

KIDS DOSE

Oceania Regional Series

Antibiotic dosing for drug-resistant infections in children

OVERVIEW

Antimicrobial resistance (AMR) is an escalating threat to child health, yet evidence to guide treatment of drug-resistant infections in children remains limited.

Two recent reviews led by the Australasian KIDS DOSE Consortium (kidsdose.org.au) synthesise dosing, clinical trial, licensing, and access data for first-line antibiotics targeting WHO priority pathogens, including MRSA, VRE, and drug-resistant Gram-negative infections.

WHY THIS MATTERS FOR PID CLINICIANS

These findings are highly relevant for paediatric infectious disease clinicians globally, underscoring the risks of extrapolating from adult data and the need for optimised dosing informed by paediatric pharmacokinetic studies.

The reviews serve as a comprehensive clinical resource when using these antibiotics off-label in children.

KEY FINDINGS

The reviews show that:

- Standard recommended doses often result in subtherapeutic exposure in children under 12 years
- Fewer than half of recommended antibiotics are licensed for this age group
- There are very limited options for neonates

They also highlight:

- Rising rates of resistant infections in children
- A higher burden among First Nations children
- Major gaps in surveillance and access in Pacific Island Countries and Territories

RESEARCH AND ADVOCACY IMPLICATIONS

The reviews also identify clear research priorities for WSPID, including:

- Advocacy for child-appropriate formulations
- Early inclusion of children in clinical trials
- Strengthened AMR surveillance
- Coordinated regional investment to ensure equitable access to life-saving antibiotics for children

ACCESS THE REVIEWS

[Review 1](#)[Review 2](#)