



# Positions of Medical & Scientific Organizations on Antibiotic Use in Livestock Operations

Antibiotic-resistant infections lead to longer illnesses, more hospitalizations, the use of antibiotics with greater side effects, and even death when treatments fail. Resistance results from the use of antibiotics in both human medicine and in animal agriculture. Eighty percent of all antibiotics sold in the U.S. are used on cattle, pigs, and poultry, and other livestock, the vast majority to speed up growth and compensate for crowded, unsanitary conditions. In its recent report “Antibiotic Resistance Threats”, the Centers for Disease Control stated, “Up to half of antibiotic use in humans and much of antibiotic use in animals is unnecessary and inappropriate and makes everyone less safe.”<sup>1</sup> In the face of a looming health crisis caused by growing antibiotic resistance, many of the nation’s leading scientific and health-focused organizations have sounded the alarm over animal uses of these drugs, as documented below.

## **BROAD COALITION OF PROMINENT MEDICAL AND PUBLIC HEALTH GROUPS**

“Overuse and misuse of important antibiotics in food animals must end, in order to protect human health.”

*Letter to Congressional leaders from: Alliance for the Prudent Use of Antibiotics; American Academy of Pediatrics; American College of Preventive Medicine; American Medical Association; American Public Health Association; Center for Science in the Public Interest; Infectious Diseases Society of America; Johns Hopkins Center for a Livable Future, Bloomberg School of Public Health; Michigan Antibiotic Resistance Reduction Coalition; National Foundation for Infectious Diseases; Pediatric Infectious Diseases Society; Pew Health Group; Society of Infectious Diseases Pharmacists; Union of Concerned Scientists.<sup>2</sup>*



## INFECTIOUS DISEASES SOCIETY OF AMERICA

“The Preservation of Antibiotics for Medical Treatment Act (PAMTA) . . . and/or other measures (including FDA regulations) should be adopted to end use of antibiotics for growth promotion, feed efficiency, and routine disease prevention purposes in animal agriculture and to ensure that these precious drugs are being used wisely in all settings.”<sup>3</sup>

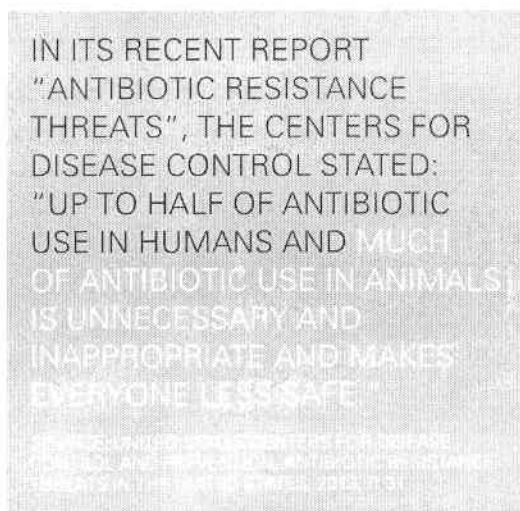
## WORLD HEALTH ORGANIZATION

The Director General of the World Health Organization recently said, “Things as common as strep throat or a child’s scratched knee could once again kill. ... A post-antibiotic era means, in effect, an end to modern medicine as we know it.”<sup>4</sup>

“The problem arises when drugs used for food production are medically important for human health, as evidence shows that pathogens that have developed resistance to drugs in animals can be transmitted to humans.”<sup>5</sup>

## CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

“Antibiotics are widely used in food-producing animals, and according to data published by FDA, there are more kilograms of antibiotics sold in the United States for food-producing animals than for people. This use contributes to the emergence of antibiotic-resistant bacteria in food-producing animals. Resistant bacteria in food-producing animals are of particular concern because these animals serve as carriers.”<sup>6</sup>



“Resistant bacteria can contaminate the foods that come from those animals, and people who consume these foods can develop antibiotic-resistant infections...”<sup>7</sup>

“Scientists around the world have provided strong evidence that antibiotic use in food-producing animals can harm public health through the following sequence of events:

- Use of antibiotics in food-producing animals allows antibiotic-resistant bacteria to thrive while susceptible bacteria are suppressed or die.
- Resistant bacteria can be transmitted from food-producing animals to humans through the food supply.
- Resistant bacteria can cause infections in humans.
- Infections caused by resistant bacteria can result in adverse health consequences for humans.”<sup>8</sup>

## AMERICAN MEDICAL ASSOCIATION

“Antibiotics are one of the most useful and important medical advances in recent history. Their effectiveness, however, is being compromised by bacterial resistance, arising in part from excessive use of antibiotics in animal agriculture. [...] The AMA is opposed to the use of antimicrobials at nontherapeutic levels in agriculture or as pesticides or growth promoters.”<sup>9</sup>

## AMERICAN ACADEMY OF PEDIATRICS

“Resistance to antimicrobial agents is an increasing and serious problem. Judicious use of antimicrobial agents in humans will address only approximately 50% of use and will be insufficient to curb the accelerating upward trend in resistance. The largest nonhuman use of antimicrobial agents is in food-animal production, and most of this is in healthy animals to increase growth or prevent diseases. Evidence now exists that these uses of antimicrobial agents in food-producing animals have a direct negative impact on human health and multiple impacts on the selection and dissemination of resistance genes in animals and the environment. Children are at increased risk of acquiring many of these infections with resistant bacteria and are at great risk of severe complications if they become infected.”<sup>10</sup>

## AMERICAN NURSES ASSOCIATION

“RESOLVED, [...]American Nurses Association urge Congress, meat and poultry producers, and bulk purchasers of meat to promptly phase out the non-therapeutic use of medically important antibiotics and the use of fluoroquinolones in poultry.”<sup>11</sup>

## AMERICAN PUBLIC HEALTH ASSOCIATION

APHA advocates the following: [...]

- Withdrawal of all antibiotics given to healthy animals for economic reasons when those antibiotics are also used for people.<sup>12</sup>

## INSTITUTE OF MEDICINE, NATIONAL ACADEMIES OF SCIENCE

“Clearly, a decrease in the inappropriate use of antimicrobials in human medicine alone is not enough. Substantial efforts must be made to decrease inappropriate overuse of antimicrobials in animals and agriculture as well.”<sup>13</sup>

## AMERICAN SOCIETY FOR MICROBIOLOGY

“There is a growing scientific body of literature demonstrating that antimicrobial resistance among many human pathogens is inextricably linked to the use of antimicrobial agents in animal populations. Hence a comprehensive approach to control and ultimately reverse antimicrobial resistance must limit the inappropriate and non-judicious use of antimicrobial agents in veterinary medicine and food production.”<sup>14</sup>

## Endnotes

- 1 United States Centers for Disease Control and Prevention, Antibiotic Resistance Threats in the United States, 2013, p. 31.
- 2 Letter dated 9/6/2011: [http://www.pewhealth.org/uploadedFiles/PHG/Content\\_Level\\_Pages/Issue\\_Briefs/Joint-Letter-State-Science-Antibiotic-Use-2011-09-06.pdf](http://www.pewhealth.org/uploadedFiles/PHG/Content_Level_Pages/Issue_Briefs/Joint-Letter-State-Science-Antibiotic-Use-2011-09-06.pdf)
- 3 Excerpt from IDSA Policy Paper: Combating Antimicrobial Resistance: Policy Recommendations to Save Lives, 5/1/2011, [http://www.idsociety.org/Agriculture\\_Policy/](http://www.idsociety.org/Agriculture_Policy/)
- 4 <http://www.telegraph.co.uk/health/healthnews/9147414/Resistance-to-antibiotics-could-bring-the-end-of-modern-medicine-as-we-know-it-WHO-claim.html>
- 5 Excerpt from 2011 Statement on 2011 World Health Day: Combat drug resistance: no action today means no cure tomorrow, 4/6/11, [http://www.who.int/mediacentre/news/statements/2011/whd\\_20110407/en/index.html](http://www.who.int/mediacentre/news/statements/2011/whd_20110407/en/index.html)
- 6 United States Centers for Disease Control and Prevention, Antibiotic Resistance Threats in the United States, 2013, pgs. 36-37.
- 7 Ibid.
- 8 Ibid.
- 9 Excerpts from letter commenting on PAMTA, 4/9/2009, [http://www.keepantibioticsworking.com/new/KAWfiles/64\\_2\\_106530.pdf](http://www.keepantibioticsworking.com/new/KAWfiles/64_2_106530.pdf)
- 10 Excerpt from American Academy of Pediatrics Technical Report, 9/2004, <http://pediatrics.aappublications.org/content/114/3/862.full>; reaffirmed 1/2009: <http://pediatrics.aappublications.org/content/123/1/188.full>
- 11 Excerpt from APA 2004 House of Delegates Resolution on Inappropriate Use of Antimicrobials in Agriculture <http://nursingworld.org/MainMenuCategories/WorkplaceSafety/Environmental-Health/PolicyIssues/ANARResolution.pdf>
- 12 Excerpt from Antibiotic Resistance Factsheet, Updated 3/2003, <http://www.apha.org/advocacy/reports/facts/advocacyfactantibiotic.htm>
- 13 Microbial Threats to Health: Emergence, Detection, and Response (2003): [http://books.nap.edu/openbook.php?record\\_id=10636&page=205](http://books.nap.edu/openbook.php?record_id=10636&page=205)
- 14 Excerpt from ASM comments to FDA on FDA's proposed guidance 213, 7/9/2012.

For more information, please visit: <http://www.nrdc.org/food/saving-antibiotics.asp>.

