



Highlights of [GAO-04-490](#), a report to congressional requesters

Why GAO Did This Study

Antibiotic resistance is a growing public health concern; antibiotics used in animals raised for human consumption contributes to this problem. Three federal agencies address this issue—the Department of Health and Human Services' (HHS) Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC), and the Department of Agriculture (USDA). GAO examined (1) scientific evidence on the transference of antibiotic resistance from animals to humans and extent of potential harm to human health, (2) agencies' efforts to assess and address these risks, (3) the types of data needed to support research on these risks and extent to which the agencies collect these data, (4) use of antibiotics in animals in the United States compared with its key agricultural trading partners and competitors, and (5) information on how use has affected trade.

What GAO Recommends

GAO recommends that (1) FDA expedite its risk assessments of drugs used in animals that are critical for human health and (2) USDA and HHS develop and implement a plan to collect data on antibiotic use in animals. USDA and HHS generally agreed with GAO's findings. With respect to the recommendations, HHS agreed that it is important to review animal drugs that are critical to human health and both agencies discussed ways to better collect antibiotic use data.

www.gao.gov/cgi-bin/getrpt?GAO-04-490.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Anu Mittal at (202) 512-3841 or Marcia Crosse at (202) 512-7119.

ANTIBIOTIC RESISTANCE

Federal Agencies Need to Better Focus Efforts to Address Risk to Humans from Antibiotic Use in Animals

What GAO Found

Scientific evidence has shown that certain bacteria that are resistant to antibiotics are transferred from animals to humans through the consumption or handling of meat that contains antibiotic-resistant bacteria. However, researchers disagree about the extent of harm to human health from this transference. Many studies have found that the use of antibiotics in animals poses significant risks for human health, but a small number of studies contend that the health risks of the transference are minimal.

Federal agencies have expanded their efforts to assess the extent of antibiotic resistance, but the effectiveness of their efforts to reduce human health risk is not yet known. FDA, CDC, and USDA have increased their surveillance activities related to antibiotic resistance. In addition, FDA has taken administrative action to prohibit the use of a fluoroquinolone in poultry. FDA has identified animal drugs that are critically important for human health and begun reviewing currently approved drugs using a risk assessment framework that it recently issued for determining the human health risks of animal antibiotics. However, because FDA's initial reviews of approved animal drugs using this framework have focused on other drugs and have taken at least 2 years, FDA's reviews of critically important drugs may not be completed for some time.

Although federal agencies have made some progress in monitoring antibiotic resistance, they lack important data on antibiotic use in animals to support research on human health risks. These data, such as the type and quantity of antibiotics and purpose for their use by species, are needed to determine the linkages between antibiotic use in animals and emerging resistant bacteria. In addition, these data can help assess human health risks from this use and develop and evaluate strategies for mitigating resistance.

The United States and several of its key agricultural trading partners and competitors differ in their use of antibiotics in animals in two important areas: the specific antibiotics allowed for growth promotion and availability of antibiotics to producers (by prescription or over the counter). For example, the United States and Canada allow some antibiotics important in human medicine to be used for growth promotion, but the European Union (EU) and New Zealand do not. Regarding over the counter sales of antibiotics, the United States is generally less restrictive than the EU.

Antibiotic use in animals has not yet been a significant factor affecting U.S. international trade in meat and poultry, although the presence of antibiotic residues in meat has had some impact, according to government and industry officials. Instead, countries raise other food safety issues, such as hormone use and animal diseases. However, according to these officials, antibiotic use in animals may emerge as a factor in the future. They particularly noted that the EU could object to U.S. use of antibiotics for growth promotion as its member countries are phasing out that use.