



Workshop Title	Use of antimicrobial agents in veterinary practice
Facilitators and contributors Details of the individuals leading and contributing to the workshop, including: • Workshop facilitators • Guest speakers or contributors • Their roles in the session	Facilitators: • Dr Conny Turni (University of Queensland) • Dr Sean Bisset (CEA-StAR) • Dr Justine Gibson (University of Queensland) • Prof Ricardo Soares Magalhaes (University of Queensland) • Dr Jeffrey T. LeJeune (FAO) • Dr Jorge Pinto-Ferreira (FAO) • Dr Elizabeth Parker (FAO) • Dr Susan Vaughn Grooters (UNEP) • Dr Dixie Mollenkopf (Ohio State University) Additional speakers: • Dr Ri Scarborough (The University of Melbourne) (recorded video)
Background An overview of the context and rationale for the workshop, outlining the key issue, challenge, or opportunity it addresses, and why this topic is timely and relevant.	Many researchers and AMR stakeholders are unclear on how antimicrobials are used in veterinary practices and how this differs across species and countries. For example, antimicrobial use in companion animals and horses often mirrors human use and differs from antimicrobial use in food-producing animals. Furthermore, use of antimicrobials in food-producing animals is extremely diverse with different administration routes and drug availability/prescribing guidelines differing across animal sectors. Restrictions and label constraints are also in place on what can be used, together with withholding periods to prevent antimicrobial residues entering the food chain. The role that antibiotic use in animals plays in a One Health context cannot be ignored. This workshop seeks to educate attendees on the factors influencing how antibiotics are used within different animal sectors, as well as steps that can be taken to reduce the effects that antimicrobial use in animals can have on the environment and humans.
Workshop Aims A description of the purpose of the workshop and its intended focus. This section highlights what participants can expect to explore, learn, or develop during the session.	The aims of this workshop are to: • Build knowledge on how antimicrobial agents are used in veterinary practice in key regions globally • Inform participants that the division of antimicrobials into first line, second line, third line choices and prohibited use closely mirrors their use and importance in/for humans • Provide instruction on where to source information on how antimicrobials are used in animals globally • Highlight the differences in stability and environmental persistence (i.e. fluoroquinolones) and explain why use of these agents is restricted in food-producing animals in various jurisdictions. • Teach the important principles of indicated use, off-label use, withholding periods, antimicrobial residue testing and export slaughter intervals • Reinforce the importance of prudent use guidelines and antimicrobial stewardship • Be familiar with the various routes of administration and constraints on antimicrobial prescribing in animals
Participant Takeaways A summary of what participants will gain from attending the workshop. This may include new knowledge, practical skills, tools, frameworks, or shared resources, as well as any tangible outputs (e.g. ideas, draft materials, or collaborative outcomes).	Participants will leave this workshop with: • An understanding of the different antibiotics used in veterinary practices; • An understanding of the factors driving the selection of specific antibiotic use within veterinary and production animal practise; and

	- A concept of key stewardship measures taken in Australia and other case study examples, and how these can be extended to other regions of the world. Participants will also receive: - An information packet highlighting the recommended antibiotic use within different animal sectors of Australia.																												
Expected Impact An outline of the broader value of the workshop, including how it may: - Influence research, policy, or practice - Support collaboration and knowledge exchange - Contribute to future work or ongoing initiatives	The potential outcomes from this workshop include: - Education and discussion about best practise antimicrobial stewardship measures and its importance within One Health AMR mitigation. - Networking and global collaboration opportunities. This workshop will provide a great opportunity for attendees from different corners of the world and from different career backgrounds to interact and network via group activities. Output - Outline a fact sheet on what is known (key knowledge points around the use of antimicrobials in animals, and their connection to the environment and based on these, what can be done, to minimize the related impact)																												
Who should attend? Information on the intended audience for the workshop, including: - Relevant backgrounds, sectors, or expertise - The level of participation expected (e.g. discussion, group work, problem-solving)	All participants are welcome at this workshop.																												
Workshop Schedule and Duration A summary of the structure and flow of the workshop, including: - Key session components - Interactive or breakout activities	<table><tr><th>Section</th><th>Description</th><th>Host</th><th>Timing</th></tr><tr><td>Introduction to antibiotic stewardship and veterinary use</td><td>Provide an introduction to the ASTAG and international antimicrobial importance ratings, and antibiotic stewardship in general</td><td>Stephen</td><td>30 mins</td></tr><tr><td>Diagnostics and their shortcomings</td><td>A case study will be discussed, which will highlight the methods and limitation of current diagnostic and surveillance methods Activity: Case-study activity</td><td>Conny</td><td>30 mins</td></tr><tr><td>Attitudes around antibiotic selection by vets, and helping vets improve their choices</td><td>This section will feature a pre-recorded video from Ri Scarborough from the University of Melbourne.</td><td>Video</td><td>30 mins</td></tr><tr><td>Afternoon tea</td><td></td><td></td><td>30 mins</td></tr><tr><td>Post-video discussion</td><td></td><td></td><td>15 mins</td></tr><tr><td>Methods of delivery and animal-specific use</td><td>Method of delivery and the factors surrounding these will be discussed, alongside key concepts such as withholding periods Activity: Group exercises on identifying the ideal route of</td><td>Justine</td><td>30 mins</td></tr></table>	Section	Description	Host	Timing	Introduction to antibiotic stewardship and veterinary use	Provide an introduction to the ASTAG and international antimicrobial importance ratings, and antibiotic stewardship in general	Stephen	30 mins	Diagnostics and their shortcomings	A case study will be discussed, which will highlight the methods and limitation of current diagnostic and surveillance methods Activity: Case-study activity	Conny	30 mins	Attitudes around antibiotic selection by vets, and helping vets improve their choices	This section will feature a pre-recorded video from Ri Scarborough from the University of Melbourne.	Video	30 mins	Afternoon tea			30 mins	Post-video discussion			15 mins	Methods of delivery and animal-specific use	Method of delivery and the factors surrounding these will be discussed, alongside key concepts such as withholding periods Activity: Group exercises on identifying the ideal route of	Justine	30 mins
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	administration in a given scenario		
Antibiotic stewardship	Guidelines for each industry sector and stewardship in Australia Activity: How can we improve communication with the people at the frontline of disease – the veterinarian, the producer and the pet owner from all countries?	Stephen and others	30 mins
Wrap up/ Next steps	Decision on next steps and contributions		15 mins

2.00 pm – Workshop start, Introduction
 2.30 pm – Diagnostics and their shortcomings
 3.00 pm – Attitudes around antibiotic selection by vets
 3.30 pm – Afternoon tea
 4.00 pm – Post-video discussion
 4.15 pm – Method of delivery and animal-specific use
 4.45 pm – Antibiotic stewardship
 5.15 pm – Wrap up/ next steps
 5.30 pm – Workshop close