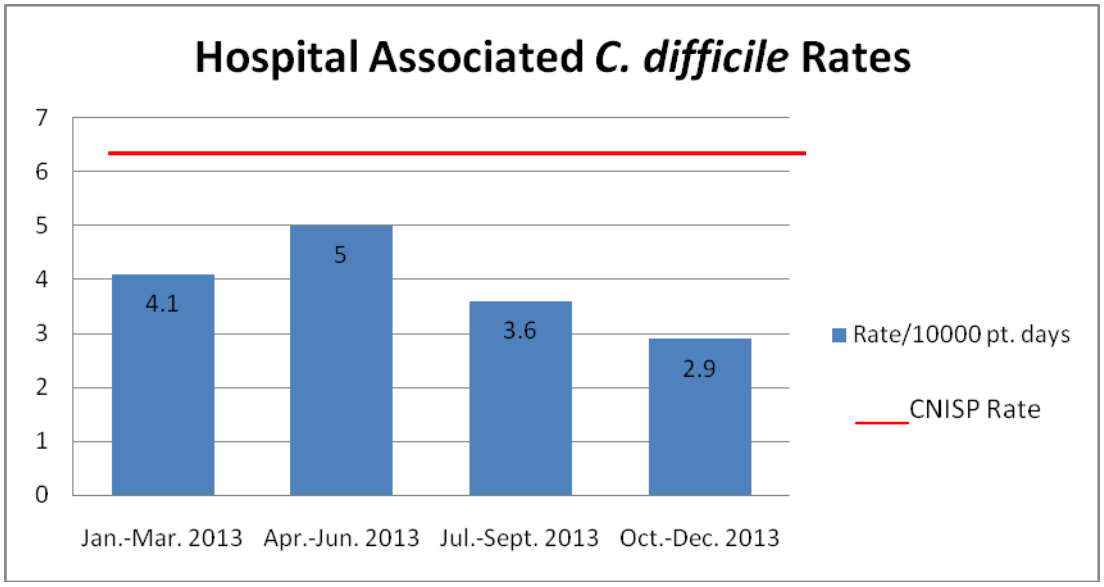
Capital Health
Infection Prevention and Control

Clostridium difficile Infection (CDI) Quarterly Incidence Rates



Benchmark and comparators: How does our rate compare to others?

The 2011 national CNISP* benchmark rate for CDI was 6.32 per 10,000 patient days. Capital Health's rate was 4.1 per 10,000 patient days for the first quarter, 5.0 per 10,000 patient days for the second quarter, 3.4 per 10,000 patient days for the third quarter and 2.9 per 10,000 patient days for the fourth quarter of 2013.

*CNISP is the Canadian Nosocomial Infection Surveillance program

What is a *Clostridium difficile* infection?

Clostridium difficile is a bacterium that can cause infections of the gastrointestinal (GI) tract.*C. difficile* infection (CDI) happens when antibiotics kill the usual bacteria in the GI tract, allowing *C. difficile* to overgrow and produce toxins that can damage the bowel.*C. difficile* can range from uncomplicated diarrhea to severe illness with serious complications that require prolonged treatment with antibiotics and sometimes surgery. In rare situations CDI can result in death.

What is the purpose of this indicator and why is it important?

C. difficile is a type of bacteria that causes infectious diarrhea and can spread in health care facilities. Measuring the incidence of CDI and the locations in our facilities where it occurs can help health care providers reduce infection risk and improve patient outcomes.

What is being measured and how often?

The CDI indicator measures the incidence (number of new infections over a defined period of time) of CDI among hospitalized patients on acute care units. The CDI rate is calculated by dividing the total number of newly identified cases of CDI (determined to be a result of a stay in a Capital Health acute care unit) divided by the total number of patient days. This number is then multiplied by 1,000 to get the CDI rate per 10,000 patient days.

This measurement is reported four times a year.

What interventions have been instituted to prevent and manage CDI?

- Improved technology and modified cleaning procedures
- Infection Control Practitioners review all new CDI cases to ensure appropriate precautions and interventions are in place and treatment is being considered when required.
- Antimicrobial handbook developed by pharmacy to optimize the appropriate use of antibiotics
- Environmental and housekeeping auditing with feedback
- Room cleaning checklist
- Enhanced Infection Control Measures outlined in new policy and procedure (based on national guidelines) to prevent transmission of *C Difficile*.
- Infection Control recommendations for design of future infrastructure include decentralized bedpan waste disposal, dedicated hand hygiene sinks, and single rooms