

## Clostridium difficile Infections (CDI) Update, Q1 of 2017/18

November 2017

### Summary Table

	Q1 2017/18	Previous quarter (Q4 2016/17)*	Same quarter of previous year (Q1 2016/17)	Year-to-date 2017/18
Total CDI cases identified	515	801	576	515
Number of new CDI cases associated with the reporting facility	249	395	285	249
Total inpatient days	598,698	962,129	611,234	598,698
<b>Rate of CDI associated with the reporting facility per 10,000 inpatient days (95% CI)</b>	<b>4.2 (3.7-4.7)</b>	<b>4.1 (3.7-4.5)</b>	<b>4.7 (4.2-5.2)</b>	<b>4.2 (3.7-4.7)</b>

\* There were more days in Q4 than in Q1, Q2 and Q3 of each fiscal year

### Highlights

- The provincial rate of CDI associated with the reporting facility in Q1 of 2017/18 was 4.2 per 10,000 inpatient days. This is not statistically significantly different from the previous quarter (4.1 per 10,000 inpatient days).
- The rate in Q1 of 2017/18 was lower than the same quarter of the previous year (4.2 versus 4.7 per 10,000 inpatient days), but the difference was not statistically significant.
- The overall downward trend in the provincial rates from Q1 of 2013/14 to Q1 of 2017/18 was not statistically significant.

### What is *Clostridium difficile* infections (CDI)?

*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.

### How is *Clostridium difficile* transmitted?

The bacteria and their spores are shed in feces. People can acquire the bacteria if they touch items or surfaces (e.g., toilets, commodes, bathing tubs, etc.) that are contaminated with feces, and then touch their mouth or mucous membranes without washing their hands thoroughly. *C. difficile* can live for long periods on surfaces and can spread very easily.

### How to prevent *Clostridium difficile* transmission?

The risk of acquiring CDI can be reduced by frequent hand washing with soap and water — particularly after toileting, before eating, and after touching any frequently touched surfaces (such as door handles, elevator buttons, shared keyboards/mouses, etc.) Other risk reduction methods include avoiding sharing personal items, and using antibiotics judiciously. Staff in healthcare settings can significantly reduce the spread of *C. difficile* by strictly following infection control guidelines.

**Why is CDI being monitored in BC hospitals?**

Monitoring CDI in acute care facilities helps us improve the quality of care and protect both patients and healthcare providers through the development of evidence based infection prevention and control guidelines. It will also increase awareness and understanding of CDI among professionals and the public.

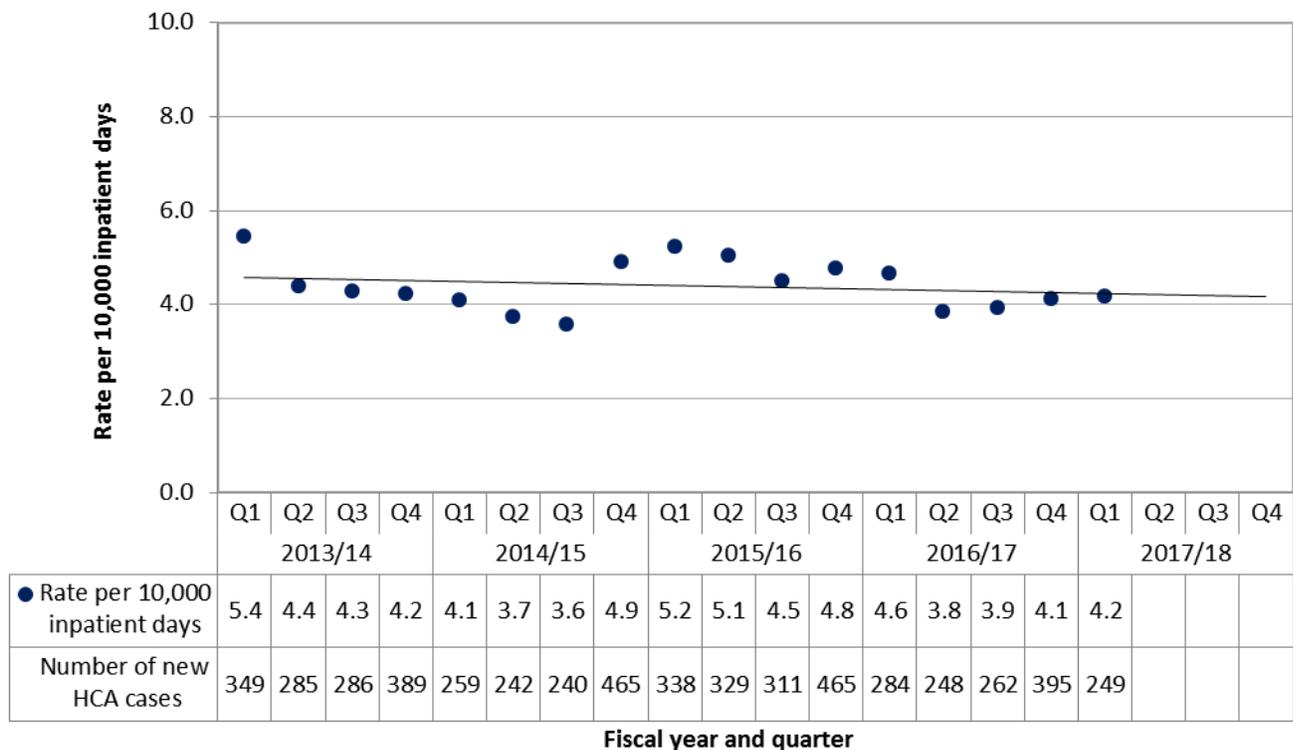
**Where to find information about CDI?**

The PICNet website ([www.picnet.ca](http://www.picnet.ca)) provides provincial or national guidance, toolkits, and related resources about CDI prevention and control, as well as the surveillance protocol and reports on CDI in BC. If you have questions or suspect that you have CDI, please contact your doctor or healthcare provider.

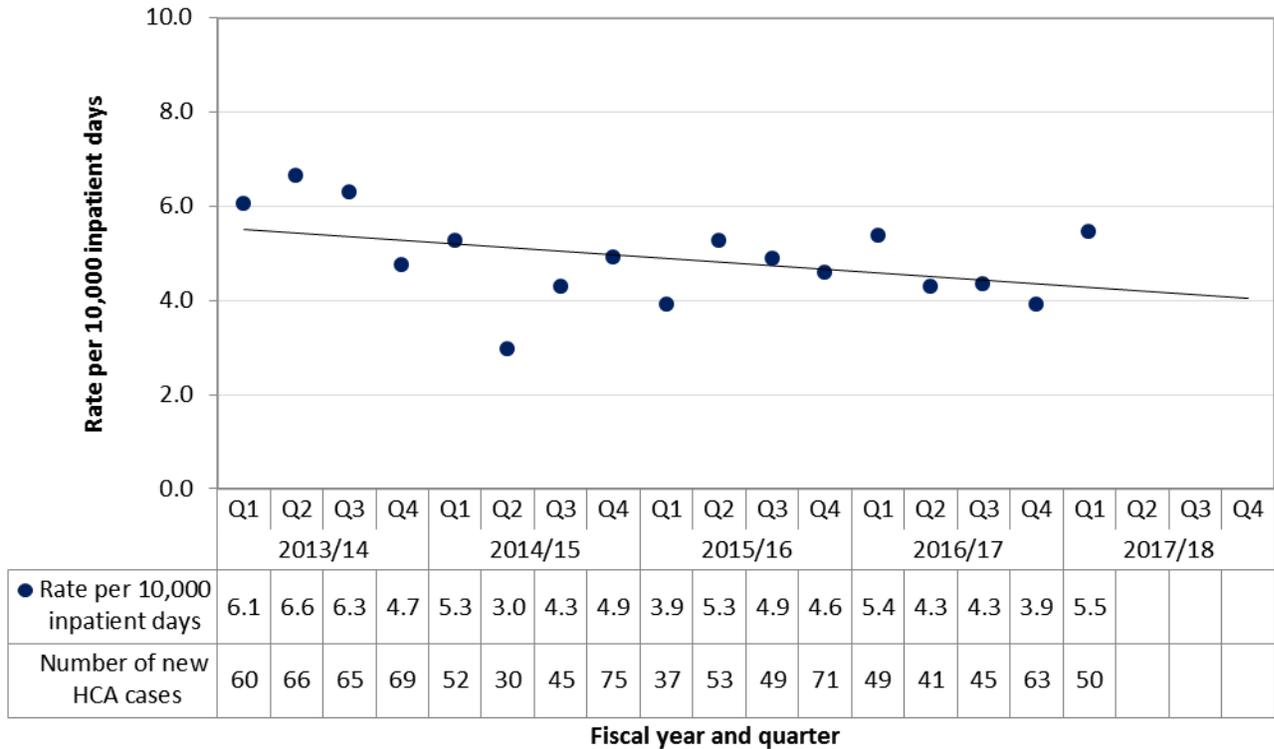
This quarterly update presents the latest data on incidence and trends of new CDI that were healthcare-associated (HCA) with the reporting facility among inpatients in the last five years. In the following graphs,

- 1) Relapses of CDI and new cases that were associated with another healthcare facility, or community-associated, or of unknown origin were not included.
- 2) The data were aggregated by fiscal quarter for each health authority except Provincial Health Services Authority (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 the fourth quarter (Q4) than in other three quarters (Q1, Q2, and Q3) of each fiscal year.
- 3) The line in each graph represents the overall linear trend over time.
- 4) 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.

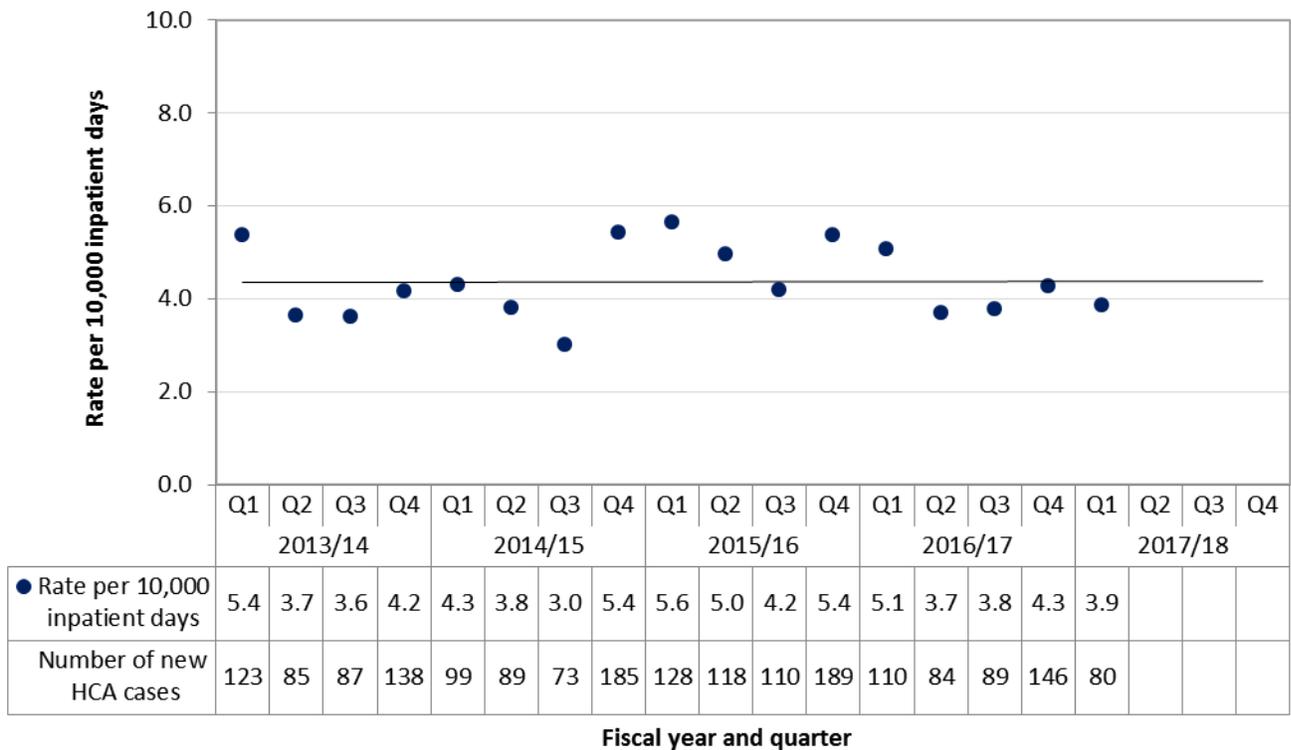
**Figure 1. Provincial rate and number of new cases of CDI associated with the reporting facility, by fiscal year and quarter, 2013/14- 2017/18, British Columbia**



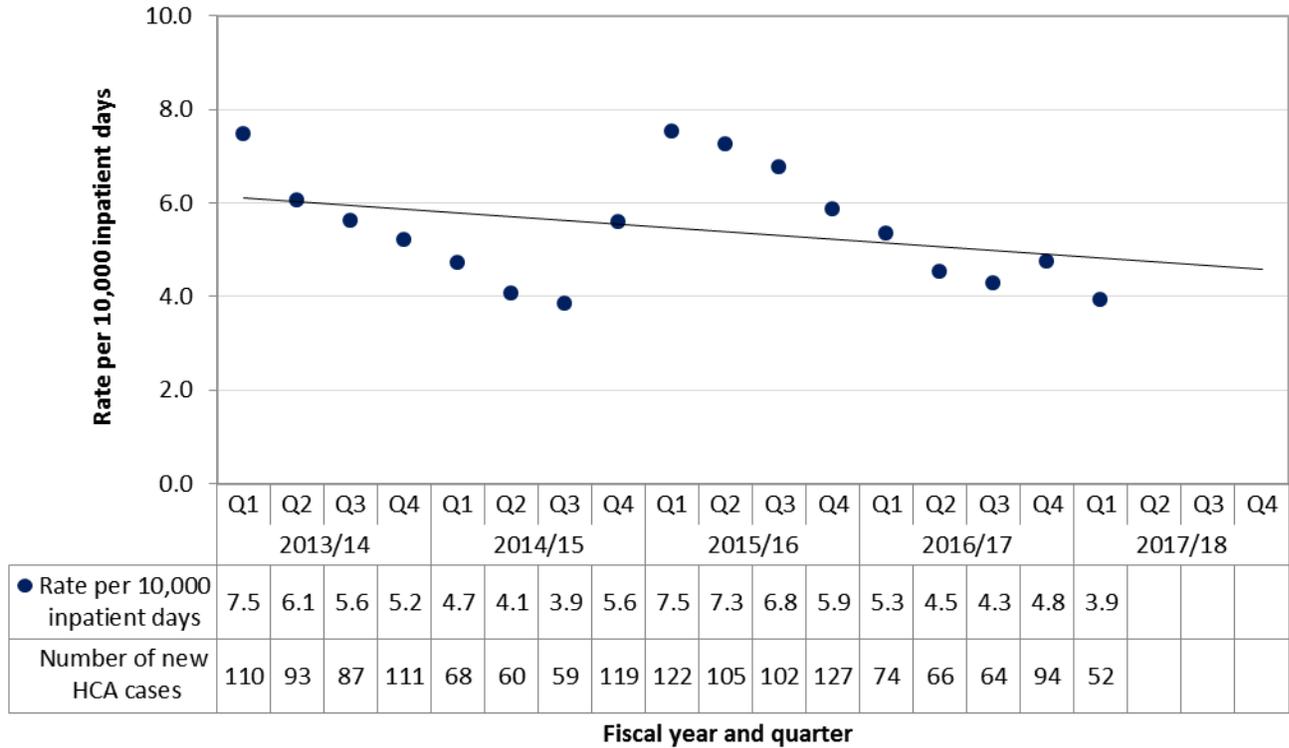
**Figure 2. Rate and number of new cases of CDI associated with the reporting facility, 2013/14- 2017/18, Interior Health**



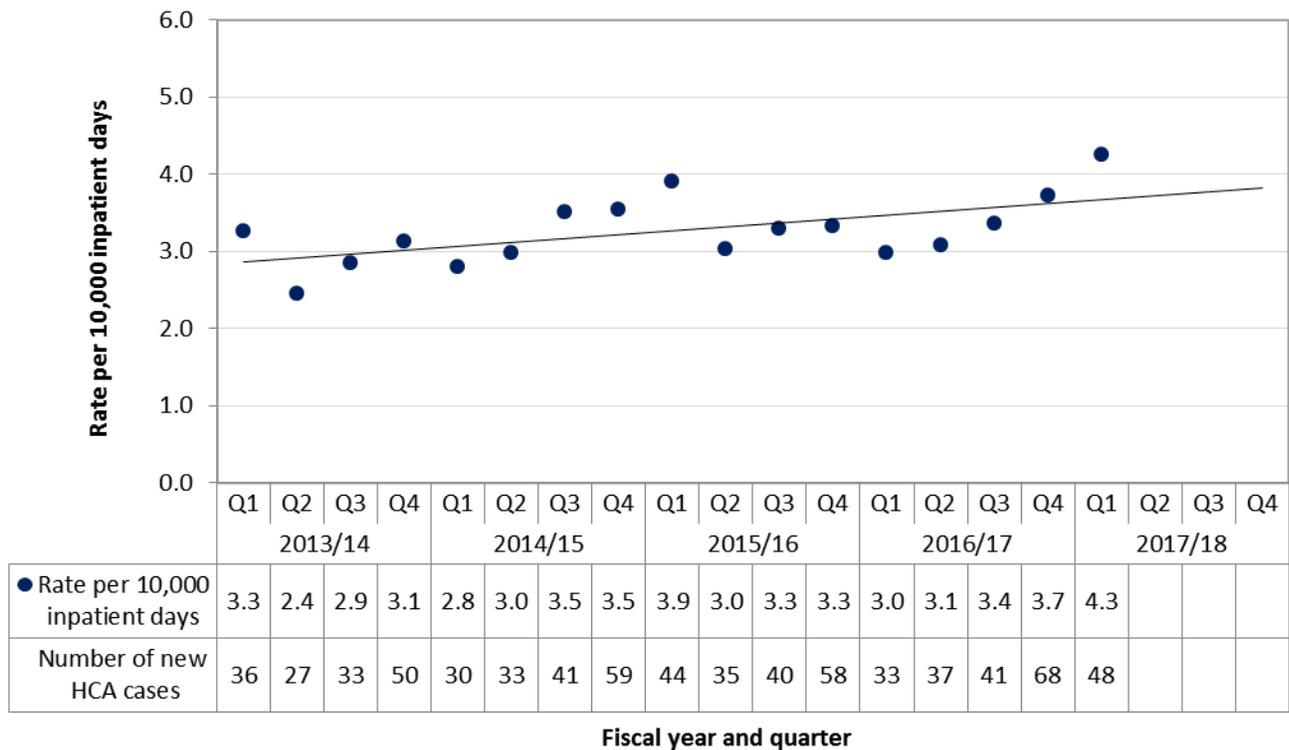
**Figure 3. Rate and number of new cases of CDI associated with the reporting facility, 2013/14- 2017/18, Fraser Health**



**Figure 4. Rate and number of new cases of CDI associated with the reporting facility, 2013/14- 2017/18, Vancouver Coastal Health<sup>1</sup>**

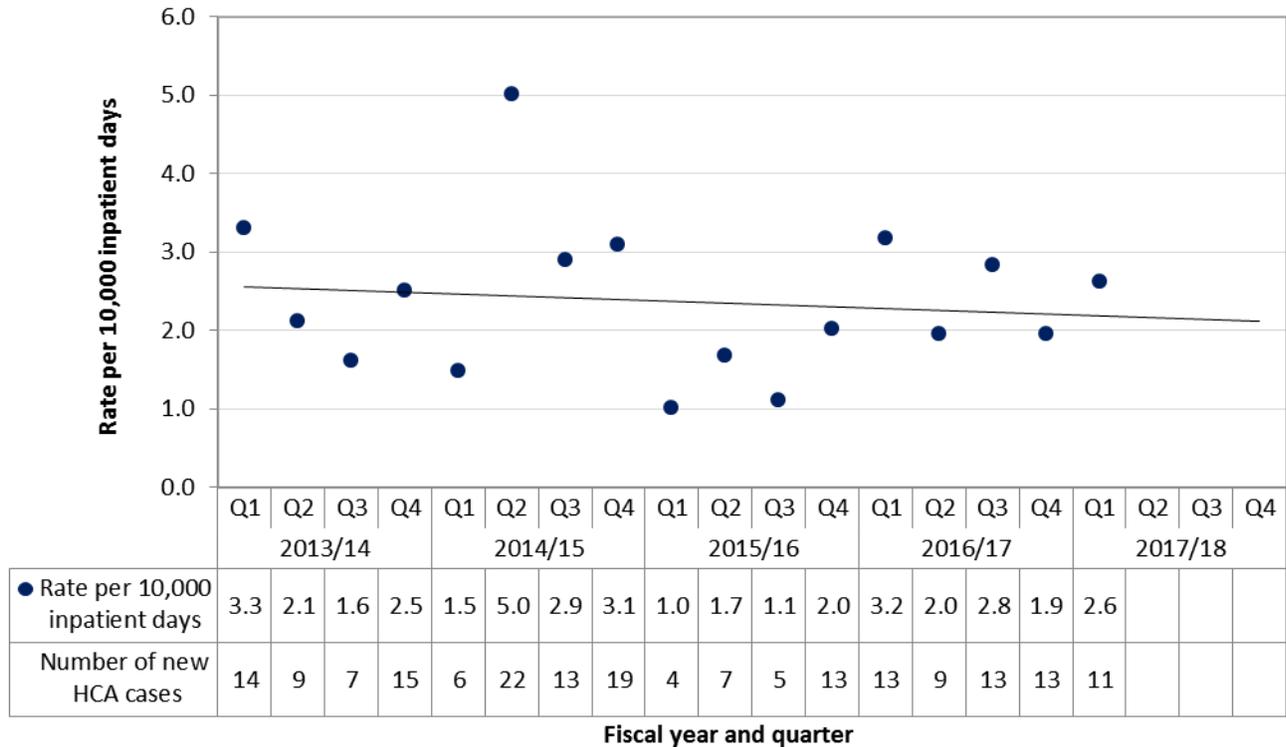


**Figure 5. Rate and number of new cases of CDI associated with the reporting facility, 2013/14- 2017/18, Island Health**

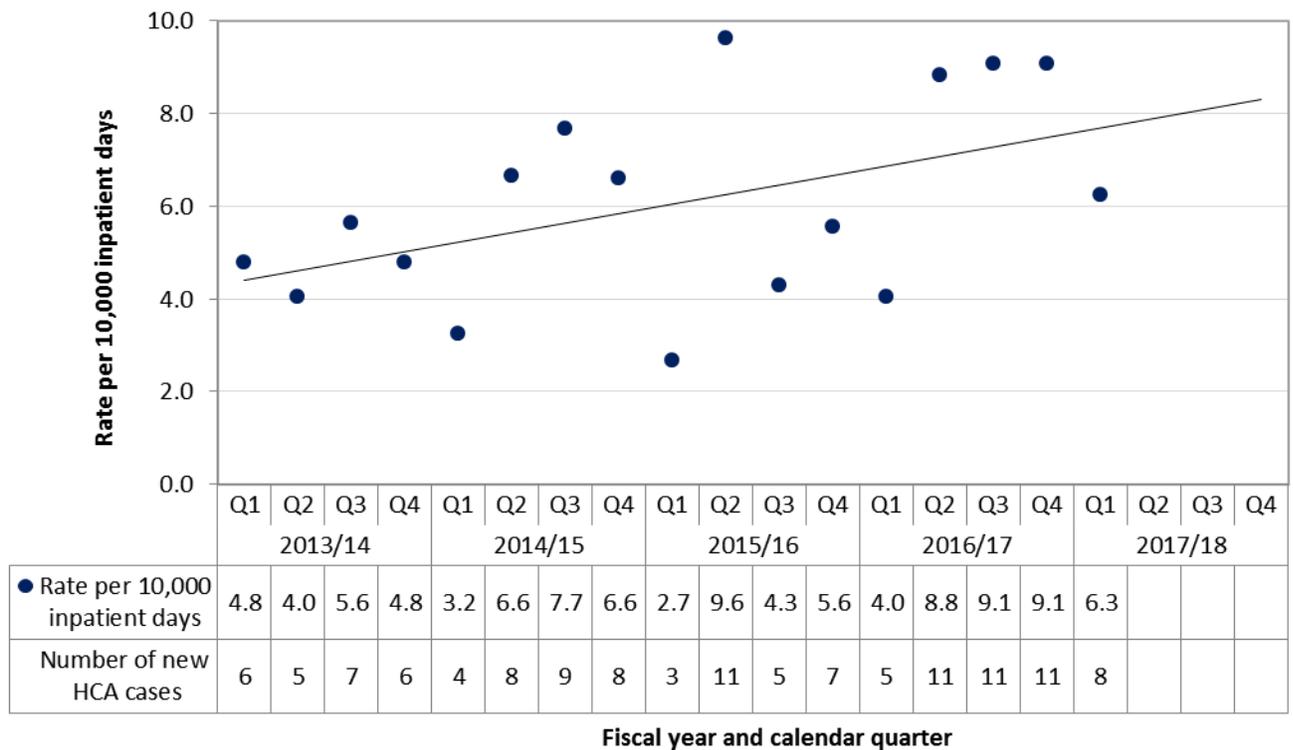


<sup>1</sup> Includes acute care facilities of Providence Health Care (PHC)

**Figure 6. Rate and number of new cases of CDI associated with the reporting facility, 2013/14- 2017/18, Northern Health**



**Figure 7. Rate and number of new cases of CDI associated with the reporting facility, 2013/14- 2017/18, Provincial Health Services Authority**



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**Disclaimer**

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