

12-09

STATEMENT OF POLICY

Antimicrobials in Animals

Policy

The National Association of County and City Health Officials (NACCHO) supports federal efforts to ensure judicious use¹ of antimicrobial drugs, particularly those that are medically important,² in food-producing animals to protect animal and public health and minimize antimicrobial resistance. NACCHO also supports efforts to promote judicious therapeutic use of antimicrobials in all animals, including efforts to expand the understanding of use patterns and promote antimicrobial stewardship among veterinarians, the livestock industry, and animal owners.

To reduce the spread of antimicrobial resistance, while protecting the health of animals, NACCHO supports a multifaceted approach that includes voluntary adoption of recommendations, policy implementation, funding, and consideration of the strategies outlined below.

- Limited Use of Medically Important Antimicrobials
 - o Promote education, policies, and funding that:
 - Encourage adherence to evidence-based guidelines for judicious use of medically important antimicrobials in animals, including guidance issued by the USDA and the FDA.
 - Eliminate the use of medically important antimicrobials for growth promotion and improved feed efficiency in food-producing animals.
 - Require veterinary oversight of the use of all medically important antimicrobials for food-producing animals, in the context of a veterinarianclient-patient relationship, including limiting prophylactic use to situations with a determined medical rational for use, targeted specific etiologic agent, and ensured appropriate timing of administration.
 - Promote and incentivize judicious global use of medically important antimicrobials through multinational partnerships, agreements, and strong import standards.



- Licensing and Availability of Medically Important Antimicrobials
 - o Promote policies and funding that:
 - Support antimicrobial licensing guidelines that are based on the latest scientific evidence, maximize therapeutic efficacy, and minimize the potential for antimicrobial resistance and harm to humans.
 - Accelerate the development of new antimicrobials and alternative prevention and treatment approaches for infectious diseases, and support through federal funding and/or incentives the continued production of medically important antimicrobials.
 - Support the continued production of antimicrobials that are critical to treatment of veterinary diseases, such as through the creation of a veterinary orphan drug program.³
 - Enhance antimicrobial take-back programs to minimize potential household and environmental exposures.

Broad Educational Efforts

- o Support educational and training programs and public awareness campaigns that:
 - Increase the adoption of antimicrobial stewardship best practices and evidence-based recommendations for judicious use by veterinarians, the livestock industry, and animal owners.
 - Educate consumers and food retailers about the impact of antimicrobial use in animals and the potential to influence antimicrobial use practices through purchasing decisions.
 - Support companies that provide food to the public (such as retailers, grocers, and restaurants) in selecting animal producers that adhere to policies and recommendations for the judicious use of antimicrobials in animals.

• Research and Surveillance

- o Promote policies and funding that:
 - Enhance laboratory capacity to support One Health surveillance (human and animal) including the availability of pulse-field gel electrophoresis and whole genome sequencing.
 - Enhance surveillance and monitoring of antimicrobial use and resistance in animal populations.
 - Integrate veterinary data with population and public health data to assess and monitor the impact of antimicrobial resistance in animals and humans.
 - Enhance global capacity to detect, analyze, and report antimicrobial use and resistance.

Justification

Antimicrobials have saved countless human lives since their discovery. However, misuse and overuse of these drugs in both humans and animals has led to the emergence and spread of antimicrobial-resistant pathogens. In the United States, two million people are infected with bacteria resistant to at least one antimicrobial each year, and antibiotic resistance causes at least

23,000 annual deaths.⁴ The primary burden of antimicrobial resistance is borne by the most vulnerable members of our society: children, the elderly, and individuals with weakened immune systems.⁵ In addition, antimicrobial resistance is making the treatment of common infections increasingly complex and expensive.^{6,7}

Antimicrobials have been used in animals since the 1940s to treat and prevent infections and currently, their use is widespread but difficult to quantify. In food-producing animals, administration of drugs through medicated feed or water helps to treat entire groups. Antimicrobials have also been used in these species to promote growth. This widespread use of antimicrobials in food-producing animals poses a significant threat to human health, "as pathogenic-resistant organisms propagated in these livestock are poised to enter the food supply and could be widely disseminated in food products." The U.S. Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA) have indicated that use of antimicrobials in animal agriculture has likely led to cases of antibiotic resistance among humans and scientific evidence supports this possible link. 8,12,13

Some steps to address this public health threat at the federal level have already been taken. ¹⁴ The National Action Plan for Combating Antibiotic-Resistant Bacteria calls for the identification and implementation of measures to foster stewardship of antibiotics in animals to achieve the goal of "slow[ing] the emergence of resistant bacteria and prevent[ing] the spread of resistant infections." ¹⁵ Specific objectives include eliminating the use of medically important antibiotics for growth promotion and requiring veterinary oversight for in-feed uses of antibiotics for the prevention, control, and treatment of diseases. ¹⁵ The U.S. Food and Drug Administration (FDA) has released the Veterinary Feed Directive Final Rule ¹⁶ and several Guidance for Industry (GFI) documents to guide the use of antimicrobials in animals. ^{17,18,19} Beginning January 2017, medically important antimicrobials used in feed or water for food animals require a prescription in the context of a veterinary-client-patient-relationship. ²⁰ Non-governmental stakeholders have also contributed by providing guidance for antimicrobial stewardship in food and companion animals. ²¹

To preserve the effectiveness of existing antimicrobials as much as possible, human and animal health sectors should work collaboratively on local, national, and global levels to align policies, strategies and activities to minimize the emergence and spread of antimicrobial resistance. These efforts should include public health, human and animal health, food animal producers and members of the public.

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