

# **Guidelines on "The Prudent use of Antimicrobial Drugs in Animals"**

## **Introduction**

Antimicrobials have been important tools in the control of infectious diseases since the 1950s. Their use in veterinary medicine has improved the health and welfare of animals. Antimicrobial use has also contributed to the production of meat, milk, and eggs that are safe for both the consumer, and the people involved in food production.

The continued use of antimicrobials in veterinary medicine depends upon using these products wisely and finding the balance between maximizing animal welfare and conserving antimicrobial efficacy.

## **General Principles**

Veterinarians and livestock owners share responsibility for minimizing the use of antimicrobial drugs to conserve drug efficacy.

Antimicrobial treatment regimes should be designed to maximize therapeutic efficacy while minimizing bacterial resistance.

Antimicrobials used in animals should only be used within the confines of a valid veterinarian-client-patient relationship.

All users of antimicrobials should be educated in the proper use of antimicrobials including administration, handling, storage and disposal.

## **Specific Principles**

- Animal owners and caretakers should be instructed in and encouraged to implement management, immunization, housing, and nutritional programs that prevent or reduce the incidence of disease and therefore antimicrobial use.
- Antimicrobials should only be used therapeutically if a pathogen is demonstrated or anticipated to be present, based on clinical signs, history, necropsy examinations, or laboratory data, and if the pathogen is expected to respond to treatment.
- The need for prophylactic antimicrobials should be regularly assessed. Prophylactic antimicrobials should only be used when an animal(s) is determined to be at risk and evidence indicates that such usage reduces morbidity and/or mortality.
- Antimicrobials should only be used to promote growth and feed efficiency if such use does not compromise therapeutic use in animals and people.
- Antimicrobials that specifically target the pathogen should be selected over broader-spectrum agents and local therapy should be selected over systemic therapy when appropriate.

- Antimicrobials with unique mechanisms of action or importance to human medicine are not used regularly, unless other antimicrobials have been shown to be ineffective and use of the antimicrobial is considered to be life-saving in the animal.
- Combinations of antimicrobials, compounding of active pharmaceutical ingredients, and extra-label usage of antimicrobials is avoided unless under veterinary prescription.
- Antimicrobials should be used for the shortest time period required to reliably achieve a cure. This minimizes exposure of other bacterial populations to the antimicrobial.

*Information above based on Canadian Veterinary Medicine Association guidelines.*