

PICNet

PROVINCIAL INFECTION CONTROL
NETWORK OF BRITISH COLUMBIA

A program of the Provincial Health Services Authority

Clostridium difficile Infection (CDI) Surveillance

Quarterly data summary:
Q1 of Fiscal Year 2014/2015

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Provincial Infection Control Network of British Columbia (PICNet)

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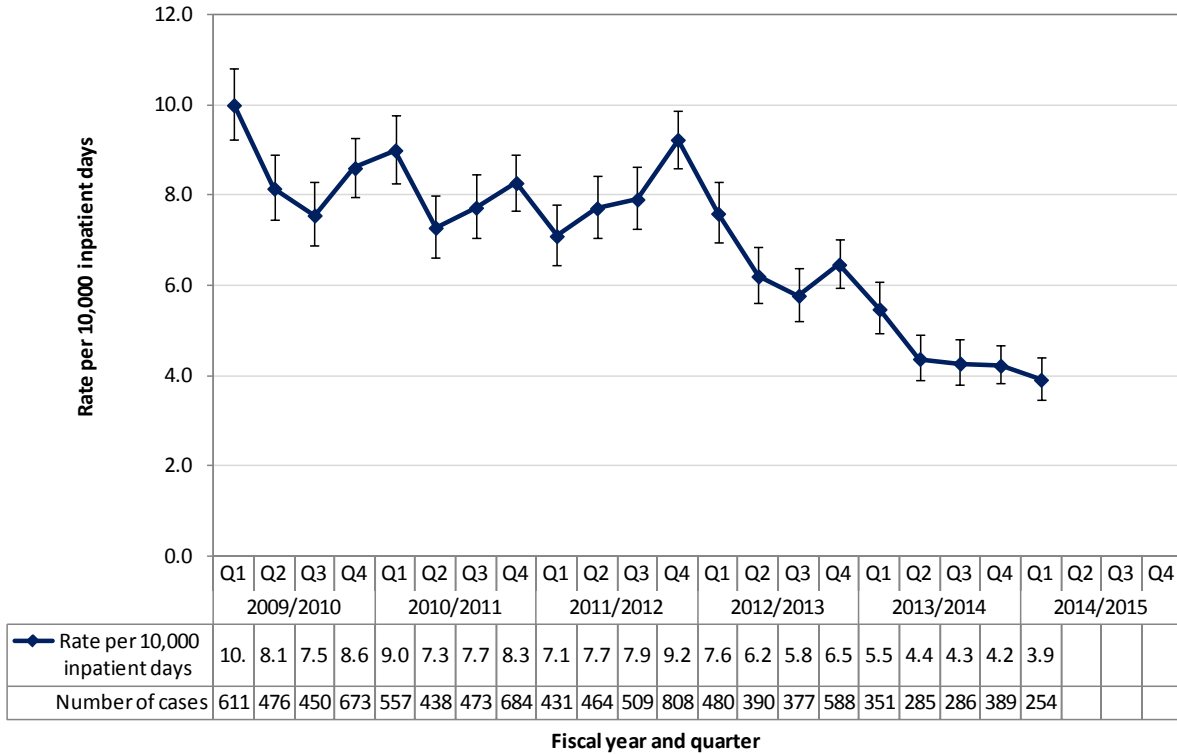
Clostridium difficile infection (CDI) is a leading cause of healthcare-associated infectious diarrhea, and is associated with increased healthcare costs, prolonged hospitalization, and higher morbidity and mortality. The provincial CDI surveillance program was established to monitor the incidence and trends of CDI among inpatients admitted to acute care facilities in British Columbia (BC). This summary updates the cases of CDI identified during the first fiscal quarter (Q1, April 1 – June 19, 2014) of fiscal year (FY) 2014/2015, with a focus on new cases of CDI associated with the reporting facility. Direct comparison of the numbers of cases and rates between health authorities (HA) is not recommended due to the variations and changes in laboratory testing for detection of *C. difficile*, application of case classification, and different at-risk populations served by each health authority. For details about this provincial surveillance program, case definition, and data limitations, please refer to the annual *Clostridium difficile Infection (CDI) Surveillance Report: For the Fiscal Year 2013/2014*, which can be found on the PICNet website (<http://s.picnet.ca/cdireports>).

- A total of 467 cases of CDI were identified among acute care inpatients during Q1 of FY 2014/2015, of which 254 (54.4%) cases were new cases of CDI associated with the reporting facility.
- The provincial rate of new cases of CDI associated with the reporting facility was 3.9 [95% confidence interval (CI): 3.5-4.4] per 10,000 inpatient days in Q1 of FY 2014/2015, which is the lowest quarterly rate since inception of the provincial CDI surveillance program in FY 2009/2010.
- Compared with the rate in the previous quarter (Q4 of 2013/2014), the provincial rate in Q1 of FY 2014/2015 continued to decrease, but the difference was not statistically significant.
- The provincial rate in Q1 of FY 2014/2015 was significantly lower than the same quarter (Q1) in each of the past five years (FY 2009/2010 to FY 2013/2014).
- The downward trend of the provincial quarterly CDI rate from Q1 of FY 2009/2010 to Q1 of FY 2014/2015 was statistically significant (trend $\chi^2 = 430.37$, $p < 0.0001$).

Figures

Figure 1. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter, British Columbia.....	4
Figure 2. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Interior Health.....	5
Figure 3. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Fraser Health.....	5
Figure 4. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Vancouver Coastal Health ²	6
Figure 5. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Island Health ³	6
Figure 6. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Northern Health.....	7
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.....	7

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



Bars in the line chart represent 95% confidence interval of the rates. 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. 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. The same hereinafter.

¹ Excluded from this report were certain acute care facilities in Interior Health from Q3 of FY 2011/2012 to Q2 of FY 2012/2013. Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter.

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

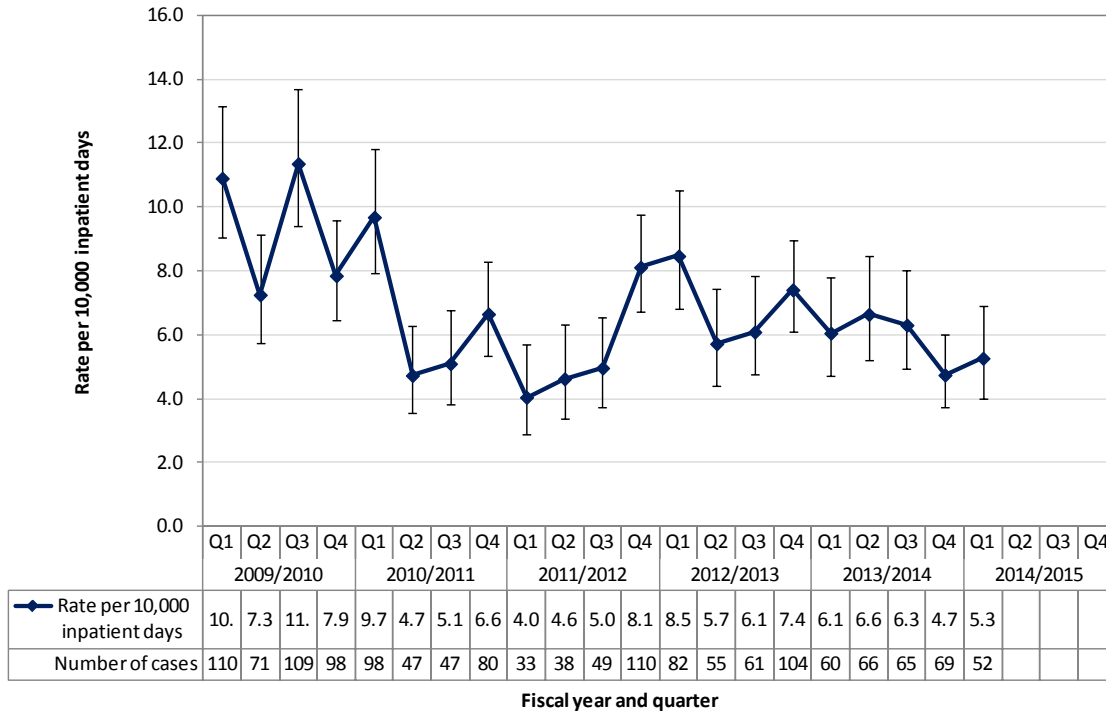
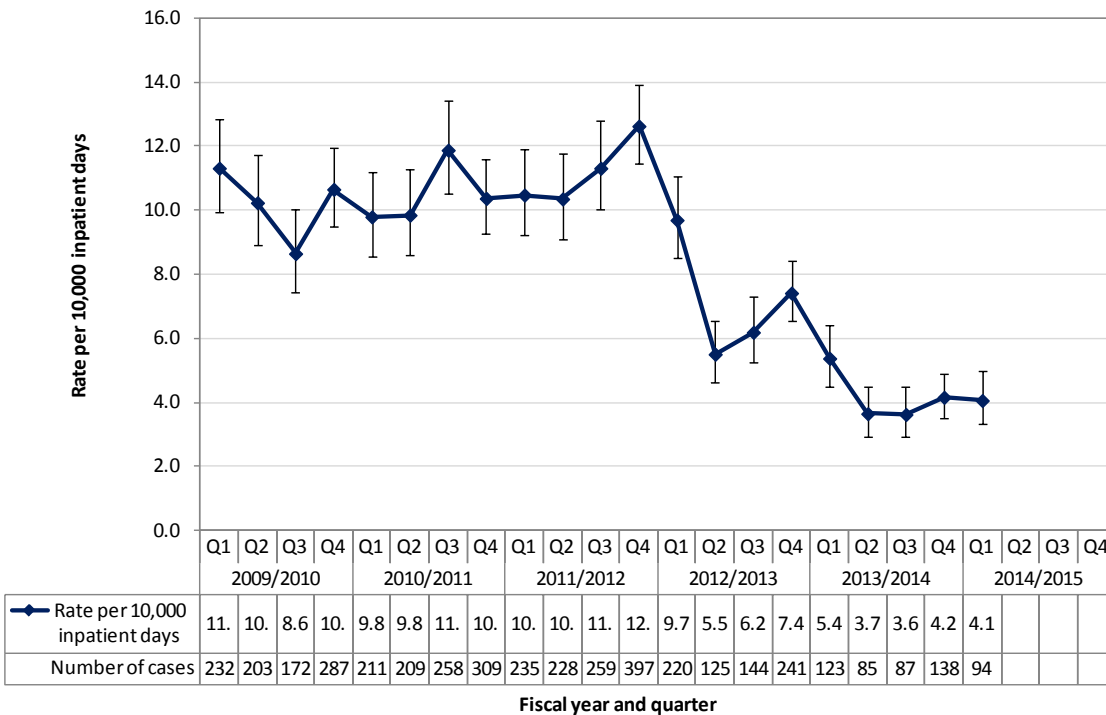


Figure 3. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Fraser Health



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

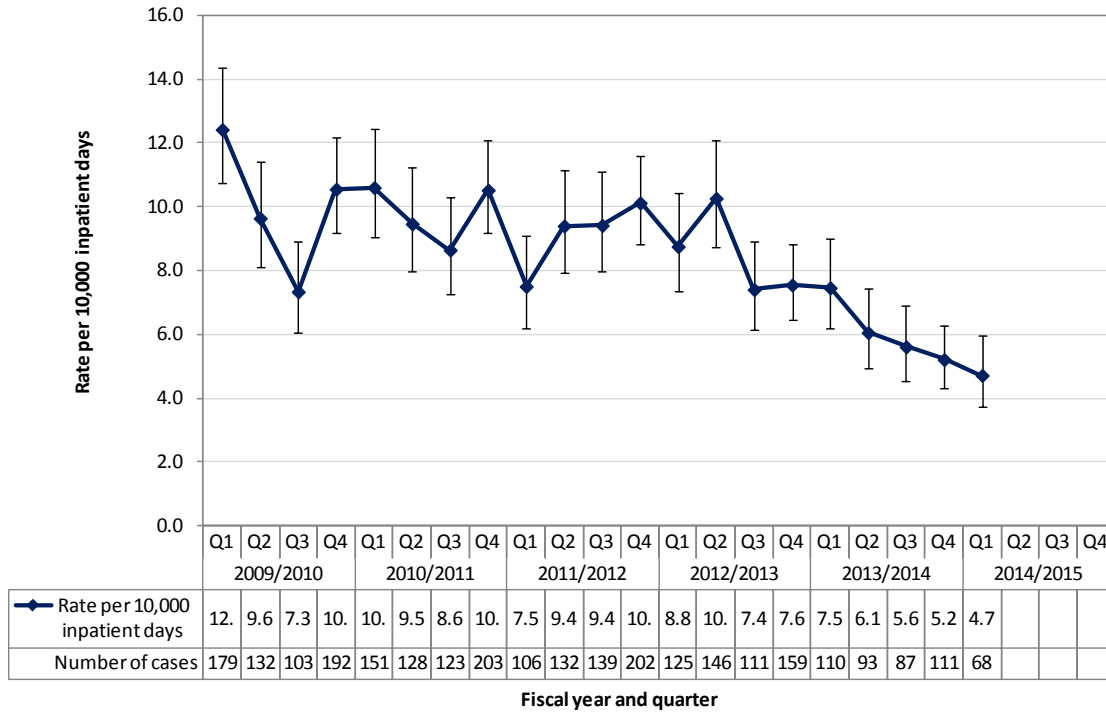
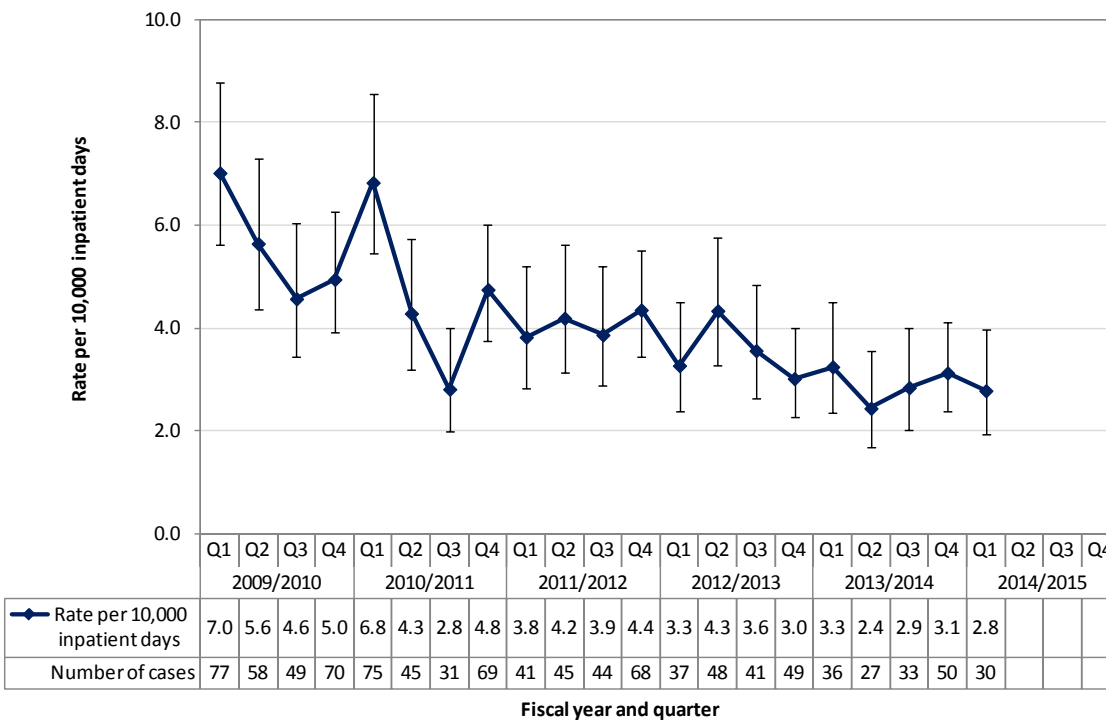


Figure 5. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and quarter for Island Health⁴



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

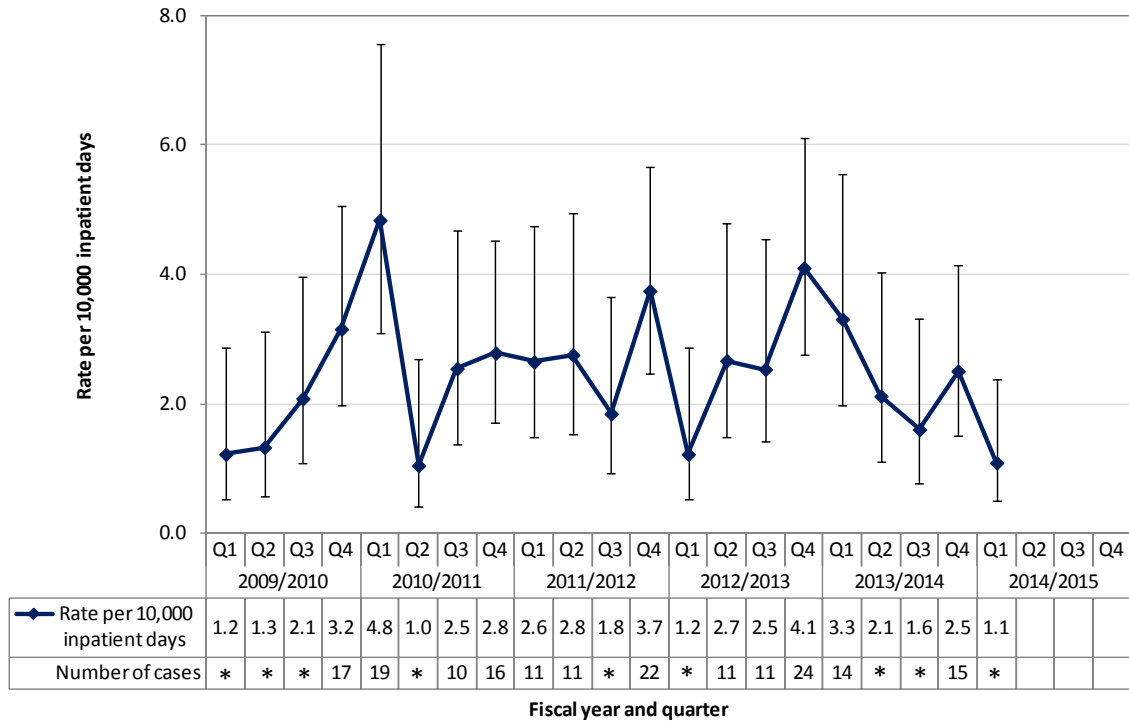
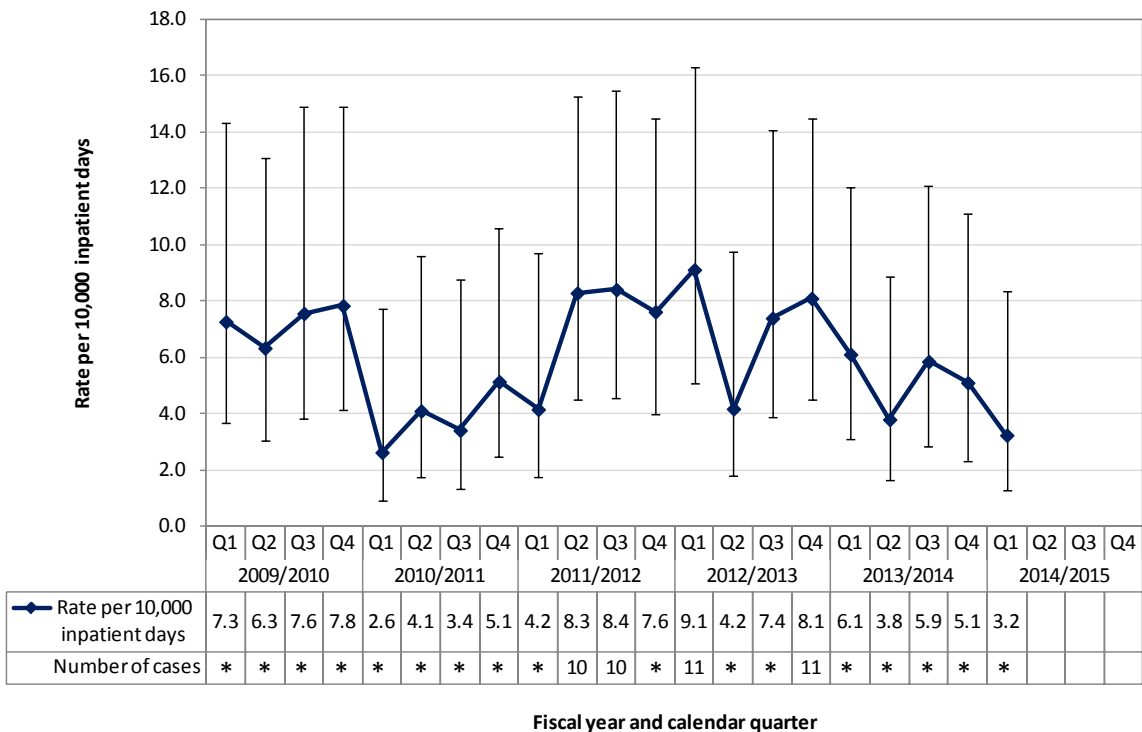


Figure 7. Number of new cases and rate of CDI associated with the reporting facility, by fiscal year and calendar quarter for Provincial Health Services Authority



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