

Policy Applies to:

This policy applies to Credentialed Specialists, pharmacists, nursing staff, Infection Prevention and Control committee members, Medicines committee members and other clinical staff members involved in the prescribing, administering, monitoring, auditing, reviewing or supporting antimicrobial use within Mercy Hospital.

Related Standards:

- Ngā Paerewa Health and Disability Services Standard (NZS 8134:2021)
- New Zealand Antimicrobial Resistance Action Plan
- Health New Zealand (HNZ) antimicrobial stewardship guidance
- Australian Council on Healthcare Standards (ACHS) Clinical Indicator Program
- HNZ and Health Quality Safety Commission (HQSC) surgical site infection improvement programmes

Rationale:

Mercy Hospital maintains an Antimicrobial Stewardship (AMS) Programme appropriate to the size, scope and complexity of an elective surgical hospital with outpatient delivery services.

The purpose of this policy is to optimise antimicrobial use, support safe and effective patient care, minimise antimicrobial related harm, reduce antimicrobial resistance and contribute to the prevention of healthcare associated infections.

AMS activities are incorporated within the Infection Prevention and Control (IPC) Programmes, the annual planning processes and supports the compliance with Ngā Paerewa Health and Disability Services Standard.

Cultural Considerations:

Antimicrobial decision making will support culturally safe, equitable, person centred and whānau centred care. Patients and whānau will be supported to understand the purpose, benefits and risks of antimicrobial treatment or prophylaxis, the monitoring and follow up requirements. Communication should consider health literacy, language requirements, cultural preferences and individual care needs.

Definitions:

Antimicrobial stewardship (AMS):

A systematic approach to ensuring antimicrobials are used appropriately to achieve the best clinical outcomes while minimising adverse effects, antimicrobial resistance, and unnecessary antimicrobial exposure.

Surgical Antimicrobial Prophylaxis (SAP):

The administration of antimicrobial therapy before, during, or immediately after a surgical procedure to reduce the risk of surgical site infection when clinically indicated.

NZ Formulary:

An independent, evidence based prescribing resource that provides current information on the selection, dosing, administration and monitoring of medicines used in New Zealand (NZ) for adults.

NZ Formulary for Children:

An independent, evidence based prescribing resource that provides current information on the selection, dosing, administration and monitoring of medicines used in New Zealand (NZ) for children.

Te Whata Kura – Aotearoa Antibiotic Prescribing Guidelines: website

An education tool standardised across NZ that is: evidenced-based, expert informed recommendations for empiric treatment and prophylaxis of infections in adults and children, supports effective, equitable, safe and sustainable antimicrobial use, links for the NZ Formulary, contacts for Infectious Diseases and Clinical Microbiology experts, and guidance on complex dosing. As a live, online tool, the guidelines update from ongoing scientific evidence and practice improvements.

Objectives:

- Promote the appropriate antimicrobial prescribing and administration
- Support optimal surgical antimicrobial prophylaxis practices
- Minimise unnecessary antimicrobial exposure
- Reduce antimicrobial resistance
- Reduce healthcare associated infections
- Support safe and equitable patient outcomes
- Provide access to specialist antimicrobial advice
- Monitor antimicrobial prescribing practices and outcomes

Governance and Accountability

Infection Prevention and Control Committee provides organisational oversight of AMS activities through integration within the IPC programme. Responsibilities include:

- Reviewing AMS indicators and surveillance findings
- Reviewing SAP audit findings
- Reviewing of healthcare associated infection surveillance findings relevant to antimicrobial use
- Reviewing Multi Drug Resistance Organism (MDRO) surveillance findings and antimicrobial resistance trends
- Monitoring AMS improvement activities
- Monitoring progress against AMS objectives within the IPC and AMS Annual Plan
- Supporting compliance with Ngā Paerewa Health and Disability Standards and organisational quality requirements
- Receiving AMS reports and recommendations from the IPC Nurse.

Infection Prevention and Control Nurse are responsible for:

- Coordinating Mercy Hospital AMS programme
- Undertaking surveillance and audit activities
- Monitoring surgical SAP compliance
- Monitoring healthcare associated infection surveillance and audit findings relevant to AMS.
- Monitoring MDRO surveillance findings and antimicrobial resistance trends.

- Trend analysis, reporting and presentation of stewardship findings.
- Collaboration with Credentialed Specialists, Pharmacist, and other stakeholders as required.
- Develop and implement AMS education and improvement initiatives
- Review and maintenance of antimicrobial stewardship policies, resources and supporting documentation, reporting on AMS to IPC committee.

Credentialed Specialists are responsible for:

- Appropriate antimicrobial prescribing and clinical decision making
- Accurate documentation of antimicrobial prescribing decisions
- Overall clinical management of the patient, including use, interpretation and application of recommendations in Te Whata Kura.
- Identifying and acting on factors that may affect antimicrobial selection, dosing and monitoring such as:
 - Infection severity
 - Allergy status
 - Renal function
 - Age
 - Colonisation with resistant microorganisms
 - Available microbiology results
- Seeking expert advice of Infectious Diseases or Clinical Microbiology services when required for complex antimicrobial management decisions.

Implementation:

- An electronic copy of the NZ Formulary (www.nzformulary.org) is available to Credentialed Specialists in all clinical areas and is updated as new information becomes available.
- Te Whata Kura – Aotearoa Antibiotic Prescribing Guidelines are endorsed by Mercy Hospital as the primary antimicrobial prescribing resource and are available electronically to Credentialed Specialists and relevant clinical staff.
- The Principles of AMS **Appendix One**, provides practical stewardship guidance to support antimicrobial prescribing and clinical decision making.
- Specialist advice on antimicrobial therapy can be accessed through the Clinical Microbiologists of Awanui Laboratories and Health New Zealand, Infectious Disease service.
- Credentialed Specialists clearly document antimicrobial prescribing decisions including indication, review plan, treatment duration, stop date and intravenous to oral switch decisions where applicable, of clinical decisions for antimicrobial prescribing, clear stop date recorded, IV to Oral switch if appropriate and prescription review plan.
- Surveillance monitoring of designated SAP parameters is undertaken through the IPC and AMS plan.
- Patients are assessed for medication allergies through the admission and clinical assessment processes. Known antimicrobial allergies are documented within the clinical record and medication chart.
- Antimicrobial Awareness week education is promoted annually to Credentialed Specialists, staff, patients and visitors.

- Patients who meet Mercy Hospital Multi Drug Resistant Organisms (MDRO) screening criteria are tested in accordance with the MDRO policy to support appropriate antimicrobial prescribing and infection prevention measures.
- Available microbiology results, antimicrobial susceptibility reports and regional antimicrobial resistance data are utilised to support AMS activities and quality improvement initiatives.
- AMS findings and improvement opportunities are communicated to relevant stakeholders through established reporting processes.

Evaluation

- Infection Prevention and Control Nurse audits and reports AMS surveillance activities against best practice parameters (choice, dose, timing, duration).
- Antimicrobial surveillance data is reported through organisation quality and Infection Prevention and Control reporting processes.
- SAP audit results are reviewed to identify improvement opportunities and support best practice.
- Healthcare associated infection surveillance findings are reviewed for antimicrobial stewardship improvement opportunities.
- MDRO surveillance findings and antimicrobial resistance trends are monitored and reported.
- AMS education and quality improvement activities are reviewed as part of programme review.
- Findings, recommendations and improvement activities are reported through the IPC governance processes.
- AMS programme effectiveness is reviewed during policy review cycles and ongoing IPC programme evaluation.

Associated Documents

- Appendix One - Principles of Antimicrobial Stewardship.

External

- Te Whata Kura (National antimicrobial guideline for Aotearoa NZ)
- NZ Formulary and NZ Formulary for Children
- Health New Zealand, Te Whatu Ora, IPC Surgical Site Infection Improvement Programme, Anti *Staphylococcus aureus* Programme
- New Zealand Antimicrobial Resistance Action Plan, Ministry of Health, August 2017.
- Australian Council of Healthcare Standards Clinical Indicator Programme.

Internal

- IPC Surveillance Policy
- MDRO Policy
- IPC and AMS Annual Plan
- Infection Prevention and Control Committee Terms of Reference
- Admission and clinical assessment processes, Clinical Services Work Manual
- Medication Policy