

Common Antibiotic Myths

Myth: Antibiotics used in animals are the cause of major human drug resistant diseases

Fact: The major resistant bacteria/drug combinations that are in the news and are severe problems in human health settings are not related to the use of antibiotics in animals.

The Center for Disease Control (CDC) issued a report in 2013 entitled “Antibiotic Resistant Threats in the United States.” The report listed the 18 major antibiotic resistant pathogens that are the greatest current threats to human health. In discussing the causes and sources of these pathogens, the report said only two—Campylobacter and Salmonella—have potential sources in agriculture. As a result, it is these two pathogens where the agriculture community is focusing its efforts on research and judicious use.

Myth: 80% of antibiotics in the U.S. are used in healthy animals

Fact: This statistic has no foundation in fact, according to the Food and Drug Administration.

- The 80% figure was deduced from comparing two sets of data that are not comparable. The number for antibiotic use in animals had a different methodology than the estimate presented for human use.
- 35% of the use attributed to animals is with compounds not used in human medicine, thus having no potential for reducing the effectiveness of antibiotics used to treat human disease.
- Most antibiotics used in animals are used for therapeutic purposes of treating, controlling and preventing disease. According to AHI data, in 2007 about 87% of all antibiotics used in animals were used for these therapeutic purposes.
- There are 40 times the numbers of food animal raised in the US as there are people.

Myth: Multiple drug resistant (MDR) Salmonella in retail meats is a major public health threat

Fact: Data from FDA’s National Antimicrobial Resistance Monitoring System (NARMS) tells a different story. FDA released an interim report of the retail meats section of NARMS in April 2016 showing a decline of Salmonella in poultry over the past 15 years, including a decline in antibiotic resistant Salmonella. This is consistent with data from the human portion of NARMS, which shows over 80% of Salmonella isolates from humans tested by CDC in the 2012-13 report are susceptible to all antibiotics, meaning they carry no resistance.

While these reports do not support claims that animals are a major source of antibiotic resistance in human infections, the animal health industry continues to promote judicious use of all antibiotics to protect human and animal health. This includes current work to implement FDA’s Judicious Use policy, eliminating the use of medically important antibiotics for growth promotion and ensuring veterinary oversight of all remaining uses.