5	5.6	0.89	Same	34	29.3	1.16	Same
Auburn Memorial	2016	0	4.2	0.00	**Better	1	1.5	0.66	Same	13	11.2	1.16	Same
	2017	2	3.0	0.67	Same	3	1.2	2.42	Same	15	12.5	1.20	Same
Bellevue Ellis	2016	0	0.5	0.00	Same				No Data				Not calculated
	2017	0	0.3	0.00	Same				No Data				Not calculated
Bellevue Hospital	2016	7	9.2	0.76	Same	23	15.2	1.51	Same	78	86.6	0.90	Same
	2017	11	9.6	1.14	Same	31	15.3	2.02	^ Worse	52	64.2	0.81	Same
Bertrand Chaffee	2016				No Data				Not calculated	0	0.7	0.00	Same
	2017				Not calculated	0	0.0	0.00	Same	0	0.9	0.00	Same
Blythedale Childrens	2016				No Data				No Data				Not calculated
	2017				No Data	8	2.5	3.21	^ Worse				Not calculated
Bon Secours	2016	1	1.6	0.64	Same	1	1.0	1.03	Same	0	7.1	0.00	**Better
	2017	5	0.7	7.39	^ Worse	0	0.6	0.00	Same	4	5.1	0.78	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Bronx-Lebanon	2016	2	7.5	0.27	**Better	10	13.7	0.73	Same	44	50.4	0.87	Same
	2017	3	4.6	0.65	Same	13	11.4	1.14	Same	45	39.2	1.15	Same
Brookdale Hospital	2016	17	6.1	2.77	^ Worse	16	7.6	2.11	^ Worse	14	22.5	0.62	Same
	2017	11	4.7	2.35	^ Worse	5	4.7	1.06	Same	13	16.9	0.77	Same
Brookhaven Memorial	2016	6	5.4	1.12	Same	12	9.5	1.26	Same	52	45.0	1.15	Same
	2017	2	4.9	0.41	Same	13	6.4	2.05	^ Worse	51	52.9	0.96	Same
Brooklyn Hosp Ctr	2016	7	7.8	0.89	Same	6	9.6	0.62	Same	33	32.2	1.03	Same
	2017	4	6.7	0.59	Same	1	8.7	0.11	**Better	5	24.4	0.21	**Better
Brooks Memorial	2016	2	1.8	1.10	Same	1	0.4	2.46	Same	3	4.5	0.66	Same
	2017	2	1.8	1.10	Same	1	0.6	1.75	Same	1	5.0	0.20	Same
Buffalo General	2016	18	24.9	0.72	Same	17	27.3	0.62	**Better	94	102.4	0.92	Same
	2017	21	24.0	0.88	Same	23	25.7	0.90	Same	69	78.7	0.88	Same
Burdett Care Center	2016				No Data				No Data				Not calculated
	2017				No Data				No Data				Not calculated
Calvary Hospital	2016				No Data				No Data				Not calculated
	2017				No Data				No Data				Not calculated
Canton-Potsdam	2016	7	5.4	1.30	Same	0	1.3	0.00	Same	9	7.9	1.14	Same
	2017	7	3.9	1.82	Same	2	1.3	1.56	Same	12	11.6	1.04	Same
Catskill Regional	2016	1	2.2	0.46	Same	2	1.2	1.61	Same	14	9.0	1.56	Same
	2017	2	1.5	1.32	Same	1	1.1	0.95	Same	18	8.8	2.04	^ Worse
Cayuga Medical Ctr	2016	1	4.8	0.21	Same	1	2.4	0.42	Same	12	15.6	0.77	Same
	2017	2	3.3	0.60	Same	1	1.8	0.56	Same	1	12.3	0.08	**Better
Champlain Valley	2016	6	5.9	1.01	Same	5	9.7	0.52	Same	42	53.8	0.78	Same
	2017	3	6.7	0.45	Same	2	6.4	0.31	Same	32	56.2	0.57	**Better

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Claxton-Hepburn	2016	2	1.0	1.92	Same	1	1.7	0.60	Same	8	6.7	1.19	Same
	2017	1	1.2	0.82	Same	2	1.5	1.34	Same	10	5.3	1.90	Same
Clifton Springs	2016				Not calculated	2	1.3	1.52	Same	6	7.6	0.78	Same
	2017				Not calculated	0	1.2	0.00	Same	1	6.4	0.16	Same
Cobleskill Regional	2016				No Data	0	0.1	0.00	Same	0	1.6	0.00	Same
	2017				No Data	0	0.2	0.00	Same	2	1.8	1.12	Same
Cohens Childrens	2016				No Data	5	9.3	0.54	Same				Not calculated
	2017				No Data	9	11.2	0.81	Same				Not calculated
Columbia Memorial	2016	4	5.2	0.76	Same	2	2.6	0.77	Same	20	19.8	1.01	Same
	2017	4	4.7	0.86	Same	7	2.3	3.07	^ Worse	25	13.9	1.80	^ Worse
Coney Island Hosp	2016	0	2.4	0.00	Same	34	13.3	2.56	^ Worse	94	76.6	1.23	Same
	2017	0	3.5	0.00	**Better	12	11.9	1.01	Same	72	53.1	1.36	Same
Corning Hospital	2016	1	2.5	0.40	Same	3	1.1	2.69	Same	11	9.1	1.21	Same
	2017	3	2.8	1.08	Same	0	1.2	0.00	Same	7	9.7	0.72	Same
Cortland Reg Med	2016	1	1.4	0.72	Same	2	1.1	1.86	Same	2	5.7	0.35	Same
	2017	1	2.3	0.43	Same	0	0.8	0.00	Same	5	4.8	1.03	Same
Crouse Hospital	2016	37	22.8	1.62	^ Worse	18	14.7	1.22	Same	35	49.0	0.71	Same
	2017	25	22.1	1.13	Same	22	12.8	1.72	^ Worse	26	33.3	0.78	Same
DeGraff Memorial	2016	2	0.7	2.75	Same	0	0.5	0.00	Same	3	3.9	0.76	Same
	2017				Not calculated	0	0.3	0.00	Same	3	2.5	1.22	Same
East. Niag. Lockport	2016	2	2.6	0.78	Same	1	0.4	2.51	Same	10	7.2	1.39	Same
	2017	3	1.8	1.68	Same	0	0.3	0.00	Same	5	6.6	0.76	Same
Eastern Long Island	2016	2	0.5	4.28	Same	0	0.2	0.00	Same	0	5.0	0.00	**Better
	2017				Not calculated	1	0.2	5.69	Same	5	4.8	1.04	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Ellis Hospital	2016	16	14.1	1.14	Same	5	10.6	0.47	Same	45	63.9	0.70	Same
	2017	14	14.8	0.94	Same	7	10.1	0.69	Same	72	32.4	2.22	^ Worse
Elmhurst Hospital	2016	7	5.8	1.20	Same	34	11.7	2.92	^ Worse	29	44.6	0.65	Same
	2017	11	5.7	1.94	Same	14	8.5	1.65	Same	18	36.7	0.49	**Better
Erie County Med Ctr	2016	12	8.9	1.35	Same	11	13.2	0.83	Same	72	63.5	1.13	Same
	2017	10	9.9	1.01	Same	22	11.9	1.85	^ Worse	57	50.9	1.12	Same
FF Thompson	2016	2	2.9	0.68	Same	2	3.0	0.67	Same	16	16.6	0.97	Same
	2017	3	3.9	0.77	Same	1	2.2	0.45	Same	12	11.7	1.02	Same
Faxton St. Lukes	2016	6	5.3	1.14	Same	4	6.2	0.65	Same	66	46.2	1.43	^ Worse
	2017	10	5.6	1.77	Same	4	5.6	0.72	Same	51	35.1	1.45	Same
Flushing Hospital	2016	7	5.3	1.31	Same	10	7.9	1.26	Same	50	33.8	1.48	Same
	2017	9	3.7	2.47	^ Worse	6	5.3	1.13	Same	26	23.3	1.12	Same
Geneva General	2016	5	4.5	1.12	Same	1	2.6	0.38	Same	25	25.0	1.00	Same
	2017	2	3.8	0.52	Same	1	2.1	0.48	Same	8	15.5	0.52	Same
Glen Cove Hospital	2016	1	2.2	0.47	Same	3	0.9	3.46	Same	8	9.1	0.88	Same
	2017	2	1.8	1.08	Same	0	0.7	0.00	Same	4	7.4	0.54	Same
Glens Falls Hospital	2016	4	9.0	0.44	Same	3	6.1	0.49	Same	35	46.3	0.76	Same
	2017	4	8.4	0.48	Same	2	5.0	0.40	Same	39	28.5	1.37	Same
Good Samar. Suffern	2016	6	8.6	0.70	Same	6	7.9	0.76	Same	50	38.5	1.30	Same
	2017	9	9.1	0.99	Same	4	4.0	0.99	Same	47	34.6	1.36	Same
Good Samar. W Islip	2016	26	18.8	1.38	Same	7	17.2	0.41	**Better	89	68.0	1.31	Same
	2017	21	21.0	1.00	Same	2	15.4	0.13	**Better	65	48.0	1.35	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Harlem Hospital	2016	2	2.2	0.92	Same	6	5.1	1.17	Same	16	22.9	0.70	Same
	2017	3	2.0	1.49	Same	6	6.1	0.98	Same	25	19.1	1.31	Same
HealthAlli Broadway	2016	0	3.0	0.00	**Better	0	5.2	0.00	**Better	21	12.5	1.68	Same
	2017	2	2.8	0.72	Same	8	3.7	2.17	Same	13	8.3	1.56	Same
HealthAlli MarysAve	2016	0	1.2	0.00	Same	0	0.5	0.00	Same	1	2.0	0.50	Same
	2017	0	1.1	0.00	Same	0	0.2	0.00	Same	0	1.4	0.00	Same
Henry J. Carter	2016				No Data				No Data				Not calculated
	2017				No Data				No Data				Not calculated
Highland Hospital	2016	20	17.7	1.13	Same	2	16.5	0.12	**Better	40	45.1	0.89	Same
	2017	15	20.9	0.72	Same	9	12.1	0.75	Same	22	29.3	0.75	Same
Hosp for Spec Surg	2016	17	28.2	0.60	**Better	0	3.2	0.00	**Better				Not calculated
	2017	17	36.3	0.47	**Better	0	2.5	0.00	Same				Not calculated
Huntington Hospital	2016	11	11.6	0.95	Same	3	3.4	0.89	Same	39	37.0	1.05	Same
	2017	8	11.4	0.70	Same	2	2.2	0.92	Same	30	30.3	0.99	Same
Interfaith Med Ctr	2016	1	1.5	0.68	Same	7	2.6	2.73	^ Worse	14	8.8	1.59	Same
	2017	4	1.1	3.78	^ Worse	4	2.4	1.64	Same	1	6.7	0.15	Same
Ira Davenport	2016				No Data	0	0.1	0.00	Same	0	0.4	0.00	Same
	2017				No Data				Not calculated	0	0.2	0.00	Same
JT Mather Hospital	2016	7	6.7	1.05	Same	5	6.4	0.78	Same	33	19.0	1.73	^ Worse
	2017	12	7.1	1.68	Same	2	7.0	0.29	Same	41	16.1	2.55	^ Worse
Jacobi Med Ctr	2016	8	8.8	0.91	Same	14	7.3	1.91	^ Worse	64	53.4	1.20	Same
	2017	10	8.7	1.15	Same	12	6.5	1.84	Same	46	40.3	1.14	Same
Jamaica Hospital	2016	7	6.5	1.08	Same	6	8.8	0.68	Same	54	51.3	1.05	Same
	2017	8	5.9	1.36	Same	11	7.5	1.47	Same	32	39.0	0.82	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Jones Memorial	2016	0	0.7	0.00	Same	0	1.0	0.00	Same	2	1.9	1.05	Same
	2017	0	0.8	0.00	Same	0	0.8	0.00	Same	1	3.8	0.26	Same
Kenmore Mercy	2016	9	8.8	1.02	Same	0	2.5	0.00	Same	18	17.4	1.04	Same
	2017	12	9.9	1.21	Same	2	2.1	0.94	Same	15	14.2	1.06	Same
Kings County Hosp	2016	8	9.4	0.85	Same	13	13.9	0.94	Same	17	34.5	0.49	**Better
	2017	5	9.9	0.51	Same	15	11.8	1.27	Same	29	40.7	0.71	Same
Kingsbrook Jewish MC	2016	3	2.8	1.07	Same	24	7.7	3.12	^ Worse	40	27.6	1.45	Same
	2017	6	2.4	2.49	Same	24	6.8	3.53	^ Worse	48	27.1	1.77	^ Worse
LIJ at Forest Hills	2016	5	7.3	0.69	Same	1	4.4	0.22	Same	26	34.0	0.77	Same
	2017	5	6.0	0.84	Same	2	4.3	0.47	Same	22	24.4	0.90	Same
LIJ at Valley Stream	2016	2	3.4	0.59	Same	5	2.8	1.76	Same	25	21.4	1.17	Same
	2017	4	3.2	1.25	Same	2	1.6	1.22	Same	8	13.4	0.60	Same
Lenox Hill Hospital	2016	24	28.7	0.84	Same	7	12.3	0.57	Same	45	58.2	0.77	Same
	2017	22	25.7	0.85	Same	4	11.6	0.35	**Better	36	49.9	0.72	Same
Lincoln Med Ctr	2016	3	5.9	0.51	Same	9	10.5	0.86	Same	10	22.7	0.44	**Better
	2017	9	6.5	1.39	Same	11	9.4	1.17	Same	13	18.0	0.72	Same
Long Isl Jewish(LIJ)	2016	24	32.4	0.74	Same	16	14.6	1.09	Same	104	99.5	1.04	Same
	2017	21	33.9	0.62	**Better	9	14.2	0.63	Same	98	88.5	1.11	Same
Maimonides Med Ctr	2016	23	25.5	0.90	Same	43	22.5	1.91	^ Worse	56	60.7	0.92	Same
	2017	26	21.3	1.22	Same	28	19.5	1.43	Same	43	53.0	0.81	Same
Mary Imogene Bassett	2016	13	12.9	1.01	Same	4	6.1	0.65	Same	23	28.1	0.82	Same
	2017	26	14.8	1.76	^ Worse	1	6.7	0.15	**Better	17	20.2	0.84	Same
Massena Memorial	2016	0	0.5	0.00	Same	0	0.1	0.00	Same	3	2.2	1.34	Same
	2017	1	0.6	1.59	Same	0	0.2	0.00	Same	4	1.9	2.08	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Memor SloanKettering	2016	86	82.0	1.05	Same				No Data				Not calculated
	2017	91	81.0	1.12	Same	8	5.5	1.47	Same				Not calculated
Mercy Hosp Buffalo	2016	35	23.3	1.50	^ Worse	8	14.7	0.55	Same	61	48.7	1.25	Same
	2017	21	21.4	0.98	Same	9	11.6	0.78	Same	52	43.7	1.19	Same
Mercy Med Ctr	2016	1	5.0	0.20	Same	5	3.9	1.28	Same	53	32.5	1.63	^ Worse
	2017	1	3.3	0.30	Same	1	3.2	0.32	Same	21	17.9	1.17	Same
Metropolitan Hosp	2016	0	3.2	0.00	**Better	3	2.4	1.25	Same	4	15.9	0.25	**Better
	2017	2	2.6	0.78	Same	1	2.9	0.35	Same	6	10.7	0.56	Same
MidHudson Reg of WMC	2016	3	3.7	0.81	Same	2	4.7	0.43	Same	20	10.0	2.00	^ Worse
	2017	1	4.0	0.25	Same	4	3.0	1.32	Same	16	7.1	2.26	^ Worse
Millard Fill. Suburb	2016	16	21.4	0.75	Same	3	9.3	0.32	**Better	30	49.5	0.61	**Better
	2017	17	21.2	0.80	Same	6	8.0	0.75	Same	38	32.9	1.16	Same
Monroe Community	2016				No Data				No Data				Not calculated
	2017				No Data				No Data				Not calculated
Montefiore-Einstein	2016	24	19.1	1.26	Same	25	18.4	1.36	Same	117	92.0	1.27	Same
	2017	28	21.0	1.33	Same	19	18.1	1.05	Same	116	82.7	1.40	^ Worse
Montefiore-Moses	2016	26	23.8	1.09	Same	42	43.7	0.96	Same	221	156.0	1.42	^ Worse
	2017	29	22.0	1.32	Same	47	41.7	1.13	Same	200	144.3	1.39	^ Worse
Montefiore-Mt Vernon	2016	3	1.2	2.44	Same	4	1.6	2.43	Same	17	7.6	2.24	^ Worse
	2017	0	1.6	0.00	Same	4	0.9	4.40	^ Worse	13	4.7	2.79	^ Worse
Montefiore-NewRochl	2016	5	4.3	1.15	Same	6	2.6	2.30	Same	20	18.2	1.10	Same
	2017	4	3.1	1.31	Same	2	2.3	0.86	Same	14	11.3	1.23	Same
Montefiore-Nyack	2016	7	5.4	1.30	Same	4	3.9	1.02	Same	48	50.1	0.96	Same
	2017	3	4.9	0.61	Same	1	4.3	0.23	Same	26	50.9	0.51	**Better

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Montefiore-Wakefield	2016	13	8.0	1.62	Same	5	7.6	0.65	Same	72	35.6	2.02	^ Worse
	2017	14	7.6	1.84	^ Worse	6	7.8	0.77	Same	43	28.7	1.50	Same
Mount St. Marys	2016	2	3.1	0.65	Same	2	3.0	0.67	Same	4	12.4	0.32	Same
	2017	5	2.3	2.20	Same	0	2.3	0.00	Same	10	12.2	0.82	Same
Mt Sinai	2016	68	59.1	1.15	Same	62	46.7	1.33	^ Worse	167	153.7	1.09	Same
	2017	68	50.7	1.34	^ Worse	67	35.8	1.87	^ Worse	123	123.0	1.00	Same
Mt Sinai Beth Israel	2016	19	16.6	1.14	Same	16	12.6	1.27	Same	29	58.4	0.50	**Better
	2017	21	10.1	2.09	^ Worse	9	7.5	1.20	Same	7	27.3	0.26	**Better
Mt Sinai Brooklyn	2016	1	4.5	0.22	Same	8	4.0	1.99	Same	14	26.6	0.53	Same
	2017	5	3.0	1.67	Same	10	5.1	1.95	Same	6	22.3	0.27	**Better
Mt Sinai Queens	2016	2	3.9	0.51	Same	6	4.0	1.51	Same	9	24.6	0.37	**Better
	2017	6	4.2	1.41	Same	3	3.9	0.78	Same	7	16.9	0.42	Same
Mt Sinai St Lukes	2016	5	9.0	0.55	Same	8	7.6	1.05	Same	23	38.4	0.60	Same
	2017	8	12.3	0.65	Same	9	7.6	1.18	Same	10	28.6	0.35	**Better
Mt Sinai West	2016	11	13.4	0.82	Same	3	4.4	0.68	Same	19	41.4	0.46	**Better
	2017	14	12.7	1.10	Same	2	3.2	0.63	Same	7	33.8	0.21	**Better
NY Community Hosp	2016	1	1.9	0.52	Same	1	1.5	0.68	Same	32	24.1	1.33	Same
	2017	2	1.2	1.64	Same	1	1.2	0.81	Same	47	23.7	1.98	^ Worse
NY Eye&Ear Mt Sinai	2016				No Data				Not calculated				Not calculated
	2017				No Data				Not calculated				Not calculated
NYP-Allen	2016	0	1.3	0.00	Same	3	3.1	0.98	Same	23	25.0	0.92	Same
	2017	0	1.0	0.00	Same	7	3.1	2.26	Same	27	18.3	1.48	Same
NYP-Brklyn Methodist	2016	10	22.2	0.45	**Better	16	15.0	1.07	Same	134	94.2	1.42	^ Worse
	2017	11	19.7	0.56	**Better	12	14.6	0.82	Same	87	76.9	1.13	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
NYP-Columbia	2016	38	48.2	0.79	Same	70	56.6	1.24	Same	238	189.8	1.25	^ Worse
	2017	38	40.0	0.95	Same	56	42.4	1.32	Same	197	142.1	1.39	^ Worse
NYP-Hudson Valley	2016	3	4.0	0.75	Same	2	2.7	0.73	Same	24	29.6	0.81	Same
	2017	7	4.3	1.64	Same	3	2.5	1.22	Same	31	21.4	1.45	Same
NYP-Lawrence	2016	5	4.2	1.18	Same	9	5.4	1.66	Same	24	26.8	0.90	Same
	2017	3	4.5	0.67	Same	11	4.5	2.46	^ Worse	20	20.7	0.97	Same
NYP-Lower Manhattan	2016	4	4.8	0.82	Same	8	3.7	2.15	Same	26	21.1	1.23	Same
	2017	2	2.6	0.78	Same	4	3.4	1.16	Same	21	15.1	1.39	Same
NYP-Morgan Stanley	2016	0	2.5	0.00	Same	15	17.8	0.84	Same				Not calculated
	2017	1	2.2	0.45	Same	15	20.6	0.73	Same				Not calculated
NYP-Queens	2016	16	20.8	0.77	Same	23	14.1	1.63	^ Worse	97	112.7	0.86	Same
	2017	6	16.2	0.37	**Better	6	10.4	0.58	Same	55	81.6	0.67	**Better
NYP-Weill Cornell	2016	21	34.9	0.60	**Better	46	46.0	1.00	Same	219	156.8	1.40	^ Worse
	2017	14	28.9	0.48	**Better	61	38.6	1.58	^ Worse	206	131.8	1.56	^ Worse
NYU Langone Brooklyn	2016	14	10.2	1.37	Same	23	9.8	2.35	^ Worse	86	58.1	1.48	^ Worse
	2017	23	12.1	1.90	^ Worse	11	6.4	1.73	Same	44	36.4	1.21	Same
NYU Orthopedic Hosp	2016	16	14.5	1.11	Same	1	0.3	3.58	Same				Not calculated
	2017	22	16.8	1.31	Same	0	0.2	0.00	Same				Not calculated
NYU Tisch	2016	47	37.1	1.27	Same	37	31.4	1.18	Same	119	101.9	1.17	Same
	2017	28	37.0	0.76	Same	24	30.0	0.80	Same	98	85.9	1.14	Same
NYU Winthrop	2016	41	30.3	1.35	Same	17	24.7	0.69	Same	98	93.9	1.04	Same
	2017	28	29.1	0.96	Same	23	22.9	1.00	Same	89	86.8	1.03	Same
Nassau University	2016	4	4.2	0.94	Same	3	6.4	0.47	Same	14	26.0	0.54	Same
	2017	3	3.7	0.81	Same	5	5.1	0.99	Same	22	19.7	1.12	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Nathan Littauer	2016	1	1.7	0.60	Same	1	0.6	1.66	Same	4	3.1	1.30	Same
	2017	0	1.1	0.00	Same	0	0.8	0.00	Same	4	3.1	1.28	Same
Newark Wayne	2016	4	2.5	1.61	Same	1	2.4	0.41	Same	14	20.2	0.69	Same
	2017	4	2.6	1.54	Same	0	2.6	0.00	Same	3	11.9	0.25	**Better
Niagara Falls	2016	3	2.7	1.12	Same	5	2.3	2.16	Same	7	11.3	0.62	Same
	2017	4	1.7	2.34	Same	1	1.8	0.56	Same	9	8.9	1.02	Same
North Central Bronx	2016	2	2.0	0.99	Same	1	1.0	0.97	Same	8	13.9	0.58	Same
	2017	0	1.1	0.00	Same	2	0.8	2.40	Same	7	8.5	0.82	Same
North Shore	2016	36	55.7	0.65	**Better	15	27.3	0.55	**Better	155	166.6	0.93	Same
	2017	28	47.1	0.59	**Better	21	24.4	0.86	Same	109	118.2	0.92	Same
Northern Dutchess	2016	6	3.8	1.57	Same	1	1.1	0.90	Same	14	8.9	1.57	Same
	2017	5	3.6	1.38	Same	0	1.2	0.00	Same	20	8.3	2.40	^ Worse
Northern Westchester	2016	13	7.2	1.81	Same	2	2.7	0.75	Same	26	23.8	1.09	Same
	2017	10	8.3	1.21	Same	5	2.5	1.98	Same	20	24.9	0.80	Same
Noyes Memorial	2016	2	2.0	1.02	Same	0	0.6	0.00	Same	2	4.1	0.49	Same
	2017	1	1.4	0.70	Same	0	0.6	0.00	Same	5	5.1	0.98	Same
Oishei Childrens	2016	5	2.2	2.32	Same	10	6.9	1.45	Same				Not calculated
	2017	0	1.5	0.00	Same	13	10.0	1.30	Same				Not calculated
Olean General	2016	4	4.1	0.96	Same	5	3.2	1.58	Same	24	17.8	1.35	Same
	2017	6	4.3	1.39	Same	2	3.5	0.57	Same	16	15.8	1.01	Same
Oneida Healthcare	2016	5	3.9	1.27	Same	0	1.0	0.00	Same	3	4.8	0.62	Same
	2017	6	4.0	1.50	Same	0	0.7	0.00	Same	1	6.5	0.15	Same
Orange Regional	2016	7	12.8	0.55	Same	11	11.2	0.99	Same	97	68.2	1.42	^ Worse
	2017	7	13.0	0.54	Same	8	6.9	1.17	Same	76	57.3	1.33	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Oswego Hospital	2016	3	3.6	0.83	Same	1	1.6	0.62	Same	7	12.3	0.57	Same
	2017	6	2.6	2.35	Same	1	1.1	0.90	Same	8	10.2	0.78	Same
Our Lady of Lourdes	2016	9	7.6	1.18	Same	3	5.5	0.55	Same	28	27.1	1.04	Same
	2017	0	8.6	0.00	**Better	4	4.7	0.85	Same	17	20.5	0.83	Same
Peconic Bay Medical	2016	10	7.2	1.39	Same	6	2.0	3.07	^ Worse	22	18.5	1.19	Same
	2017	6	7.0	0.85	Same	0	2.0	0.00	Same	18	18.0	1.00	Same
Phelps Memorial	2016	0	3.7	0.00	**Better	1	2.0	0.50	Same	24	27.8	0.86	Same
	2017	2	3.7	0.54	Same	1	1.6	0.62	Same	26	22.6	1.15	Same
Plainview Hospital	2016	7	8.7	0.81	Same	5	3.4	1.48	Same	22	22.9	0.96	Same
	2017	3	5.8	0.52	Same	3	2.4	1.26	Same	13	14.6	0.89	Same
Putnam Hospital	2016	6	6.0	0.99	Same	2	2.1	0.94	Same	28	23.8	1.18	Same
	2017	8	6.3	1.27	Same	1	1.4	0.70	Same	11	12.9	0.85	Same
Queens Hospital	2016	8	5.2	1.53	Same	4	4.8	0.84	Same	19	21.3	0.89	Same
	2017	4	4.3	0.93	Same	5	4.0	1.26	Same	13	16.4	0.79	Same
Richmond Univ MC	2016	15	8.7	1.73	Same	16	8.0	2.00	^ Worse	56	35.6	1.57	^ Worse
	2017	21	7.8	2.68	^ Worse	13	6.8	1.90	^ Worse	48	30.8	1.56	^ Worse
Rochester General	2016	43	39.9	1.08	Same	26	23.1	1.12	Same	124	247.6	0.50	**Better
	2017	46	39.8	1.15	Same	13	21.5	0.60	Same	84	135.3	0.62	**Better
Rome Memorial	2016	1	1.3	0.77	Same	1	1.1	0.91	Same	20	14.2	1.41	Same
	2017	0	1.3	0.00	Same	0	0.8	0.00	Same	8	7.7	1.03	Same
Roswell Park	2016	26	10.3	2.53	^ Worse				No Data				Not calculated
	2017	21	10.3	2.04	^ Worse	2	1.8	1.10	Same				Not calculated
SUNY Downstate MedCr	2016	9	8.1	1.11	Same	22	11.6	1.90	^ Worse	38	39.9	0.95	Same
	2017	6	7.5	0.80	Same	17	10.5	1.62	Same	31	29.8	1.04	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Samaritan- Troy	2016	3	7.3	0.41	Same	1	4.6	0.22	Same	5	8.4	0.59	Same
	2017	13	4.9	2.64	^ Worse	2	4.4	0.45	Same	5	10.4	0.48	Same
Samaritan- Watertown	2016	3	3.9	0.77	Same	0	3.5	0.00	**Better	18	30.1	0.60	Same
	2017	9	5.1	1.76	Same	2	3.0	0.66	Same	24	29.0	0.83	Same
Saratoga Hospital	2016	8	8.1	0.99	Same	3	4.7	0.64	Same	38	31.0	1.23	Same
	2017	7	8.8	0.79	Same	2	3.4	0.59	Same	25	21.2	1.18	Same
Sisters of Charity	2016	17	10.6	1.60	Same	3	7.1	0.42	Same	24	26.6	0.90	Same
	2017	11	9.4	1.17	Same	5	7.7	0.65	Same	17	20.1	0.85	Same
Sisters- St Joseph	2016	8	4.6	1.75	Same	1	2.9	0.35	Same	4	9.6	0.42	Same
	2017	7	4.1	1.72	Same	0	2.3	0.00	Same	12	8.6	1.40	Same
South Nassau Comm.	2016	18	16.6	1.08	Same	10	15.4	0.65	Same	64	84.1	0.76	Same
	2017	13	14.3	0.91	Same	12	12.7	0.94	Same	56	58.8	0.95	Same
Southampton	2016	2	2.6	0.77	Same	4	2.0	1.97	Same	20	12.6	1.59	Same
	2017	3	2.7	1.12	Same	4	1.5	2.72	Same	11	7.3	1.51	Same
Southside	2016	21	20.3	1.03	Same	5	5.8	0.86	Same	45	39.6	1.14	Same
	2017	10	20.4	0.49	**Better	9	5.8	1.56	Same	51	36.0	1.42	Same
St Anthony	2016	1	1.6	0.63	Same	0	0.7	0.00	Same	12	6.4	1.88	Same
	2017	2	2.1	0.95	Same	0	0.3	0.00	Same	3	3.7	0.82	Same
St Barnabas	2016	3	5.5	0.55	Same	5	4.0	1.26	Same	18	40.1	0.45	**Better
	2017	0	5.0	0.00	**Better	1	3.1	0.33	Same	9	20.5	0.44	**Better
St Catherine Siena	2016	5	6.3	0.80	Same	5	6.3	0.79	Same	31	37.9	0.82	Same
	2017	2	6.4	0.31	Same	1	5.4	0.19	Same	15	22.8	0.66	Same
St Charles Hospital	2016	0	4.1	0.00	**Better	5	3.0	1.64	Same	22	26.7	0.82	Same
	2017	5	5.1	0.98	Same	0	1.7	0.00	Same	15	19.6	0.77	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
St Elizabeth Medical	2016	17	12.2	1.39	Same	1	7.1	0.14	**Better	45	35.9	1.25	Same
	2017	12	9.9	1.21	Same	3	5.7	0.53	Same	41	33.1	1.24	Same
St Francis- Roslyn	2016	33	28.5	1.16	Same	12	21.2	0.56	**Better	77	72.4	1.06	Same
	2017	23	29.0	0.79	Same	7	16.2	0.43	**Better	28	55.5	0.50	**Better
St James Mercy	2016				Not calculated	0	0.3	0.00	Same	0	0.7	0.00	Same
	2017				Not calculated	1	0.2	4.40	Same	0	0.4	0.00	Same
St Johns Dobbs Ferry	2016	2	0.6	3.27	Same	0	0.1	0.00	Same	1	0.6	1.55	Same
	2017	1	0.8	1.20	Same				Not calculated	0	0.5	0.00	Same
St Johns Episcopal	2016	6	3.4	1.75	Same	17	6.7	2.54	^ Worse	14	21.5	0.65	Same
	2017	3	2.2	1.39	Same	6	3.5	1.71	Same	14	12.1	1.15	Same
St Johns Riverside	2016	7	3.1	2.28	Same	2	3.3	0.61	Same	21	13.1	1.61	Same
	2017	5	3.2	1.57	Same	2	2.5	0.78	Same	7	9.6	0.73	Same
St Joseph- Bethpage	2016	2	2.3	0.87	Same	1	2.8	0.36	Same	24	21.7	1.11	Same
	2017	5	2.4	2.12	Same	1	2.7	0.38	Same	14	16.5	0.85	Same
St Josephs- Elmira	2016				No Data	0	0.3	0.00	Same	1	4.6	0.22	Same
	2017				No Data	0	0.1	0.00	Same	4	3.8	1.07	Same
St Josephs- Syracuse	2016	31	33.0	0.94	Same	18	24.4	0.74	Same	89	75.4	1.18	Same
	2017	34	33.8	1.01	Same	8	17.7	0.45	**Better	63	63.1	1.00	Same
St Josephs- Yonkers	2016	1	1.6	0.64	Same	3	1.7	1.76	Same	6	6.8	0.88	Same
	2017	1	1.0	1.04	Same	1	1.3	0.77	Same	1	4.5	0.22	Same
St Lukes Cornwall	2016	4	6.0	0.67	Same	0	3.4	0.00	**Better	33	28.5	1.16	Same
	2017	3	4.7	0.63	Same	2	3.2	0.62	Same	29	31.8	0.91	Same
St Marys Amsterdam	2016	3	2.3	1.28	Same	0	1.7	0.00	Same	2	9.3	0.21	**Better
	2017	4	1.9	2.08	Same	1	1.5	0.65	Same	9	6.8	1.32	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
St Peters Hospital	2016	48	43.9	1.09	Same	13	29.9	0.43	**Better	65	76.5	0.85	Same
	2017	36	39.2	0.92	Same	11	24.3	0.45	**Better	48	57.3	0.84	Same
Staten Island U N	2016	22	19.3	1.14	Same	12	13.6	0.88	Same	104	91.7	1.13	Same
	2017	18	17.6	1.02	Same	8	8.6	0.93	Same	69	68.2	1.01	Same
Staten Island U S	2016				Not calculated	0	2.1	0.00	Same	18	20.9	0.86	Same
	2017				Not calculated	2	1.7	1.21	Same	24	14.7	1.63	Same
Strong Memorial	2016	27	26.7	1.01	Same	51	53.8	0.95	Same	210	175.4	1.20	Same
	2017	36	25.5	1.41	Same	45	54.8	0.82	Same	158	143.4	1.10	Same
Sunnyview Rehab Hosp	2016				No Data	0	0.2	0.00	Same				Not calculated
	2017				No Data	0	0.1	0.00	Same				Not calculated
Syosset Hospital	2016	3	3.9	0.77	Same	0	1.0	0.00	Same	4	7.7	0.52	Same
	2017	5	4.7	1.06	Same	0	0.7	0.00	Same	2	6.8	0.30	Same
TLC Lake Shore	2016				Not calculated				Not calculated	1	1.0	1.01	Same
	2017				Not calculated				Not calculated	1	1.3	0.76	Same
UHS Binghamton	2016	3	2.2	1.35	Same	1	1.9	0.52	Same	12	11.7	1.03	Same
	2017	5	2.4	2.06	Same	1	1.2	0.85	Same	10	8.6	1.17	Same
UHS Chenango Memor	2016	2	0.7	2.92	Same	0	0.2	0.00	Same	0	3.5	0.00	Same
	2017	0	0.8	0.00	Same	0	0.1	0.00	Same	2	2.0	1.00	Same
UHS Wilson	2016	13	10.6	1.23	Same	15	10.7	1.41	Same	49	38.4	1.28	Same
	2017	17	10.1	1.69	Same	20	9.1	2.19	^ Worse	34	28.4	1.20	Same
UPMC Chautauqua WCA	2016	1	2.6	0.39	Same	1	2.9	0.34	Same	24	33.7	0.71	Same
	2017	2	2.7	0.75	Same	2	2.7	0.75	Same	17	32.4	0.53	**Better
United Memorial	2016	4	2.2	1.83	Same	0	0.9	0.00	Same	7	9.6	0.73	Same
	2017	3	1.6	1.87	Same	0	1.0	0.00	Same	5	8.8	0.57	Same

Summary of Hospital-Acquired Infection Data, 2017 New York State

		Surgical Site Infections (SSI)				Central Line Associated Blood Stream Infections (CLABSI)				Hospital Onset <i>Clostridium difficile</i> Infections (CDI)			
Hospital	Year	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?	Observed infections	Predicted infections	Ratio	How does this hospital compare to the state average?
Unity Hosp Rochester	2016	13	17.7	0.74	Same	2	14.1	0.14	**Better	44	39.5	1.11	Same
	2017	17	18.0	0.94	Same	4	11.3	0.35	**Better	26	35.4	0.73	Same
Univ Hosp SUNY Upst	2016	29	11.2	2.60	^ Worse	29	32.0	0.91	Same	95	119.9	0.79	Same
	2017	12	16.5	0.73	Same	16	28.3	0.57	**Better	76	91.1	0.83	Same
Univ Hosp StonyBrook	2016	29	23.8	1.22	Same	19	22.7	0.84	Same	141	127.7	1.10	Same
	2017	24	24.1	0.99	Same	12	21.4	0.56	**Better	98	95.6	1.03	Same
Upst. Community Gen	2016	14	7.1	1.96	^ Worse	2	2.8	0.71	Same	19	20.7	0.92	Same
	2017	6	7.8	0.77	Same	1	3.1	0.33	Same	12	20.4	0.59	Same
Vassar Brothers	2016	10	20.0	0.50	**Better	9	12.2	0.74	Same	107	118.4	0.90	Same
	2017	5	18.8	0.27	**Better	2	9.8	0.20	**Better	92	83.0	1.11	Same
Westchester Medical	2016	18	18.4	0.98	Same	37	34.7	1.07	Same	139	121.8	1.14	Same
	2017	10	18.8	0.53	**Better	23	34.2	0.67	Same	159	115.0	1.38	^ Worse
White Plains Hosp	2016	9	10.9	0.83	Same	7	9.1	0.77	Same	43	41.3	1.04	Same
	2017	12	10.6	1.14	Same	4	7.3	0.55	Same	42	28.7	1.46	Same
Woodhull Med Ctr	2016	1	2.9	0.34	Same	6	5.6	1.08	Same	12	18.7	0.64	Same
	2017	2	2.6	0.77	Same	6	4.8	1.25	Same	7	15.8	0.44	Same
Wyckoff Heights	2016	7	5.2	1.34	Same	9	6.1	1.47	Same	29	26.4	1.10	Same
	2017	4	4.0	1.00	Same	8	4.3	1.85	Same	20	20.1	1.00	Same
Wyoming County Comm.	2016	0	0.5	0.00	Same	0	0.4	0.00	Same	0	1.8	0.00	Same
	2017	1	0.4	2.66	Same	0	0.4	0.00	Same	0	1.4	0.00	Same

Each hospital's 2017 data was compared to the NYS 2017 average. SSIs were reported for colon, coronary artery bypass graft, hip replacement, and abdominal hysterectomy procedures. CLABSIs were reported in selected intensive care units and wards. See Technical Report for details on risk adjustment methods. ****Better**: Significantly better than the NYS average. **^ Worse**: Significantly worse than the NYS average. **Same**: Not significantly different from the NYS average. No data: Hospital does not have any reportable data. Not calculated: The hospital performed fewer than 20 procedures, used fewer than 50 central line days, or was a specialty hospital that was excluded from CDI risk adjustment.

Summary of hospital performance

In 2017, 48 hospitals (27%) were flagged red for having an HAI rate significantly higher than the state average in one of the 21 indicators (i.e. colon SSI, CABG chest SSI, CABG donor SSI, hip SSI, hysterectomy SSI, overall SSI SIR, CLABSIs in eight types of ICUs and five types of wards, overall CLABSI SIR, and CDI). Hospital Infection Preventionists were required to submit improvement plans to NYSDOH to address each red flag. The details of the response and NYS involvement increase based on the number of consecutive years flagged high, following the NYSDOH HAI Reporting Program's "Policy for Facilities with Consecutive Years of High HAI Rates"

http://www.health.ny.gov/statistics/facilities/hospital/hospital_acquired_infections/2015/docs/policy_repeat_high_hai_rates.pdf.

What should I do with this information?

It's important to understand that numbers alone won't show how well a hospital is doing in preventing HAIs. This report shows how hospitals performed during a single year, 2017, based on a selected set of HAIs and with limited adjustment for differences between patient populations. Consumers should consult with doctors, healthcare facilities, health insurance carriers, and reputable healthcare websites before deciding where to receive care. Decisions regarding healthcare quality should not be based on these data alone.

Role of the State Health Department

The NYSDOH collaborates with federal agencies, healthcare facilities, and the public with the common goal of reducing HAIs and antibiotic resistance. Some specific achievements in 2017 are listed below.

- DOH continued to audit hospitals to ensure that public reporting fairly reflects what is actually occurring in each hospital.
- DOH continued to monitor the improvement plans of hospitals flagged with high HAI rates to encourage improvement and provide assistance as requested.
- DOH continued leading an antimicrobial stewardship collaborative in NYS long term care facilities (LTCFs). In 2018, a group of LTCFs participated in educational webinars and tracked antimicrobial starts and urine cultures collected related to urinary tract infections. The percent of LTCFs with antimicrobial stewardship programs increased.
- DOH visited facilities with high CRE rates and *Candida auris* rates, discussing a variety of topics including facility-wide CRE surveillance and prevention practices, barriers to implementation, antibiotic stewardship activities, and other strategies intended to reduce facility incidence rates.
- DOH continued to provide grant funding to health care organizations to develop, implement, and evaluate strategies to reduce targeted HAIs.
- DOH continued to act as a central resource for up-to-date, evidence-based information on HAI prevention, and DOH continued to assist facilities in responding to outbreaks.

Additional information on these topics is available in Part 2: Technical Report.

What Patients Can do to Prevent Infections

1. Keep hands clean.

Be sure everyone cleans their hands before touching you. If you do not see your healthcare providers clean their hands before caring for you, don't be shy about asking them to do so. Keep your own hands clean to avoid contaminating yourself.

2. Talk to your doctors about all of your questions and concerns.

Clear communication is very important. Ask your doctor what specific steps he or she takes to prevent infections, as well as what you can do to help prevent infections.

3. Take antibiotics only if necessary and exactly as your doctor prescribes.

Ask your doctor if you really need an antibiotic and what you can do to feel better if you don't. Ask if tests will be done to make sure the right antibiotic is prescribed.

4. Know the signs and symptoms of infection so you can seek medical care quickly.

Diarrhea while taking an antibiotic could be a sign of *Clostridium difficile* infection. Carefully follow your doctor's instructions for post-operative care of your wounds. Watch for fever, as well as redness, pain, or discharge near a surgery or catheter site.

5. If you have a central line or urinary catheter, ask each day if it is necessary.

Invasive devices provide a way for bacteria to enter the body. Carefully follow instructions for care of these devices when they are necessary.

Additional information on HAIs is available from CDC at <http://www.cdc.gov/hai/>.