

Policy Applies to:

All staff Credentialed Specialists, contractors, students, visitors and volunteers in clinical areas.

Related Standards:

NZS 8134.3:2021– Ngā Paerewa Health and disability service standard.

NZS 4304:2002 – Management of Healthcare Waste.

Cultural Considerations:

Nil cultural considerations for the screening and surveillance of MDRO, however for many patients particularly Māori, whānau support is extremely important. Whānau should be included (where indicated by the patient) in any MDRO finding and education that is offered by Mercy staff. Whānau will be instrumental to help the patient process their MDRO status and psychological impact of any transmission-based precautions that may be provided.

Rationale:

To prevent and control the transmission of MDROs within the hospital, ensuring patient safety and compliance with Ngā Paerewa Health and Disability Services Standard NZS8134:2021.

Controlling MDRO's is essential because they:

- Are resistant to usual antimicrobial therapy, limiting treatment options.
- Increase patient morbidity and mortality.
- Prolong hospital stay and escalate treatment costs (not limited to monetary cost).
- Have the potential to spread within healthcare facilities and the community.
- Act as a source of resistant genes, facilitating transmission to other organisms.

Definitions:

PPE- personal protective equipment.

IPCC- Infection Prevention and Control Committee

IPC – Infection Prevention and Control

MDRO: *Organisms resistant to multiple antimicrobial classes, including but not limited to:*

- **MRSA** – Methicillin-resistant Staphylococcus aureus
- **ESBL** – Extended-spectrum beta-lactamase-producing Enterobacteriaceae
- **VRE** – Vancomycin-resistant Enterococcus
- **CPE/CPO** – Carbapenemase-producing Enterobacterales/Organisms (Formerly CRE)
- **CRAB** – Carbapenem-resistant Acinetobacter baumannii
- **Candida auris** – Multidrug-resistant yeast

Objectives:

The hospital will:

- Implement **risk-based screening** for MDROs in elective surgical patients.
- Apply **Standard Precautions** for all patients and **Transmission-Based Precautions** for confirmed or suspected MDRO cases as per the MDRO screening, testing and patient placement flow charts.
- Ensure compliance with **Ngā Paerewa outcome statements** for infection prevention and cultural safety.
- Maintain robust **antimicrobial stewardship** and **surveillance systems**.

Responsibilities

- **Infection Prevention and Control Team:** Develop protocols, monitor compliance, and report MDRO trends.
- **Clinical Staff:** Adhere to screening, testing, isolation and PPE requirements.
- **Microbiology Laboratory:** Notify IPC team of MDRO-positive results promptly.
- **Managers:** Ensure staff training and resource availability.

Implementation:

Successful control of MDRO is based on a combination of interventions:

- Screening of patients at high risk of MDRO carriage
- Isolation and Precautions
- Environmental Cleaning
- Antimicrobial Stewardship
- Staff Education

Screening

Screening adult patients for MDRO

Screening patients for MDRO is an important measure in the control of the spread of these resistant organisms.

- *Please note Manaaki modified screening for Endoscopy and Eye surgery. No screening and testing for this group. Environmental changes, cleaning processes and IPC protocols are in place for every patient. If a patient has a known MDRO, IPC protocol related to that MDRO following a risk assessment will be put in place for the patients' stay.*

All other non-Manaaki patients are screened on the first contact with the Credentialed Specialist according to the MDRO screening and testing flow chart, see **Appendix 1**.

Screening children 10 years and under for MDRO

Children 10 years and under are exempt from testing. Although children are not exempt from MDRO carriage and infection, Children admitted to Mercy are allocated their own room with a caregiver/parent in attendance. Testing children can be difficult and traumatic, therefore they are not tested.

If at any stage if a child has transmission risk factors, or signs and symptoms of infection, transmission precautions based on those risk factors apply.

Further details on screening, including communication of MDRO status can be found in the Appendices of this policy.

Isolation and Precautions

Modes of transmission:

Contact (direct and non-direct) transmission is the primary mode of spread for MDRO:

- Transient carriage on the hands of health care workers is a significant risk for transmission. Surfaces and equipment can also become reservoirs and contribute to spread within the healthcare environment.

Droplet transmission may also be implicated in the spread of MDRO when the patient has a MDRO organism causing respiratory tract infection.

Following the Patient Placement Flow chart in **Appendix 1, Contact Precautions maybe required. This is important to limit the spread of MDRO to others.**

Not all types of MDRO's require Contact Precautions e.g., when community transmission is epidemic and the patient is at low risk of transmission.

- **For further information on the required IPC protocols needed please refer to the following documents:**

Infectious Diseases – Patient Management Policy and Isolation Policy.

When isolation facilities are limited, the following isolation room prioritisation for patients with an MDRO in the high-risk category is highly recommended:

- Organisms that have been assessed as high risk by IPC, or the Clinical Microbiologist such as *Acinetobacter.baumannii* and *Pseudomonas.aeruginosa*
- CPE/CPO
- VRE
- ESBL Non-E.coli
- E.coli ESBL with transmission factors
- Unknown MDRO status

Environmental Cleaning

Cleaning protocols for transmission precautions applies to patient areas when MDRO colonisation or infections are present. Patient rooms/areas should have transmission precaution signage outside of the entry/exit point indicating what controls are in place to contain MDROs to the area.

- Daily and terminal cleaning with detergent and disinfectants for isolation.
- Enhanced cleaning for high touch surfaces and shared equipment such as using approved detergent and disinfectant wipes.

Antimicrobial Stewardship

In the event of positive MDRO colonisation or infection, antimicrobial review prior to procedure should occur.

- Suppression of MRSA is possible, and treatment should be initiated at least 24 hours before surgery (refer MRSA decolonisation treatment for patients).
- Southern Antimicrobial Guide is the preferred reference guide for the latest antimicrobial protocols.
- Advice from a Clinical Microbiologist should be consulted for antimicrobials requiring permission and where MDRO results are complex. Awanui offers an online consultation service for Clinical Microbiologists in Southern New Zealand, available on their website.

Staff Education

Staff education is achieved through mandatory annual IPC and MDRO education for clinical staff. This occurs at:

- Clinical Orientation at the beginning of employment
- Annually through participation/attendance at IPC education opportunities on IPC and MDRO, scheduled during the calendar year, and available to all staff.

Patient and Whānau education resources are listed as appendices below

Also, see **Isolation Policy** education resource.

Appendix 8 – What you need to know, Patient Information Booklet (Isolation Policy)

Evaluation

- Incident forms.
- Complaints
- Monthly MDRO surveillance reports by the IPC Nurse to the Mercy Hospital Board, and the Quality and Risk Advisory Group
- MDRO surveillance reports every two months to the IPCC
- Audit compliance with screening, isolation and cleaning protocols

Appendices

- Appendix 1 - MDRO Flow Charts – Screening, testing and transmission risk assessment
- Appendix 2 – MDRO Screening Patient Booklet (How to swab guide)
- Appendix 3 – MDRO Whanau Information Booklet
- Appendix 4 – MRSA Patient Booklet
- Appendix 5 – ESBL Patient Booklet
- Appendix 6 – VRE Patient Booklet
- Appendix 7 – CRE Patient Booklet
- Appendix 8 – Information and Management Processes for MDRO

Associated Documents

Internal

- Standard Precautions Policy
- Infectious Diseases Patient Management Policy
- Outbreak Management Policy
- Isolation Policy- Transmission Based Precautions and appendices
- Antimicrobial Policy
- Waste Management Policy
- Environmental Cleaning Policy
- Laundry Policy
- Transfer of Patients Policy
- Discharge Policy
- Clinical Records Policy
- Personal Protective Equipment - Infection Control Policy
- Pre-admission – Trak Electronic Alert System
- Pre-admission- Telephone calls assessment process
- By-Laws for Credentialed Specialists
- New Zealand Formulary

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Southern