

Healthcare-associated infections surveillance report

Methicillin-resistant Staphylococcus aureus (MRSA) Update, Q1 2016/17

November 2016

Summary Table

	Q1 2016/17	Previous quarter (Q4 2015/16*)	Same quarter of previous year (Q1 2015/16)
Total new MRSA cases identified	713	1,067	757
Number of new MRSA cases associated with the reporting facility	325	481	361
Total inpatient days	655,086	1,035,544	695,469
Rate of MRSA associated with the reporting facility per 10,000 inpatient days (95% CI)	5.0 (4.5-5.5)	4.6 (4.2-5.1)	5.2 (4.7-5.8)

^{*} There were more days in fiscal Q4 2015/16 (119 days) than in Q1 2016/17 (79 days) and Q1 2015/16 (79 days)

Highlights

- The provincial rate of new MRSA cases associated with the reporting facility increased in Q1 of 2016/17 compared to the previous quarter (Q4 of 2015/16); however, the change was not statistically significant.
- The MRSA rate in Q1 of 2016/17 was not significantly different from the same quarter of the previous year (Q1 of 2015/16).
- The provincial MRSA rates were relatively stable over the past six quarters.

The provincial Methicillin-resistant Staphylococcus aureus (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 is 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 severe skin/wound infections, pneumonia, or septicaemia (infections getting into the bloodstream) — can result in life-threatening illness or, if left untreated, death. 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 residential 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 healthcare settings 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) 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.













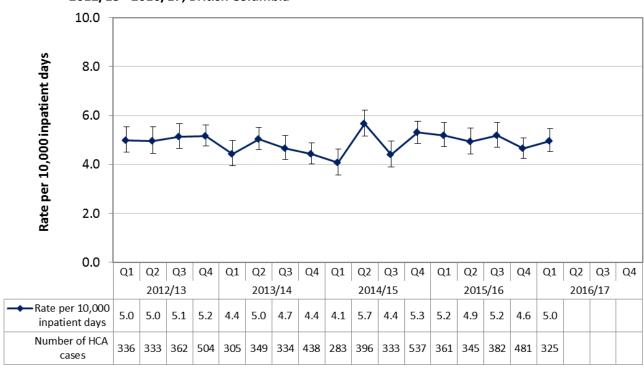


Figure 1. Provincial rate and number of new cases of MRSA associated with the reporting facility, 2012/13 - 2016/17, British Columbia¹

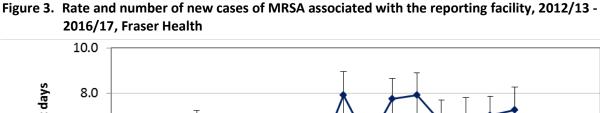
Note: vertical bars on the line represent 95% confidence interval of the rates

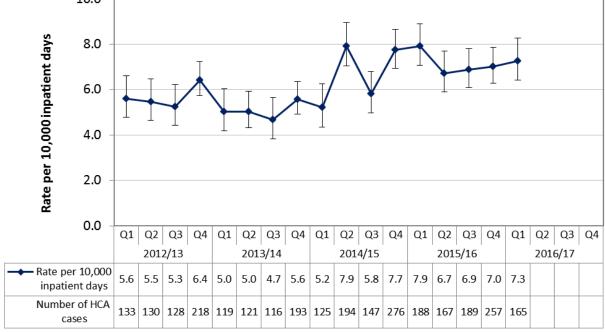
Provincial Infection Control Network of British Columbia (PICNet)

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.

10.0 Rate per 10,000 inpatient days 8.0 6.0 4.0 2.0 0.0 Q1 | Q2 | Q3 Q4 Q1 | Q2 | Q3 | Q4 2012/13 2014/15 2016/17 2013/14 2015/16 Rate per 10,000 5.7 4.5 4.3 4.5 5.0 5.5 4.4 3.5 3.6 3.3 2.5 3.2 3.1 2.4 3.1 2.6 2.9 inpatient days Number of HCA 62 49 49 72 55 61 51 57 40 38 37 55 33 27 34 44 29 cases

Figure 2. Rate and number of new cases of MRSA associated with the reporting facility, 2012/13 -2016/17, Interior Health²





Fiscal year and quarter

 $^{^{2}}$ Excluded certain acute care facilities from Q3 of FY 2011/2012 to Q2 of FY 2012/2013

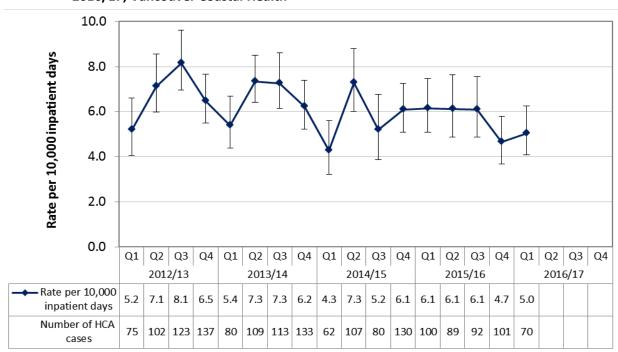


Figure 4. Rate and number of new cases of MRSA associated with the reporting facility, 2012/13 - 2016/17, Vancouver Coastal Health³

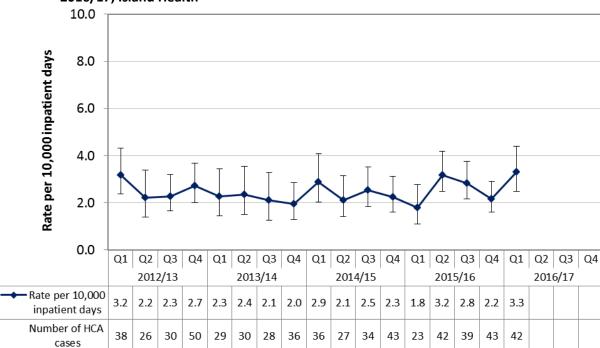


Figure 5. Rate and number of new cases of MRSA associated with the reporting facility, 2012/13 - 2016/17, Island Health⁴

Fiscal year and quarter

³ Includes acute care facilities of Providence Health Care (PHC)

⁴ Formerly known as Vancouver Island Health Authority

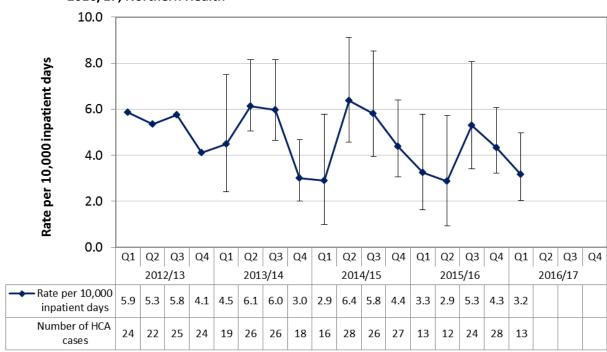
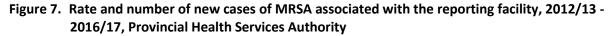
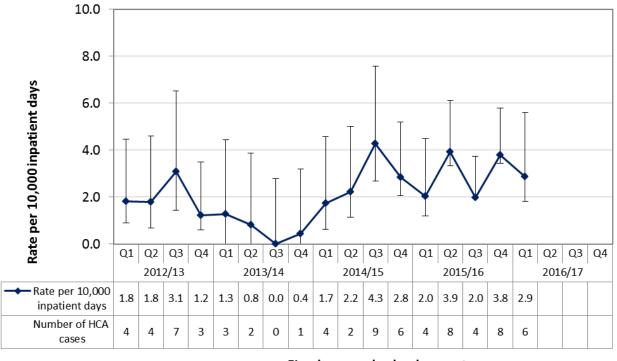


Figure 6. Rate and number of new cases of MRSA associated with the reporting facility, 2012/13 - 2016/17, Northern Health





Fiscal year and calendar quarter

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Disclaimer

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