

2009 Surgical Site Infection Rates – Knee Replacement

The “Knee Replacement Surgery Infection Rate” refers to the percentage of people who underwent knee replacement surgeries who developed infections in their surgical wounds within one year of the surgery. Infections may have been identified during the initial hospital stay, or if patients returned for inpatient, emergency room, or observation care to the same hospital, a different Vermont hospital, or any reporting out-of-state hospital. Lower rates are better. This measure was developed by the National Centers for Disease Control and Prevention (CDC).

What is Knee Replacement?

Knee replacement is a surgery in which certain parts of a damaged knee are removed and replaced with artificial implants. Infections following knee replacement surgery are infrequent, but they can be serious when they do happen.

Are there any considerations I should be aware of when reviewing the data?

Yes, be careful when drawing conclusions from this information, for the following reasons:

- Infections that appear after a patient is discharged from the hospital, and do not result in hospital treatment, are not captured in the data.
- Infections related to hip replacements can potentially occur up to one year after the surgery is performed, although most occur sooner than that.
- Small numbers of procedures can distort reported hospital performance.
- Hospitals treating higher risk patients would be expected to have higher infection rates.

What if my hospital isn't listed?

If you are unable to find your hospital, it is because the hospital had fewer than 20 surgeries in each risk category for the reporting period. Such small numbers do not constitute a meaningful sample, so no data is shown.

What are the results?

See below.

For more details about this measure, click here for the [Technical Guide](#).

Knee Replacement Infection Rates

The Infection Rate is the percent of knee replacement surgeries that had an infection. **Lower rates are better.** Results are presented separately for patients with different risks of infection (the categories are Lower, Moderate, and Higher Risk). The degree of risk is determined by the length of surgery, contamination of the wound, and an assessment of the overall physical status of the patient (using a standardized 1 to 5 scale).

Where possible, Vermont hospitals are compared to the Average Infection Rate for “NHSN Hospitals”. “NHSN Hospitals” refers to the hospitals across the country that reported data on knee replacements to the Centers for Disease Control and Prevention’s National Healthcare Safety Network (NHSN) Database between January 2006 and December 2008.

There are three categories summarizing how Vermont hospital infection rates compare to the infection rates for NHSN hospitals:

- The hospital can have a **lower (better)** infection rate than the national average for hospitals reporting to NHSN.
- The hospital can have an infection rate that is **similar** to the national average for hospitals reporting to NHSN.
- The hospital can have a **higher (worse)** infection rate than the national average for hospitals reporting to NHSN.

Keep in mind that a hospital's infection rate is only one thing to consider when choosing where to get your care. The advice of your physician, the hospital’s and specialist’s experience with the type of care you need, and other factors unique to your situation should be considered as well. Be careful when drawing conclusions from this information. Small numbers of patients and infections may distort reported performance.

Brattleboro Memorial Hospital October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	0	26	0%	0.58%	Similar to national average
Moderate risk	0	42	0%	0.99%	Similar to national average
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

Copley Hospital October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	0	24	0%	0.58%	Similar to national average
Moderate risk	1	44	2.27%	0.99%	Similar to national average
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

Fletcher Allen Healthcare October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	0	186	0%	0.58%	Similar to national average
Moderate risk	0	170	0%	0.99%	Similar to national average
Higher risk	0	45	0%	1.60%	Similar to national average

Gifford Medical Center October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	Fewer than 20 surgeries in this risk category so data are not published				
Moderate risk	0	25	0%	0.99%	Similar to national average
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

North Country Hospital October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	Fewer than 20 surgeries in this risk category so data are not published				
Moderate risk	0	22	0%	0.99%	Similar to national average
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

Northeastern Vermont Regional Hospital October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	0	28	0%	0.58%	Similar to national average
Moderate risk	Fewer than 20 surgeries in this risk category so data are not published				
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

Northwestern Medical Center October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	Fewer than 20 surgeries in this risk category so data are not published				
Moderate risk	1	43	2.33%	0.99%	Similar to national average
Higher risk	0	37	0%	1.60%	Similar to national average

Porter Hospital October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	Fewer than 20 surgeries in this risk category so data are not published				
Moderate risk	0	38	0%	0.99%	Similar to national average
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

Rutland Regional Medical Center October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	0	134	0%	0.58%	Similar to national average
Moderate risk	2	73	2.74%	0.99%	Similar to national average
Higher risk	Fewer than 20 surgeries in this risk category so data are not published				

Southwestern Vermont Medical Center October 1, 2008 through September 30, 2009					
Risk Category	Number of Infections	Number of Surgeries	Infection Rate (percent)	Average Infection Rate for NHSN Hospitals See Footnote 1	Infection Rate Compared with NHSN Hospitals in U.S. See Footnote 2
Lower risk	Fewer than 20 surgeries in this risk category so data are not published				
Moderate risk	0	38	0%	0.99%	Similar to national average
Higher risk	1	36	2.78%	1.60%	Similar to national average

¹ Includes hospitals across the country that reported data on knee replacements to the Centers for Disease Control and Prevention's National Healthcare Safety Network (NHSN) Database between January 2006 and December 2008.

² Vermont hospitals' infection rates can appear to be lower or higher than the national average, but when statistical testing is done they can be found to be "similar to national average." One of the biggest reasons for this is that Vermont hospitals perform a small number of surgeries compared to all NHSN reporting hospitals. A single infection can result in a rate that appears higher than the national average; similarly, it is hard to draw conclusions from a report of zero infections when the number of surgeries performed is low.