

GAO Highlights

Highlights of [GAO-17-192](#), a report to congressional requesters

Why GAO Did This Study

According to the World Health Organization, antibiotic resistance is one of the biggest threats to global health. CDC estimates antibiotic-resistant bacteria cause at least 2 million human illnesses in the United States each year, and there is strong evidence that some resistance in bacteria is caused by antibiotic use in food animals (cattle, poultry, and swine). HHS and USDA are primarily responsible for ensuring food safety, including safe use of antibiotics in food animals. In 2011, GAO reported on antibiotic use and recommended addressing gaps in data collection. GAO was asked to update this information. This report (1) examines actions HHS and USDA have taken to manage use of antibiotics in food animals and assess the impact of their actions, (2) identifies actions selected countries and the EU have taken to manage use of antibiotics in food animals, and (3) examines the extent to which HHS and USDA conducted on-farm investigations of foodborne illness outbreaks from antibiotic-resistant bacteria in animal products.

GAO reviewed documents and interviewed officials and stakeholders. GAO selected three countries and the EU for review because they have taken actions to mitigate antibiotic resistance.

What GAO Recommends

GAO is making six recommendations, including that HHS address oversight gaps, HHS and USDA develop metrics for assessing progress in achieving goals, and USDA develop a framework with HHS to decide when to conduct on-farm investigations. USDA agreed and HHS neither agreed nor disagreed with GAO's recommendations.

View [GAO-17-192](#). For more information, contact John Neumann at (202) 512-3841 or neumannj@gao.gov

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ANTIBIOTIC RESISTANCE

More Information Needed to Oversee Use of Medically Important Drugs in Food Animals

What GAO Found

Since 2011, when GAO last reported on this issue, the Department of Health and Human Services (HHS) has increased veterinary oversight of antibiotics and, with the Department of Agriculture (USDA), has made several improvements in collecting data on antibiotic use in food animals and resistance in bacteria. For example, HHS's Food and Drug Administration (FDA) issued a regulation and guidance for industry recommending changes to drug labels. However, oversight gaps still exist. For example, changes to drug labels do not address long-term and open-ended use of antibiotics for disease prevention because some antibiotics do not define duration of use on their labels. FDA officials told GAO they are seeking public comments on establishing durations of use on labels, but FDA has not clearly defined objectives for closing this gap, which is inconsistent with federal internal control standards. Without doing so, FDA will not know whether it is ensuring judicious use of antibiotics. Moreover, gaps in farm-specific data on antibiotic use and resistance that GAO found in 2011 remain. GAO continues to believe HHS and USDA need to implement a joint on-farm data collection plan as previously recommended. In addition, FDA and USDA's Animal and Plant Health Inspection Service (APHIS) do not have metrics to assess the impact of actions they have taken, which is inconsistent with leading practices for performance measurement. Without metrics, FDA and APHIS cannot assess the effects of actions taken to manage the use of antibiotics.

Three selected countries and the European Union (EU), which GAO reviewed, have taken various actions to manage use of antibiotics in food animals, including strengthening oversight of veterinarians' and producers' use of antibiotics, collecting farm-specific data, and setting targets to reduce antibiotic use. The Netherlands has primarily relied on a public-private partnership, whereas Canada, Denmark, and the EU have relied on government policies and regulations to strengthen oversight and collect farm-specific data. Since taking these actions, the use or sales of antibiotics in food animals decreased and data collection improved, according to foreign officials and data reports GAO reviewed. Still, some U.S. federal officials and stakeholders believe that similar U.S. actions are not feasible because of production differences and other factors.

HHS and USDA officials said they have not conducted on-farm investigations during foodborne illness outbreaks including those from antibiotic-resistant bacteria in animal products. In 2014, USDA agencies established a memorandum of understanding to assess the root cause of foodborne illness outbreaks. However, in 2015 in the agencies' first use of the memorandum, there was no consensus among stakeholders on whether to conduct foodborne illness investigations on farms and the memorandum does not include a framework to make this determination, similar to a decision matrix used in other investigations. According to a directive issued by USDA's Food Safety and Inspection Service, foodborne illness investigations shall include identifying contributing factors and recommending actions or new policies to prevent future occurrences. Developing a framework, in coordination with HHS's Centers for Disease Control and Prevention (CDC) and other stakeholders, would help USDA identify factors that contribute to or cause foodborne illness outbreaks, including those from antibiotic-resistant bacteria in animal products.