Did You Know? Get the Facts on Antibiotic Resistance

Up to 70 percent of all antibiotics sold in the U.S. are used on industrial farms in healthy food animals, according to the <u>Union of Concerned Scientists</u>. This makes the U.S. one of the biggest users of antibiotics in food animal production in the world.

In human health care, antibiotic use is generally confined to treatment of illness. In contrast, antibiotics are often used in food animal production not only to treat sick animals but also as a means to offset the effects of overcrowding and poor sanitation, as well as to spur animal growth. This helps explain why it is estimated that up to 70 percent of all antibiotics sold in the U.S. are given to healthy food animals, not people.

- Food animals on industrial farms often are routinely fed antibiotics in food and water to promote growth and to compensate for the effects of overcrowded and unsanitary conditions.
- Eighty percent of antibiotics sold in the U.S. are given to food animals, often non-therapeutically to promote growth and to compensate for the effects of unsanitary and overcrowded conditions.
- Many of the antibiotics used in food animal production -- for example, penicillins, tetracyclines, macrolides and sulfonamides -- are identical to, or from the same family as, drugs used in human medicine to cure serious diseases. According to the Centers for Disease Control and Prevention (CDC), because these classes of antibiotics are similar, bacteria resistant to antibiotics used in animals also will be resistant to antibiotics used in humans.
- The U.S. Food and Drug Administration, the U.S. Department of Agriculture and the Centers for Disease Control and Prevention testified before Congress last year that there was a definitive link between the routine, non-therapeutic uses of antibiotics on industrial farms and the crisis of antibiotic resistance in humans.
- If bacteria become resistant to antibiotics, they can spread in many ways, including handling or eating contaminated meat or produce fertilized by contaminated manure or coming in contact with farm or food workers who handle contaminated animals or meat or with soil and water fouled by animal waste.
- Resistant bacterial infections are harder to treat, require multiple applications of antibiotics, longer hospital stays and possibly other interventions.
- <u>The Alliance for the Prudent Use of Antibiotics</u> has estimated, based on a study conducted at Cook County Hospital in Chicago, that antibiotic-resistant bacteria generate \$16.6 billion to \$26 billion per year in extra costs to the U.S. health care system.
- <u>Resistant infection can be deadly</u>. According to the CDC, 99,000 people die each year of hospitalacquired infectious diseases. Many of these infections are resistant to at least one antibiotic.
- There are 48 million cases of food-borne illness every year in the U.S., causing 3,000 deaths and 128,000 hospitalizations, according to the CDC. These illnesses are especially dangerous when they are resistant to antibiotic treatment.
- Children, the elderly, cancer patients and the chronically ill are particularly vulnerable to resistant infections.
- Previously treatable diseases like pneumonia, meningitis and tuberculosis may again become untreatable, according to the <u>Interagency Task Force on Antimicrobial Resistance</u>, which is cochaired by CDC, FDA and the National Institutes of Health.

- Without effective antibiotics, modern medical treatments such as operations and transplants will become all but impossible.
- <u>The American Medical Association</u>, <u>American Academy of Pediatrics</u>, <u>World Health Organization</u> and other medical groups warn that the routine use of antibiotics in healthy food animals presents a serious and growing threat to human health because it contributes to the spread of dangerous antibiotic-resistant bacteria.

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The Pew Campaign on Human Health and Industrial Farming is working to save antibiotics by phasing out the overuse of the drugs in food animal production. We work with public health leaders, veterinarians, agricultural interests, academics and citizens groups who share our objective of preserving the integrity of antibiotics as a means of protecting human and animal health. Learn more and get involved at www.saveantibiotics.org.