

## Methicillin-resistant *Staphylococcus aureus* (MRSA) Update, Q4 2015/16

July 2016

### Summary Table

	Q4 2015/2016	Previous quarter (Q3 2015/16)	Same quarter of previous year (Q4 2014/15)
Total new MRSA cases identified	1,067	785	1,082
Number of new MRSA cases associated with the reporting facility	481	382	537
Total inpatient days	1,035,544	738,513	1,014,015
<b>Rate of MRSA associated with the reporting facility per 10,000 inpatient days (95% CI)</b>	<b>4.6 (4.2-5.1)</b>	<b>5.2 (4.7-5.7)</b>	<b>5.3 (4.9-5.8)</b>

### Highlights

- The provincial rate of new MRSA cases associated with the reporting facility decreased compared to last quarter (Q3 2015/16), however the change was not statistically significant.
- The rate was lower than the same quarter of last year (Q4 2014/15) and the overall trends since Q4 2014/15 was slightly downward, although the rates did not change statistically significantly.

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

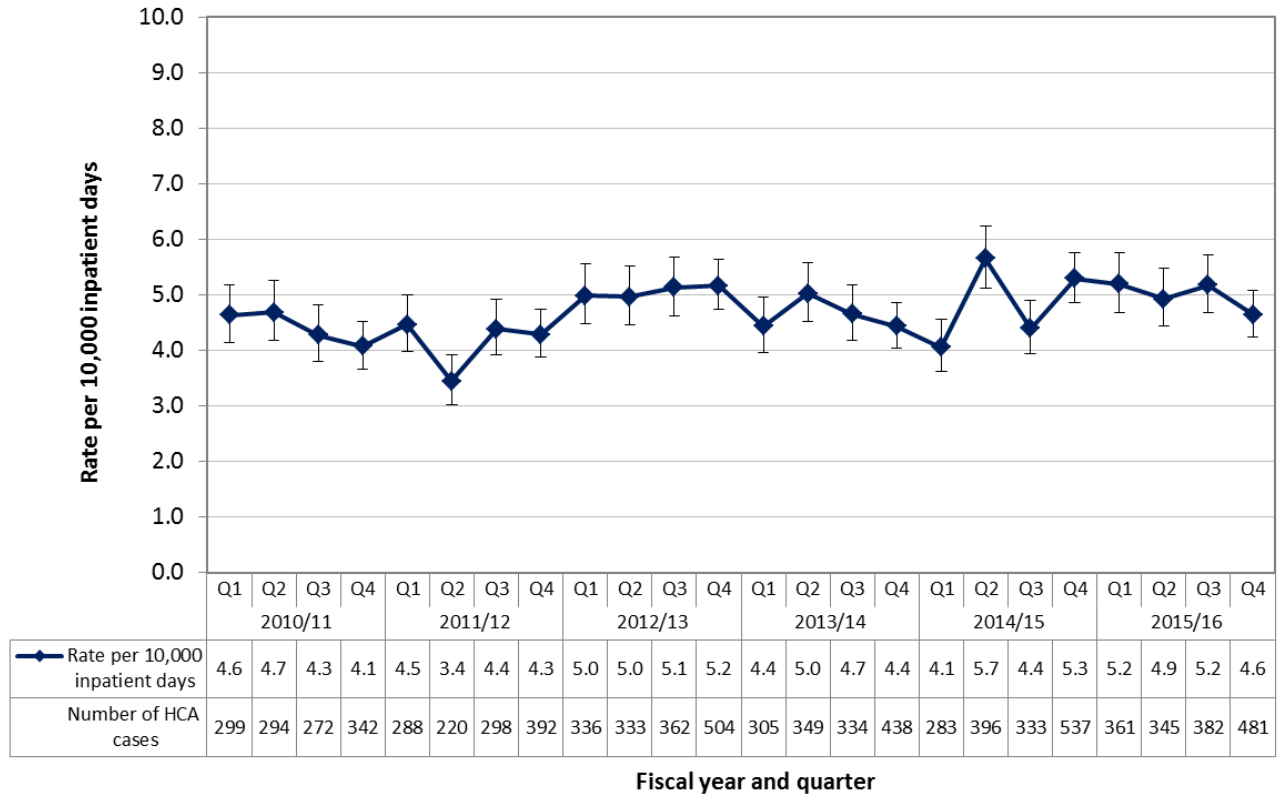
MRSA stands for Methicillin-resistant *Staphylococcus aureus*, a type of *S. aureus* that has become resistant to certain antibiotics such as methicillin, penicillin, amoxicillin, etc., and is thus more difficult to treat. MRSA often lives on the skin or in the nose of healthy people without causing symptoms (this is called colonization). It can, however, 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 the bloodstream) — can result in life-threatening illness or, on rare occasions, death, if left untreated. Those with weakened immune systems and chronic illnesses are more susceptible to developing an infection.

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, therefore hospital patients, and residents in nursing homes or long-term care facilities, are at a higher risk of acquiring MRSA. In addition, MRSA has been found in community settings.

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 or healthcare provider.

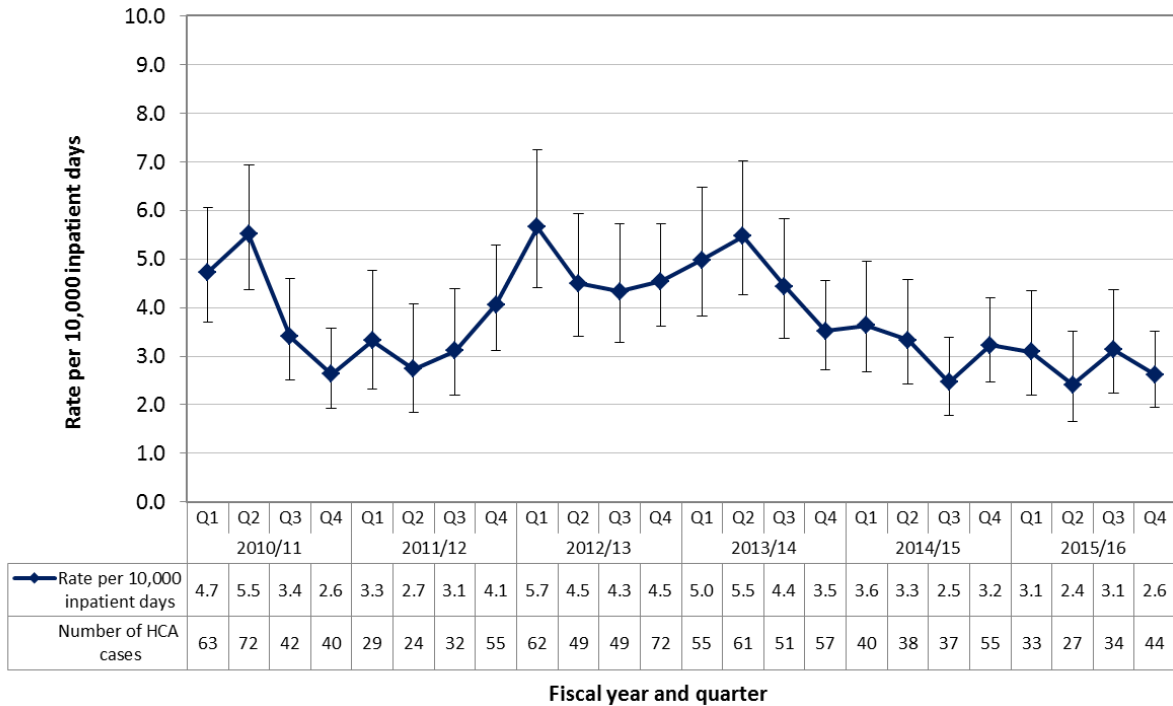
**Figure 1. Provincial rate and number of new cases of MRSA associated with the reporting facility by fiscal year and quarter, British Columbia<sup>1</sup>**



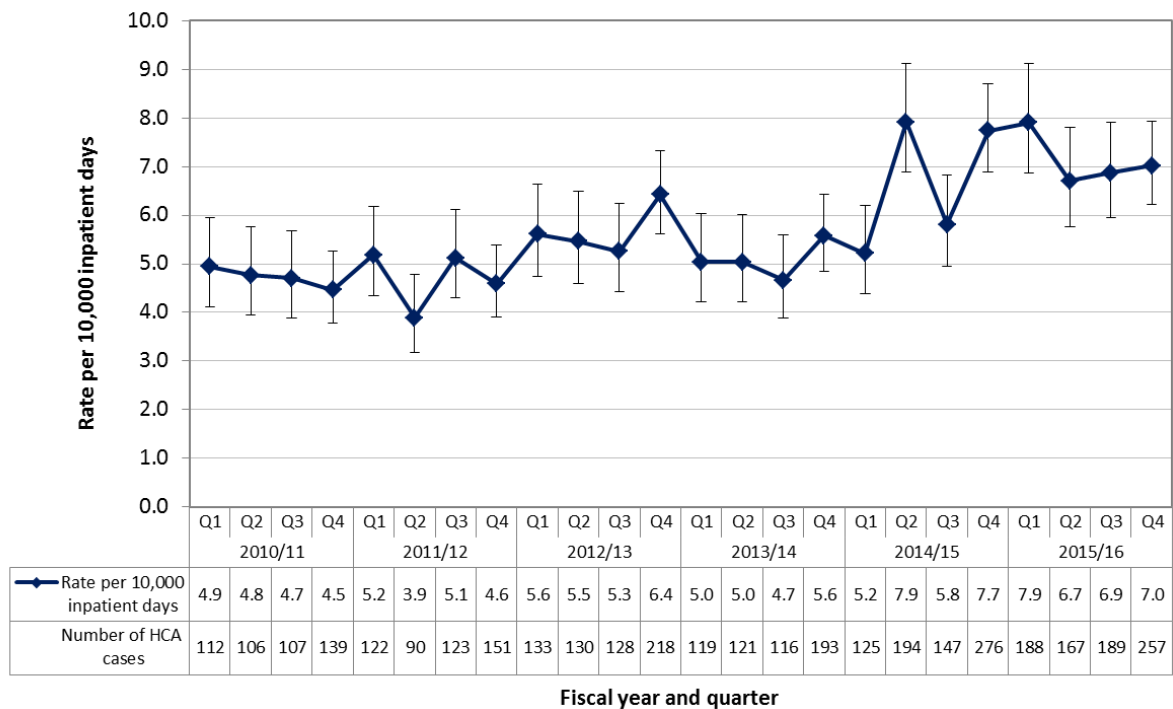
Note: vertical bars on the line represent 95% confidence interval of the rates to show an estimated range of values

<sup>1</sup> 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 each fiscal year. Case finding strategy and application of case classification for MRSA surveillance may vary over time and by health authority.

**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>**

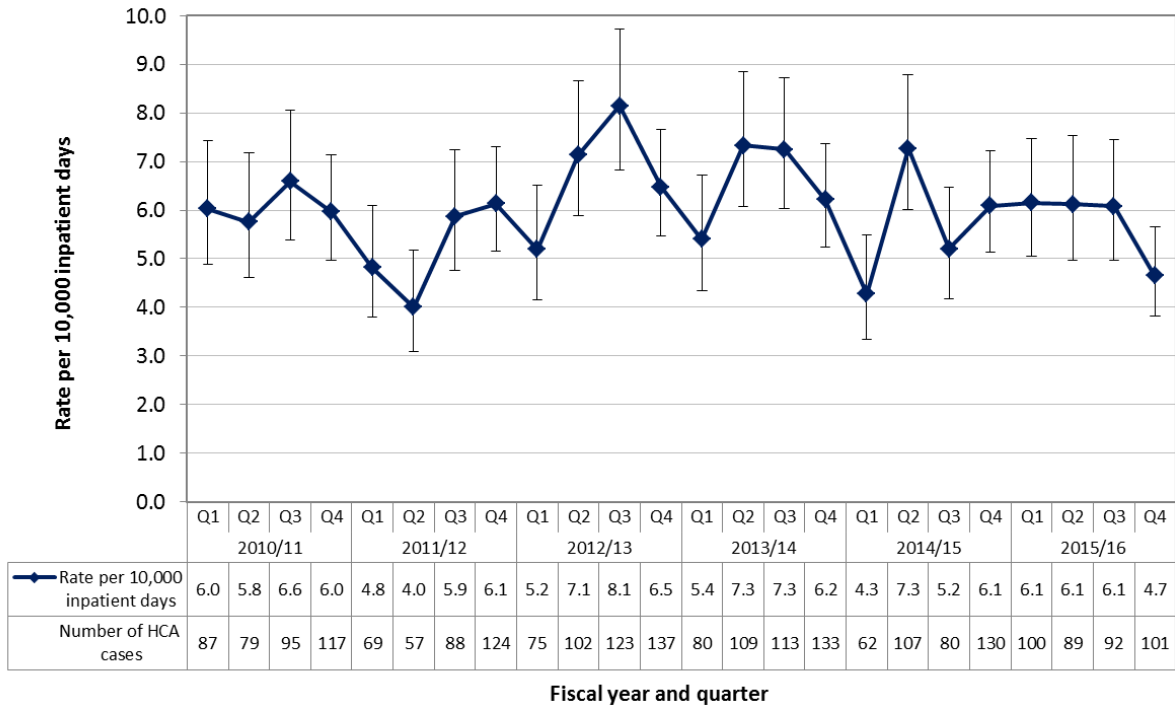


**Figure 3. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Fraser Health**

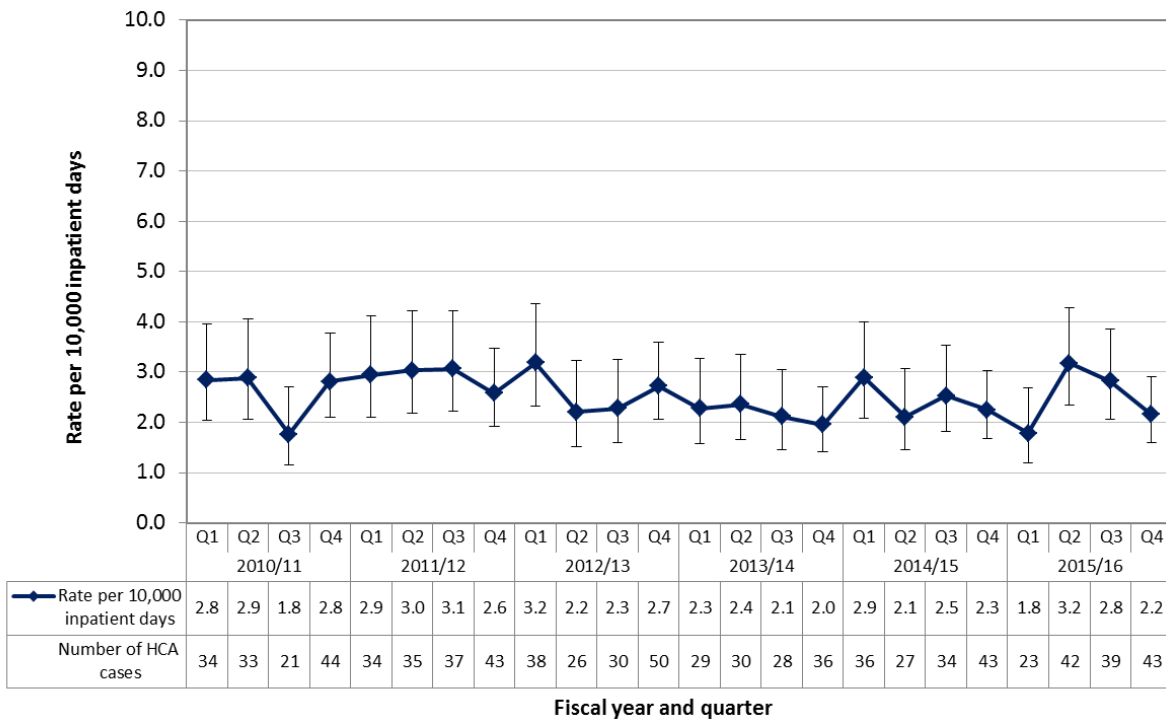


<sup>2</sup> Excluded certain acute care facilities from Q3 of FY 2011/2012 to Q2 of FY 2012/2013

**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>**



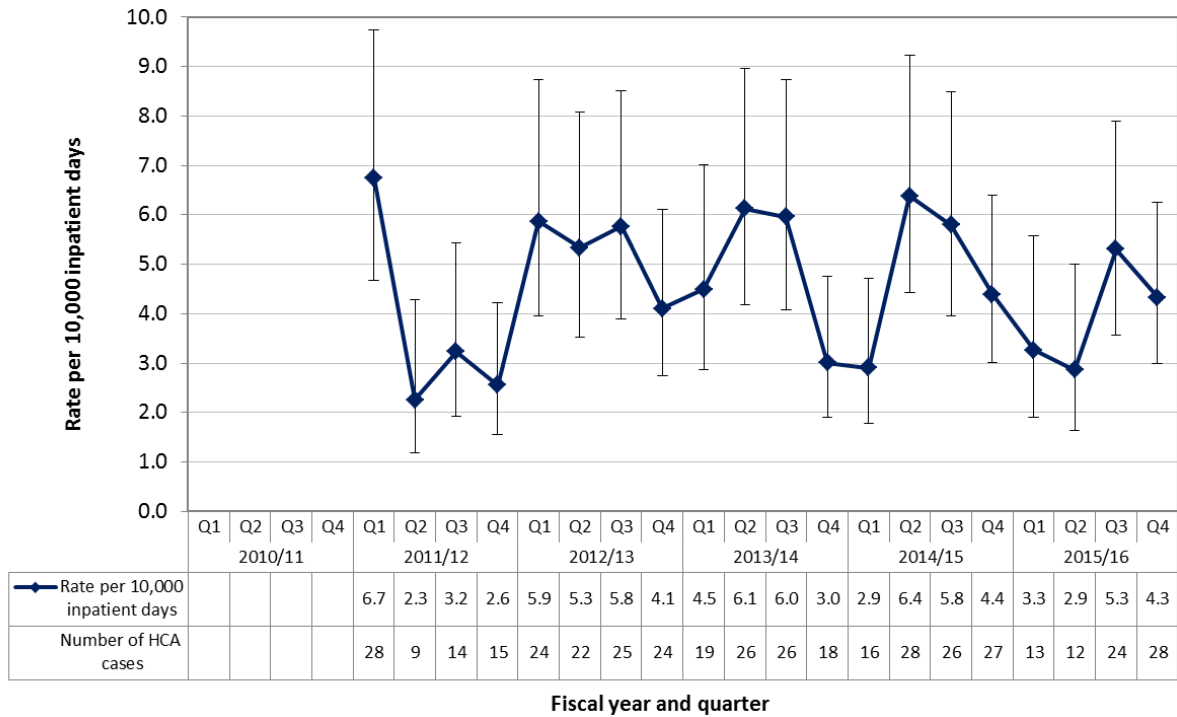
**Figure 5. Rate and number of new cases of MRSA associated with the reporting facility, by fiscal year and quarter for Island Health<sup>4</sup>**



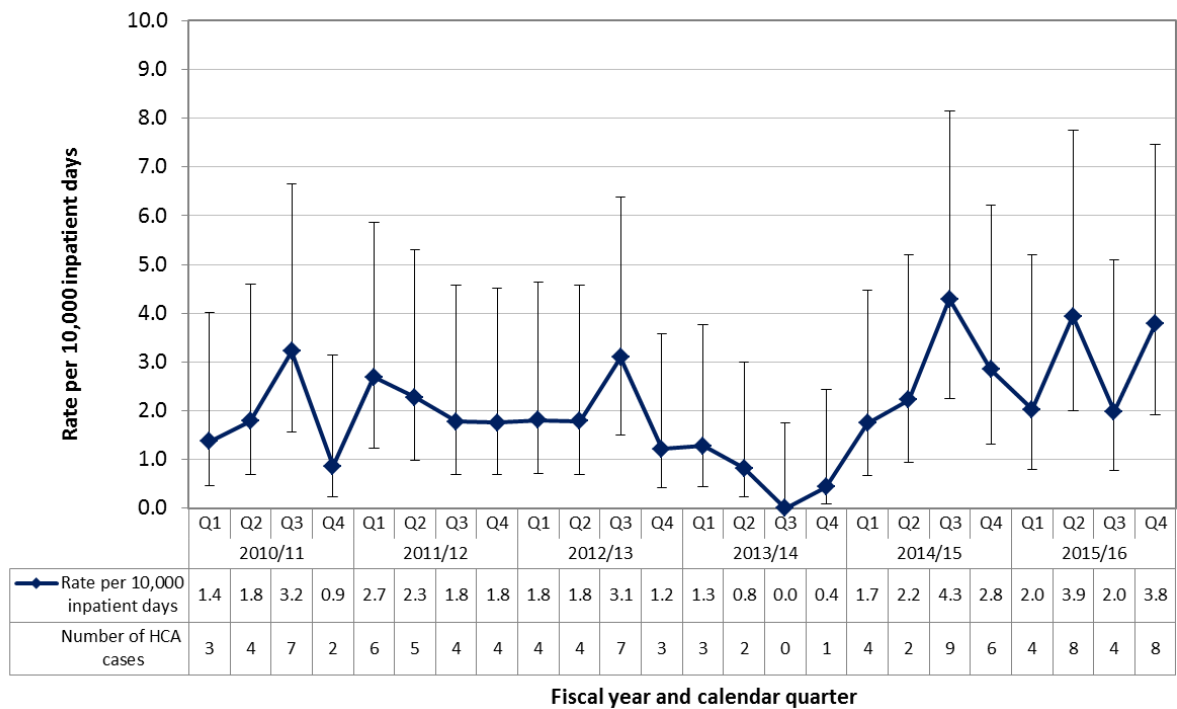
<sup>3</sup> Includes acute care facilities of Providence Health Care (PHC)

<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**



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

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**Disclaimer**

The purpose of this report is to provide information on healthcare-associated infections identified among the patients admitted to the acute care facilities to healthcare providers, decision-makers, patients, and the public. This report may be used, in whole or in part, as the basis for infection prevention and control practices to improve the quality of healthcare services. PICNet does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information in the report; neither does it intend to provide specific medical advice. Commercial uses are prohibited without express written permission.