

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:
Q3 of Fiscal Year 2012/2013

Prepared by:

Provincial Infection Control Network of British Columbia (PICNet)

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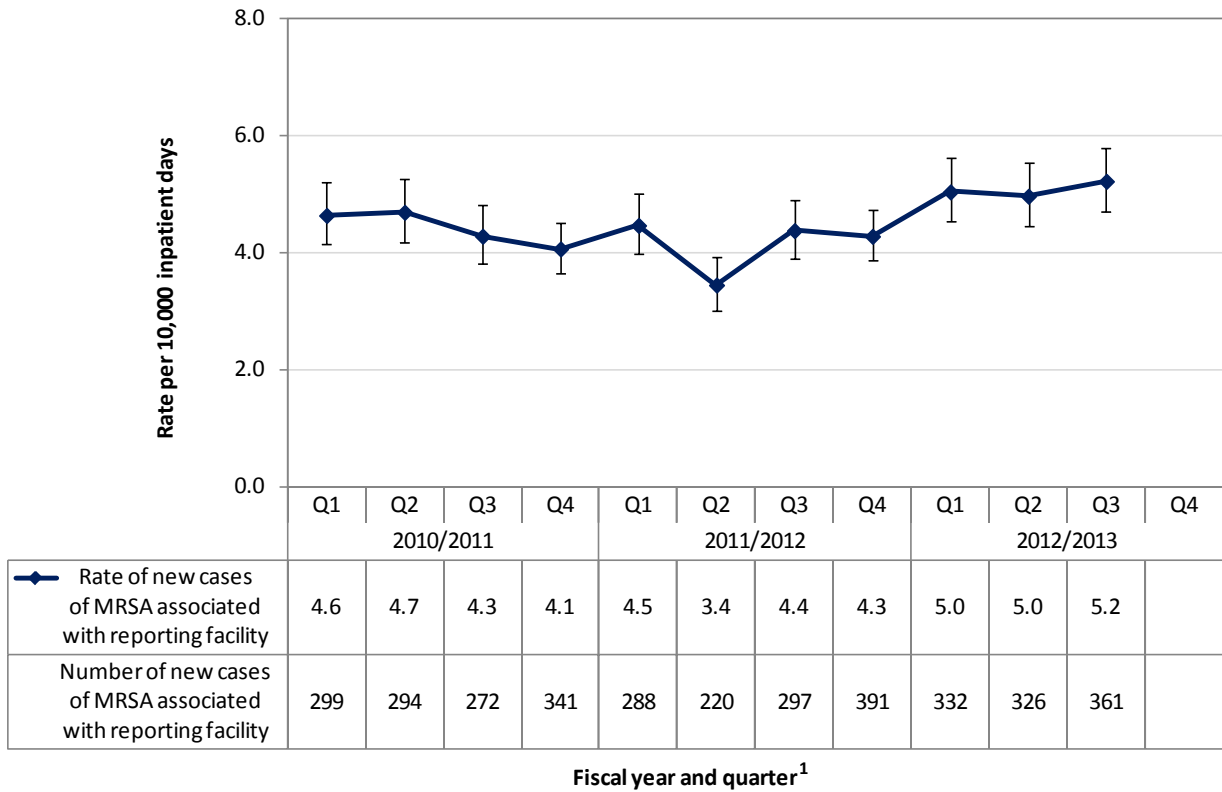
The emergence and spread of Methicillin-resistant *Staphylococcus aureus* (MRSA) in healthcare settings has become a major concern because MRSA infections are more difficult to treat than ordinary *S. aureus* infections, and may result in higher mortality. The provincial MRSA surveillance program was established to monitor the incidence and trends of MRSA among inpatients admitted to acute care facilities across BC. This summary updates the new cases of MRSA identified during the third fiscal quarter (Q3, September 14 – December 6, 2012) of the fiscal year (FY) 2012/2013. 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 the healthcare facilities, such as the intensity of MRSA screening performed by the facility, the patients’ exposure history to healthcare and antibiotics, environmental conditions, 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 (Fiscal Year 2011/2012)*”, which can be found on the PICNet website (<http://s.picnet.ca/mrsareports>).

- A total of 651 cases of MRSA (either colonizations or infections) were newly identified among inpatients admitted to all 80 acute care facilities in BC during Q3 of FY 2012/2013, of which 361 were defined as healthcare-associated with the reporting facility (55.5%).
- The provincial rate of new cases of MRSA associated with the reporting facility was 5.2 per 10,000 inpatient days [95% confidence interval (CI): 4.7-5.8] in Q3 of FY 2012/2013.
- The rate in Q3 of FY 2012/2013 was not significantly different from the rate in Q2 of FY 2012/2013 and rates in the same quarter of the past two fiscal years.
- The trend of the rates of new cases of MRSA was statistically significant for the period from Q1 of FY 2010/2011 to Q3 of FY 2012/2013 (trend $\chi^2 = 6.27, p = 0.012$).

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



Note: Bars in the line chart represent 95% confidence interval of the rates, the same herein after.

1. Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter. Case finding strategy and application of case classification for MRSA surveillance may vary over time and by health authority, the same hereinafter.

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

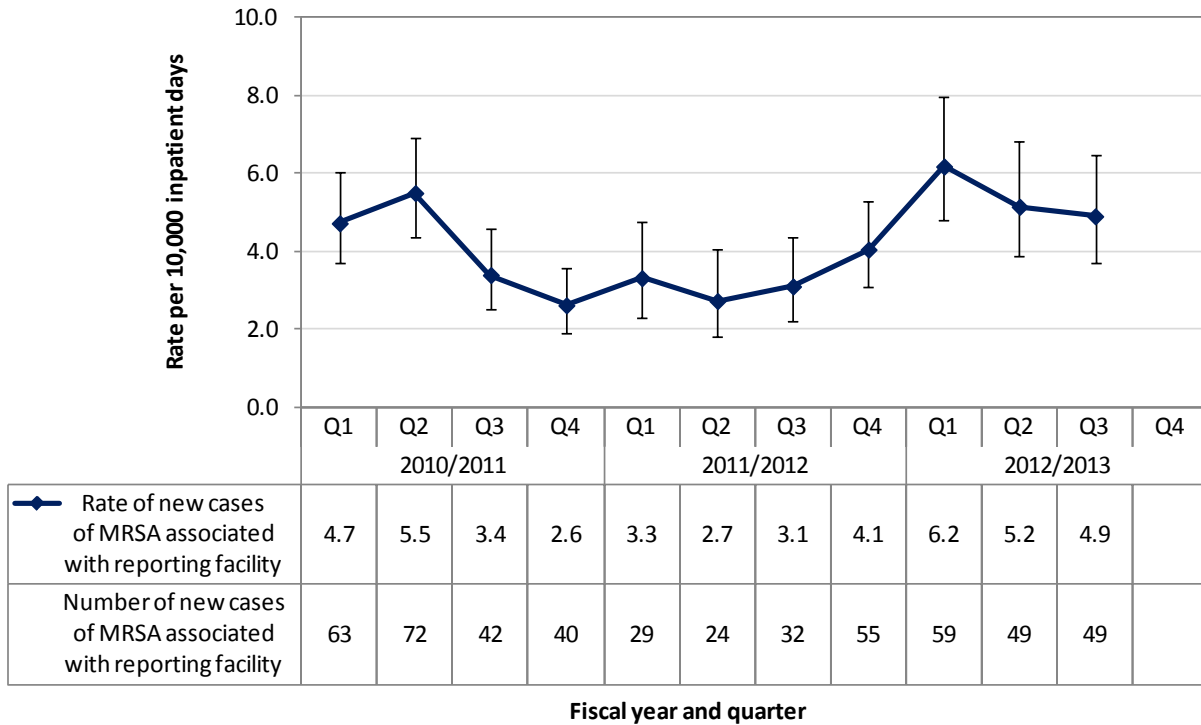


Figure 3. Number of new cases and rate of MRSA associated with the reporting facility by fiscal year and quarter in Fraser Health Authority

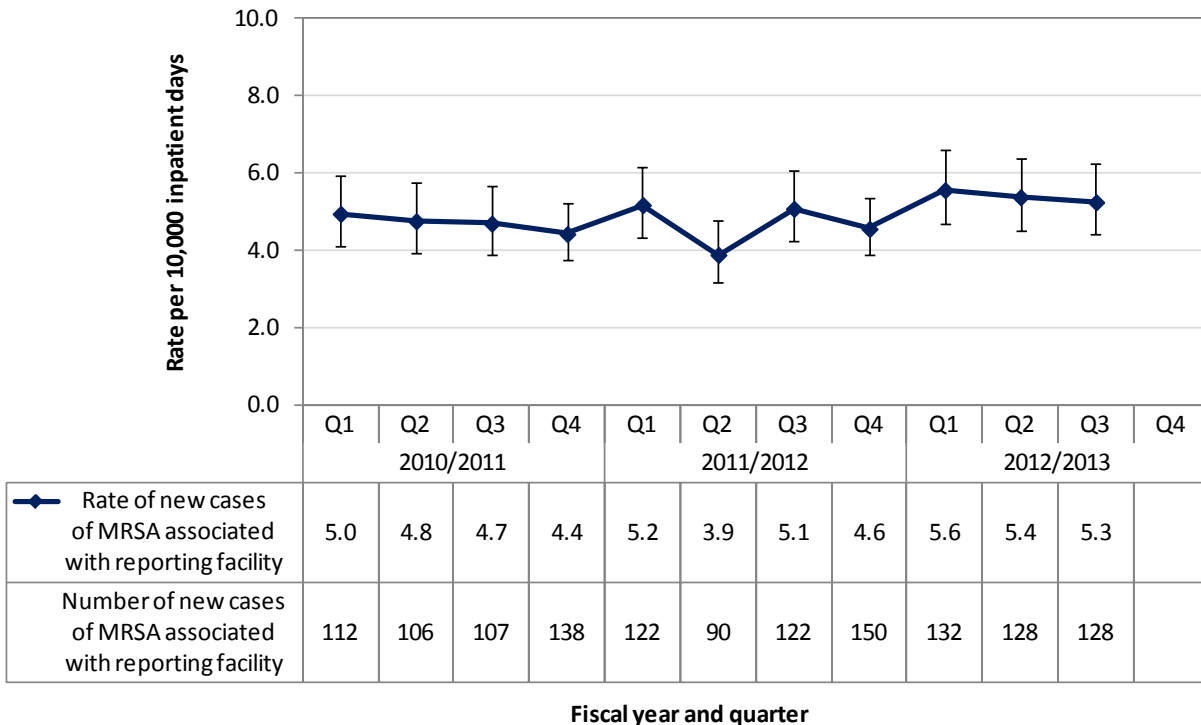


Figure 4. Number of new cases and rate of MRSA associated with the reporting facility by fiscal year and quarter in Vancouver Coastal Health Authority²

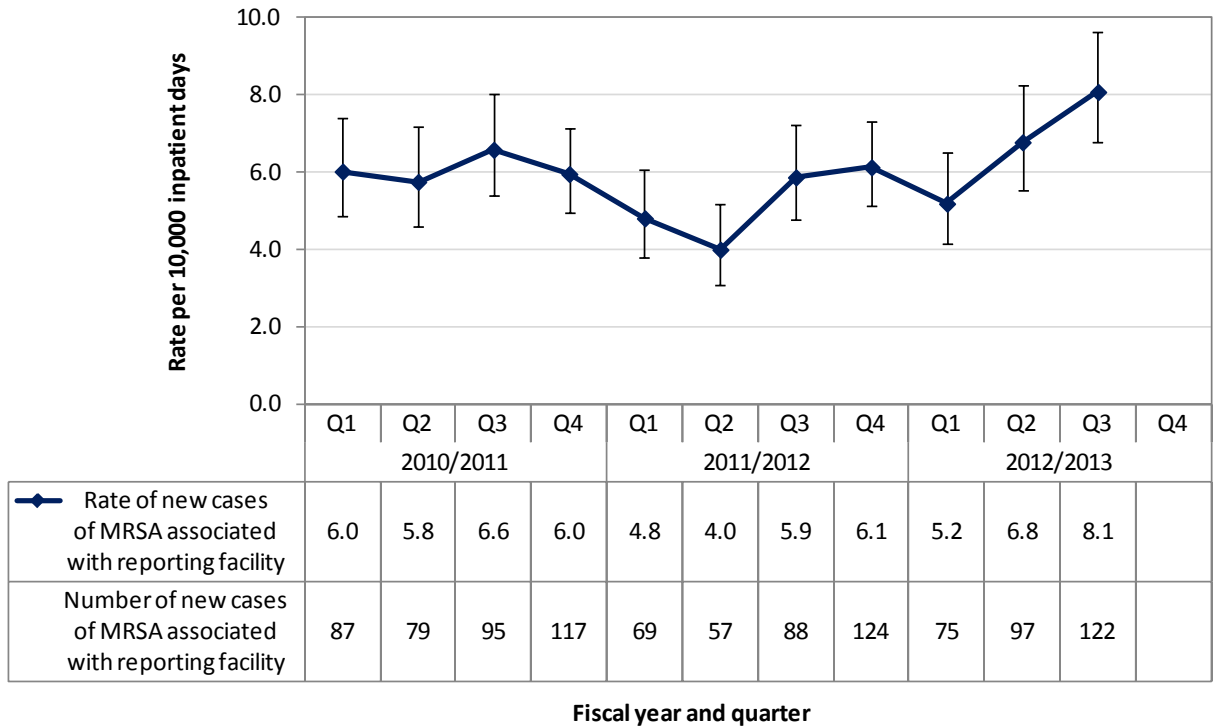
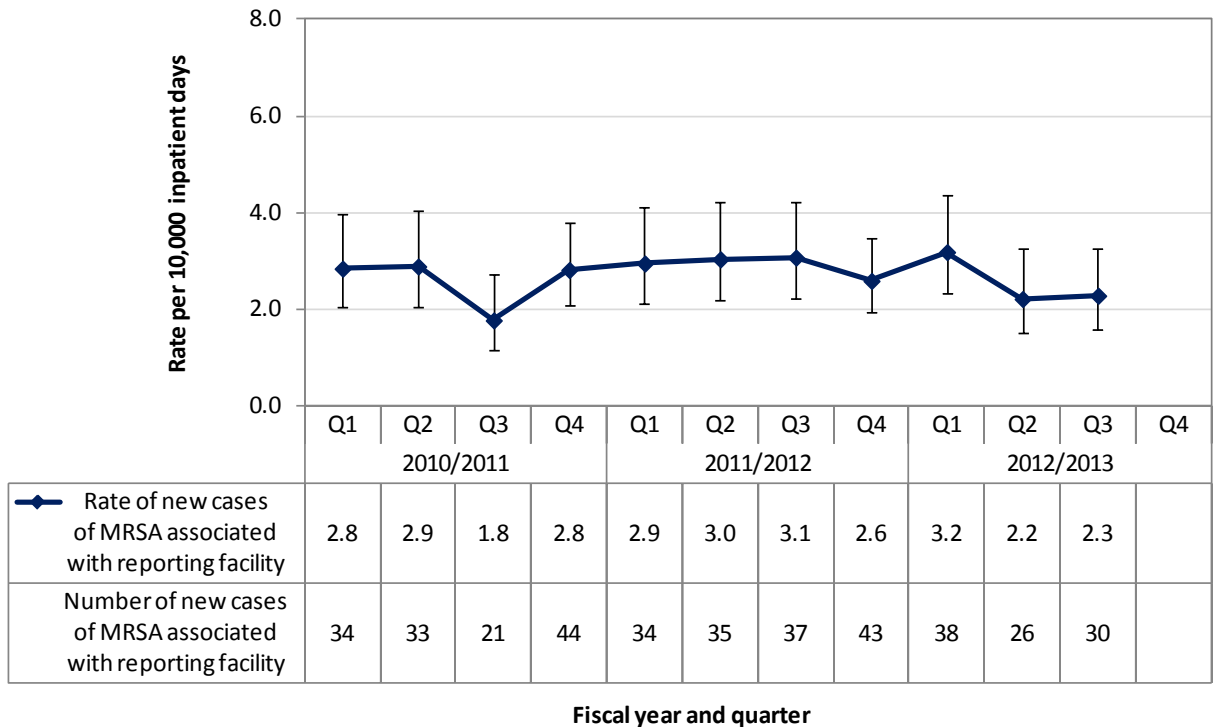


Figure 5. Number of new cases and rate of MRSA associated with the reporting facility by fiscal year and quarter in Vancouver Island Health Authority



Note: 2. Includes Providence Health Care (PHC)

Figure 6. Number of new cases and rate of MRSA associated with the reporting facility by fiscal year and quarter in Northern Health Authority³

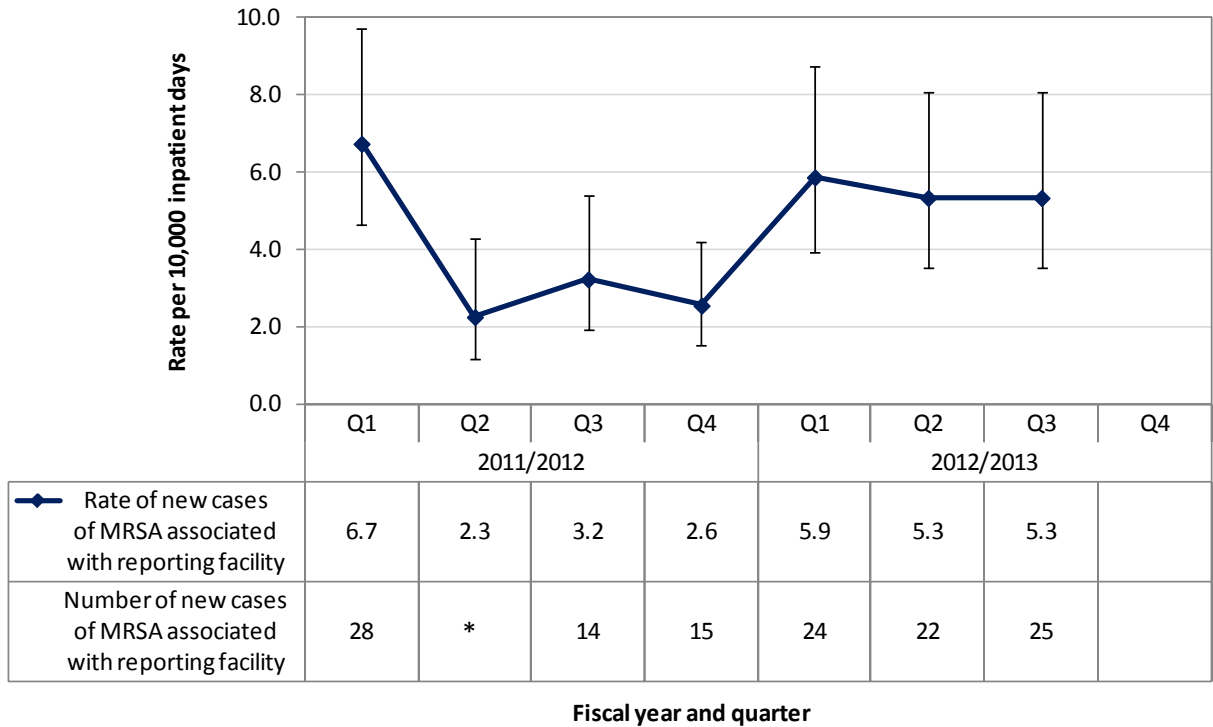
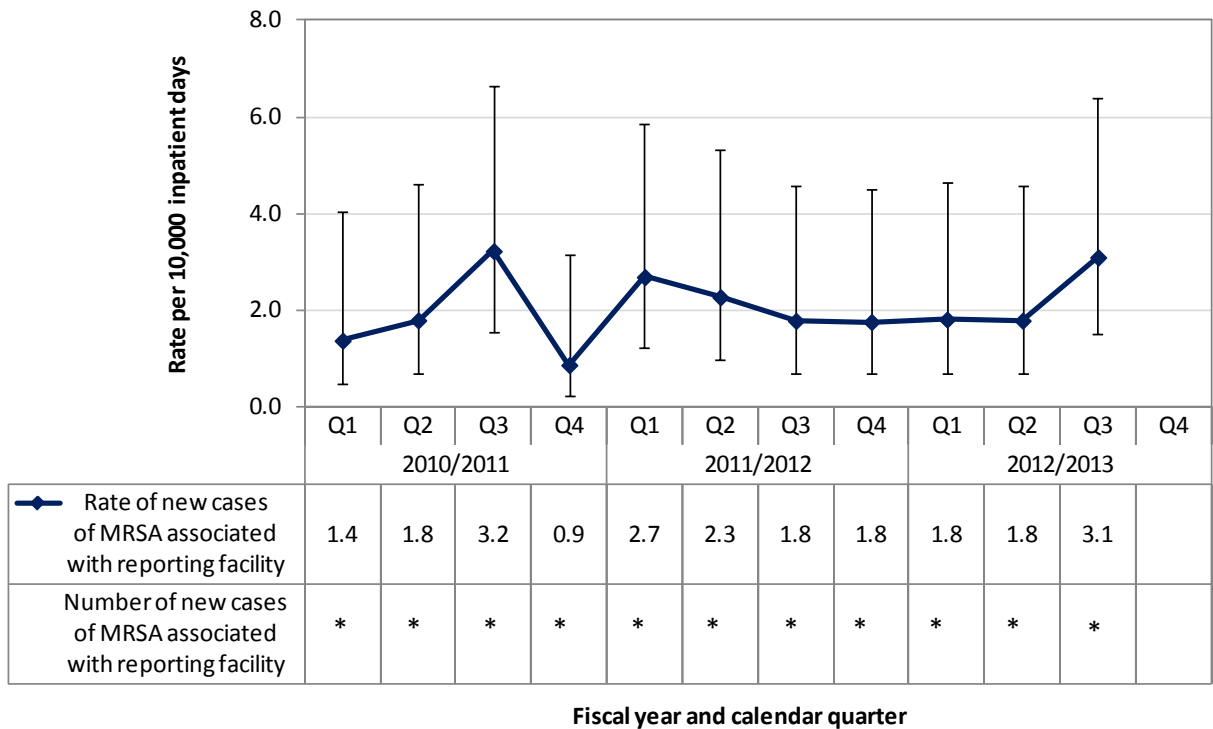


Figure 7. Number of new cases and rate of MRSA associated with the reporting facility by fiscal year and calendar quarter in Provincial Health Services Authority



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

3. PICNet's MRSA surveillance protocol was not implemented in the acute care facilities of NHA for FY 2010/2011.