

BRITISH VETERINARY POULTRY ASSOCIATION

Antimicrobials Guidelines

BACKGROUND

Therapeutic antimicrobial products are prescribed and used by veterinary surgeons for the treatment and control of many types of bacterial infection in a wide variety of animal species. If a number of animals in a group have overt signs of disease, both sick and healthy animals may need to be treated with therapeutic levels of an approved antimicrobial product for the recommended period. This is intended to cure the clinically affected animals and prevent the progression of disease in the remainder.

Antimicrobial resistance is a natural phenomenon which is an inherent risk associated with any use of antimicrobial medication both in animals and humans. Opinion is divided on the practical effects of any resistance associated with antimicrobial use in animals on human health. There is the potential for spread of resistant organisms from treated humans (directly or via sewage effluent) to animal species, and from treated animals to humans (either by direct contact, environmental contamination, or foodborne contamination). Measures aimed at limiting the development of resistance are important for prolonging the useful life of all antimicrobials in both human and animal medicine.

Use of antimicrobial substances for growth promotion is no longer permitted under EU regulation.

GUIDING PRINCIPLES

1. Antimicrobial medication should not be used as an alternative to good management, vaccination, or site hygiene.
2. Antimicrobial products should be used within general principles of responsible use:
 - 2.1. Use only when clinically necessary
 - 2.2. Treatment duration should be limited to that necessary to treat disease
 - 2.3. Treatment should be given only to birds showing clinical signs or those at immediate risk of infection
3. **RCVS Code of Conduct.**

Prescribing of antimicrobials must only be carried out for animals under the care of the prescribing veterinarian as defined in the RCVS Code of Conduct. Prescription-only medicines (POM-V) may only be supplied when prescribed by a veterinary surgeon. A copy of the prescription should be retained by the prescriber for at least 5 years. All antimicrobials are classified as POM-V medicines.
4. **Justification for treatment.**

The prescribing veterinarian must be satisfied that treatment is justified, following either examination of the animals in question on a site visit or by post-mortem examination, or following a consultation, all of which should be documented. The person issuing the prescription shall verify that this medication is justified for the target animals on veterinary grounds.
5. **Evidence-based treatment.**

In all uses of antimicrobials the best available information should be used to determine treatment regimens and dosages aimed at providing optimal efficacy with minimal risk of collateral resistance development in either the target organisms, potentially zoonotic organisms, or organisms capable of transmitting resistance to pathogens. The marketing authorisation holder will be the normal source of such information.

6. Comprehensive treatment programme

Detailed preventative medicine programmes should be documented for all companies and/or farms, typically in the form of a Veterinary Health and Welfare Plan. These should include all routine medications (including non-prescription medicines such as anticoccidials and anthelmintics), competitive exclusion and probiotic treatments and vaccines. Any prescribing of antimicrobial medication should be made taking into account its possible effects on other aspects of the programme (in particular live bacterial vaccines and competitive exclusion).

7. Salmonella testing

Any antimicrobial treatment programme must bear in mind requirements for withdrawal of antimicrobial treatment before sampling for official Salmonella testing programmes. For further information contact APHA or DARD.

8. Antimicrobial sensitivity

In an outbreak of bacterial animal disease, the sensitivity of the causal organism should, ideally, be ascertained before therapy is started. In disease outbreaks involving high mortality, or where there are signs of rapid spread of disease among in-contact animals, treatment may be started on the basis of clinical diagnosis. Even so, the sensitivity of the suspected causal bacterial organism should, where possible, be determined so that if treatment fails it can be changed in the light of results of sensitivity testing. Antimicrobial sensitivity trends should be monitored over time and such monitoring may be used to guide clinical judgement on antimicrobial usage.

9. Preventive treatment

The use of therapeutic antimicrobial products in the absence of clinical disease or specific pathogen infections and, in particular, administration to prevent disease should not be practiced without a clear justification with respect to the health and welfare of the treated birds.

However, it is recognised that preventative medication may be appropriate in certain precisely defined circumstances. Each veterinary practice should develop a written policy or protocol covering the circumstances in which this is considered appropriate.

10. Medicated feed

In the case of medicated feed, this may be used only for the animals for which the prescription was intended and only for a diagnosed disease.

11. Off-label use

Any use of antimicrobials outwith the above guidelines, in particular use of antimicrobials outside normal data-sheet recommendations (in accordance with “the cascade”) should be carefully justified, for instance as part of the written prescription.

12. Treatment monitoring

It is acceptable and desirable for QA schemes to monitor antimicrobial usage, medication documentation, and withdrawal period compliance. However such schemes must not prevent the attending veterinarian from taking steps to alleviate suffering in the animals under his care or encourage under-dosing. Tracking of antimicrobial usage should take into account the concentration of active ingredient. The simplest approach is to record the number of Kgs. of animal treated/day as a proportion of the total Kgs. of animals at risk. Any usage where the mg/kg dosage does not match the licensed values would need to be justified.

13. Use of antimicrobials in humans

The Association acknowledges the potential role of veterinary use of antimicrobials in the development of resistance in the human field. Certain antimicrobials are defined as critically important for treatment of human disease, and their veterinary use should therefore take human usage into account. The WHO provides a list of critically important antimicrobials to be used as a

reference to help formulate and prioritise risk assessment and management strategies for limiting resistance due to human and veterinary use.

The Association recommends that members take into account all of the above issues before prescribing any antimicrobials that are of importance in human medicine. Consideration should be given to the principles of ‘One Health’ approach to protecting human health includes collaboration between human, animal and/or environmental health entities on disease surveillance, outbreak response and prevention in order to achieve an optimal outcome.

Ultimately, the continued use of antimicrobials depends on responsible prescribing by the veterinary surgeon.

Further reading

1. BPC Antibiotic Stewardship Scheme 2016 http://www.britishpoultry.org.uk/wp-content/uploads/2016/04/The_BPC_Antibiotic_Stewardship_Scheme_April2016.pdf
2. Code of Professional Conduct for Veterinary Surgeons. <http://www.rcvs.org.uk/advice-and-guidance/code-of-professional-conduct-for-veterinary-surgeons/supporting-guidance/veterinary-medicines/>
3. RUMA Guideline “Responsible use of antimicrobials in poultry production” 2014 <http://www.ruma.org.uk/wp-content/uploads/2014/09/poultryandgameApr20141.pdf>
4. Tackling drug-resistant infections globally: final report and recommendations (The Review on Antimicrobial Resistance – The O’Neill Report) 2016 http://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf
5. BVA: Responsible use of antimicrobials in veterinary practice. http://www.bva.co.uk/uploadedFiles/Content/News_campaigns_and_policies/Policies/Medicines/responsible-use-of-antimicrobials-in-veterinary-practice.pdf
6. VMD: The Cascade: Prescribing unauthorised medicines. <https://www.gov.uk/guidance/the-cascade-prescribing-unauthorised-medicines>
7. WHO 2011. Critically important antimicrobials for human medicine, 3rd revision. <http://www.who.int/foodsafety/publications/antimicrobials-third/en/>

BVPA 07/2016