

Healthcare-associated infections surveillance report

Clostridium difficile Infections (CDI) Update, Q1 2015/2016

October 2015

Summary Table

	Q1 2015/2016	Previous quarter	Last 4 quarters
Total CDI cases identified	637	831	2,260
Number of new CDI associated with the reporting facility	339	465	1,206
Total inpatient days	649,497	946,826	2,903,390
Provincial rate per 10,000 inpatient days (95% CI)	5.2 (4.7-5.8)	4.9 (4.5-5.4)	4.2 (3.9-4.4)

Note: there were more days in the previous fiscal quarter Q4 (117 days) than current fiscal quarter Q1 (79 days).

Highlights

- The provincial rate of new cases of CDI associated with the reporting facility continued to increase in Q1 of 2015/2016.
- The rate in Q1 of 2015/2016 was not significantly higher than the previous quarter (Q4 of 2014/2015), but was significantly higher than the average rate of the last four quarters (Q1 – Q4 of 2014/2015).
- The increase was observed in most acute care facilities in the Lower Mainland and two facilities in Vancouver Island. The respective health authorities have been monitoring and addressing the increase of CDI in their facilities.

The provincial CDI surveillance program was established to monitor the incidence and trends of healthcareassociated CDI among patients who have been hospitalized in acute care facilities.

Clostridium difficile or C. difficile is a germ that can live in the bowel without causing harm. However, if the normal bacteria in the gut are destroyed by taking certain antibiotics in high doses or over a prolonged period of time, C. difficile can grow to unusually high levels and produce toxins that can damage the bowel and cause diarrhea, fever, abdominal cramping, dehydration, and even death.

C. difficile bacteria and their spores are shed in feces. People can acquire the bacteria if they touch surfaces (e.g., toilets, commodes, bathing tubs, and electronic rectal thermometers) contaminated with feces, and then touch their mouth. For healthy people, C. difficile does not often pose a health risk. The elderly and those with other illnesses or who are taking antibiotics are at a greater risk of developing infections.

Regular hand hygiene by healthcare providers and patients is the most effective way of preventing the transmission of *C. difficile* in the healthcare setting. Using antibiotics wisely, keeping the environment as clean as possible (especially around ill patients), and good hand hygiene can help reduce the risk of C. difficile spreading to patients and visitors.

The PICNet website (www.picnet.ca) has general information about CDI prevention and control, as well as the case definition, data sources, and limitations used to generate this report. If you have questions or suspect that you have CDI, please contact with your doctor or healthcare provider.













12.0 10.0 Rate per 10,000 inpatient days 8.0 6.0 4.0 2.0 0.0 2009/2010 2010/2011 2011/2012 2012/2013 2015/2016 2013/2014 2014/2015 Rate per 10,000 10. 8.1 7.5 8.6 9.0 7.3 7.7 8.3 7.1 7.7 7.9 9.2 7.6 6.2 5.8 6.5 5.4 4.4 4.3 4.2 4.1 3.7 3.6 4.9 5.2 inpatient days Number of cases 611 476 450 673 557 438 473 684 431 464 509 808 480 390 377 588 349 285 286 389 259 242 240 465 339

Figure 1. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter, British Columbia¹

Note: vertical bars on the line represent 95% confidence interval of the rates

Provincial Infection Control Network of British Columbia (PICNet)

Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter. The time frame of each fiscal quarter varied by fiscal year and there were more days in Q4 than in Q1, Q2, and Q3 each fiscal year. There were changes and variations in the laboratory testing for confirmation of CDI diagnosis and application of case definition over time and by health authority.

Figure 2. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Interior Health²

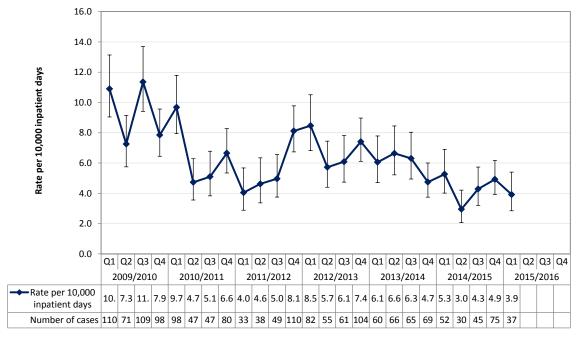
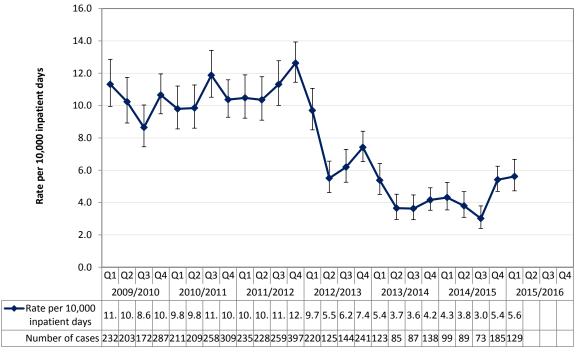


Figure 3. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Fraser Health



Fiscal year and quarter

² Excluded certain acute care facilities from Q3 of FY 2011/2012 to Q2 of FY 2012/2013

Figure 4. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Vancouver Coastal Health³

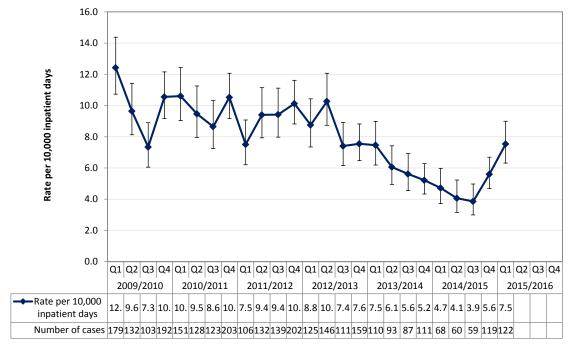
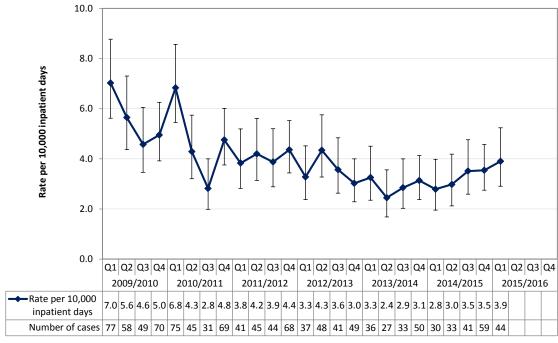


Figure 5. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Island Health⁴



Fiscal year and quarter

³ Includes acute care facilities of Providence Health Care (PHC)

⁴ Formerly known as Vancouver Island Health Authority.

Figure 6. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Northern Health

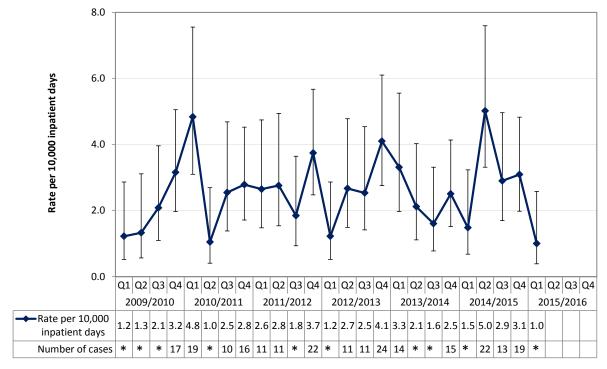
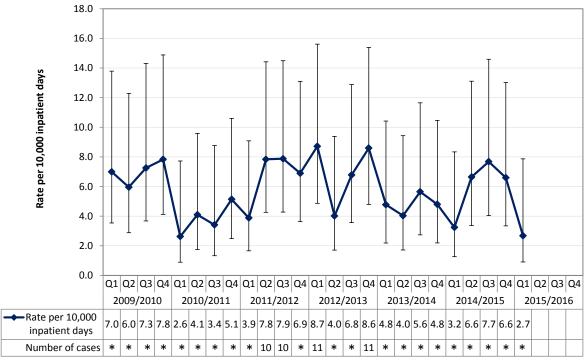


Figure 7. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and calendar quarter for Provincial Health Services Authority



Fiscal year and calendar quarter

^{*} represents that the number of cases is <10 to ensure patient confidentiality

Provincial Infection Control Network of BC (PICNet) 1001 West Broadway, Suite 504 Vancouver, BC V6H 4B1

Tel: 604-875-4844 x 22985 Fax: 604-875-4373

Website: www.picnet.ca
Email: picnet@phsa.ca

Disclaimer

The purpose of this report is to provide information on healthcare-associated infections identified among the patients admitted to the acute care facilities to healthcare providers, decision-makers, patients, and the public. This report may be used, in whole or in part, as the basis for infection prevention and control practices to improve the quality of healthcare services. PICNet does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information in the report; neither does it intend to provide specific medical advice. Commercial uses are prohibited without express written permission.



