

About CLIs

1. What is a Central Line Infection - Blood Stream Infection (CLI-BSI)?

When a patient requires long-term access to medication through an IV, a central line is put in place. A central line infection can occur when bacteria and/or fungi enters the blood stream, causing a patient to become sick. The bacteria can come from a variety of places (e.g., skin, wounds, environment, etc.), though it may often come from the patient's skin. Hospitals follow best practices on how to prevent bacteria from entering the blood stream. Patients in the ICU often require a central line since they are seriously ill, and will require a lot of medication, for a long period of time.

2. How serious are CLI bloodstream infections for patients?

Sometimes, a central line infection may spread to the blood stream and may affect organ function, and in severe cases may cause death.

Patient safety remains the most important priority for our hospital; this involves ensuring that patients are not at risk for contracting health care-associated infections.

We have sound infection control programs in place and are committed to using standardized patient safety data and public reporting to drive further improvements.

3. Can you only get a central line infection in an ICU?

You can get a central line infection in any environment if you have a central line in place (i.e., a hospital ward or at home). However, patients that develop a central line blood stream infection usually become sick very quickly, and are transferred to an ICU for immediate treatment.

The Ministry of Health and Long-Term Care has asked that CLI bloodstream infection rates in ICUs be publicly reported because this is where the majority of patients have central lines.

4. How are CLI bloodstream infections treated?

CLIs are treated with antibiotics, and patients are usually transferred to the ICU. In all cases they are cared for by a team of highly skilled professionals.

5. Do people contract central line infections because of improper sterilization of hospital equipment?

There are many different causes for central line infection.. Infection control practices require that central lines are inserted into patients in a sterile environment, and with sterile equipment. There are best practice recommendations known as "central line

bundles” that when grouped together reduce the chances of contracting a central line infection.

Public Reporting Questions

6. What is being publicly reported with CLI?

Only blood stream central line infections in a hospital ICU that developed after 48 hours are being publically reported. A blood stream infection is considered to be associated with a central line if the line was in use during the 48-hour period before the development of the infection.

7. Which hospitals are publicly reporting their CLI rates? (Why are some hospitals considered “eligible” and others “ineligible”?)

All hospitals with ICUs that are reporting into the Critical Care Information System (CCIS) – a centralized data collection system where hospitals report a variety of critical care information – must publicly report the CLI indicator data.

Therefore, hospitals reporting into the CCIS are considered “eligible,” and those not reporting into the CCIS are “ineligible.” For a list of eligible hospitals, see the list of “Hospitals Eligible to Report to CCIS as of January 27, 2009” (enclosed in OHA package).

8. What will your hospital report on April 30th?

Beginning April 30, 2009, each eligible hospital will post its quarterly CLI rate and case count for those infections acquired in their facility. The first reporting period will cover the months of January, February and March 2009.

9. How frequently will hospitals have to publicly report their CLI rates?

While hospitals will be entering their data into CCIS on a daily basis, reporting will occur on a quarterly basis. For each quarter, hospitals will be expected to post the quarterly CLI rates and case count data on the hospital’s website. The first reporting period will cover the months of January, February and March 2009.

10. What is the method of calculation for the CLI indicator?

The CLI rate is the number of ICU patients (18 years and older) with new CLI per 1,000 central line days.

CLI infection rate =	$\frac{\text{Total number of ICU related BSIs after 48 hours of central line placement}}{\text{Total number of central line days for ICU patients 18 years and older}}$	X 1,000
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11. Where will the public be able to access this information?

Beginning April 30, 2009, the public can access each eligible hospital's CLI rates from the individual hospital's website or on the Ministry of Health and Long-Term Care's site: www.ontario.ca/patientsafety.

12. Is your hospital's rate high? How do you know?

Currently, the public reporting of our hospital's CLI bloodstream infection rate is allowing us to establish a baseline from which we will use to track our rates over time. If our rates rise above our baseline, we can look internally at our hospital's processes, identify areas for improvement, and implement strategies to reduce the incidences of these infections in our organization.

15. Will you be reporting on deaths caused by CLI blood stream infection?

This is a sensitive, complicated issue as patients in the ICU are already very ill to begin with. Our priority right now is to begin reporting, obtain a baseline for our hospital, analyze the numbers, and continue implementing leading practices from there.

16. Why is your hospital's rate above the provincial average?

Rates can differ from quarter to quarter, from hospital site to hospital site, for many reasons:

- Some hospitals treat patients that are more seriously ill than others; these patients have higher risk factors for central line blood stream infections
- Patients who have had a central line in place for longer periods of time are also more prone to a central line blood stream infection
- There are many differences in patient population

Patients should know that their hospital is safe, that the care received is top-notch, and that every effort is made to ensure patients receive the highest quality of care possible.

The analysis of our CLI indicator rate over time will certainly provide helpful information that we can use to make quality improvements in our organization. We look forward to working with our health professionals to make those improvements in the time ahead.

17. Can the CLI bloodstream infection rates be used as a guide to choosing hospitals?

No. CLI rates should not be used as a guide to choosing which hospital to seek care. Rates can differ from quarter to quarter, from hospital site to hospital site, for many reasons:

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These rates being publicly reported are indicators and represent only a snapshot of an isolated area of a hospital's performance. Like other indicators, it is important to look at CLI indicator rates in a broader context.

17. Does your hospital face consequences if your CLI rates are high?

The public reporting of patient safety indicators has been mandated by the government to help hospitals improve performance, not penalize them. We expect that ongoing efforts among hospitals will continue to be supported by the government and the OHA, and that hospitals will receive the resources and tools needed to continue quality and performance improvements.