

December 2007

**Rural and Regional Health and Aged
Care Services Division**

Department of Human Services

**Rapid Multi Resistant Organism (MRO)
Typing Guidelines**

Introduction

The appropriate infection control management of patients with clinically important bacterial outbreaks such as methicillin resistant *Staphylococcus aureus* (MRSA) and vancomycin resistant enterococcus (VRE) are often influenced by information regarding whether the organism is genetically the same.

A rapid standardised typing service will enable earlier recognition and characterisation of infection clusters which will facilitate timely implementation of appropriate management and treatment regimes.

The Microbiological Diagnostic Unit (MDU) Public Health Laboratory provides public health testing for suspected cases of infectious diseases that includes an emergency response capability. A rapid typing service will enhance MDU's bacterial typing capacity for Victorian public hospitals.

Benefits of Service

A Victorian rapid typing service will facilitate:

- Earlier recognition and characterisation of hospital acquired infection clusters
- Improved management and prevention of infections
- Improved recognition and control of infection outbreaks
- Shorter and safer hospital stay for consumers
- Access to rapid and sophisticated typing of isolates

An enhanced statewide capacity for bacterial typing will enable early and regular engagement of the Department of Human Services (the department) when clusters of infection occur in health care facilities.

The department and health services will be provided with regular de-identified summary reports of typing results. Results will inform clinical services of likely clonality of clusters, facilitating control measures, source detection and prevention of further cases.

Duration of Understanding

This agreement operates from the 1 December 2007, finishing on the 30 June 2012.

Funding

The Department of Human Services will fund the Microbiological Diagnostic Unit (MDU) Public Health Laboratory via the University of Melbourne service agreement.

The funding is for the service to continue until and including 2011/2012.

Availability of Service

The Ribotyping service is available to Victorian public health services and hospitals for rapid typing of agreed isolates from clusters of disease where there is reason to believe cases may be related.

In certain circumstances the use of the service may be required e.g. public health outbreak or research; in these circumstances agreement will need to be reached with the department for the use of the service.

The service will issue a minimum of 1,000 results per year upon request at the rate of up to eight tests per workday.

Responsibility of Requesting Laboratory

The requesting laboratory must have authorization from the department for each typing request. The request is to be forwarded to the Quality and Safety Branch via an e-form (under development) at <http://www.health.vic.gov.au/ideas/infcon>.

Bacteria for typing must be grown and provided as a fresh pure culture on a non-selective purity plate.

The number and selection of isolates as agreed by the department are forwarded on purity plates to MDU accompanied by a completed request for Ribotyping form, copies of the original request forms and copies of the referring laboratory's reports to date.

Typing runs are batched to ensure a full run of eight isolates requiring identical test conditions per run. Smaller runs will only be considered in exceptional circumstances.

When it has been agreed to begin typing isolates, the referring laboratory is to advise MDU of dispatch and ensure isolates arrive at MDU by 3:00 PM.

Responsibility of Department of Human Services

The department will approve test requests prior to isolates being forwarded to MDU.

The department is responsible for informing MDU of approvals and the parameters of the approval.

Responsibility of Microbiological Diagnostic Unit Public Health Laboratory

The MDU has appropriate accreditation by the National Association of Testing Authorities.

The MDU is responsible for receiving isolates, performing Ribotyping and reporting results.

Results will include personal details as provided and be distributed as per the request form.

Any disease detected which is scheduled notifiable disease in accordance with the Health (Infectious Diseases) Regulations 2001 will be notified as per the requirements of the legislation.

Test runs will be undertaken each working day when there are sufficient compatible isolates for a full run. Results will then be available in the morning of the next working day and provided to the requesting organization.

The MDU will provide 2 monthly summary reports to the department, including:

- Number of tests conducted (utilisation)
- Turn around times for results
- Summary of typing results

At the completion of the financial year MDU will provide the department an Annual Report detailing the services provided throughout the duration of the agreement.