Imagine a world where infections and diseases in animals, humans and plants cannot be treated. This worst-case scenario could become a reality as some bacteria, viruses, fungi and parasites develop resistance to the drugs we use to fight them. Antimicrobial resistance, or AMR, has become one of the most pressing health issues of our time. Solutions exist and you have a role to play to address this global threat.
As an animal health professional, you are at the forefront of the fight against antimicrobial resistance. Misuse and overuse of antimicrobials in animals can lead to the development of resistant pathogens and undermine global health. As you have the power to prescribe and use antimicrobials, you have an essential role to play. Let’s preserve the efficacy of antimicrobials by using them responsibly and only when necessary.

Here is what you can do every step of the way.

Advocate for preventive measures

Educate animal producers on good biosecurity and husbandry practices to reduce the disease burden in animal populations and, therefore, the need for antimicrobials.

Steer animal owners towards vaccination to help reduce the need for antimicrobials globally.

Make a proper diagnosis

Collate the full history of the animal or group of animals.

Conduct a thorough clinical examination.

Take appropriate samples for further testing as necessary.
**Prescribe responsibly**

Evaluate all the therapeutic or hygienic alternatives to antimicrobials. **Prescribe antimicrobials only when necessary**, when no other treatment is possible or when it is the best possible option.

**Think ahead before prescribing antimicrobials:** using antimicrobials when unnecessary (i.e. to compensate for inadequate animal husbandry practices) is a quick-fix today with serious long-term consequences.

**Check local epidemiological guidelines to select relevant drugs** for use in animals before prescribing antimicrobials.

**Perform an antibiogramme** before prescribing critically important antimicrobials.

When prescribing antimicrobials, always **indicate dosage regimen** (dose, treatment intervals, duration), **withdrawal periods**, and **total amount of antimicrobials** to be delivered. Guide the animal owner to a **reliable procurement source** to avoid the use of substandard or falsified products.

**Maintain your knowledge**

Keep up-to-date with information and **recommendations** on antimicrobial use and the fight against antimicrobial resistance.

**Help monitor antimicrobial use**

Record the amounts of antimicrobials you use **and report them** to your country’s Veterinary Services.
Did you know that your choice to prescribe antimicrobials can affect animal health, but also human and plant health? In a world more interconnected than ever, your decisions can benefit from collaborating with other sectors in a One Health perspective. To curb AMR, we are stronger together.

Building stronger networks of animal health professionals

Disease surveillance, drug sales, food inspection, vaccination, animal welfare... A key support to veterinarians, veterinary paraprofessionals (VPP) are essential in maintaining animal health in some remote areas where veterinarians have little or no accessibility. All the members of the veterinary workforce should work together and collaborate to ensure knowledge on the fight against AMR and prevention practices are shared and promoted everywhere.
Drug-resistant pathogens in air, soil, water, insects and wildlife

Drug-resistant pathogens in manure, waste water and around aquaculture facilities

Drug-resistant pathogens in soil and water

Drug-resistant pathogens in soil and water

Drug-resistant pathogens in soil and water

Drug-resistant pathogens in air, soil, water and wildlife

Drug-resistant pathogens in soil and water

Drug-resistant pathogens in faeces, soil and water

Drug-resistant pathogens in vegetables, soil and water
FIGHTING AMR ON A DAILY BASIS: THE FAQ

When should I **prescribe antimicrobials?**
- After conducting a clinical examination of the animal(s), establishing a medical diagnosis, and considering other options or alternatives.
- Never in replacement of good animal husbandry practices, hygiene, biosecurity and vaccination programmes.

How should I **prescribe antimicrobials?**
- By basing my choice of antimicrobial agent on clinical experience and diagnostic laboratory information.
- By taking into consideration the [WOAH List of antimicrobial agents of veterinary importance](#).
- By providing animal owners with detailed information on treatment protocols and withdrawal periods.

What should I **consider in order to choose the appropriate antimicrobial?**
- Farm records of previous antimicrobial use and epidemiological history of the farm.
- Clinical experience and diagnostic insights.
- Diagnostic laboratory information when available (culture and susceptibility testing).
- Pharmacodynamics (activity against pathogens involved).
- Pharmacokinetics (tissue distribution, efficacy at infection site).
- [WOAH list of antimicrobials of veterinary importance](#).

What should I **do if first-line treatment fails?**
- Report lack of expected efficacy to the national competent authorities.
- Base the second-line treatment on diagnostic test results, including susceptibility testing.
- Use a different class or sub-class in the absence of test results.
- Only use combinations of antimicrobials if supported by scientific evidence.
What should I write on my prescriptions for antimicrobials?

- Dosage regimen (dose, treatment intervals, duration of treatment).
- Withdrawal periods for eggs, meat and milk, as well as other animal products.
- Amount of antimicrobial to be provided, depending on dosage and number of animals.
- Labelling of all veterinary drugs supplied.

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

- In agreement with national legislation.
- When appropriate registered product are not available.
- With my client’s informed consent.

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

- Educate myself on the AMR situation, on good practices and recommendations.
- Educate people around me on AMR. It is a global challenge which concerns us all.
- Advocate for alternatives to antimicrobials such as vaccination.
- Advocate for prevention measures such as biosecurity and good husbandry.
- Advise against use of antimicrobials for growth promotion.
- Collaborate with other sectors to address this as a One Health challenge.

Your tools in the fight against AMR

We have produced several tools to help you in your daily fight against AMR. From prescription to advocacy, here are a few essentials you should use regularly:

- Our Standards on AMR
- Our List of antimicrobials of veterinary importance
- Our Guidelines on How to talk about AMR
Use antimicrobials with care.
Because animal health is our health, it’s everyone’s health.