

PICNet

PROVINCIAL INFECTION CONTROL
NETWORK OF BRITISH COLUMBIA

A program of the Provincial Health Services Authority

Methicillin-Resistant *Staphylococcus aureus* (MRSA) Surveillance

Quarterly data summary:
Q1 of Fiscal Year 2013/2014

Prepared by:

Provincial Infection Control Network of British Columbia (PICNet)

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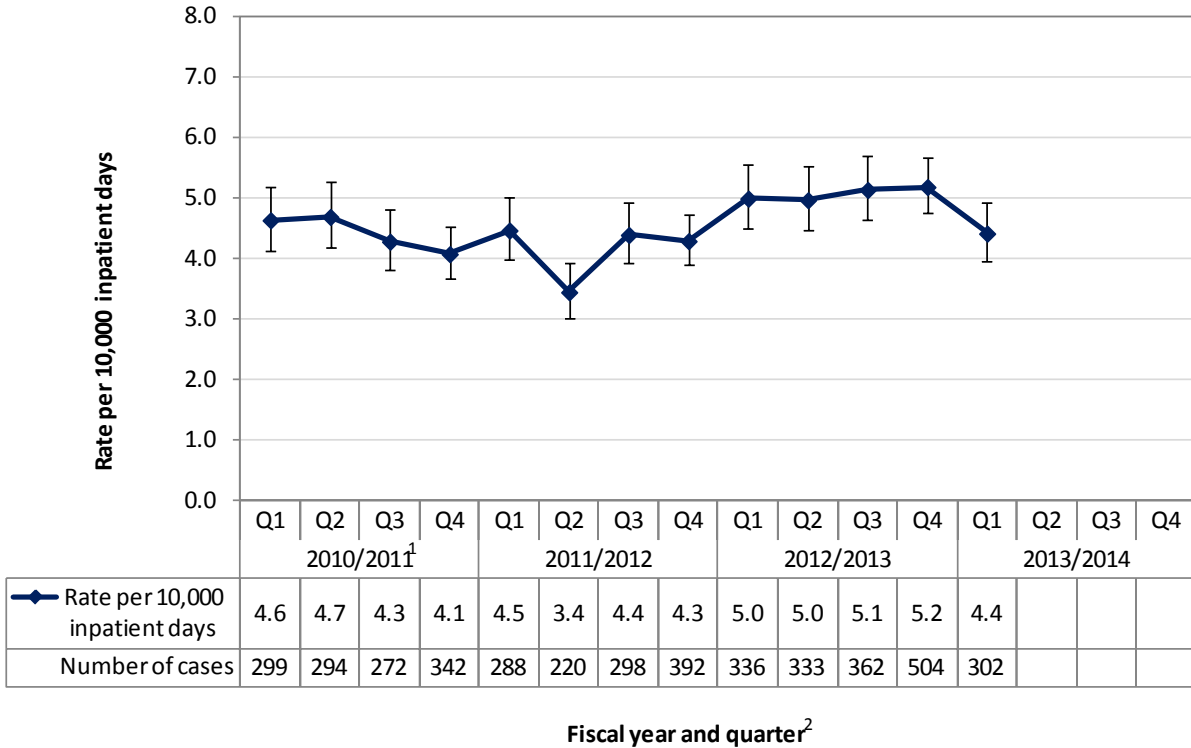
The emergence and spread of Methicillin-resistant *Staphylococcus aureus* (MRSA) in healthcare settings has become a major concern because MRSA infections are more difficult to treat than ordinary *S. aureus* infections, and may result in higher morbidity and mortality. The provincial MRSA surveillance program was established to monitor the incidence and trends of the cases of MRSA newly identified among acute care inpatients admitted to healthcare facilities in British Columbia (BC). This summary updates the cases of MRSA identified during the first fiscal quarter (Q1, April 1 – June 20, 2013) of fiscal year (FY) 2013/2014. Direct comparison of the numbers of cases and rates between health authorities (HA) is not recommended, as many factors can affect the rate of MRSA in healthcare facilities, such as the intensity of MRSA screening performed by the facility, the patients’ exposure history to healthcare and antibiotics, and the prevalence of MRSA in the community. For details about this provincial surveillance program, case definition, and data limitations, please refer to the annual “*Methicillin-Resistant Staphylococcus aureus (MRSA) Surveillance Report: For the Fiscal Year 2012/2013*”, which can be found on the PICNet website (<http://s.picnet.ca/mrsareports>).

- A total of 584 cases of MRSA (either colonization or infection) were newly identified among acute care inpatients during Q1 of FY 2013/2014, of which 302 (51.7%) were defined as healthcare-associated with the reporting facility.
- The provincial rate of new cases of MRSA associated with the reporting facility was 4.4 [95% confidence interval (CI): 3.9-4.9] per 10,000 inpatient days in Q1 of FY 2013/2014.
- The provincial rate in Q1 of FY 2013/2014 was lower than the previous quarter (Q4 of FY 2012/2013) and the same quarter for the last three years (Q1 of FY 2010/2011, 2011/2012 and 2012/2013), but the differences were not statistically significant.

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Figure 1. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and quarter, British Columbia



Note: Bars in the line chart represent 95% confidence interval of the rates. Case finding strategy and application of case classification for MRSA surveillance may vary over time and by health authority; the same hereinafter.

1. Excluded from this report was Northern Health in FY 2010/2011, which did not apply the PICNet’s case definition retrospectively to their MRSA cases identified in FY 2010/2011.
2. Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter (Q1, April 1 – June 30, 2013).

Figure 2. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and quarter for Interior Health

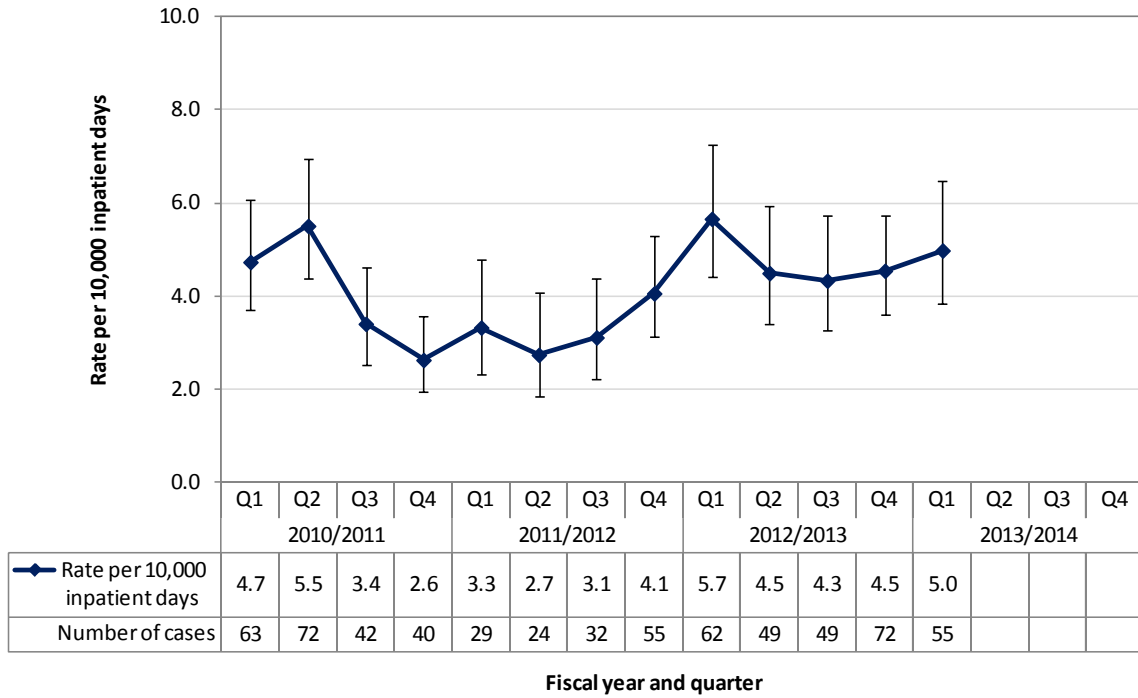


Figure 3. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and quarter for Fraser Health

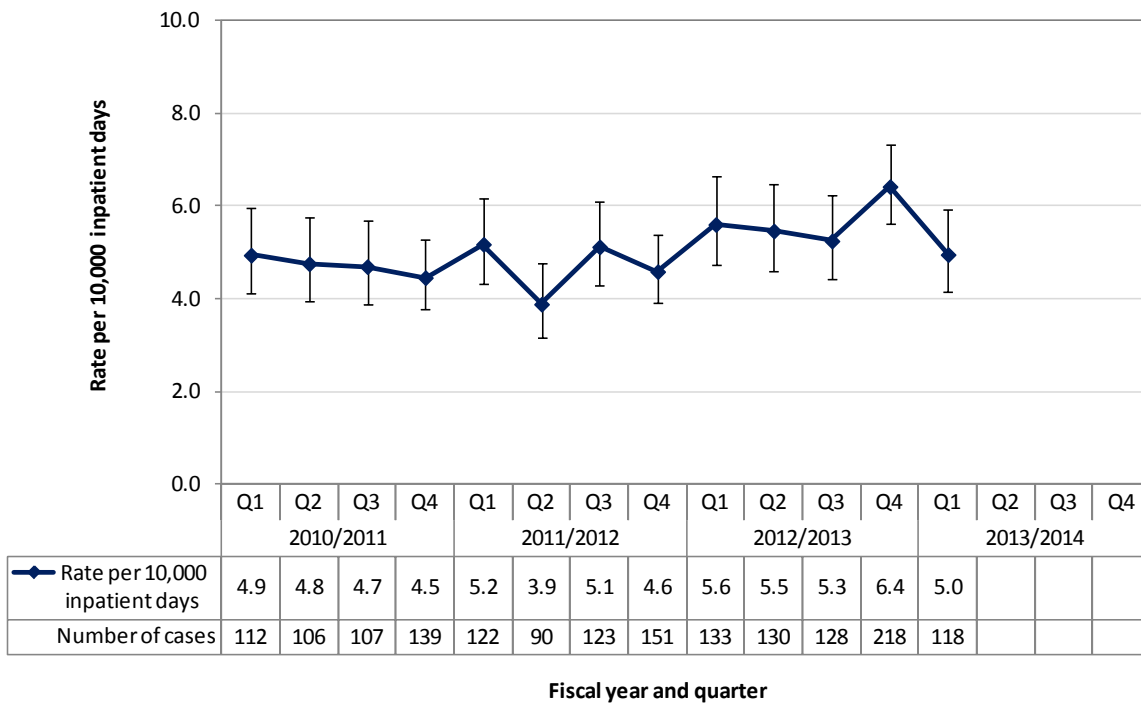


Figure 4. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and quarter for Vancouver Coastal Health³

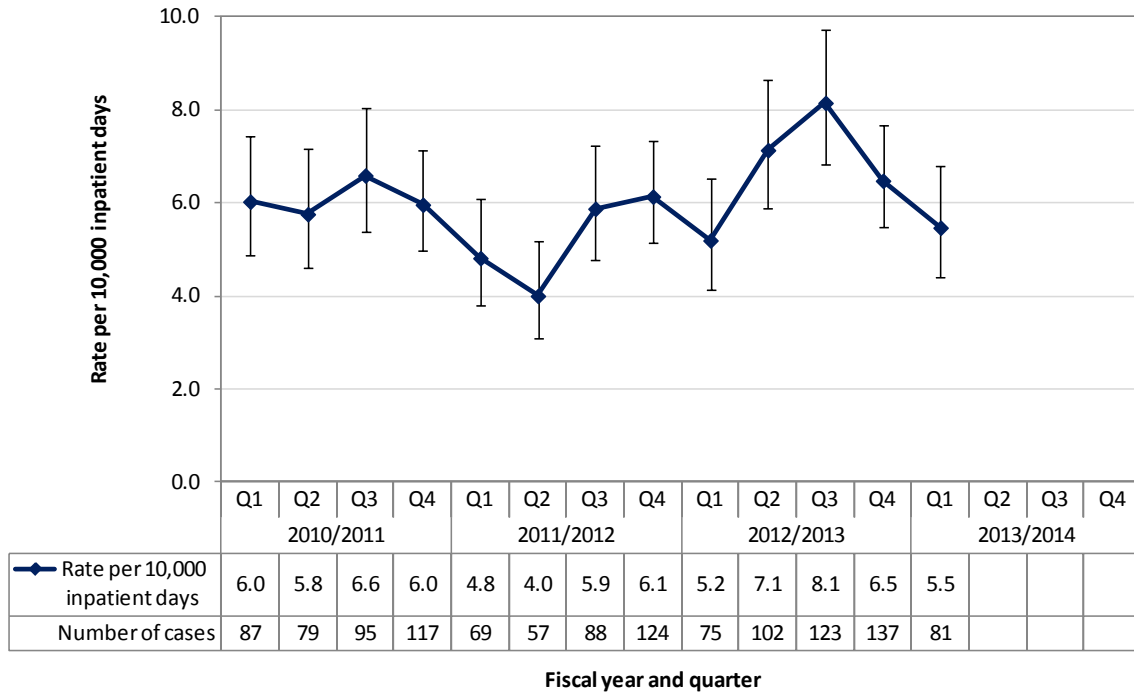
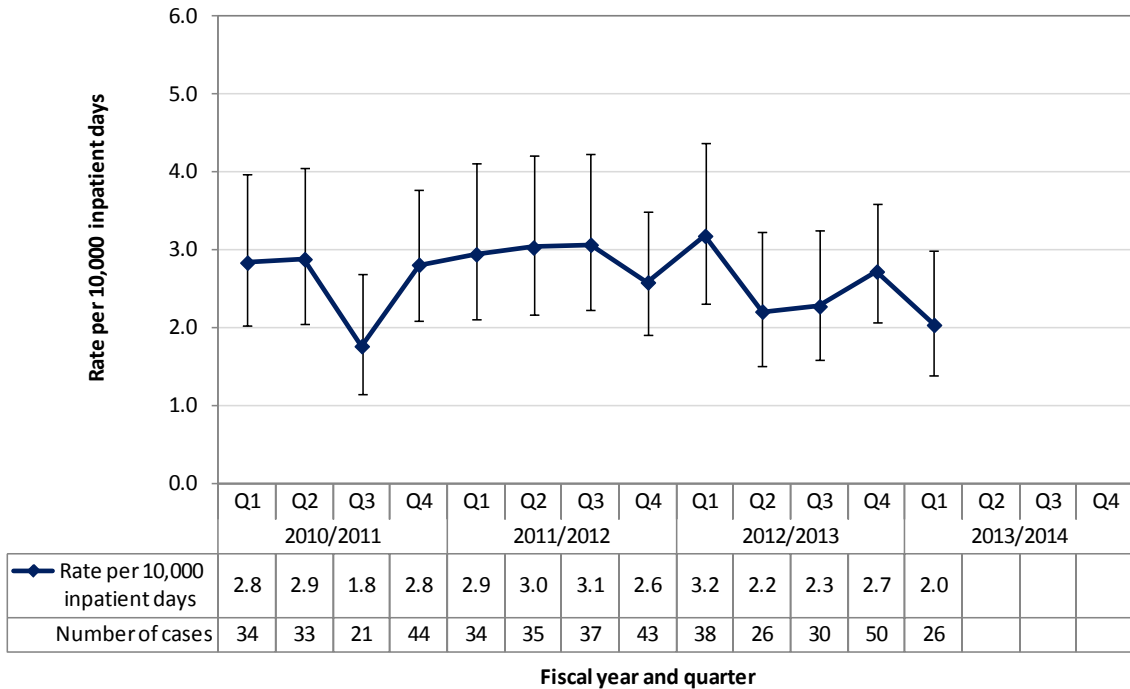


Figure 5. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and quarter for Island Health⁴



Note: 3. Includes Providence Health Care (PHC)
 4. Formerly known as Vancouver Island Health Authority

Figure 6. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and quarter for Northern Health⁵

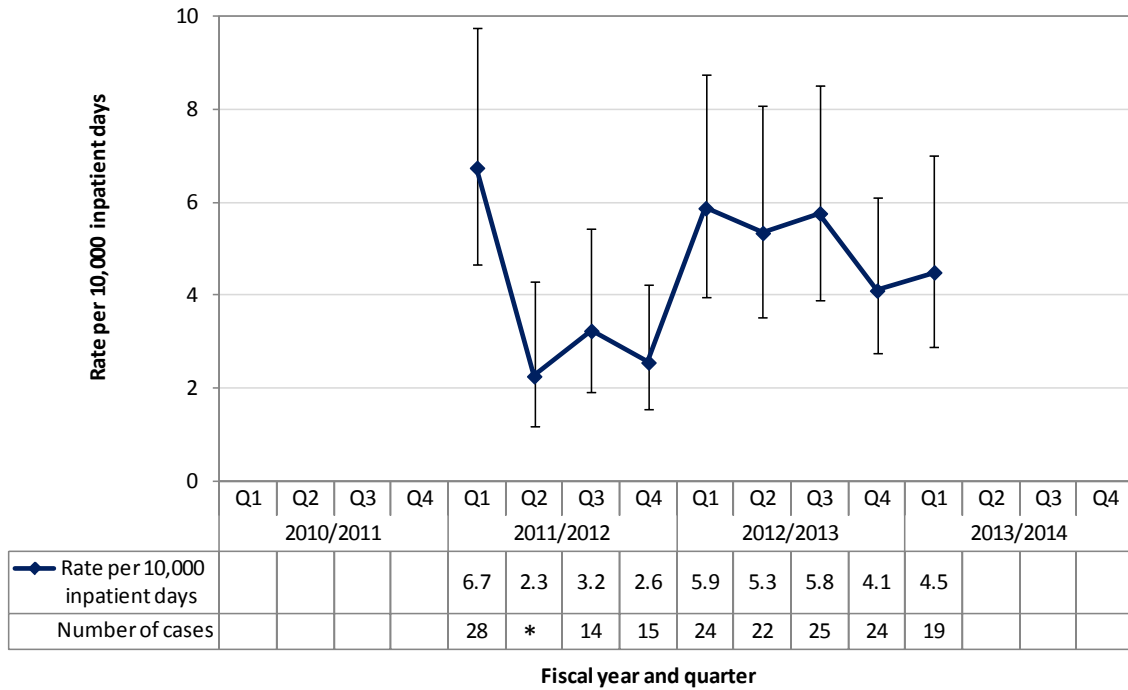
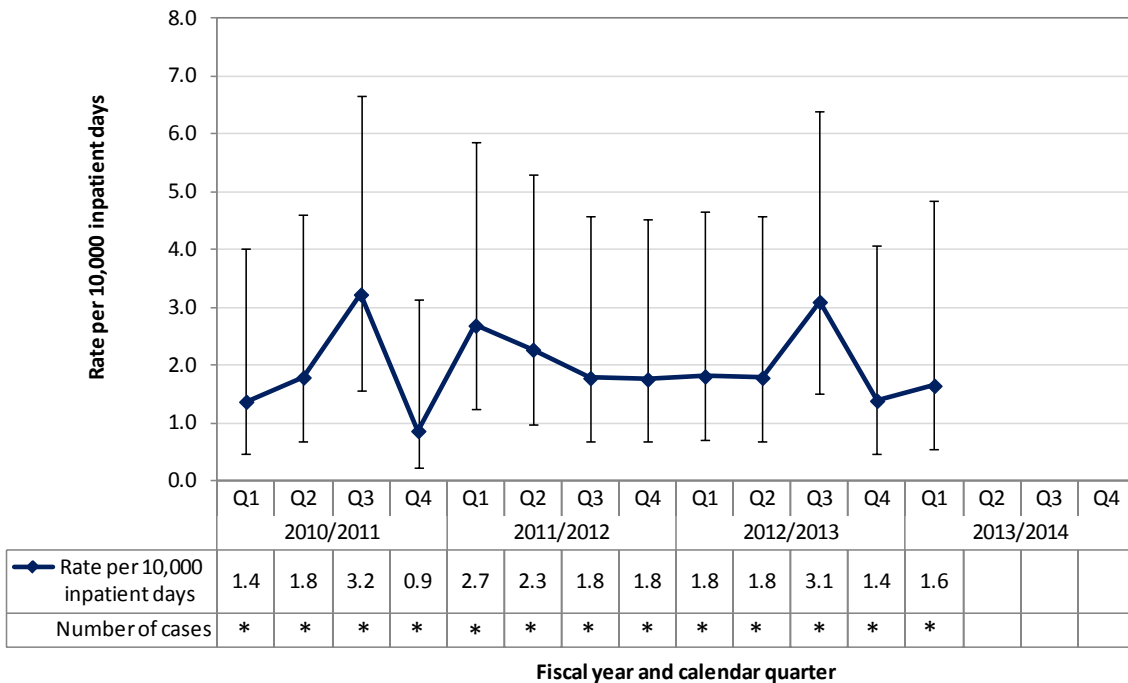


Figure 7. Number of new cases and rate of MRSA associated with the reporting facility, by fiscal year and calendar quarter for Provincial Health Services Authority



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

5. Northern Health did not apply the PICNet’s MRSA case definition retrospectively to their MRSA cases identified in 2010/2011.