

## ***Clostridium difficile* Infection (CDI) Surveillance**

**Quarterly data summary:  
Q3 of Fiscal Year 2012/2013**

**Prepared by:  
Provincial Infection Control Network of British Columbia (PICNet)  
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## Quarterly data summary: Q3 of Fiscal Year 2012/2013

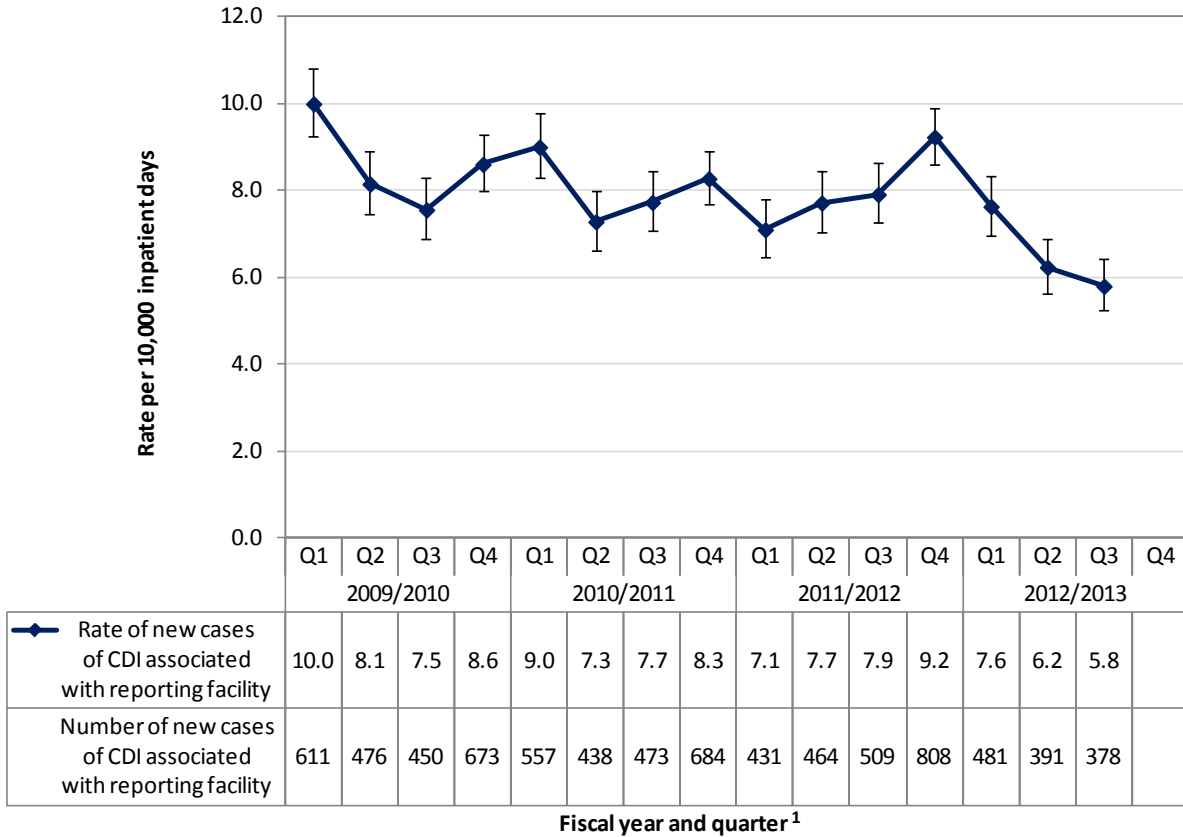
*Clostridium difficile* infection (CDI) is a leading cause of healthcare-associated infectious diarrhea, and is associated with increased healthcare costs, prolonged hospitalization, and patient morbidity. The provincial CDI surveillance program was established to monitor the incidence and trends of CDI among inpatients admitted to acute care facilities across BC. This summary updates the cases of CDI identified during the third fiscal quarter (Q3, September 14 – December 6, 2012) of the fiscal year (FY) 2012/2013, with a focus on the 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* and application of case classification. At-risk populations, the patients’ exposure history to healthcare and antibiotics, and environmental conditions may also differ by HA. For details about this provincial surveillance program, case definition, and data limitations, please refer to the annual “*Clostridium difficile* Infection (CDI) Surveillance Report (Fiscal Year 2011/2012)”, which can be found on the PICNet website (<http://s.picnet.ca/cdireports>).

- A total of 677 cases of CDI were identified in Q3 of FY 2012/2013 in all 80 acute care facilities, of which 478 were defined as healthcare-associated (70.6%) and 199 were defined as community-associated or unknown (29.5%). Among the healthcare-associated cases, 378 cases were new cases associated with the reporting facility (55.8% of total cases).
- The provincial rate of new cases of CDI associated with the reporting facility was 5.8 [95% confidence interval (CI): 5.2-6.4] per 10,000 inpatient days in Q3 of FY 2012/2013.
- The provincial rate in Q3 was not significantly lower than the rate in Q2 of FY 2012/2013, but was significantly lower than the rates in the same quarter of the past three years from FY 2009/2010 to FY 2011/2012.
- The continued decrease in the provincial rate of new cases of CDI associated with the reporting facility during Q1–Q3 of this fiscal year reflects decreases of CDI rates in certain health authorities.
- The decline trend of the provincial rate from Q1 of FY 2009/2010 to Q3 of FY 2012/2013 was statistically significant (trend  $\chi^2 = 43.82$ ,  $p < 0.001$ ).

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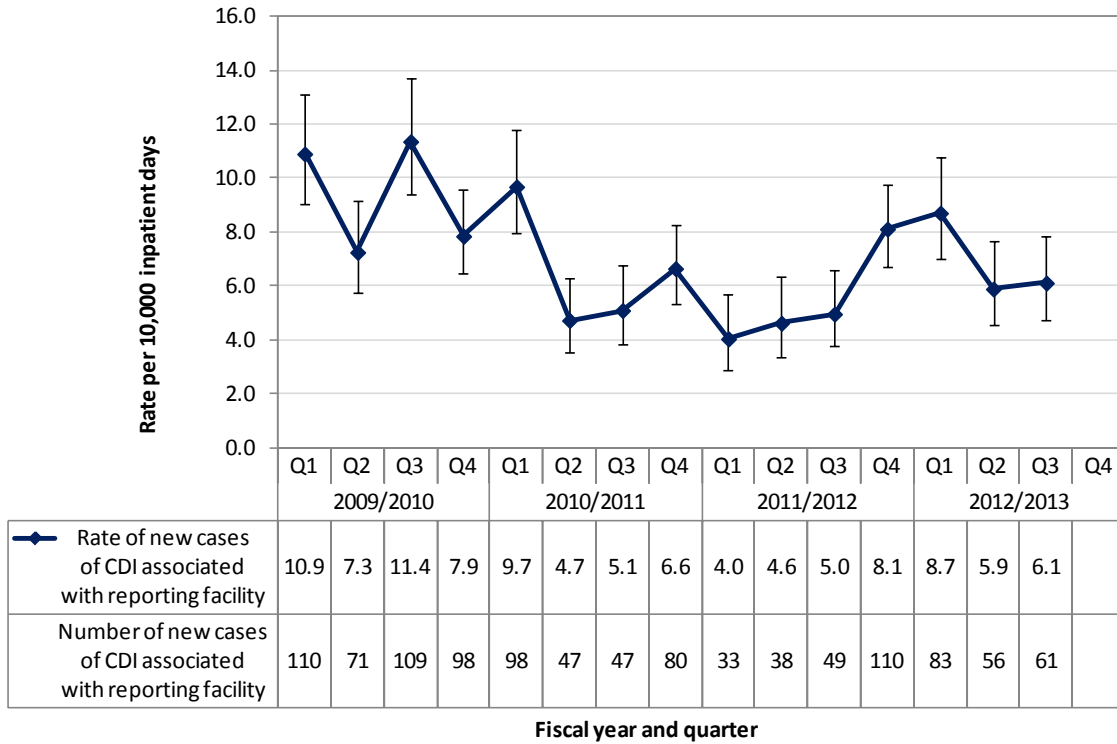
**Figure 1. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in BC**



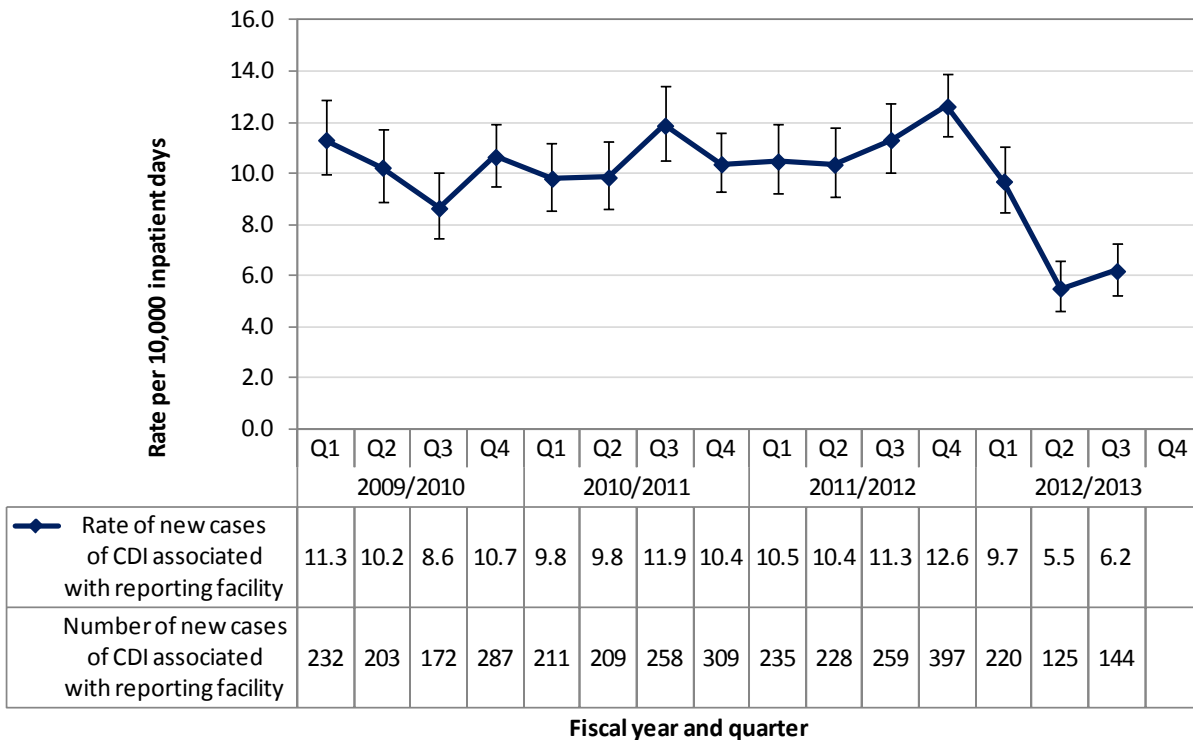
Notes: Bars in the line chart represent 95% confidence interval of the rates; the same hereinafter.

1. Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter (Q3, October 1 – December 31, 2012). Laboratory testing for detection of *C. difficile* and application of case definition varied over time and by health authority, the same hereinafter.

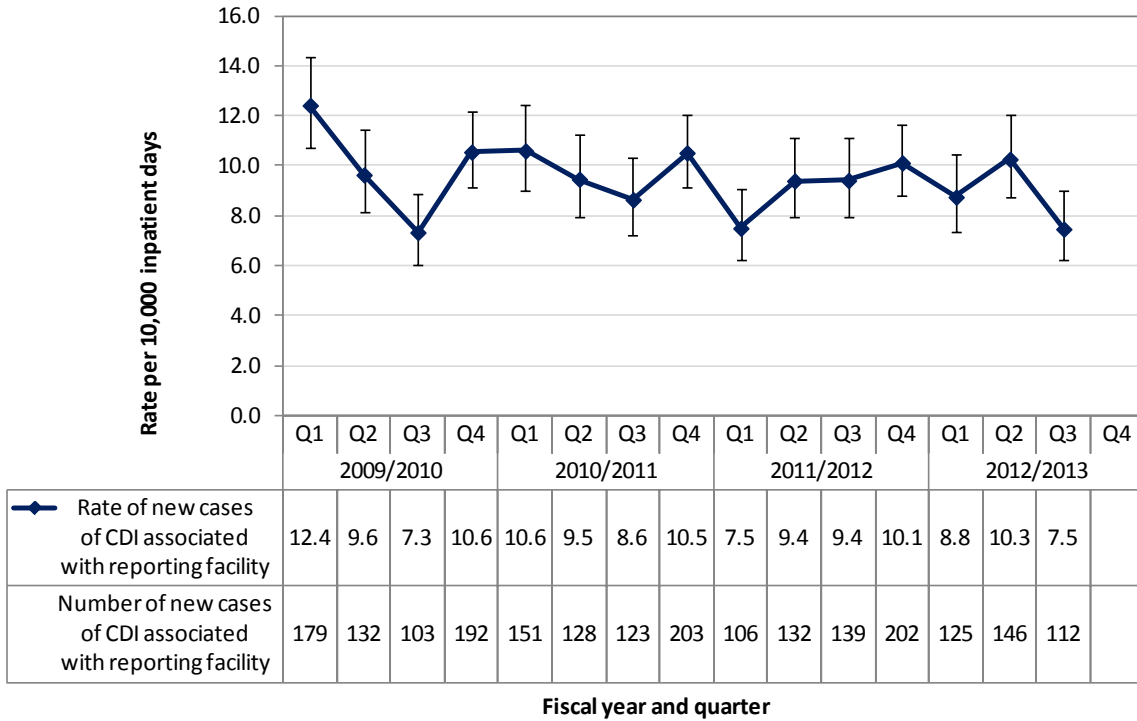
**Figure 2. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Interior Health Authority**



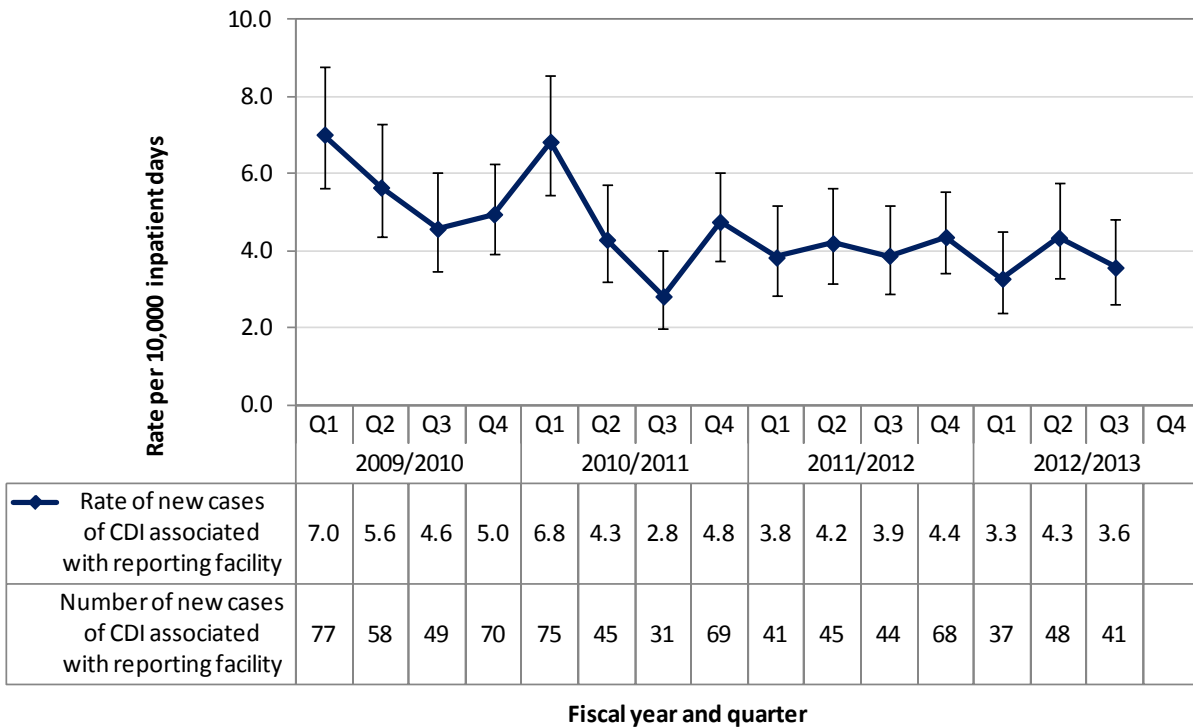
**Figure 3. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Fraser Health Authority**



**Figure 4. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Vancouver Coastal Health Authority<sup>2</sup>**

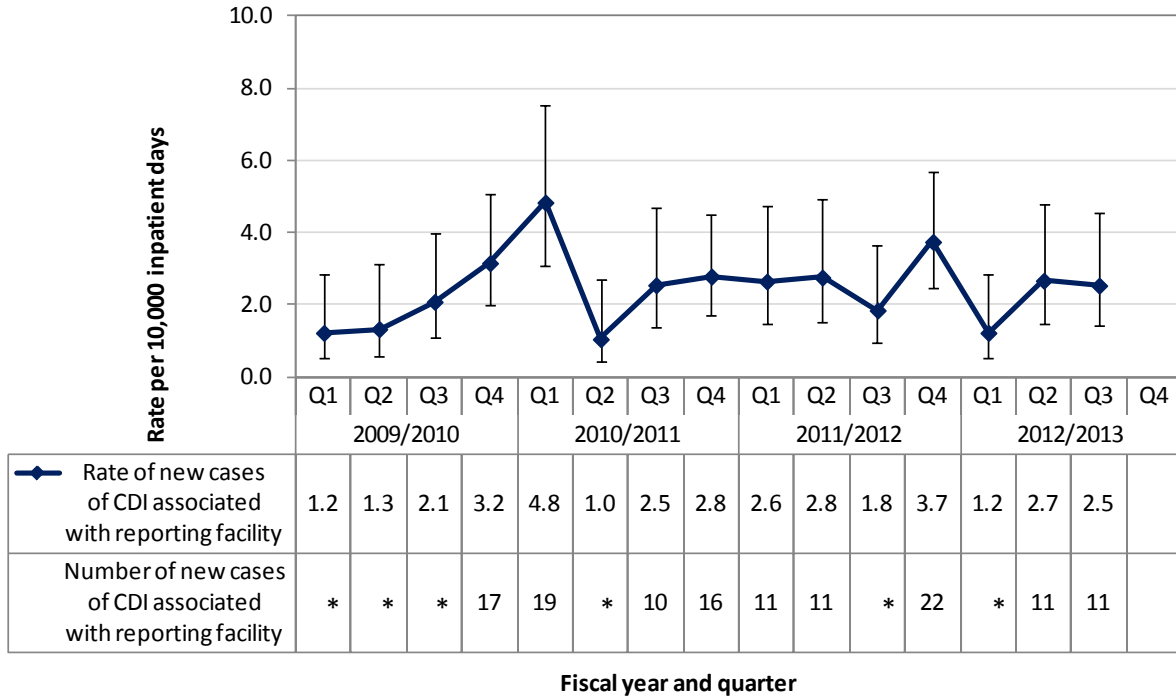


**Figure 5. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Vancouver Island Health Authority**

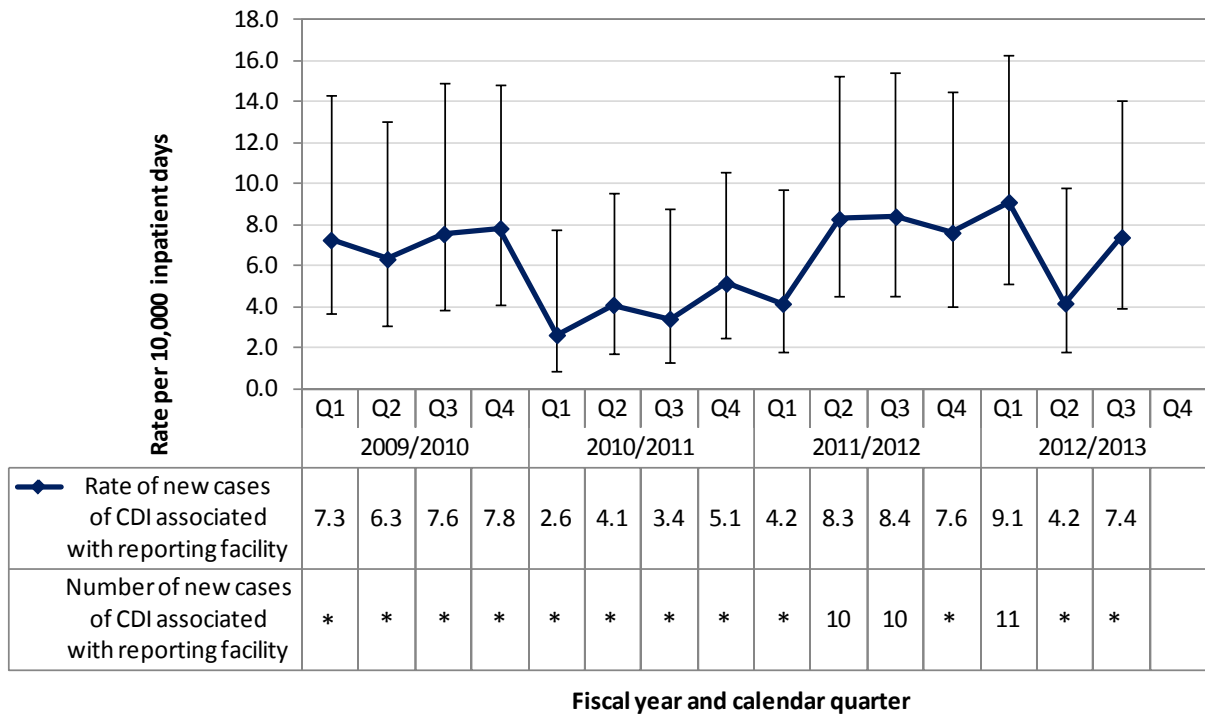


Note: 2. Includes Providence Health Care (PHC)

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



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



Note: \* data are masked to ensure patient confidentiality where the number of cases <10.