



BVA policy position on the responsible use of antimicrobials in food producing animals

Executive summary

BVA recognises antimicrobial resistance (AMR) as an issue of critical importance to society as a whole and is committed to providing leadership on this issue. Antimicrobials are essential to both veterinary and human medicine to treat infectious diseases. Continued availability of all existing antimicrobial classes and the development of new ones for veterinary use are essential to maintain the health and welfare of animals and the protection of public health.

A reduction in the use of antimicrobials in animals under the care of veterinary surgeons can only be achieved through improvements to animal health and welfare via disease prevention strategies, including improved animal husbandry and management.

Our overall aim is responsible prescribing and responsible use across the profession, industry, and in the wider context of One Health, recognising synergies between animal health, public health and environmental specialists. To fulfil this aim, BVA makes the following recommendations:

Recommendation 1: Prescribing veterinary surgeons should always carefully consider the use of an antimicrobial, with special attention given to the risk of resistance to these products as part of the benefit/risk assessment.

Recommendation 2: Use of Highest Priority Critically Important Antibiotics (HP CIAs), as defined by the European Medicines Agency, must be restricted for use used as a last resort under veterinary direction, backed up by either sensitivity or diagnostic testing. Where the welfare of the individual animal, herd or flock, and wider context are considered, euthanasia is an alternative treatment option. Off label use must be reserved for exceptional circumstances, following appropriate sensitivity testing.

Recommendation 3: In the interests of animal welfare, critically important antibiotics should remain available for veterinary use. They provide key treatments against some animal diseases where there are currently few or no viable alternatives.

Recommendation 7: Each veterinary practice should develop a written policy or protocol covering the circumstances in which metaphylaxis is considered appropriate. Where antimicrobials are used for metaphylaxis that the clinical justification should be recorded on each occasion.

Recommendation 8: Any off-label use of antimicrobials should be carefully justified. Where the clinical judgement of the veterinary surgeon is satisfied, the veterinary surgeon should prescribe an antibiotic under the cascade in the interests of minimising the development of resistance.

Recommendation 9: Farm assurance schemes should incorporate responsible use of antimicrobials as a requirement of the scheme.

Recommendation 10: Veterinary surgeons should familiarise themselves with the targets for their sector and work with producers to achieve these targets.

Recommendation 11: Government should continue to work with vets and industry to review and set further rational targets through the RUMA Targets Task Force. This should recognise and build on the success to date of BVA specialist divisions, industry and Government in reducing antimicrobial usage.

Recommendation 12: Improved data capture, analysis, dissemination and benchmarking are required across all sectors to underpin future interventions. Efforts to provide usage data rather

Antimicrobial is a term referring to all agents that act against all types of microorganisms – bacteria, viruses, fungi and protozoa. Antibiotic, often used synonymously with antibacterial, refers to an antimicrobial used primarily in the treatment and prevention of bacterial infections.

Antimicrobials are essential to both veterinary and human medicine to treat infectious diseases. Continued availability of all existing antimicrobial classes and the development of new ones for veterinary use are essential to maintain the health and welfare of animals and the protection of public health.

The veterinary profession is concerned by the implications of the development of antibiotic and other antimicrobial resistance. Each use of an antibiotic and other antimicrobials increases the risk of selection for resistant bacteria and other organisms, so we must ensure the use of antimicrobials is responsible across human and animal health.

Antimicrobial resistance is a natural phenomenon which is an inherent risk associated with any use of antimicrobial medication both in animals and humans. Scientific evidence suggests that the clinical issues with antimicrobial resistance faced in human medicine are primarily the result of antimicrobial use in people, rather than the use in animals.¹ The inappropriate and irresponsible use of antibiotics in animals may lead to resistance and reduce availability for efficacious treatments for use in livestock. Further, the use of antibiotics in animals is a contributing factor to the wider pool of resistance which may have long term consequences.

In the UK antibiotics must be prescribed by a veterinary surgeon. Antibiotics are used to:

The timespan of the UK Five Year Antimicrobial Resistance Strategy 2013-2018, has seen considerable success, reflected in October 2017 by the publication of the Veterinary Antimicrobial Resistance and Sales Surveillance (VARSS) 2016 report which marked several important milestones:

The commitment to reduce antibiotic use in livestock and fish farmed for food to a multi-species average of 50 mg/kg by 2018 was achieved two years early. Antibiotic use in food-producing animal species decreased by 27% to 45 mg/kg.

The lowest UK veterinary antibiotic total sales figure recorded (337 tonnes) since regular UK antibiotic sales reporting began in 1993.

Reductions across sales of all highest-priority critically important antibiotics (HP-CIAs), including an 83% reduction in sales of colistin use for food producing animals, from an already very low level.

The VARSS 2017 report demonstrated further progress. Total sales of veterinary antibiotics, adjusted for animal populations, was 37 mg/kg in 2017. This result signals an additional 18%

medications (including medicines not requiring a vet to sign a prescription such as anticoccidials and anthelmintics), competitive exclusion and probiotic treatments and vaccines. Any prescribing of antimicrobial medication should be made considering its possible effects on other aspects of the programme (live bacterial vaccines, competitive exclusion, and monitoring of disease).

Recommendation 4: Detailed preventive medicine programmes should be documented and regularly reviewed for all farms and/or holdings.

Recommendation 5: Government should promote incentives to improving husbandry and biosecurity measures on farm, within a system of Government agricultural support. The involvement of veterinary surgeons will be essential to any such scheme.

Veterinary Prescribing

The prescribing veterinary surgeon 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.

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.

In an outbreak of bacterial animal disease, the identity and sensitivity of the causal organism should, ideally be ascertained through appropriate clinical tests including

Metaphylaxis and Prophylaxis

Control treatment (sometimes referred to in veterinary medicine as Metaphylaxis) is the treatment of a group of animals after the diagnosis of infection and/or clinical disease in part of the group, with the aim of preventing the spread of infectious disease to animals in close contact and at considerable risk and which may already be (sub-clinically) infected or incubating the disease. Preventive

justified to prescribe an antibiotic on the cascade, on a case-by-case basis, in the interests of minimising the development of resistance, particularly where culture and sensitivity indicate that a particular antibiotic active ingredient is effective against a bacterial pathogen and where knowledge of pharmacokinetics indicates that the selected product is likely to be safe and effective for the species and condition being treated (i.e. a narrow spectrum antibiotic over a broad spectrum

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Farm assurance

Farm assurance schemes

eggs
fish
gamebirds
pigs
poultry meat
sheep

Recommendation 10: Veterinary surgeons should familiarise themselves with the targets for their sector and work with producers to achieve these targets.

Recommendation 11:

Recommendation 14: Farmers and stock keepers play a major role in ensuring the responsible use of medicines on farms. They should be empowered through education, facilitation and incentivised to work with their vets to achieve this.

One Health approach

In 2013, BVA warmly welcomed the publication of the UK Five Year Antimicrobial Resistance - agriculture and the wider environment. This is illustrated by the prominence given to human and animal health within the document and the UK Chief Medical Officer and Chief Veterinary Officer providing a joint foreword. This is a success that must now be built upon.

Human and environmental professionals collaborating is crucial given that it affects both animal and human medicine and the environment.

Recommendation 15: Progress the One Health approach

[sector-specific targets for the reduction of antibacterial use. \(108KB PDF\).](#)

Relevant BVA Specialist Divisions positions

[The Best Practice Procedure for Prescribing Antimicrobials in Gamebirds \(1.03KB PDF\)](#)

[British Veterinary Poultry Association Antimicrobials Guidelines \(122KB PDF\)](#)

[Pig Veterinary Society Prescribing principles for antimicrobials \(175KB PDF\)](#)

Goat Veterinary Society Statement: Antibiotic Use in UK Goat Sector, 2018

[British Cattle Veterinary Association AMR Statement December 2016 \(139KB PDF\)](#)

[Sheep Veterinary Society Antibiotics Policy](#)