

## Methicillin-resistant *Staphylococcus aureus* (MRSA) Update, Q2 2014/2015

December 2014

### Summary Table

	Q2 2014/2015	Previous quarter	Last 4 quarters
Total new MRSA cases identified	734	610	2,683
Number of MRSA associated with the reporting facility	400	287	1,408
Total inpatient days	702,236	698,855	3,099,292
<b>Provincial rate (95% CI) per 10,000 inpatient days</b>	<b>5.7 (5.2-6.3)</b>	<b>4.1 (3.7-4.6)</b>	<b>4.5 (4.3-4.8)</b>

### Highlights

- The provincial rate of new cases of MRSA associated with the reporting facility in Q2 of 2014/2015 was significantly higher compared to the rate in the previous quarter (Q1 of 2014/2015) and the average rate for the last four quarters (Q2 of 2013/2014 – Q1 of 2014/2015).
- Compared to the same quarter (Q2) in each of the past four fiscal years (2010/2011 to 2013/2014), the provincial rate in Q2 of FY 2014/2015 was significantly higher than that in Q2 of 2011/2012 and 2013/2014, but was not significantly different from the rate in Q2 of 2010/2011 and 2012/2013.

The provincial MRSA surveillance program was established to monitor the incidence and trends of healthcare-associated (HCA) MRSA (either colonization or infection) among the patients who have been hospitalized in the acute care facilities.

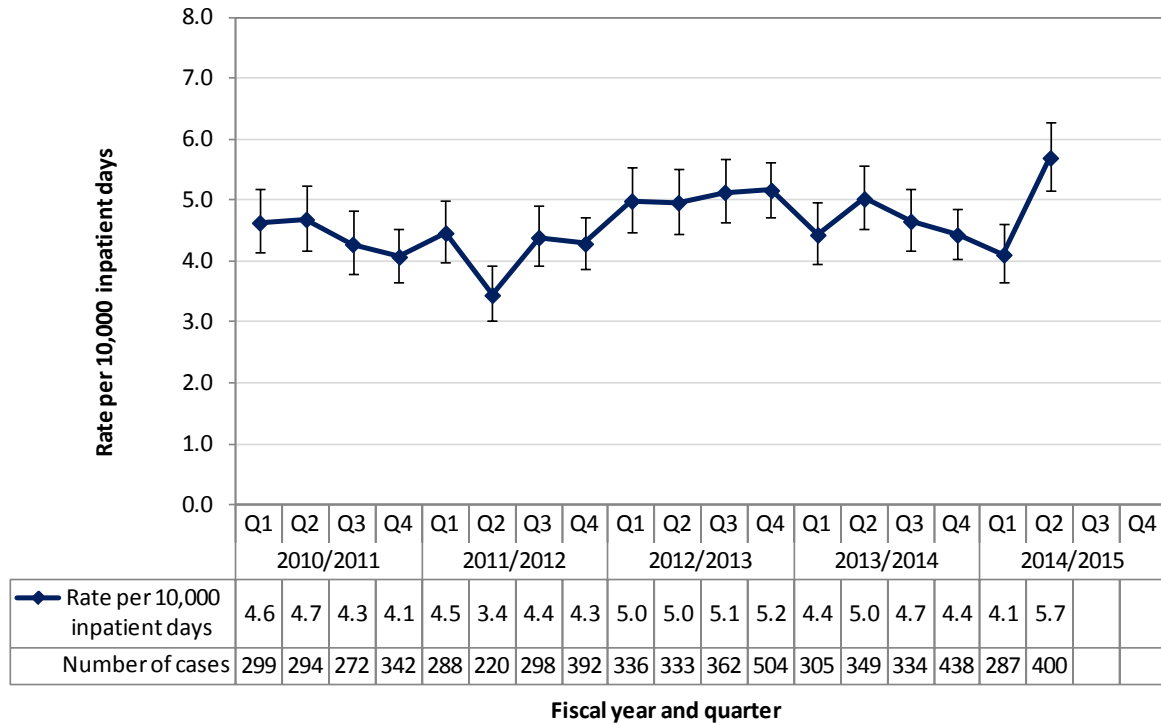
MRSA stands for Methicillin-resistant *Staphylococcus aureus*, a type of *S. aureus* that become resistant to certain antibiotics such as methicillin, penicillin, and amoxicillin, etc, thus more difficult to treat. Like non-resistant *S. aureus*, MRSA often lives on the skin or in the nose of healthy people without causing symptoms (colonization). It can also cause skin and other infections. Most infections are minor, such as pimples and boils. Serious infections — such as wound infections, pneumonia, or septicaemia (infections getting into bloodstream) — can result in life-threatening illness or, on rare occasions, death, if left untreated.

MRSA is primarily spread by skin-to-skin contact or through contact with items contaminated with the bacteria. It has been shown to spread easily in healthcare settings. The hospital patients and residents in nursing homes or long-term care facilities are at a higher risk of getting MRSA. Those with weakened immune systems and chronic illnesses are more susceptible to developing an infection. MRSA have also been found outside hospitals.

Hand hygiene is the most important measure to prevent the spread of MRSA in both the healthcare setting and the community. Hospitals perform active surveillance (e.g., screening of high risk individuals) to identify patients colonized with MRSA so that precautions can be taken to prevent transmission to other patients.

The PICNet website ([www.picnet.ca](http://www.picnet.ca)) has general information about MRSA prevention and control, as well as the case definition, data sources, and limitations used to generate this report. If you have questions or suspect that you have MRSA, please contact your doctor.

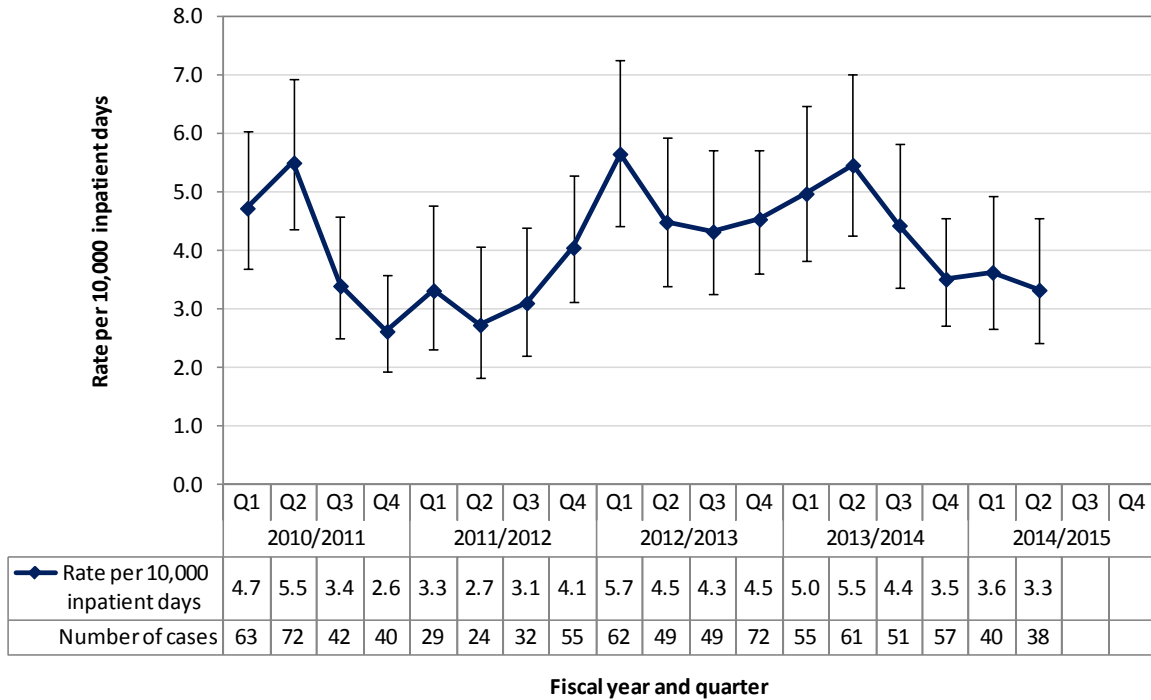
**Figure 1. Provincial rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter, British Columbia<sup>1</sup>**



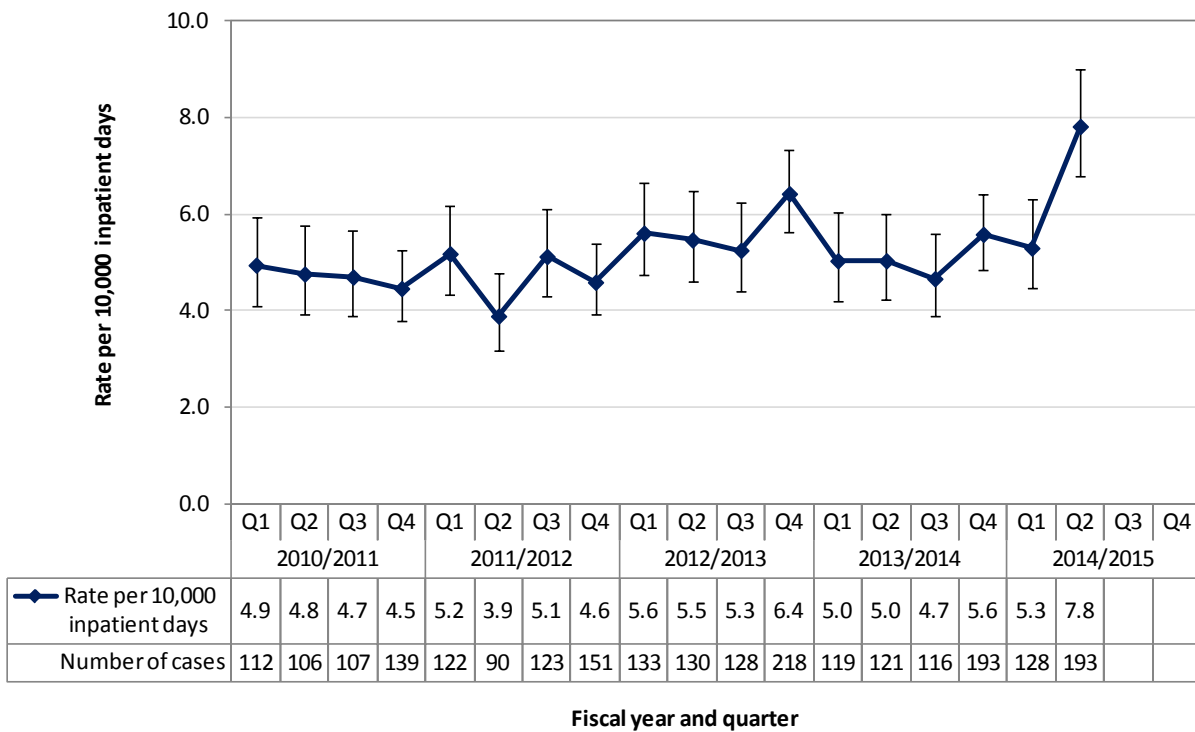
Bars in the line chart represent 95% confidence interval of the rates. Case finding strategy and application of case classification for MRSA surveillance may vary over time and by health authority. The time frame of each fiscal quarter varied by fiscal year and there were more days in Q4 than in Q1, Q2, and Q3 each fiscal year. The same hereinafter.

<sup>1</sup> Excluded from this report was Northern Health in FY 2010/2011, one acute care facility in Island Health between Q1 of FY 2010/2011 to Q2 of FY 2012/2013, and certain acute care facilities in Interior Health from Q3 of FY 2011/2012 to Q2 of FY 2012/2013. Data were aggregated by fiscal quarter for each health authority except PHSA, which aggregated the data by calendar quarter.

**Figure 2. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Interior Health<sup>2</sup>**

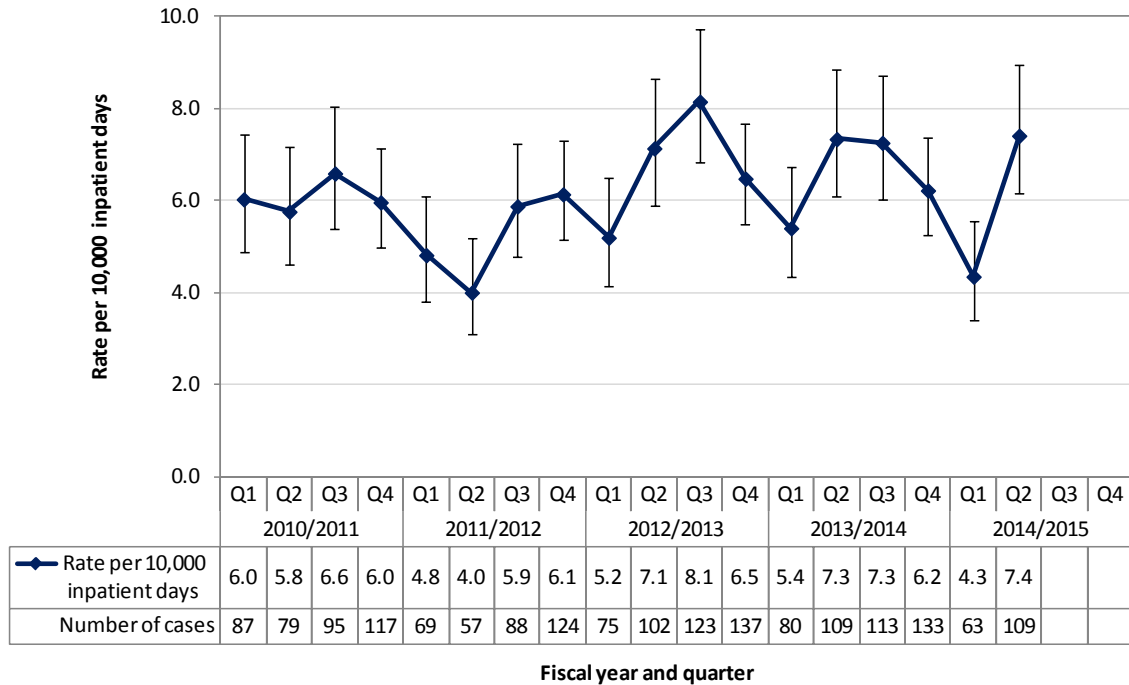


**Figure 3. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Fraser Health**

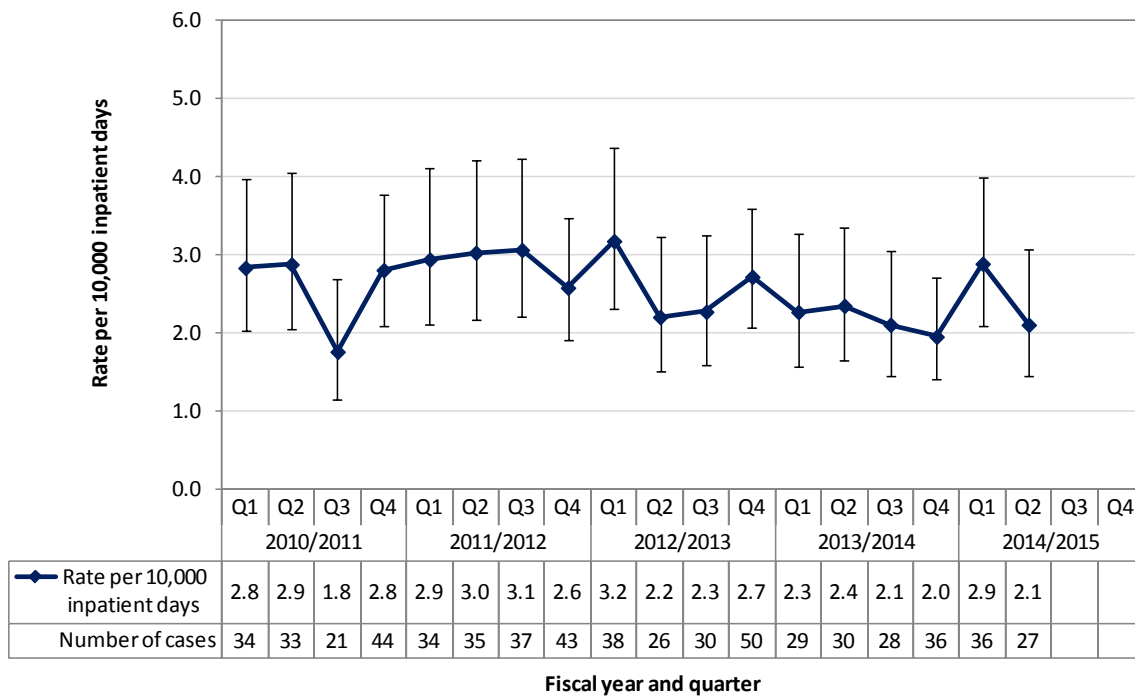


<sup>2</sup> Excluded certain acute care facilities from Q3 of FY 2011/2012 to Q2 of FY 2012/2013

**Figure 4. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Vancouver Coastal Health<sup>3</sup>**



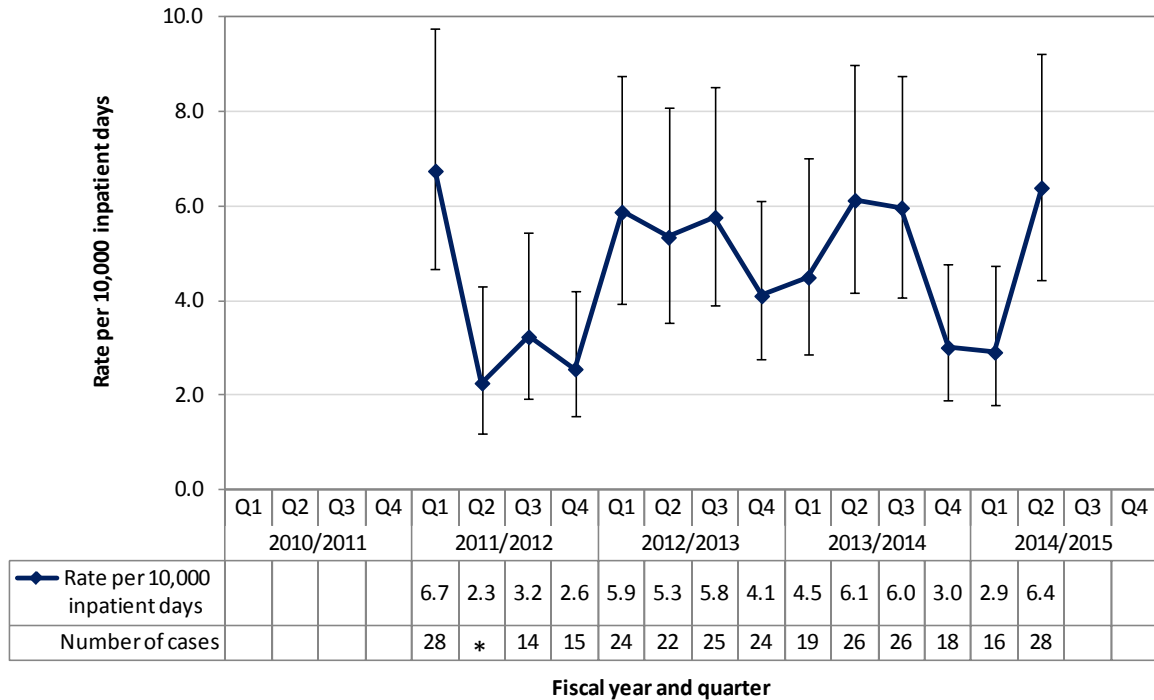
**Figure 5. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Island Health<sup>4</sup>**



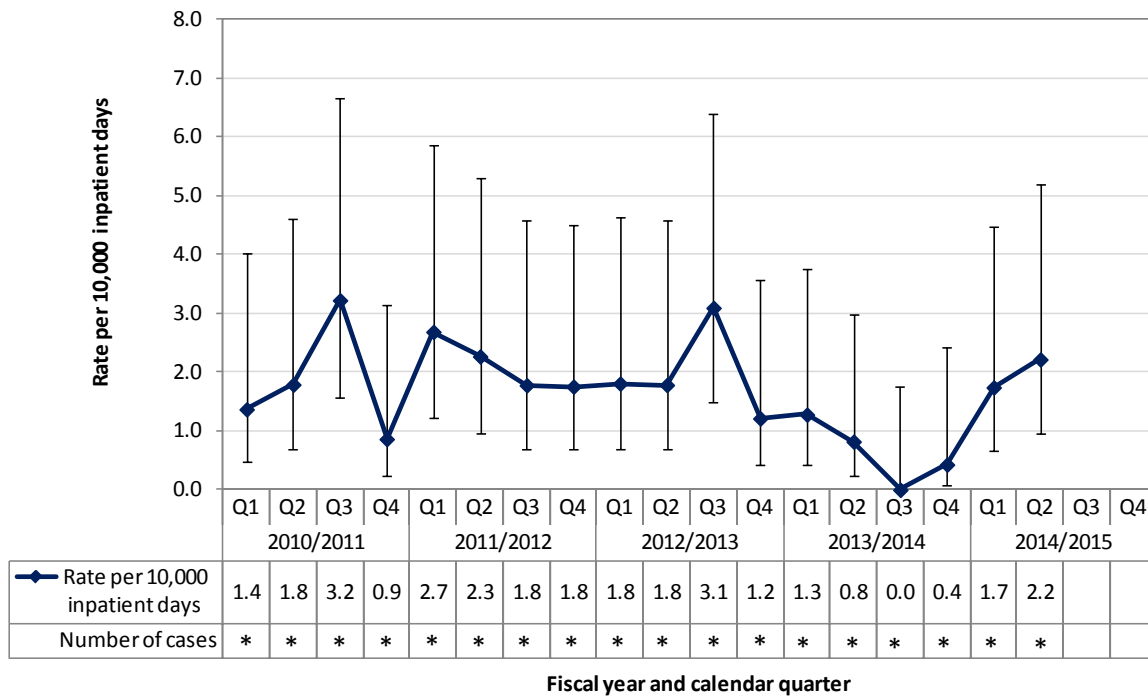
<sup>3</sup> Includes acute care facilities of Providence Health Care (PHC)

<sup>4</sup> Formerly known as Vancouver Island Health Authority. Excluded one acute care facility between Q1 of FY 2010/2011 to Q2 of FY 2012/2103

**Figure 6. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Northern Health<sup>5</sup>**



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



\* represents that the number of cases is <10 to ensure patient confidentiality

<sup>5</sup> Data in 2010/2011 were not available.

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**Disclaimer**

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