



Managing *C. difficile* at Ross Memorial Hospital

Background

***C. difficile* reporting**

- Hospitals post their own number of *C. difficile* cases and rates on their own websites. At the same time, the Ministry of Health and Long Term Care posts the numbers and rates for all hospitals on a public website.
- RMH believes the reporting of *C. difficile* rates is a beneficial step and is in full support of this initiative. By tracking outbreaks, the health care industry will be better able to prevent the spread of *C. difficile*.

What is *C. difficile*?

C. difficile is one of the many types of bacteria that can be found in feces (bowel movement), and has been a known cause of health care-associated diarrhea for about 30 years.

Where does *C. difficile* come from?

Although people may lately associate it with health care settings, it doesn't come from hospitals, long-term care homes or laboratories. It is widely distributed in the environment and can be found in the human intestine, occurring naturally in 3-5% of adults (more commonly in the elderly) without causing symptoms.

What causes *C. difficile*?

C. difficile can be picked up on the hands from exposure in the environment and can get into the stomach once the mouth is touched, or if food is handled and then swallowed. Once in the stomach, the bacteria usually will not cause any problems unless the other bowel bacteria are disturbed, which can happen when antibiotics are taken. The use of antibiotics increases the chances of developing *C. difficile* diarrhea as it alters the normal level of good bacteria found in the intestines and colon. Without the presence of the normal bowel bacteria, the *C. difficile* bacteria may start to grow and produce a toxin that can damage the bowel and lead to watery diarrhea, fever and abdominal pain or tenderness.

How does *C. difficile* spread?

When a person has *C. difficile*, the bacteria in their feces can contaminate surfaces such as toilets, bedpans, commode chairs, and door handles (if feces is on hands). Other healthy individuals can contaminate their hands if they touch these items. If these individuals then touch their mouths without washing their hands, they can become infected. *C. difficile* produces spores that survive for long periods and are resistant to destruction by many environmental factors (e.g. temperature, humidity).

What precautions are taken to prevent the spread of *C. difficile*?

Monitoring of patients with symptoms of diarrhea as well as tracking and investigation of confirmed *C. difficile* cases is nothing new to the Infection Prevention and Control (IPAC) department of RMH. The IPAC department advises us how best to prevent the spread of *C. difficile* by ensuring that our internal policies and education meets current best practices standards. Symptomatic patients with diarrhea are placed on Contact Precautions in a private room to help prevent disease-causing organisms (bacteria and viruses) from spreading to other patients, staff and visitors.

Isolation signs are placed at the doorway to the patient's isolation room, along with a stop sign. This means that everyone entering the room must take the precautions by wearing personal protective equipment (ie. gown and gloves). Visitors are discouraged from eating and drinking in the patient's room. Personal belongings should not be taken into the isolation room. Visitors must not use the patient's bathroom. Shared equipment must be cleaned after each patient use. RMH conducts twice-daily room cleaning for patients requiring Contact Precautions, and the isolation room is double-cleaned when the precautions are stopped.

Hand hygiene is everyone's responsibility

Good hand washing by everyone, healthcare staff, physicians, volunteers, patients and visitors, is the single-most effective way to prevent the spread of infectious diseases like *C. difficile*.

Our Commitment

Public reporting of our infection rates 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. If our rates have risen above our baseline, then we will look internally at our hospital's processes, consult externally with experts, identify areas for improvement, and implement strategies to reduce *C. difficile* in our organization.

What exactly do all Hospitals report?

On the last day of each month, RMH, along with all of Ontario's hospitals, is required to publicly report on the website:

- The number of new hospital-acquired *C. difficile* cases
- The rate of new hospital-acquired *C. difficile* cases

The Ministry of Health and Long Term Care will report the same information on its website.

How are the rates calculated?

The *C. difficile* rate is calculated as follows:

$$\frac{\text{Number of new hospital-acquired cases of } C. \textit{difficile} \text{ in our facility}}{\text{Number of patient days}} \times 1000$$

This rate represents the incidence rate of hospital-acquired *C. difficile* associated with the reporting facility per 1000 patient days. The exclusion criteria for the data (excluded from the numerator and denominator) are children under one year. All other patients (e.g. mental health and rehab) are included.

How frequently will hospitals report on *C. difficile*?

Monthly. New information is posted on our website, www.rmh.org, and on the Ministry's own website, www.health.gov.on.ca, on the last day of every month.

Why will you not be reporting on deaths caused by *C. difficile*?

This is a very complex clinical issue and one that Dr. Michael Baker (Expert Lead – Patient Safety with the Ministry of Health and Long-Term Care) will be looking at in the time ahead. Defining whether *C. difficile* caused or contributed to a death is a complicated procedure and one that relies on individual judgment. Until standardized reporting criteria are in place, RMH will follow the lead of the Province and not release these numbers.

What constitutes an “outbreak”?

When there are three or more new cases of *C. difficile* within a seven day period on a single ward or unit, this is treated as a cluster. The Infection Prevention & Control team is notified and informs the Public Health Unit. When there are six or more new cases within a 30 day period on a single ward or unit, this constitutes an outbreak.

Does RMH have a *C. difficile* outbreak currently?

No.

Why is it not useful to compare hospitals' *C. difficile* rates?

The public reporting of *C. difficile* rates is not intended to serve as a measure for hospitals to compare themselves against other organizations, or for the public to use as a measure of where to seek care. Rates can vary from hospital to hospital, month to month. Some hospitals may experience higher rates of *C. difficile* due to the nature of the care they provide and their patient population, such as those with higher elderly patient populations.

What the public reporting adds and ensures is that all hospitals are tracking and counting in the same way. This is not for comparison purposes, but rather for accountability. Our posting the data on our website confirms RMH's commitment to public accountability and transparency. A further benefit is that hospitals with similar demographics and challenges can more easily learn from one another and sharing tips and strategies.

What steps does RMH need to take if its *C. difficile* rate or number of cases is too high?

If we feel our rates have risen above our baseline, then we can look internally at our hospital's processes, consult outside experts, identify areas for improvement, and implement strategies to reduce the incidence of *C. difficile* in our organization.

Who can I contact to learn more about *C. difficile* at RMH?

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

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