

# 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 and Q2 of Fiscal Year 2012/2013

Prepared by:

Provincial Infection Control Network of British Columbia (PICNet)

February 8, 2013



## Quarterly data summary: Q1 and Q2 of Fiscal Year 2012/2013

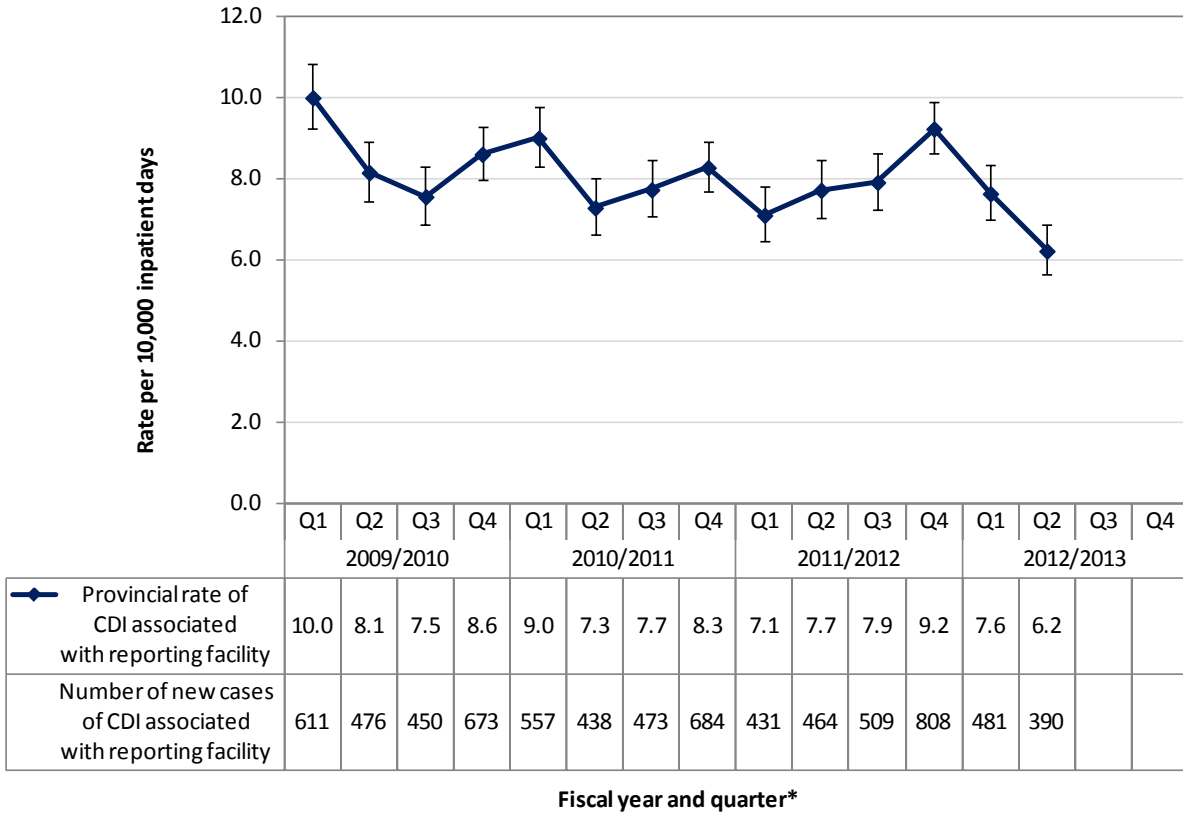
*Clostridium difficile* infection (CDI) is a leading cause of healthcare-associated infectious diarrhea, and is associated with increased healthcare costs, prolonged hospitalization, and patient morbidity. The provincial CDI surveillance program was established to monitor the incidence and trends of CDI among inpatients admitted into the acute care facilities across BC. This summary updates the new cases of CDI identified during the first quarter (Q1, April 1 – June 21, 2012) and the second quarter (Q2, June 22 – September 13, 2012) of the fiscal year (FY) 2012/2013. 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*, case classification, and different at-risk populations among health authorities. 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 1,554 cases of CDI were identified in Q1 and Q2 of FY 2012/2013 in all 80 acute care facilities, of which 871 were defined as new cases of CDI associated with the reporting facility (56.0%).
- The provincial rate of new cases of CDI associated with the reporting facility was 7.6 per 10,000 inpatient days [95% confidence interval (CI): 5.6-6.9] in Q1 of FY 2012/2013, a statistically significant decrease compared with the rate in Q4 of FY 2011/2012. This Q1 rate was not significantly different from any of the quarterly rates within the period of Q2 of FY 2009/2010 to Q3 of FY 2011/2012.
- The provincial rate of new cases of CDI associated with the reporting facility was 6.2 per 10,000 inpatient days (95% CI: 7.3-8.3) in Q2 of FY 2012/2013, a continued decrease from the last two quarters. The Q2 rate was also statistically significantly lower than the rates in most previous quarters, except Q1 of FY 2011/2012 and Q2 of FY 2010/2011.
- The lower provincial rates in Q1 and Q2 reflect significant decreases in CDI rates from previous years in certain health authorities.
- The decline of the provincial rate from Q1 of FY 2009/2010 to Q2 of FY 2012/2013 was statistically significant ( $p$  for trend < 0.001).

## Figures

Figure 1. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in BC .....	3
Figure 2. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Interior Health Authority .....	4
Figure 3. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Fraser Health Authority.....	4
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.....	5
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.....	5
Figure 6. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Northern Health Authority.....	6
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.....	6

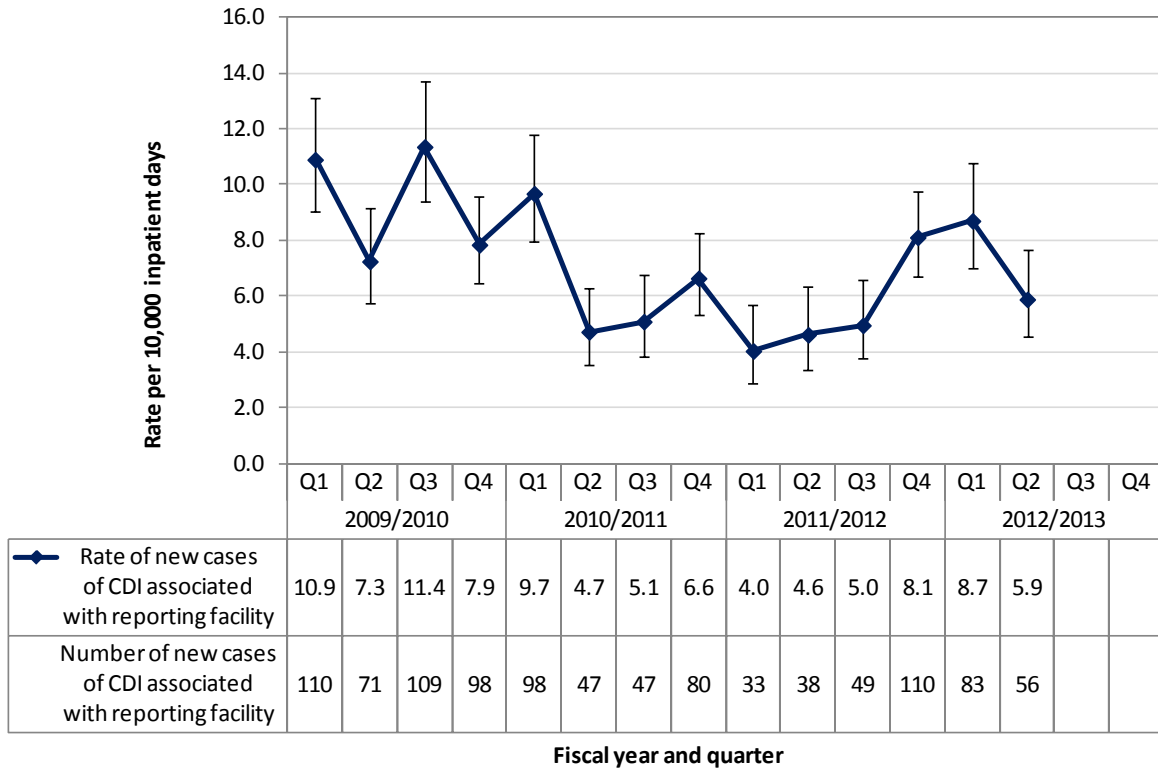
**Figure 1. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in BC**



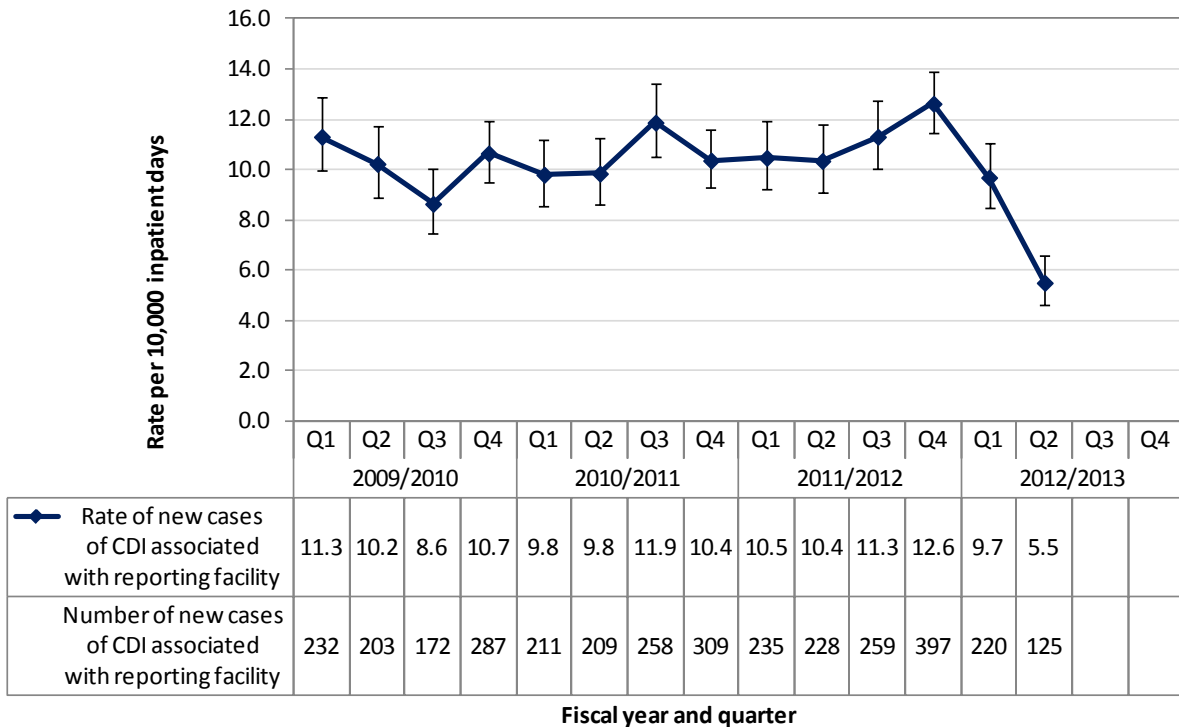
Notes: Bars in the line chart represent 95% confidence interval of the rates; the same hereinafter.

\* Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter.

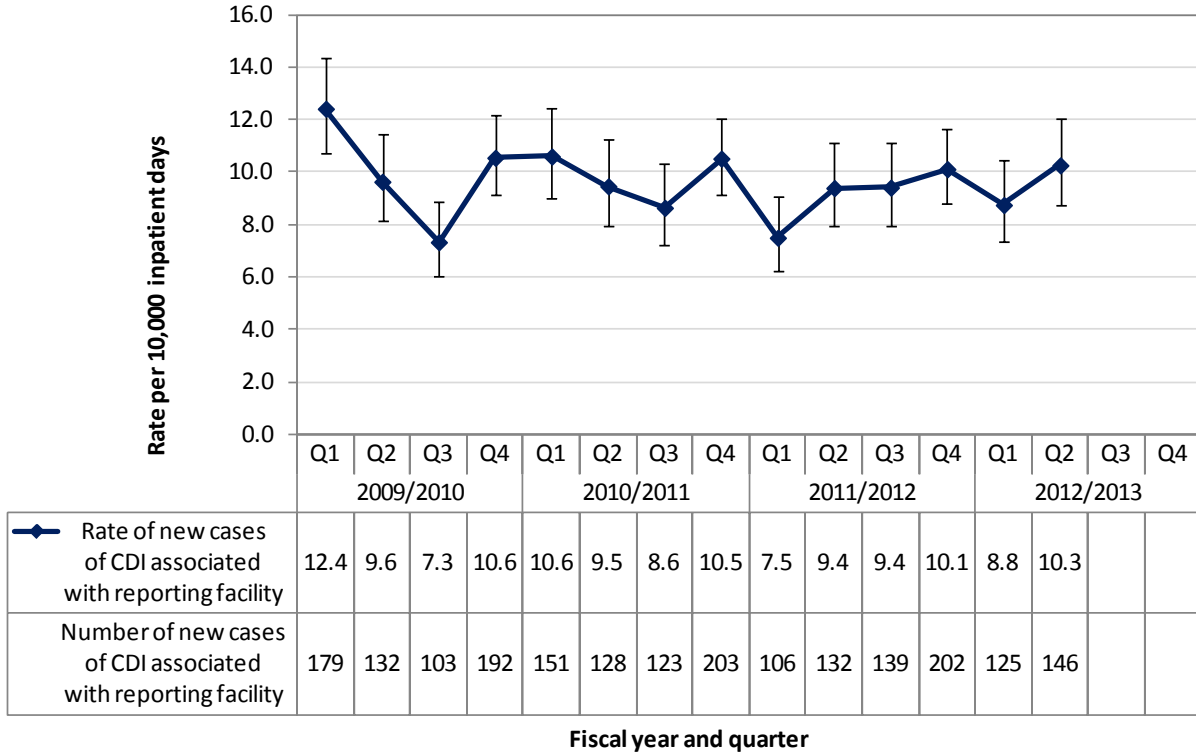
**Figure 2. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Interior Health Authority**



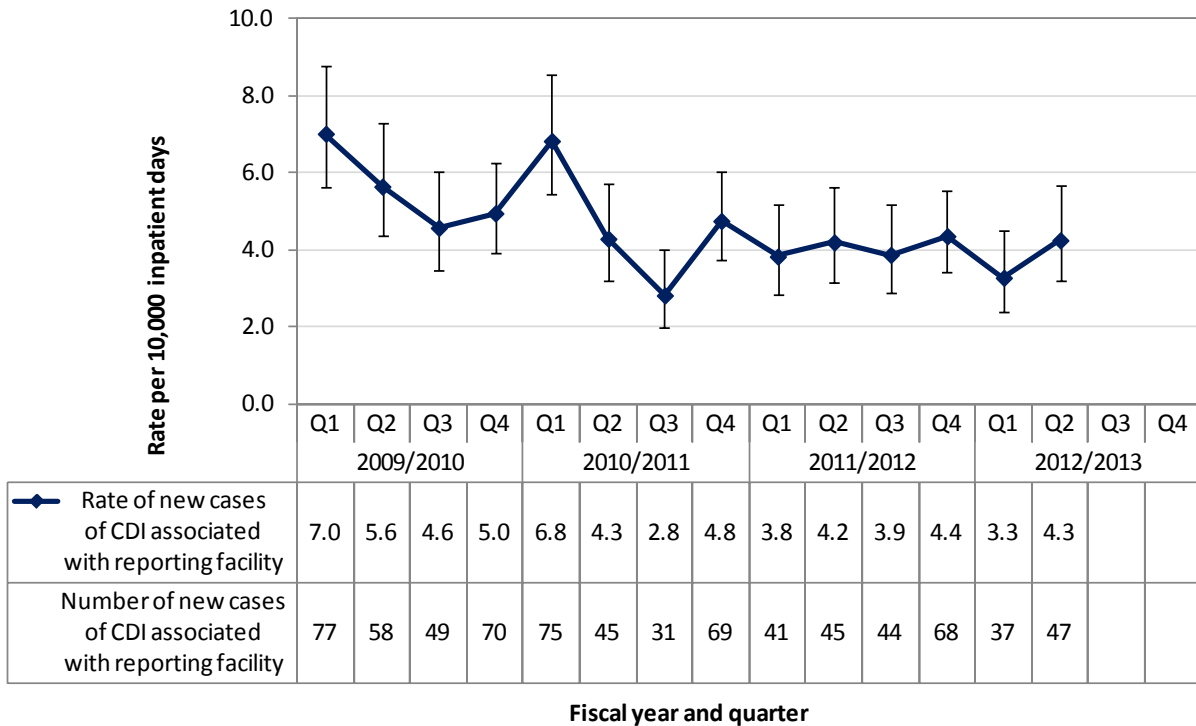
**Figure 3. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Fraser Health Authority**



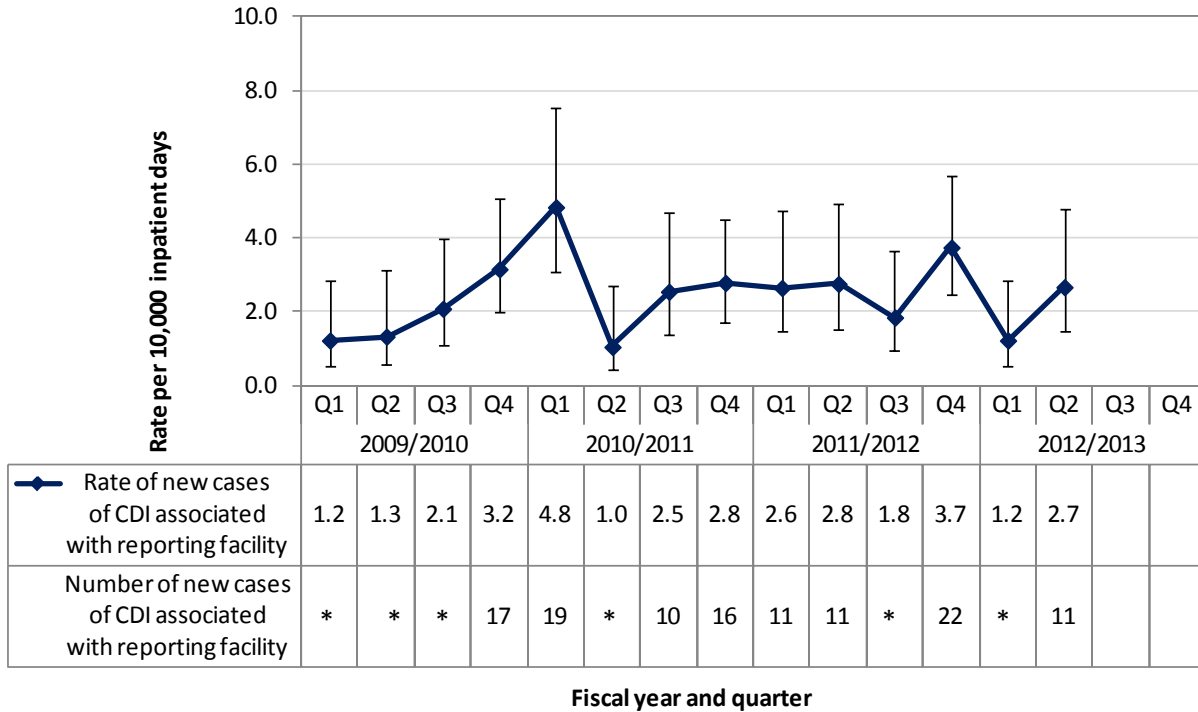
**Figure 4. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Vancouver Coastal Health Authority**



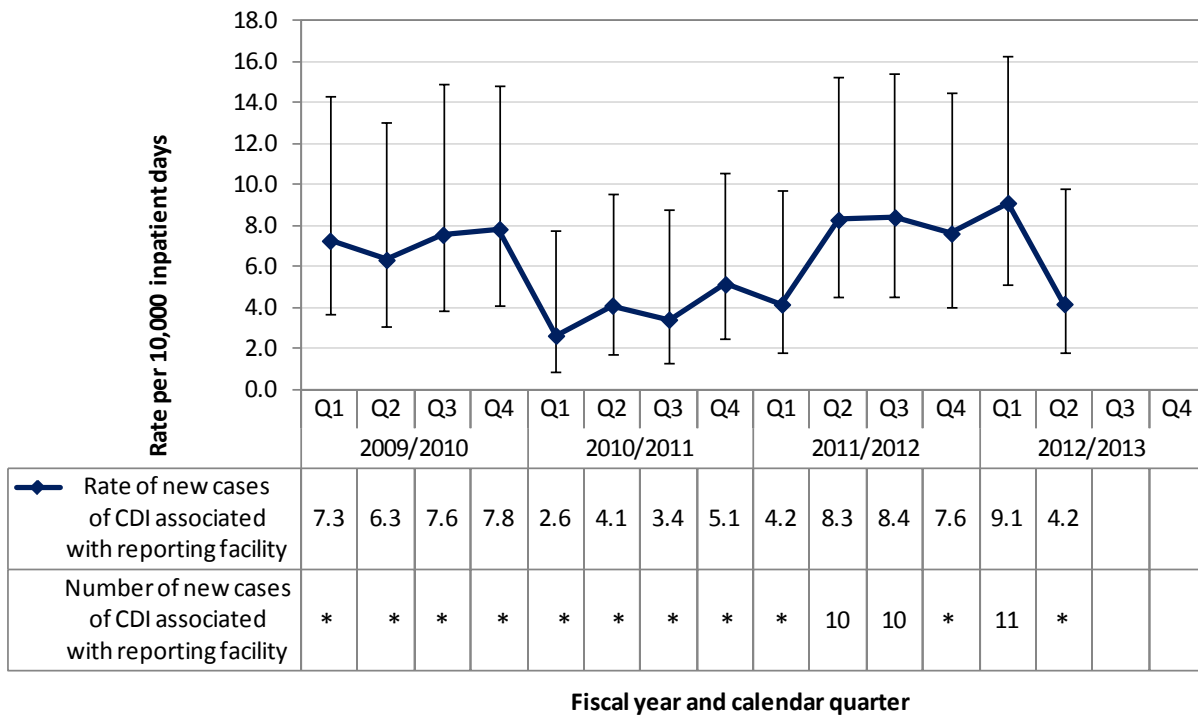
**Figure 5. Number of new cases and rate of CDI associated with the reporting facility by fiscal year and quarter in Vancouver Island Health Authority**



**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.