

Healthcare-associated infections surveillance report

Clostridium difficile Infections (CDI) Update, Q2 2016/17

January 2017

Summary Table

	Q2 2016/17	Previous quarter (Q1 2016/17)	Same quarter of previous year (Q2 2015/16)
Total CDI cases identified	524	575	660
Number of new CDI cases associated with the reporting facility	248	284	329
Total inpatient days	646,601	611,326	651,362
Rate of CDI associated with the reporting facility per 10,000 inpatient days (95% CI)	3.8 (3.4-4.3)	4.6 (4.1-5.2)	5.1 (4.5-5.6)

Highlights

- The provincial rate of CDI associated with the reporting facility in Q2 of 2016/17 decreased compared to the previous quarter (Q1 2016/17); however, this change was not statistically significant.
- The rate in Q2 2016/17 was lower than the same quarter of the previous year (Q2 2015/16); this decrease was statistically significant.

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 (C. difficile) are bacteria that can live in the bowel without causing harm. For healthy people, C. difficile does not often pose a health risk. However, for people taking antibiotics or with weakened immune systems, e.g. patients who are elderly or undergoing chemotherapy, the normal balance of healthy bacteria in the digestive system may be upset, allowing C. difficile to 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 their hands have not been cleaned after touching surfaces (e.g., toilets, commodes, bathing tubs, and electronic rectal thermometers) contaminated with the feces of an infected person, and then touch their mouth.

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 and keeping the environment as clean as possible (especially around ill patients) can help reduce the risk of C. difficile spreading to other patients and/or 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 associated with this report. If you have questions or suspect that you have CDI, please contact your doctor or healthcare provider.











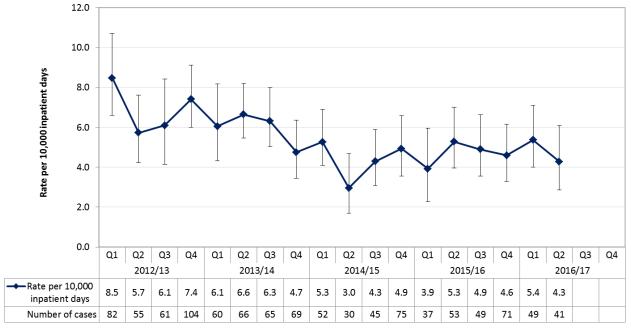
10.0 8.0 Rate per 10,000 inpatient days 6.0 4.0 2.0 0.0 Q2 Q3 Q4 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 2012/13 2013/14 2014/15 2015/16 2016/17 -Rate per 10,000 7.6 6.5 5.4 4.3 4.1 3.7 3.6 5.2 4.6 3.8 6.2 5.8 4.4 4.2 4.9 5.1 4.5 4.8 inpatient days Number of cases 480 390 377 588 349 285 286 389 259 242 240 465 338 329 311 465 284 248

Figure 1. Provincial rate and number of new cases of CDI associated with the reporting facility, by fiscal year and quarter, 2012/13- 2016/17, British Columbia¹

Fiscal year and quarter

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

Figure 2. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Interior Health²



Fiscal year and quarter

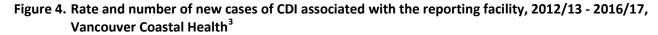
¹ Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter. The time frame of each fiscal quarter varied by fiscal year and there were more days in Q4 than in Q1, Q2, and Q3 each fiscal year. Laboratory testing for confirmation of CDI diagnosis and application of case definition changed over time and varied by health authority.

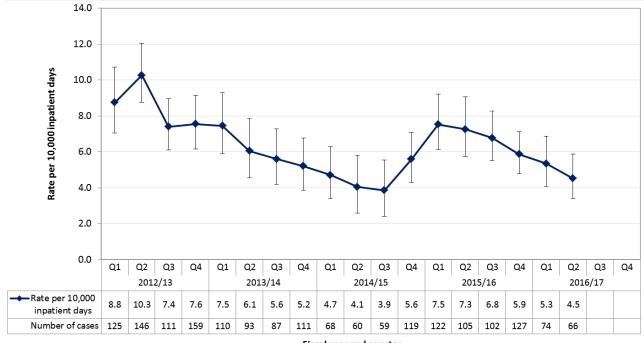
² Excluded certain acute care facilities in Q1 and Q2 of FY 2012/2013

12.0 10.0 Rate per 10,000 inpatient days 8.0 6.0 4.0 2.0 0.0 Q2 Q3 Q1 Q2 Q3 Q1 Q2 Q3 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q4 Q4 Q4 2016/17 2012/13 2013/14 2014/15 2015/16 Rate per 10,000 9.7 7.4 5.5 6.2 5.4 3.7 3.6 4.2 4.3 3.8 3.0 5.4 5.6 5.0 4.2 5.4 5.1 3.7 inpatient days Number of cases 220 125 144 241 123 85 87 138 99 89 73 185 128 118 110 189 110 84

Figure 3. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Fraser Health

Fiscal year and quarter





Fiscal year and quarter

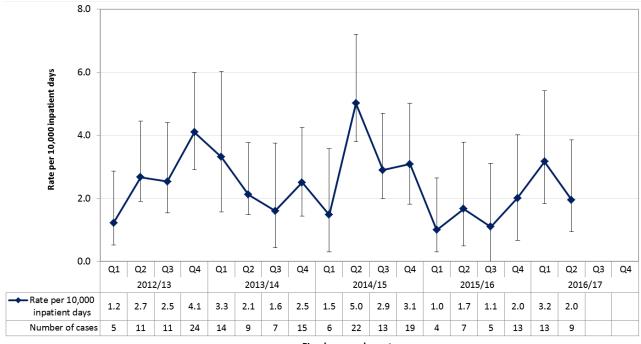
³ Includes acute care facilities of Providence Health Care (PHC)

8.0 Rate per 10,000 inpatient days 6.0 4.0 2.0 0.0 Q1 Q2 Q3 Q4 2012/13 2013/14 2014/15 2015/16 2016/17 Rate per 10,000 3.0 3.3 3.1 3.0 3.5 3.3 3.3 3.0 3.1 3.3 4.3 3.6 2.4 2.9 2.8 3.5 3.9 3.0 inpatient days Number of cases 37 37 41 33 48 41 49 36 27 33 50 30 33 59 44 35 40 58

Figure 5. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Island $Health^4$

Fiscal year and quarter

Figure 6. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Northern Health



Fiscal year and quarter

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 $^{^{\}rm 4}$ Formerly known as Vancouver Island Health Authority.

18.0 16.0 14.0 Rate per 10,000 inpatient days 12.0 10.0 8.0 6.0 4.0 2.0 0.0 Q4 Q1 Q4 Q1 Q3 Q2 Q3 Q1 Q2 Q3 Q2 Q3 Q2 Q3 Q4 Q1 Q2 Q4 Q1 2012/13 2013/14 2014/15 2015/16 2016/17 -Rate per 10,000 9.6 8.7 4.0 6.8 8.6 4.8 4.0 5.6 4.8 3.2 6.6 7.7 6.6 2.7 4.3 5.6 4.0 8.8 inpatient days Number of cases 11 5 9 11 6 5 7 6 4 8 9 8 3 11 5 7 5 11

Figure 7. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Provincial Health Services Authority

Fiscal year and calendar quarter

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Disclaimer

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