Justice Health and
Forensic Mental Health Network

NSW GOVERNMENT

Justice Health NSW Policy

Antimicrobial Stewardship

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Healthier Tomorrows

Antimicrobial Stewardship

Policy Number 1.437

Policy Function Continuum of Care

Issue Date 06 July 2023

Next Review Date 06 July 2026

Risk Rating High

Summary This policy establishes key directives for antimicrobial prescribing and management in Justice Health and Forensic Mental Health Network, with particular reference to antimicrobial prescribing processes, management of antimicrobial formulary and restrictions, use of evidence-based therapy and access to expert clinical advice.

Responsible Officer Director, Executive Medical Services

Applies to
☐ Administration Centres
☐ Community Sites and programs
☒ Health Centres - Adult Correctional Centres or Police Cells
☒ Health Centres - Youth Justice Centres
☒ Long Bay Hospital
☒ Forensic Hospital
Other: Pharmacy Department

CM Reference POLJH/1437

Change summary
- Review of existing policy for currency.
- Policy Responsible Person updated
- Membership updated – added Medical Officer Long Bay Hospital Links updated
- Appendix updated – Tobramycin added to Green list (from Yellow list)
- Approval amended in the first instance to the appropriate Clinical Director

Authorised by Chair, Policy Steering Committee

Revision History

#	Issue Date	Number and Name	Change Summary
4	July 2023	1.437 Antimicrobial Stewardship	• Review of existing policy for currency.

			• Policy Responsible Person updated • Membership updated – added Medical Officer Long Bay Hospital Links updated • Appendix updated – Tobramycin added to Green list (from Yellow list) • Approval amended in the first instance to the appropriate Clinical Director
3	November 2019	1.437 Antimicrobial Stewardship	• Review of restriction list and incorporation of Antimicrobial Stewardship Clinical Care Standard statements. • Minor update on 28 February 2020 on appendix 1 • eMeds minor update 19 July 2022
2	November 2016	1.437 Antimicrobial Stewardship	• Including of 5x5 audit in section 3.4.1 • Update of section 5 contact details
1	December 2015	1.437 Antimicrobial Stewardship	• New policy

PRINT WARNING

Printed copies of this document, or parts thereof, must not be relied on as a current reference document.

Always refer to the electronic copy for the latest version.

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1. Preface

This policy establishes key directives for antimicrobial prescribing and management in Justice Health and Forensic Mental Health Network (Justice Health NSW), with particular reference to antimicrobial prescribing processes, management of antimicrobial formulary and restrictions, use of evidence-based therapy and access to expert clinical advice.

Antimicrobial Stewardship (AMS) can be defined as an ongoing and systematic effort to optimise the use of antimicrobial medicines within a health service organisation. In the Australian healthcare setting, AMS activities are developed and delivered through AMS programs instituted within or across one or more healthcare facilities. The key objectives of these programs include reducing inappropriate antimicrobial use, improving patient care outcomes and mitigating adverse consequences of antimicrobial use (such as antimicrobial resistance, preventable patient harm and unnecessary costs associated with pharmaceutical expenses and drug-resistant infections).

The Justice Health NSW AMS Steering Committee has developed this policy to detail the Justice Health NSW AMS framework and establish key principles around antimicrobial prescribing and management within Justice Health NSW.

2. Policy Content

2.1 Mandatory Requirements

This policy establishes key directives for antimicrobial prescribing within Justice Health NSW and establishes key principles around antimicrobial prescribing and management within Justice Health NSW including the requirements of Justice Health NSW clinicians.

2.2 Implementation – Roles and Responsibilities

2.2.1 Chief Executive

- Must provide managers with the resources to support compliance with this policy and its associated procedures.

2.2.2 Executive Director Clinical Operations

- Must review all reported incidents of non-compliance with this policy in accordance with NSW Health PD2020_047 *Incident Management*.

2.2.3 Managers

- Must ensure compliance with this policy and its associated procedures.
- Must bring this policy and its associated procedures to the attention of all Justice Health NSW staff.

2.2.4 Justice Health NSW Staff

- Must comply with this policy and its associated procedures.

2.2.5 The AMS Steering Committe

The Justice Health NSW AMS Steering Committee is a multidisciplinary group responsible for the development and ongoing evaluation of the Justice Health NSW AMS program. Core membership on this committee consists of the Clinical Director Primary Care, Medical Officer – Long Bay Hospital, Clinical Director Adolescent Health, Clinical Director

Oral Health, Clinical Nurse Consultant Infection Prevention & Communicable Diseases, Chief Pharmacist, Nurse Practitioner representative, Pharmacist representative, Clinical Governance representative, Prince of Wales Hospital Infectious Diseases Specialist (upon invitation). The AMS Steering Committee reports to the Justice Health NSW Drugs and Therapeutics Committee (D&TC).

2.2.6 The AMS Team

The AMS Team is a group of clinicians with duties dedicated to AMS activities. The AMS Team is primarily responsible for providing advice, incident review, education and feedback on antimicrobial prescribing. Any issues can be escalated to the AMS Team for prescribing, supply and monitoring antimicrobial usage.

The AMS Team may be contacted as detailed in Section 5.

3. Procedure Content

3.1 Principles of Antimicrobial Prescribing

3.1.1 Key Prescribing Principles

All Justice Health NSW prescribers are expected to prescribe antimicrobial therapy according to the following key principles (adopted from *Australian Commission of Safety and Quality in Health Care. Antimicrobial Stewardship Clinical Care Standards*):

(i) A patient with a life-threatening condition due to a suspected infection receives an appropriate antimicrobial immediately, without waiting for the results of investigations.

(ii) When a patient is prescribed an antimicrobial, this is done in accordance with the current Therapeutic Guidelines or evidence-based, locally endorsed guidelines and the antimicrobial formulary.

(iii) When an adverse reaction (including an allergy) to an antimicrobial is reported by a patient or recorded in their healthcare record, the active ingredient(s), date, nature and severity of the reaction are assessed and documented. This enables the most appropriate antimicrobial to be used when required.

(iv) A patient with a suspected infection has samples taken for microbiology testing as clinically indicated, preferably before starting antimicrobial treatment.

(v) A patient with an infection, or at risk of an infection, is provided with information about their condition and treatment options in a way that they can understand. If antimicrobials are prescribed, information on how to use them, when to stop, potential side effects and a review plan is discussed with the patient.

(vi) When a patient is prescribed an antimicrobial, the indication, active ingredient, dose, frequency and route of administration, and the intended duration or review plan are documented in the patient's healthcare record.

(vii) A patient prescribed an antimicrobial has regular clinical review of their therapy, with the frequency of review dependent on patient acuity and risk factors. The need for ongoing antimicrobial use, appropriate microbial spectrum of activity, dose,

frequency and route of administration are assessed and adjusted accordingly. Investigation results are reviewed promptly when they are reported.

(viii) A patient having surgery or a procedure is prescribed antimicrobial prophylaxis in accordance with the current Therapeutic Guidelines or evidence-based, locally endorsed guidelines. This includes recommendations about the need for prophylaxis, choice of antimicrobial, dose, route and timing of administration, and duration.

3.1.2 Use of Evidence-based Prescribing Guidelines

Therapeutic Guidelines: Antibiotic

The current version of *Therapeutic Guidelines: Antibiotic* must be used in clinical scenarios when prescribing antibiotics. These guidelines are an Australian resource developed by a multidisciplinary committee of experts, with recommendations based on best available evidence for empirical efficacy, harm minimisation and other important considerations such as antimicrobial resistance and individual patient factors.

Prescribing outside the Therapeutic Guidelines: Antibiotic

If a patient is prescribed antimicrobial therapy that is not in concordance with the *Therapeutic Guidelines: Antibiotic*, the prescriber must document their clinical reasoning in the patient's eProgress notes and in the medicine notes section of the medication order.

Where an indication or clinical scenario is not covered by the *Therapeutic Guidelines: Antibiotic*, a prescriber may choose antimicrobial therapy based on an appropriate, peer-reviewed source or the latest medical evidence for emerging infectious diseases or resistance patterns. Care should be taken to ensure the recommendations made are relevant to the local Australian context in terms of both antimicrobial resistance patterns and availability of the selected antimicrobial agents.

Alternatively, a prescriber may wish to seek advice via the AMS Team or the appropriate Clinical Director with further consultation from an infectious diseases specialist/microbiologist from POWH or other tertiary hospital AMS Team obtained as needed.

3.2 Access to Prescribing Resources and Support

3.2.1 Access to Evidence-based Prescribing Guidelines

Therapeutic Guidelines: Antibiotic can be accessed through eTG Complete via the Clinical Information Access Portal (CIAP) available on the Justice Health NSW intranet and through JHeHS link to CIAP.

3.2.2 Access to Antibiotic Advice

Prescribers at all Justice Health NSW facilities have access to expert advice on antimicrobial prescribing and the management of infectious diseases 24 hours a day, 7 days a week.

During business hours (Mon-Fri, 8:30am-5pm), prescribers should contact the appropriate Clinical Director for general advice regarding antimicrobial prescribing and approval of restricted antimicrobial agents. In more complex cases, the AMS Team can be consulted and may recommend a consultation by an infectious diseases physician.

After hours, prescribers may contact the on-call medical officer for infectious diseases or microbiology, via the Prince of Wales Hospital (02) 9382 2222 switchboard or local hospital if services are available.

3.3 Local Restrictions and Non-Formulary Antimicrobials

3.3.1 Formulary and Non-Formulary Antimicrobials

A list of antimicrobial formulary items, restricted antibiotics and antimicrobials that are available as standing orders is available on the intranet: 6.059 *Prescribing Formulary*, 6.049 *Medication Guidelines*, 6.056 *Adolescent Standing Order* and 6.055 *Adult Standing Order*.

The use of a non-formulary product for an individual patient requires individual patient use approval by the appropriate Clinical Director (CD). An Individual Patient Use (IPU) application form must be submitted through the Cgov online IPU system. This is then sent to the appropriate CD for approval.

3.3.2 Antimicrobial Restrictions

The implementation and maintenance of antimicrobial restrictions is a core AMS strategy. The AMS Steering Committee determines the restriction status for each antimicrobial agent (or specific formulations) based on the following considerations:

- Best practice prescribing
- Patient safety risks associated with particular antimicrobials (including adverse effects, drug interactions, the need for therapeutic drug monitoring, risk of Clostridium difficile infection and risk of selecting for more resistant organisms)
- Complexity of relevant disease states and/or public health risks
- Potential for contributing to antimicrobial resistance in the healthcare environment
- Cost-effectiveness (as compared to alternative agents)
- Resources available to manage antimicrobial restrictions

Justice Health NSW adopted the 'traffic light system' from NSW Clinical Excellence Commission "*List of Recommended Antimicrobial Restrictions*". Antimicrobial agents (or specific antimicrobial formulations) are grouped into one of three levels, according to their relative degree of restriction.

UNRESTRICTED (Green)
Antimicrobials in this category should be prescribed appropriately, but have no specific restrictions on their use. They do not require an approval for use, but are to be used in accordance withthe Therapeutic Guidelines: Antibiotic. Although unrestricted antimicrobials are ordered and supplied as normal, prescriptions are still subject to monitoring and review by the AMS Team.

RESTRICTED (Orange)
Antimicrobials in this category are subject to criteria based restrictions. Prescriptions are automatically approved if prescribed in accordance with the listed indication and/or duration (refer to Appendix 1). All other indications or durations longer than specified are considered "Red" and must be approved by the Clinical Director Primary Care or AMS Team. This would be facilitated through an IPU.

HIGHLY RESTRICTED (Red)
Antimicrobials in this category are highly restricted, meaning there are strict limitations on use. Prescription review or consultation is required with an infectious disease physician and/or medical microbiologist prior to use. These antimicrobials prescriptions should always be flagged for review by the Clinical Director Primary Care or AMS Team. This would be facilitated through an IPU.

For details of antimicrobial restrictions, rationales and approval criteria, see the Justice Health NSW AMS Restriction Lists in Appendix 1.

3.4 Other Antimicrobial Stewardship Activities

3.4.1 Monitoring of Antimicrobial Usage and Resistance

The Justice Health NSW AMS program incorporates a range of data collection methodologies to monitor both the quantity and quality of antimicrobial usage and examine processes associated with antimicrobial prescribing and supply. These methods include (but are not limited to):

- Report quarterly to the Justice Health NSW Drug and Therapeutics Committee usage of restricted antimicrobials
- Annual National Antimicrobial Prescribing Survey (NAPS)
- Audits of compliance with the Therapeutic Guidelines: Antibiotic as determined by the AMS Committee.

3.4.2 Education and Targeted Interventions

Special initiatives or projects may be developed by the Justice Health NSW AMS Steering Committee to target particular areas of practice. Examples of targeted interventions may include an 'IV to oral switch' project, an AMS awareness campaign aimed at clinical staff, or development of a series of antimicrobial prescribing tutorials for Prescribers – Medial Officers or Nurse Practitioners.

3.4.3 Performance Measures

Assessment of organisational compliance with the Justice Health NSW AMS policy and evaluation of performance is outlined in the AMS program plan. Specific monitoring activities should be undertaken according to the needs and risk assessment performed for Justice Health NSW. Justice Health NSW staff must comply with approved assessment and evaluation activities (including audit and feedback) and may direct their concerns or queries to the AMS Steering Committee.

4. Definitions

Antimicrobial Stewardship

An ongoing and systematic effort to optimise the use of antimicrobial medicines within a health service organisation to optimise antimicrobial use in order to improve patient outcomes, ensure cost effective therapy and reduce adverse sequelae of antimicrobial use, including antimicrobial resistance.

Antimicrobial Stewardship Program Plan

A rolling document that details AMS risk assessments, priorities, strategies and organised action as directed by the AMS Steering Committee.

Must

Indicates a mandatory action required to be complied with.

Prescribing Formulary

The range of medications including antimicrobial products available for use in Justice Health NSW and configured to provide treatment options for the large majority of patient encounters.

Medication Chart

Refers to a paper-based (Long Stay Medication Chart, National Inpatient Medication Chart) or electronic medication order.

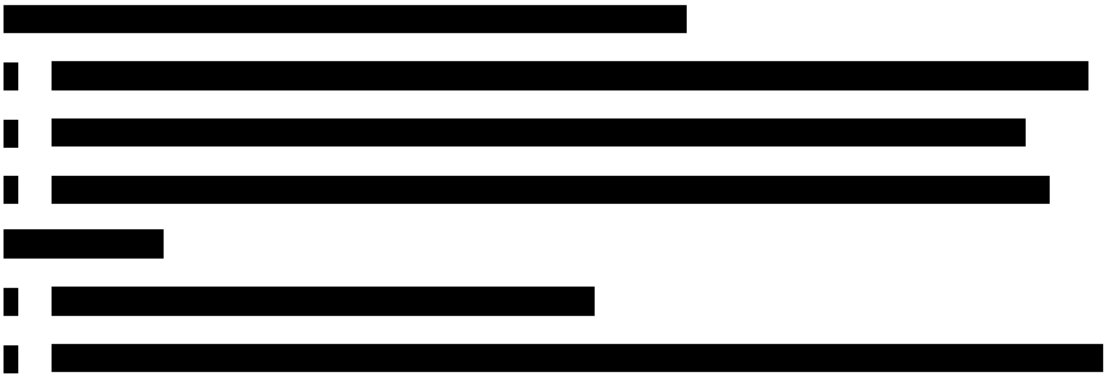
Patient Health Record

A hybrid record of paper-based and electronic information pertaining to the health of the patient.

Should

Indicates a recommended action to be followed unless there are sound reasons for taking a different course of action.

5. Contacts



6. Related Documents

Legislations	*The Therapeutic Goods Act 1989 (Commonwealth)* *Poisons and Therapeutic Goods Act 1966 (NSW)*
Justice Health NSW Policies, Guidelines and Procedures	6.059 *Prescribing Formulary* 6.049 *Medication Guidelines* 6.056 *Adolescent Standing Order* 6.055 *Adult Standing Order*
Justice Health NSW Forms	

NSW Health Policy Directives and Guidelines	PD2020_047 *Incident Management*
Other documents and resources	*Antimicrobial Stewardship Clinical Standards* *Australian Commission of Safety and Quality in Health Care. Antimicrobial Stewardship Clinical Care Standards* *Therapeutic Guidelines: Antibiotic* *National Standards of Safety and Quality Standard 3: Preventing and Controlling Infections Standard* *Quality Use of Antimicrobials in Healthcare*

Appendix 1 – Antimicrobial Traffic Light System and Restriction List

Principles of Restricted Antimicrobial within Justice Health NSW

- Refer to the tables below for Green, Orange and Red antimicrobials
- All non-formulary antimicrobials are considered "red" and require the approval of the Clinical Director Primary Care who may also suggest consultation with an infectious diseases physician. Once approved the medication can be obtained from the Justice Health NSW Pharmacy Department.
- Patient's returning from hospital prescribed a restricted antimicrobial can continue treatment as per the discharge summary, without acquiring AMS approval for up to 2 weeks. Non-formulary antimicrobials still require approval from the CDPC and should be requested urgently.

Green List

Aciclovir (oral) Amoxycillin Amoxycillin with Clavulanic Acid Ampicillin IV Amphotericin (oral lozenges) Benzathine (benzyl)penicillin Benzylpenicillin Cefaclor Cefalotin Cephalexin Cephazolin IV Chloramphenicol Clindamycin (oral, topical) Dicloxacillin Doxycycline	Erythromycin (oral) Famciclovir Flucloxacillin Fluconazole (oral) Framycetin (ear, eye) Gentamicin (eye) Gramicidin (topical) Hexamine Hippurate Mebendazole Metronidazole (oral, topical) Minocycline Neomycin (topical) Nitrofurantoin Nystatin	Phenoxymethylpenicillin Procaine Penicillin Pyrantel Roxithromycin Terbinafine Tobramycin (eye) Trimethoprim Trimethoprim + Sulfamethoxazole Valaciclovir

Orange List

Antimicrobial	Restriction
Azithromycin (oral)	1. Single oral dose for the treatment of chlamydia trachomatis as per Standing Order (1 Dose) 2. Uncomplicated gonorrhoea infections in combination with ceftriaxone as per eTG (1 Dose)
Ceftriaxone	1. Single dose for suspected cases of meningococcal disease before hospitalisation in patients with hypersensitivity to penicillin as per Standing Order. (1 Dose) 2. Uncomplicated gonorrhoea infections in combination with Azithromycin as per eTG (1 Dose) 3. Severe Respiratory Infections prior to hospitalisation or unable to transfer (Maximum 48 hours)

Ciprofloxacin	Eye and ear preparations 1. Acute bacterial otitis externa due to susceptible organisms in adults (Ciproxin HC Ear Drops) 2. Chronic suppurative otitis media due to susceptible organisms (Ciprofloxacin 0.3% ear drops) 3. Bacterial keratitis (infected corneal ulcers) (Ciprofloxacin 0.3% eye drops) 4. Severe bacterial conjunctivitis due to susceptible organisms (Ciprofloxacin 0.3% eye drops) Oral Therapy 5. Continuation of therapy, according to the discharge summary when initiated during tertiary hospital admission (2 weeks)
Clarithromycin	1. The treatment of pertussis (7 Days) 2. The management of pertussis contacts (women in the last month of pregnancy or individuals who may transmit pertussis to infants younger than 6 months) (7 Days) 3. MAC Prophylaxis for immunocompromised patient. To be managed in consultation with specialist 4. H.Pylori eradication (7-14 days)
Ethambutol	1. The management of tuberculous (TB) when used in combination with other anti-tuberculosis therapy. To be managed in consultation with an Infectious Diseases / Respiratory specialist
Gentamicin	1. According to eTG for a maximum of 48 hours
Isoniazid	1. The management of tuberculous (TB) when used in combination with other anti-tuberculosis therapy. To be managed in consultation with an Infectious Diseases / Respiratory specialist
Metronidazole (injectable)	1. For use in MSU (LBH) only - in accordance to eTG
Moxifloxacin (oral)	1. Moderate to severe respiratory infection in patients with immediate severe or delayed severe hypersensitivity to penicillins (7 Days)
Mupirocin (topical)	1. Staphylococcal skin infection (7 Days)
Norfloxacin	1. For prophylaxis of spontaneous bacterial peritonitis for patients with hypersensitivity to trimethoprim + sulfamethoxazole or if a trimethoprim + sulfamethoxazole-resistant organism is cultured
Oseltamivir	1. Treatment and prophylaxis of influenza and influenza-like-illness as per Standing Order
Pyrazinamide	1. The management of tuberculous (TB) when used in combination with other anti-tuberculosis therapy. To be managed in consultation with an Infectious Diseases / Respiratory specialist
Rifampicin	1. The management of tuberculous (TB) when used in combination with other anti-tuberculosis therapy. To be managed in consultation with an Infectious Diseases / Respiratory specialist 2. The treatment of MRSA when used in combination with Sodium Fusidate

Rifaximin	1. Prevention of hepatic encephalopathy where other treatments have failed or are contraindicated. To be prescribed in consultation with specialist
Silver Sulfadiazine	1. Prevention of infection in severe burns; other wounds e.g. pressure sores, leg ulcers (excluding very exudative)
Sodium Fusidate (oral, topical)	1. The treatment of MRSA when used in combination with Rifampicin (Oral) 2. Staphylococcal skin infection (Topical) (7 Days)
Vancomycin	For use in MSU (LBH) only and 1. Continuation of therapy, according to the discharge summary when initiated during tertiary hospital admission. Refer to High Risk Medicine Framework (2 weeks)

Red List

Dapsone	**Ganciclovir**	**Valganciclovir**