

## REPORTING MRSA AND VRE BACTERAEMIA RATES IN HOSPITALS

April 30, 2009

Updated Methicillin-resistant *Staphylococcus aureus* (MRSA) and Vancomycin-Resistant Enterococci (VRE) bacteraemia rates of all hospitals are being published today on the Ministry of Health and Long-Term Care's public website. All MRSA and VRE bacteraemia data reported to date can also be found on the public website.

### About this reporting tool

MRSA and VRE bacteraemia rates are published on the ministry website quarterly.

Ontario is requiring all hospitals to monitor and report MRSA and VRE bacteraemia cases in their facilities so the most appropriate infection prevention and control measures can be put in place.

Hospitals will use this information to ensure they are maintaining the highest possible standards of patient safety.

### How to interpret MRSA and VRE bacteraemia data

When interpreting the data, it's important to understand that many differences exist from hospital to hospital which could affect their case counts and MRSA and VRE bacteraemia rates. These include:

- Size of the hospital;
- Complexity of the services offered;
- Type of patient population served;
- Use of antibiotics;
- Percentage of patients age 65 or older in the hospital.

MRSA and VRE bacteraemia rates may vary by quarter. An increase of infection rates in several facilities over the winter months may occur.

Previously reported MRSA and VRE bacteraemia rates will be available on the Ministry of Health and Long-Term Care's website when enough information becomes available. Fluctuations in rates are best interpreted when rates from multiple periods are taken into account.

The data presented on the ministry website is best used to measure individual hospital performance over time. It can also be used to ask informed questions to hospital representatives about their infection prevention and control program. It's not intended to be the only source of information for making decisions about hospital care nor for generalizing about the overall quality of care provided by hospitals.

## **How are the data presented?**

Data are presented in tables by hospital site. Included in the tables are data on the number of new hospital-acquired MRSA and VRE bacteraemia cases as well as the MRSA and VRE bacteraemia rate by quarter. The data presented on the ministry's website has been confirmed by the hospitals and is also being reported on the hospitals' websites.

The total number of new cases of MRSA or VRE bacteraemia acquired in the hospital in a quarter is divided by the total number of patient days for that quarter. Patient days are the number of days spent in a hospital for all patients. The results are multiplied by 1000. Rates are expressed as cases per 1,000 patient days and exclude patients less than one year of age. This rate calculation allows the level of hospital activity to be taken into account, which may fluctuate over time and is different across hospitals.

Hospitals are grouped by hospital type to facilitate more relevant comparisons. The hospital types are:

- Large Community;
- Small Community;
- Mental Health;
- Acute Teaching;
- Complex Continuing Care & Rehabilitation.

These hospital types take into consideration differences in hospital size and patient case mix, factors which can make a significant difference in average MRSA and VRE bacteraemia rates. For example, teaching hospitals generally serve more complex or sicker - and therefore more vulnerable - patients and could have a higher MRSA and VRE bacteraemia rate than the provincial average.

The provincial MRSA and VRE bacteraemia rate is aggregated data, compiled from the data for all hospitals in Ontario.

## **January, February and March 2009 Data**

- 54 cases of MRSA bacteraemia were found and the provincial MRSA rate was 0.02.
- 11 cases of VRE bacteraemia were found and the provincial VRE rate was 0.00.

This is the second time hospitals have been required to report their MRSA and VRE bacteraemia rates and it will take time to establish a trend.

**For public inquiries call ServiceOntario, INFOLine at 1-866-532-3161 (Toll-free in Ontario only)**

Steve Erwin, Minister's Office, 416-326-3986  
Andrew Morrison, Ministry of Health and Long-Term Care,  
416-314-6197

**ontario.ca/health-news**  
*Disponible en français*