



Preventing Central Line Infections at Ross Memorial Hospital

Background

- On April 30, 2009, eligible hospitals in Ontario, including the Ross Memorial Hospital began posting their Central Line Infection (CLI) percentages on their websites.
- A central line infection can occur when bacteria and/or fungi enters the blood stream, causing a patient to become sick. Hospitals follow best practices on how to prevent bacteria from entering the blood stream.
- Only hospitals with an ICU are publicly reporting their CLI rates. This is because patients in the ICU are more likely to have a central line in place.
- Publicly reporting CLI rates and other indicators is another, helpful measure to ensure the care provided to our patients is even safer, and improves over time.

What is a Central Line Infection?

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. wounds, environment, etc.), though it may often come from the patient's skin. The Ross Memorial follows 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.

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 at the Ross Memorial; 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.

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, 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.

How are CLI bloodstream infections treated?

CLIs are treated with antibiotics, and patients who are not already in an ICU are usually transferred to the ICU. In all cases they are cared for by a team of highly skilled professionals.

Why are hospitals publicly reporting their CLI rates?

As part of the Ministry of Health and Long-Term Care's new public reporting of patient safety indicators initiative, eligible hospitals are posting their CLI bloodstream infection rates. This is a good thing for our hospital. The public reporting on patient safety indicators is about inspiring improved performance, enhancing patient safety, and strengthening the public's confidence in Ontario's hospitals.

Specifically, the CLI indicator is being reported because:

- 90 per cent of catheter-related blood stream infections occur with central venous catheters, which are increasingly used in acute care settings;
- CLI prolongs hospitalization; and
- There are prevention interventions known to impact infection rates.

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.

Beginning April 30, 2009, Ross Memorial Hospital is posting its quarterly CLI rate and case count for those infections acquired here. The first reporting period covers the months of January, February and March 2009.

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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Where will the public be able to access this information?

Beginning April 30, 2009, the public can access the Ross Memorial's CLI rates from our website, www.rmh.org, or on the Ministry of Health and Long-Term Care's site, www.ontario.ca/patientsafety.

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:

- 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. 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.

Our Commitment

Public reporting of our patient safety scores is important because it will allow us to work with a standardized approach across the province. Our commitment to our patients is one of safety and continuous improvement. We monitor our results closely, identifying areas for improvement and implementing strategies to ensure our patients are safe.

Who can I contact to learn more?

Ross Memorial's Infection Prevention & Control team can be reached at 705-324-6111
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