

Fighting antimicrobial resistance as a companion animal health professional

Any use, but particularly misuse and overuse of antimicrobials across sectors can lead to the development of resistant pathogens and undermine global health. As you have the power to prescribe and use antimicrobials in animals, you have an essential role to play in the fight against antimicrobial resistance (AMR). Let's preserve the efficacy of antimicrobials by using them responsibly and only when necessary. **Here are answers to the most frequent questions you may have.**

What non-antimicrobial approaches should I consider in a patient with a possible infection?

- Supportive therapy as appropriate, such as fluid therapy, electrolytes, anti-inflammatory drugs, nutritional support, surgical drainage of abscess, removal of foreign body, debridement, probiotics, watchful waiting.

When should I prescribe antimicrobials?

- After conducting a clinical examination of the animal(s), establishing a diagnosis, and considering other options or alternatives.

Note: This includes dismissing presence of viral infections and underlying conditions that do not require use of antimicrobials.

- Never as replacement for good animal care, housing, nutrition, hygiene, vaccination programmes or infection prevention and control measures.

How should I prescribe antimicrobials?

- By basing my choice of antimicrobial agent on clinical experience, and diagnostic laboratory information including culture and susceptibility results when available.
- By considering [WOAH Standards](#) and [recommendations](#).
- By providing companion animal owners with detailed information on treatment protocols.

What should I consider when selecting an antimicrobial?

- The expected pathogen(s) and its antimicrobial susceptibility.
- Available treatment guidelines.
- Site of infection.
- Ability of the owner to follow the treatment instructions.
- Comorbidities.
- Prior treatment history.
- Clinical experience and diagnostic insights.
- Diagnostic laboratory information when available (e.g., cytology and/or antimicrobial susceptibility testing).
- Route of administration.
- Effective concentration at the target site.
- Potential drug-associated adverse effects.
- Drug interactions.
- Public health critical importance rating.

When can I use extra-label or off-label antimicrobials?

- In agreement with national legislation.
- When the appropriate registered products are not available or not optimal for the specific case.
- With my client's informed consent.

What should I do if **first-line treatment fails?**

- Reconsider the diagnosis.
- Discuss treatment compliance with the companion animal owner.
- Review the dosing regimen.
- Consider uncontrolled underlying factors (e.g. lack of source control, allergic skin disease).
- Consider factors that may have impacted the response, such as patient trauma to an infected wound (e.g. lack of use of an Elizabethan collar)
- Report lack of expected efficacy to the national competent authorities.
- Base the second-line treatment on diagnostic test results, including antimicrobial susceptibility testing, if possible.
- Use a different class or sub-class in the absence of test results.

What else can I do **on a daily basis to help curb AMR?**

- Optimise animal health through preventive measures and control of underlying diseases (e.g. allergic skin disease) whenever possible.
- Inform myself about the AMR situation, good practices and recommendations.
- Educate companion animal owners on responsible antimicrobial use and AMR, emphasising that it is a global challenge which concerns us all.
- Provide recommendations on how to safely dispose of unused and expired veterinary products containing antimicrobials.
- Advocate for preventive measures (e.g. vaccination) to reduce the need for antimicrobials.
- Collaborate with other sectors to address AMR as a One Health challenge.

What information should be provided to companion animal owners **when prescribing or dispensing antimicrobials?**

- Dosage regimen (dose, dosing frequency, route of administration and duration of treatment).
- Note: dosage regimen should be included in the labelling of all veterinary drugs supplied.**
- Amount of antimicrobial to be provided, depending on dosage and number of animals.

