Antibiotics are vital to treating and preventing the spread of disease in animals and humans. However, the risk that the bacteria causing a disease will develop a resistance to an antibiotic increases every time it is used. Once bacteria are resistant, the antibiotic is ineffective and can no longer treat the disease. The development of new antimicrobials has not kept pace with the increase of resistance to existing antimicrobials. Responsible use is an integral part of your professional code of conduct and best practice guidelines. Make sure you are in line with both. The Council of European Dentists (CED), the Standing Committee of European Doctors (CPME) and the Federation of Veterinarians of Europe (FVE) support you in saving lives and making sure that antibiotics stay effective now and in the future, by following these recommendations:

- **Use antimicrobials only when really necessary and ensure that examination and diagnosis always precede a prescription**

  It is important only to use antimicrobials for sick or at-risk people and animals; restrict prophylactic use to cases where the risk of disease is clearly evident and avoid the use of broad-spectrum antibiotics whenever possible. Prescribing the correct dosage of antimicrobials following an examination and clinical diagnosis is a key action that will make sure that antimicrobials stay effective now and in the future. Always evaluate and record how well the treatment has worked afterwards.

- **Make diagnostic tests, including sensitivity tests, part of the examination process**

  A diagnostic test before prescribing antimicrobials can be very helpful in making the correct diagnosis. Even where treatment needs to start immediately, it is still advisable to do a test to confirm your first decision, or to be able to change your treatment as a result of the laboratory findings.

- **Encourage your patients or animal owners always to ask for your advice**

  Drawing up an effective health plan can reduce the risk of emergence of a disease and consequently the need to use antimicrobials. Direct communication with your patients, their relatives or animal owners will help you to convey the message of how important prevention is, as well as the risks and downsides of using antibiotics. Remember to explain to your patients and/or the persons responsible for their care how to use antimicrobials correctly.

- **Avoid off-label prescribing whenever possible**

  Using antimicrobials outside the terms defined by the licence can lead to risks and side effects for people and animals. That is why it should be avoided where possible. Whenever off-label use is justified in the patient’s best interests, make sure that you have valid consent from your patients and/or the persons responsible for their care and supervise the case closely.

- **Keep critically important antimicrobials as last resort**

  Certain antimicrobials such as fluoroquinolones, third and fourth generation cephalosporins and macrolides are classified by the WHO as “Critically Important Antimicrobials” (CIA). Be mindful to prescribe these after a sensitivity testing, as a very last resort and only exceptionally off-label.

- **Be prepared to report your prescription data to national Competent Authorities**

  Authorities may need to track prescription data accurately to evaluate antimicrobial use and any development of resistance. When asked, cooperate with the authorities and always share data according to your Code of Conduct and national legislation.

- **Report any adverse effects that you suspect are caused by antimicrobials**

  Everybody is responsible for working to keep antimicrobials effective. Please play your part by making sure you report any adverse effects antimicrobials cause, including lack of efficacy.

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1 WHO list of Critically Important Antimicrobials (CIA): http://apps.who.int/iris/bitstream/10665/77376/1/9789241504485_eng.pdf?ua=1