

Clostridium difficile Infections (CDI) Update, Q4 of 2016/17

August 2017

Summary Table

| | Q4 2016/17 | Previous quarter (Q3 2016/17) | Same quarter of previous year (Q4 2015/16) | Year-to-date 2016/17 |
|--|----------------------|-------------------------------|--|----------------------|
| Total CDI cases identified | 801 | 521 | 952 | 2,421 |
| Number of new CDI cases associated with the reporting facility | 395 | 262 | 465 | 1,189 |
| Total inpatient days | 962,129 | 667,937 | 691,550 | 2,887,993 |
| Rate of CDI associated with the reporting facility per 10,000 inpatient days (95% CI) | 4.1 (3.7-4.5) | 3.9 (3.5-4.4) | 4.8 (4.4-5.2) | 4.1 (3.9-4.4) |

Highlights

- The provincial rate of CDI associated with the reporting facility in Q4 of 2016/17 was 4.1 per 10,000 inpatient days. This is not statistically significantly different from the previous quarter (3.9 per 10,000 inpatient days).
- The rate in Q4 of 2016/17 was lower than the same quarter of the previous year (4.1 versus 4.8 per 10,000 inpatient days), but the difference was not statistically significant.
- The overall downward trend in the provincial rates from Q1 of 2012/13 to Q4 of 2016/17 was statistically significant.

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

Clostridium difficile (*C. difficile*) is a bacterium 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 is a spore-forming bacteria and the spores are shed in feces. People can acquire the bacteria if they touch surfaces contaminated with the feces of an infected person, (e.g., toilets, commodes, bathing tubs, etc.) and do not wash their hands, 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.

Note: In the following graphs,

- 1) The 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 of each fiscal year.
- 2) The line in each graph represents the overall linear trend over time.
- 3) Direct comparison of the number of rates or cases between health authorities is not recommended due to variations in laboratory testing for confirmation of CDI diagnosis and in the application of CDI case definition.

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 Columbia

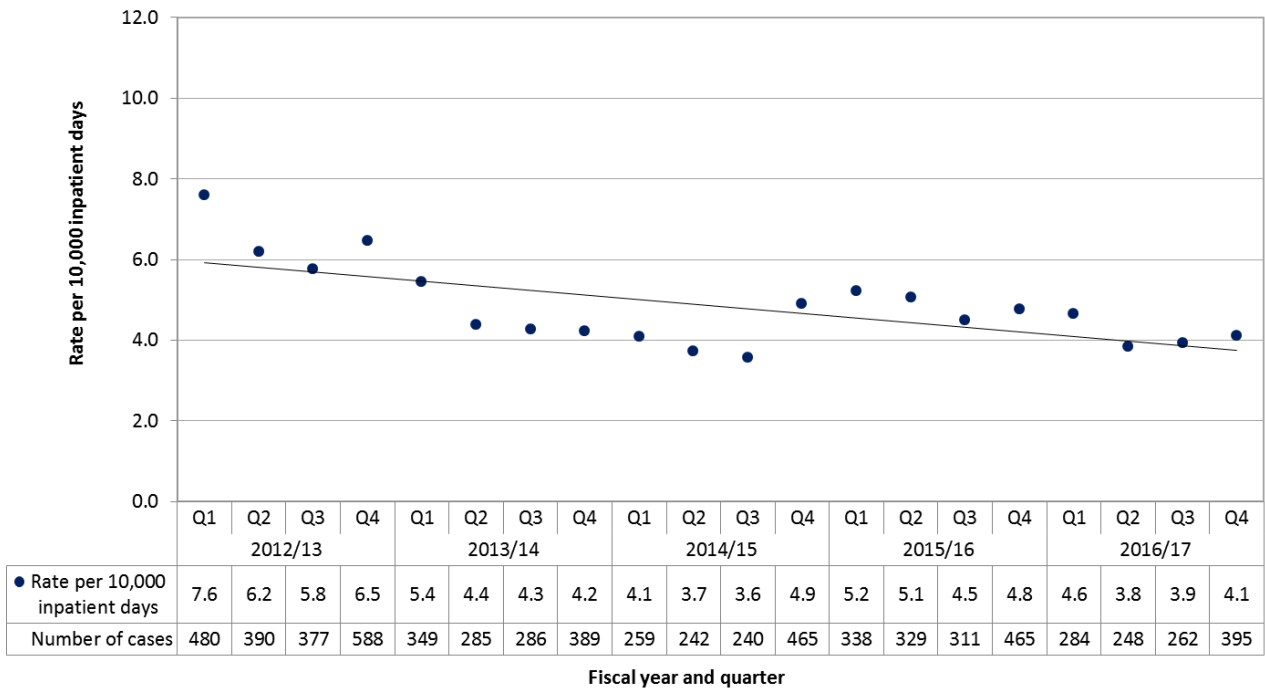


Figure 2. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Interior Health¹

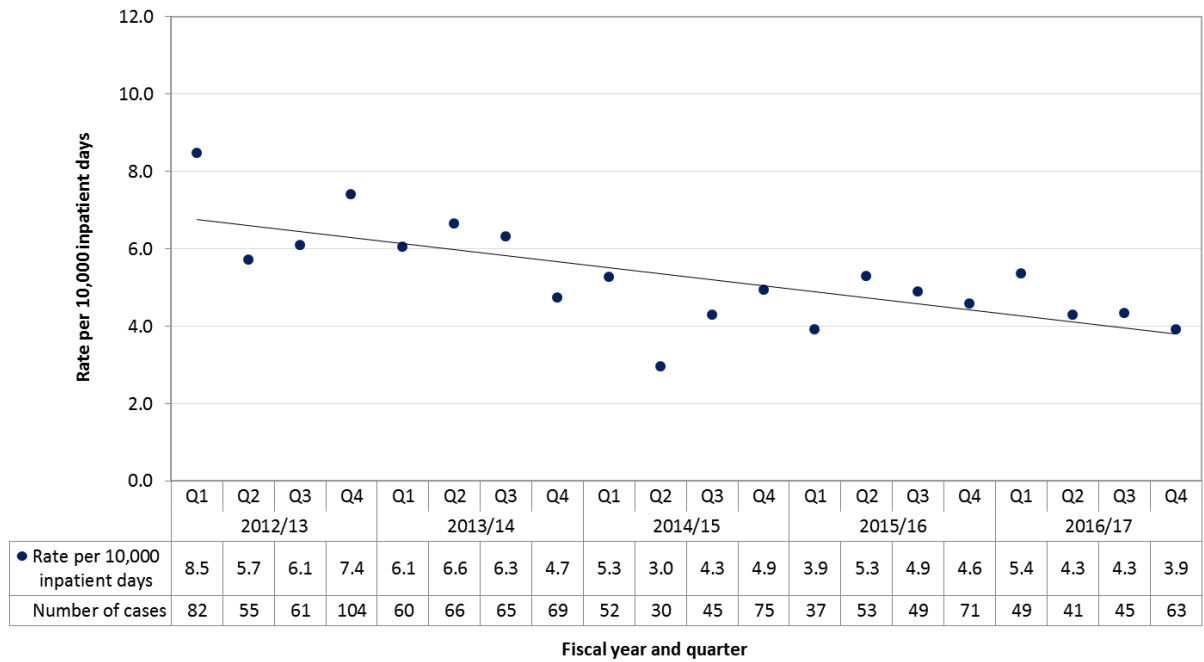
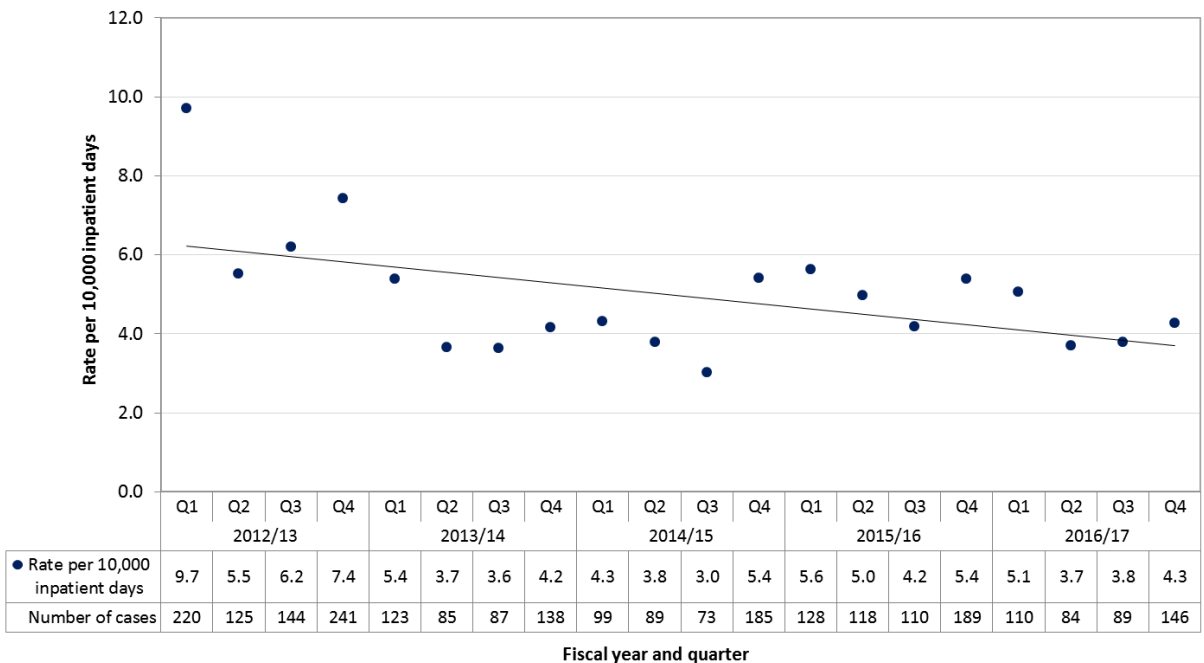


Figure 3. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Fraser Health



¹ Excluded certain acute care facilities in Q1 and Q2 of FY 2012/2013

Figure 4. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Vancouver Coastal Health²

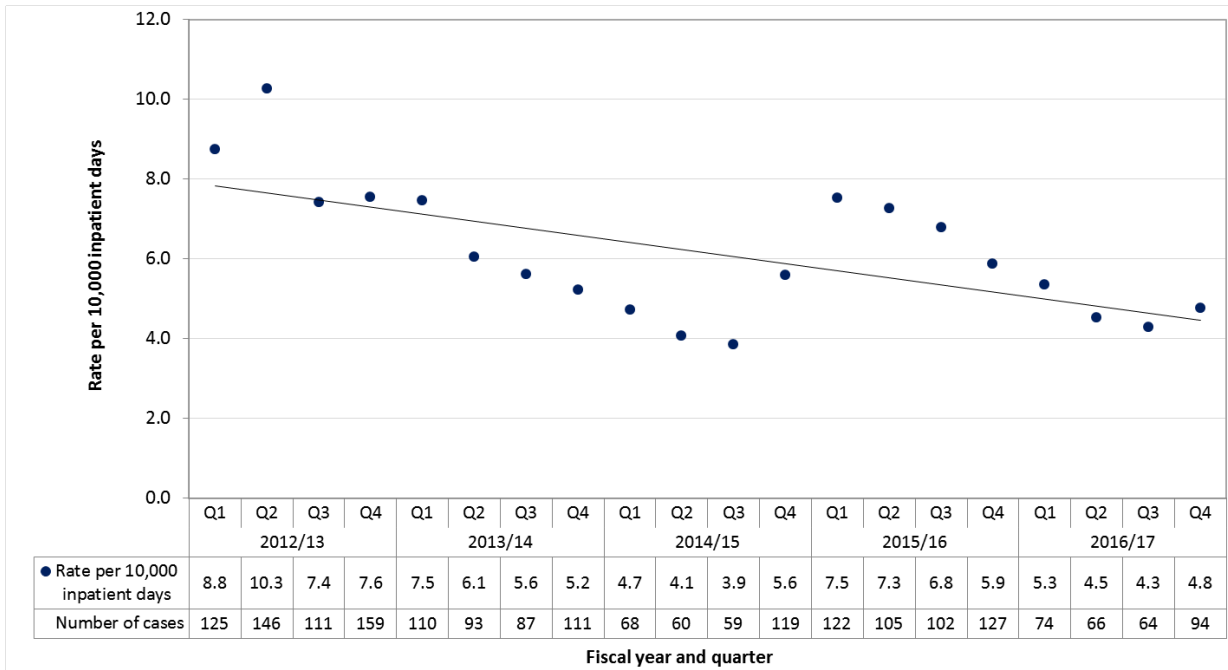
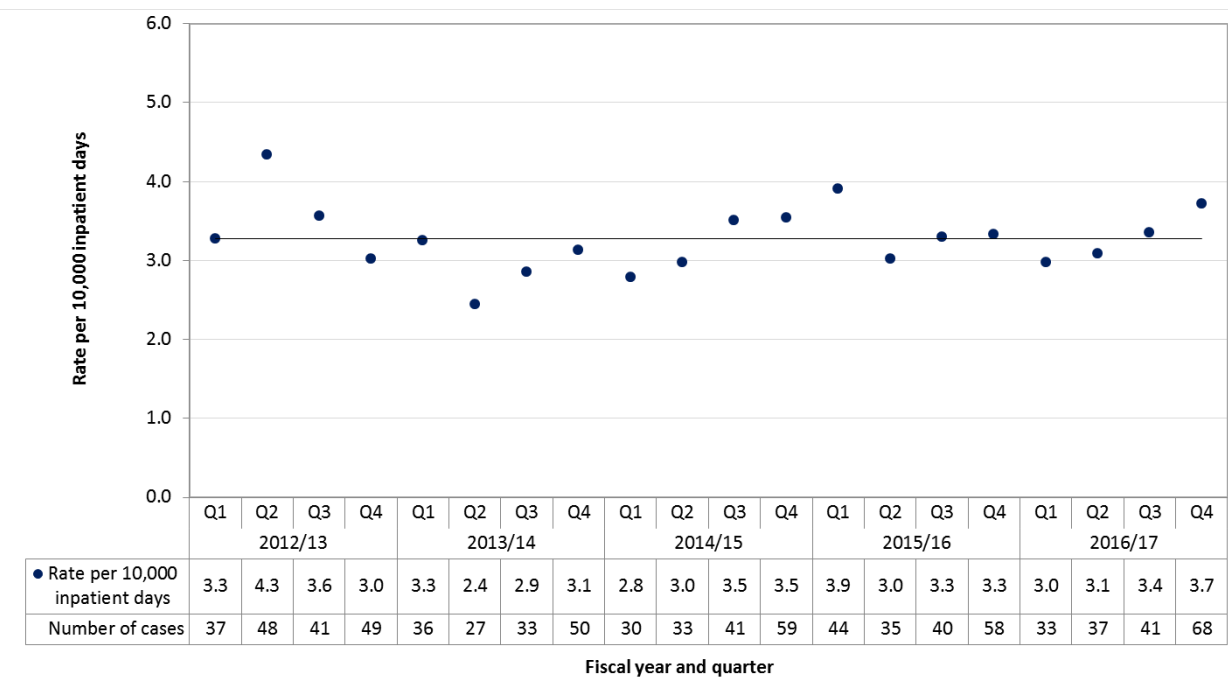


Figure 5. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Island Health



² Includes acute care facilities of Providence Health Care (PHC)

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

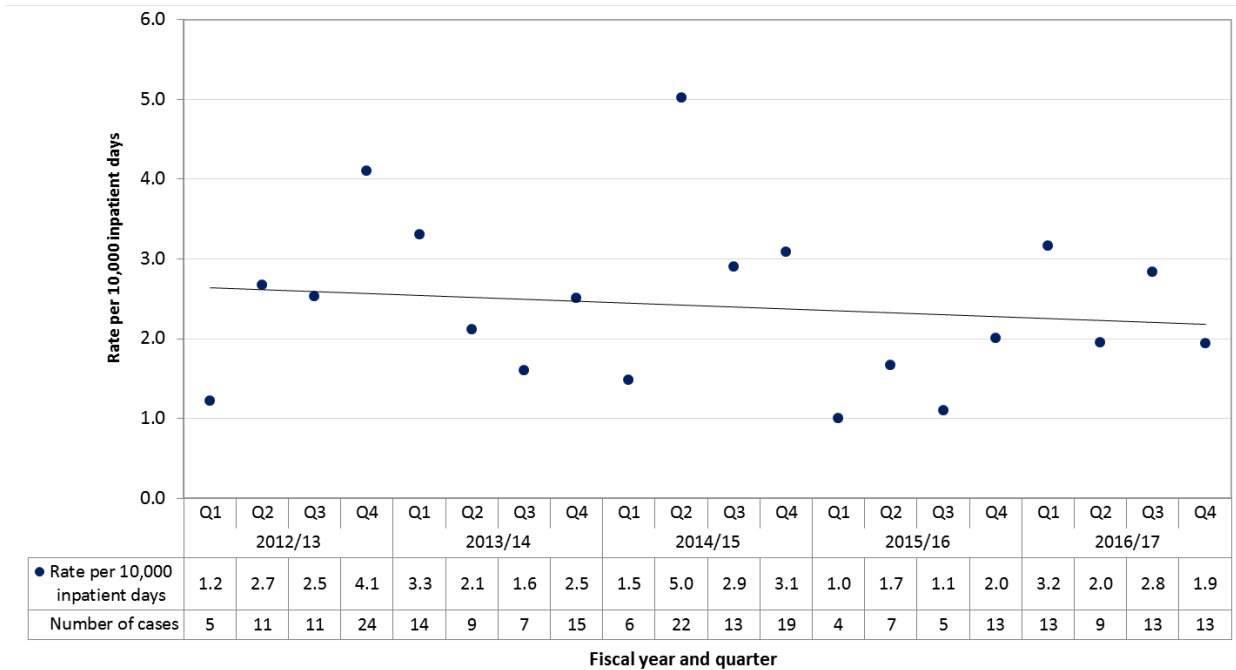
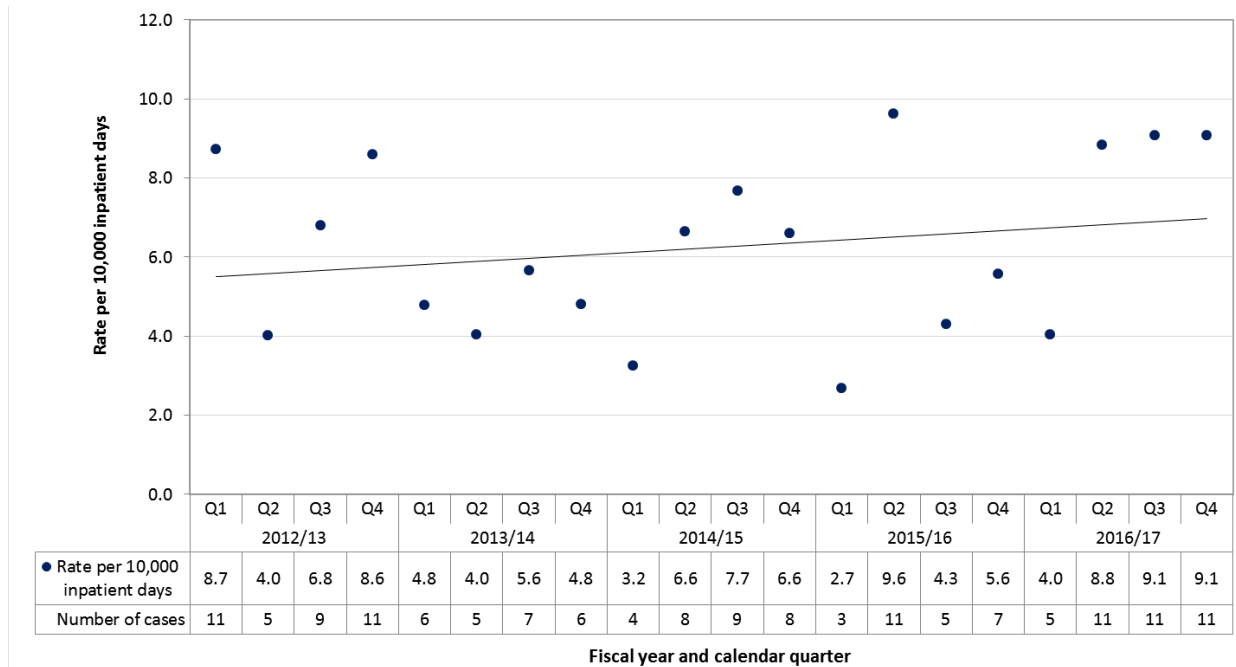


Figure 7. Rate and number of new cases of CDI associated with the reporting facility, 2012/13 - 2016/17, Provincial Health Services Authority



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Disclaimer

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