



# Antimicrobial Stewardship Policy

## 1. Background

Antimicrobial stewardship (AMS) is a systematic approach to optimising use of antimicrobials to reduce inappropriate use, improve patient outcomes and reduce adverse consequences of antimicrobial use (including antimicrobial resistance, toxicity and unnecessary costs).

WA Country Health Service (WACHS) sites are required to implement an AMS program that ensures appropriate use and review of antimicrobials.

Antimicrobial prescribing in WACHS must be consistent with the State Medicines Formulary.

Antimicrobial Stewardship should be undertaken in a manner consistent with the Australian Commission on Safety and Quality in Health Care Antimicrobial Stewardship Clinical Care Standard.

This policy is intended to supplement the existing WACHS [Medication Prescribing and Administration Policy](#).

## 2. Policy Statement

### 2.1 Principles of Antimicrobial Prescribing

- 2.1.1 It is always good practice to collect appropriate specimens whenever possible **prior** to commencement of empiric antimicrobial therapy as long as this doesn't unduly delay therapy.
- 2.1.2 The following factors are to be considered when prescribing any antimicrobial agent:
- M** microbiology guides therapy where possible
  - I** indications should be evidence based
  - N** narrowest spectrum required
  - D** dosage appropriate to the site and type of infection
  - M** minimise duration of therapy
  - E** ensure monotherapy in most cases
- 2.1.3 A switch from the IV to the oral formulation of an antimicrobial is to be made as soon as safe to do so and IV-oral switch is to be promoted by pharmacists, clinicians and local AMS groups and programs. Criteria for IV-oral switching:
- Oral fluids / food are tolerated and no reason to believe poor oral absorption
  - Temperature less than 38°C or improving over 24 hours
  - No signs of sepsis

- An appropriate oral alternative is available
  - No diagnostic criteria for IV therapy e.g. endocarditis, febrile neutropenia, *S. aureus* bacteraemia, meningitis, osteomyelitis.
- 2.1.4 All patients on antimicrobial agents are to be reviewed at each medical practitioner attendance to consider, based on the clinical picture and laboratory results, whether to de-escalate to a narrow spectrum agent, to switch to IV/oral, or to cease antimicrobials.
- 2.1.5 All antimicrobial prescriptions should include documentation of indication and duration.

## 2.2 Antimicrobial Formulary

Prescribers working in WACHS are required to prescribe medicines including antimicrobials according to the restrictions and requirements of the State Medicines Formulary (SMF).

The SMF is accessible on Formulary One, via the internet <https://formulary.health.wa.gov.au/>, the WA Health intranet <https://formulary.hdwa.health.wa.gov.au> or via your regional pharmacy intranet page.

The SMF incorporates specific local guidelines and the Kimberley Standard Drug List.

## 2.3 Use of Evidence-based Guidelines

### 2.3.1 Therapeutic Guidelines Australia

WACHS endorses the latest edition of the Therapeutic Guidelines (Antibiotic) ® (eTG) as the primary guidance for antimicrobial prescribing in all WACHS health care facilities.

Appropriate prescribing includes not only the appropriate active ingredient but also the dose, formulation, route, frequency of administration and duration for the patient's clinical condition.

Access to the eTG can be gained through multiple channels including the [WACHS Library Services home page](#).

### 2.3.2 Other evidence-based guidelines

- If a patient having surgery requires prophylactic antibiotics, the prescription is made in accordance with the [Therapeutic Guidelines \(Antibiotic\) ® \(eTG\)](#).
- WACHS endorses the use of the Perth Children's Hospital (PCH) [Children's Antimicrobial Management Program \(ChAMP\) Policy](#) for paediatric patients in WACHS.
- WACHS endorses the use of the [KEMH Clinical Guideline for Antibiotic Prophylaxis for Caesarean Section](#).

There may be other WACHS policies or local procedures developed to guide specific antimicrobial prescribing practice to augment eTG.

Any WACHS or local policies related to antimicrobial usage should:

- be consistent with the SMF
- be developed and reviewed according with the WACHS [Policy Development Policy](#) and endorsement processes
- reference and be consistent with this policy, and
- endorsed by the local AMS or equivalent group during development or review.

### 2.3.3 Prescribing outside of evidence-based guidelines

All prescribing in WACHS must be consistent with the SMF.

Where an indication is not listed in the eTG, the prescriber is to refer to other WACHS endorsed resources and policies or seek expert advice. Care should be taken to ensure that any such recommendations made are relevant to the local context.

If a patient is prescribed antimicrobial therapy that is not in concordance with endorsed guidelines, the prescriber must document their clinical reasoning in the patient's medical record.

### 2.3.4 Antimicrobial Stewardship Clinical Care Standard

WACHS prescribers and AMS programs are expected to act in concordance with the Quality Statements in the [AMS Clinical Care Standard 2020](#).

This includes the general principles of care in the standard, but also the expectation of measurement for quality improvement and meeting the requirements of national standards and accreditation.

The 2020 Quality Statements include:

1. Life-threatening conditions
2. Use of guidelines
3. Adverse reactions to antimicrobials
4. Microbiological testing
5. Patient information and shared decision making
6. Documentation
7. Review of therapy
8. Surgical and procedural prophylaxis

## 2.4 Stop Orders

In the absence of a specific cessation date on the medication chart:

- an oral or topical antimicrobial order has a seven (7) day stop order as maximum duration
- IV prescription has a three (3) day stop order as maximum duration.

The prescriber or delegate is to be informed prior to the implementation of a stop-order and a stop order is not to be enacted until this occurs. If the antibiotic is to be continued, the prescriber is to either rewrite the prescription, or be recorded as an interim medical order.

### 3. Definitions

<b>Antimicrobial Stewardship (AMS)</b>	An ongoing effort by a health service to optimise antimicrobial use in order to improve patient outcomes, ensure cost-effective therapy and reduce adverse sequelae of antimicrobial use, including antimicrobial resistance.
<b>Antimicrobial formulary</b>	The range of antimicrobial products available for use in a healthcare facility and configured to provide treatment options for the large majority of patient encounters.
<b>Prescribers</b>	A health professional authorised under the Health Practitioner Regulation National Law, and acting in the lawful practice of their profession, can prescribe medicines. Who and what can be prescribed varies by profession and classification of the medicine.

### 4. Roles and Responsibilities

**Each WACHS Regional Executive** is responsible for identifying a group with a formal governance role in relation to AMS. This may be an existing group (e.g. Drug and Therapeutics Committee, Medication Safety Group, Infection Control Committee) or a subcommittee of an existing group, but is to be multidisciplinary and include at a minimum a senior pharmacist and medical practitioner.

The Executive Sponsor accountable for the outcomes of the governance group should be explicit, as should reporting lines to Patient Safety and Quality governance groups and the Regional Executive.

**The Regional Clinical Governance lead** should

- ensure that systems are in place to meet the health service organisation’s requirements as part of the National Safety and Quality Health Service Preventing and Controlling Healthcare-Associated Infection Standard.
- evaluate and regularly review the regional AMS program.

**Regional Medical Directors:**

- Are responsible for ensuring ready access to eTG to prescribers
- Are responsible for defining and communicating the means for prescribers and pharmacists to obtain specialist infectious diseases / clinical microbiologist advice to meet the requirements of the SMF
- Are responsible for ensuring medical support for the annual National Antimicrobial Prescribing Survey.
- Based on advice of the regional AMS governance groups, and reflecting the State Medicines Formulary, the Regional Medical Directors are responsible for endorsing specific antibiotics to be **“restricted”** in local contexts:
  - Antimicrobials that are “highly restricted” in the SMF require clinical microbiologist or infectious diseases physician approval **before commencing**.

- In addition to the above mandatory arrangements for highly restricted antimicrobials, the following restricted antimicrobials **should also be restricted subject to locally applicable processes**. While pre-prescribing expert approval may be ideal for organisations with this capacity, at a minimum, a local post-prescribing review process should be in place to ensure all prescriptions meet the SMF indication for the following agents:
  - Daptomycin
  - Meropenem
  - Ertapenem
  - Caspofungin/Anidulafungin
  - Moxifloxacin
  - Voriconazole
  - IV ciprofloxacin

This list is not exhaustive and regions have discretion to vary this to include other agents, as long as they continue to be consistent with the SMF.

### **Regional AMS governance groups:**

- Determine the regional AMS program using a risk-based approach based on local data, risks and issues that is consistent with the Antimicrobial Stewardship Clinical Care Standard
- Lead the dissemination and feedback of policy, guidelines, and monitoring data to prescribers, executive and others as appropriate
- Utilise the resources from the [NSQHS Standards Guide for Hospitals, Antimicrobial Stewardship resources](#) and the [Guide for Multi-Purpose Services and small hospitals](#) to set out the key tasks required to implement an AMS program
- Are responsible for defining an approval process for “restricted” antimicrobials. This approval process should at a minimum, include a discussion with an infectious diseases physician / clinical microbiologist that is documented in the patient’s medical record, and is therefore auditable
- The SMF highly restricted antimicrobials list and the agreed regional “restricted” list and approval process should be tabled at the relevant governance groups in the region as well as the Medical Advisory Committees and reviewed annually by the AMS governance group.

**Regional Chief Pharmacists** are responsible for the provision of clinical pharmacy expertise to advise and educate prescribers and implement relevant policy; contributing to AMS governance group activities including program implementation and audit; participating in the application of antimicrobial formulary and prescribing guidelines.

**Clinical Pharmacists** are responsible for reviewing antimicrobial orders for adherence to local guidelines and providing timely feedback where applicable to the prescriber.

**Prescribers** are responsible for:

- complying with the principles of good antimicrobial prescribing in this policy;

- documenting the indication and expected duration for prescription of all antimicrobials in the medical record; and
- for complying with the local approval process for restricted antimicrobials.

**Clinical Microbiology** services are responsible for providing best practice diagnostic testing for infection, clinical microbiology advice, and regular analyses of antimicrobial resistance according to service level agreements or comparable contracts.

**Nursing staff** are responsible for complying with the Medication Administration Policy for Nurses, Midwives and Unregulated Healthcare Workers and other relevant policies and procedures.

**All Staff** are required to work within policies and guidelines to make sure that WACHS is a safe, equitable and positive place to be.

## 5. Compliance

Failure to comply with this policy may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the [Integrity Policy Framework](#) issued pursuant to section 26 of the [Health Services Act 2016](#) (WA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff are reminded that compliance with all policies is mandatory.

## 6. Records Management

All WACHS corporate records must be stored in the approved Electronic Documents and Records Management System.

[Records Management Policy](#)

[Health Record Management Policy](#)

## 7. Evaluation

Relevant data is to be regularly monitored to identify local risks, inform the focus of local quality improvement and evaluate the effectiveness of the local AMS program activities.

### 7.1 National Antimicrobial Utilisation Surveillance Program

Pharmacy distribution data is to be regularly analysed by AMS governance groups via participation in the National Antimicrobial Utilisation Surveillance Program (NAUSP). NAUSP data compares antimicrobial usage to other comparable sites across Australia.

### 7.2 Antibiograms

Pathology data provided by the Clinical Microbiology Service (PathWest) in the form of a standard antibiogram is to be analysed on a regular basis. Antibiogram data is to be discussed with the WACHS Regional Clinical

Microbiologist and the regional governance group before dissemination or action.

### 7.3 Monitoring quality of prescribing

- Each region is expected to undertake monitoring of this policy and their AMS program in a manner that is consistent with the Antimicrobial Stewardship Clinical Care Standard (2020).
- At a minimum, each region is expected to:
  - incorporate monitoring of surgical prophylaxis into their AMS program using the 2020 Antimicrobial Stewardship Clinical Care Standard indicators for quality statement 8 (8a, 8b, 8c, 8d)
  - participate in the annual National Antimicrobial Prescribing Survey (NAPS)

Such data is to be carefully analysed and distributed appropriately including to prescribers, pharmacists, and nursing staff.

If unwanted clinical variation is detected during this monitoring, accountable staff are expected to take action in response.

## 8. Standards

### National Safety and Quality Health Service Standards

Preventing and Controlling Healthcare-Associated Infection Standard: 3.15 and 3.16

Australian Commission on Safety and Quality in Healthcare  
Antimicrobial Stewardship Clinical Care Standard

## 9. References

1. WA Adult Medicines Formulary <https://formulary.hdwa.health.wa.gov.au/Home>
2. Antimicrobial Stewardship in Australian Hospitals 2011. Ed M Duguid, M Cruickshank
3. Australian Commission on Safety and Quality in Healthcare, Antimicrobial Stewardship in Australian Health Care 2018
4. Australian Commission on Safety and Quality in Healthcare, Antimicrobial Stewardship Initiative
5. Australian Commission on Safety and Quality in Healthcare, 2020 Antimicrobial Stewardship Clinical Care Standard

## 10. Related Policy Documents

PCH Children's Antimicrobial Management Program (ChAMP) Policy  
WACHS Medication Administration Policy  
WACHS Policy Development Policy

## 11. Related WA Health System Policies

MP 0077/18 [Statewide Medicines Formulary Policy](#)

## 12. Policy Framework

[Clinical Governance, Safety and Quality](#)

**This document can be made available in alternative formats  
on request for a person with a disability**

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