

GAO Urges Improved Federal Efforts To Address Antibiotic-Resistance Stemming From Farms



First Posted: 9/15/11 03:25 PM ET Updated: 9/15/11 04:09 PM ET

Just days after **Cargill** announced its **second major recall in the last two months of ground turkey** linked to antibiotic-resistant salmonella, a new report suggests the federal government has stumbled in addressing the use of antibiotics in farm animals.

The extensive use of antibiotics in livestock is widely thought to be contributing to the rise in antibiotic-resistant infections such as methicillin-resistant *Staphylococcus aureus* (MRSA). However, federal officials are doing little to monitor just how producers use antibiotics on American farms and when and where antibiotic-resistance results, the Government Accountability Office concluded in its Tuesday report.

Further, federal inaction has hindered scientists studying the connection between bacterial resistance to antibiotics and the use of drugs on livestock because there is limited available evidence, the government watchdog report said, making the trend all the more difficult to stop.

"This study reveals how unprepared we are to deal with the growing threat of antibiotic resistant bacteria and the American public should be outraged," Rep. **Louise Slaughter** (D-N.Y.), the only microbiologist in Congress, said in a statement. "Clearly there is an increasing public health threat here and we need more than 'limited progress.' "

The U.S. Food and Drug Administration first approved the use of antibiotics for growth promotion in livestock in the early 1950s, and the practice remains common today despite widespread acknowledgement of the attendant human health risks.

While the human antibiotics use is known to also play a role in the development of antibiotic-resistant infections, recent estimates suggest that livestock consume 80 percent of the nation's antibiotics. Further, according to the FDA, about 90 percent of these drugs are fed to animals via feed or water, typically at low doses. What doesn't kill bacteria often makes them stronger -- and more likely to outsmart medicine's current range of weaponry.

But many in the agriculture industry challenge the link between bacterial resistance and livestock drug use.

“Just because it is used in feed doesn't mean it is used subtherapeutically,” **Richard Carnevale**, vice president for regulatory, scientific and international affairs at the Animal Health Institute, which represents pharmaceutical companies, [told HuffPost in August](#). “It's hard to scientifically attribute the resistance problem to animals.”

Further, he pointed out at the time, 40 percent of the antibiotics compounds used in agriculture are not used in human medicine. Animal Health Institute didn't immediately respond to request for comment for this report.

Slaughter and many within the scientific community see the association as a serious threat to human health. **Victoria Dillon**, Slaughter's press secretary said, “What is happening on farms is affecting antibiotics that you count on to keep you and your kids healthy.”

Back in 2009, [Slaughter asked the GAO](#) to look into how well the government was tracking and monitoring the use of antibiotics in animals, and if it was making any progress in the assessment and mitigation of the associated human health risks. Despite government agency efforts that began in the 1980s, her request letter highlighted a 2005 report that described a continued lack of data on the actual quantity of antibiotics used for growth promotion. A battle resulted between industry groups and advocates for greater regulation, a community that now includes [a growing number of doctors](#), as HuffPost reported last month.

The situation isn't looking much better today than it was back in 2005.

U.S. Department of Agriculture and the Department of Health and Human Services “have made limited progress in improving data collection on antibiotic use and resistance,” the GAO wrote in the new report. “Without an approach to collecting more

detailed data, USDA and HHS cannot track the effectiveness of policies they undertake to curb resistance."

More specifically, the GAO recommended agencies collect higher quality data that is representative of food animals and retail meat across the country, and that the data be used to evaluate the FDA's current strategy of voluntary reduction in antibiotic use. In 2010, the agency started working with drug companies to limit approved uses of antibiotics and increasing veterinary supervision of antibiotic use. However, they have no plan in place to measure the effectiveness of the strategy.

Both the HHS and the USDA agreed with the GAO's recommendations. "Currently, there is insufficient scientific information available to make important policy decisions regarding use of antibiotics for growth promotion purposes," **Edward Avalos**, under secretary of the USDA, wrote in a letter of response.

In their response, the FDA stated that they will "collaborate with stakeholders to implement a multifaceted strategy that includes voluntary measures where appropriate, regulatory action when necessary, and research and data collection to inform future actions."

Many experts remain nervous, but hopeful.

"This is revealing and telling -- yet another verification that antibiotic resistance is a growing menace and not enough is being done to stop it," said **Stuart Levy**, a microbiologist at **Tufts** University.

"But it can be reversed," he added. "I used to want the strategy to be voluntary, but that is not working. So, finally I'm saying, 'Look Europe has done it. It's an embarrassment that we still have this practice.' "

The GAO highlighted lessons that the U.S. could learn from European Union countries, particularly Denmark. Among other actions undertaken since 1995, the countries have banned the use of antibiotics to promote growth in animals. What's more, Denmark continues to collect detailed use and resistance data to track the outcomes of their policies.

The Danish agricultural industry appears to be holding up just fine as resistance rates drop, according to recent Danish studies. Further, a U.S. study published last month found that going organic and stopping the use of antibiotics resulted in quick and significant [reductions in antibiotic resistance](#).

Earlier this year, Rep. Slaughter reintroduced legislation to restrict the use of antibiotics important to human medicine. The [Preservation of Antibiotics for Medical Treatment Act](#) currently has 64 co-sponsors and [hundreds of endorsing organizations](#) -- from the American Medical Association and the Natural Resources Defense Council to the Humane Society.

"The GAO report discovered what we already knew. The federal government has been sitting on its hands for years while farmers and ranchers continue to overuse antibiotics, putting Americans at risk," **Justin Tatham**, Washington representative for Union of Concerned Scientists's Food & Environment Program, said in a statement. "Bills by Representative Louise Slaughter and Senator **Dianne Feinstein** would go a long way to protect the public. Their bills would preserve the effectiveness of seven classes of antibiotics used to treat human disease by establishing key safeguards preventing the livestock industry from continuing to use antibiotics indiscriminately. That's just the medicine this problem needs."

But the livestock industry has challenged the call for more antibiotic regulation.

Michael Martin, director of communications for Cargill, Inc., told HuffPost in an email that they are currently "assessing every possible measure" to ensure food safety at the company's Springdale, Ark., facility, where an identical strain of Salmonella was responsible for both the August 3 and September 11 recalls of ground turkey. For now, he said, production in Springdale is on hold.

"There has been much noise swirling around about antibiotic resistance in humans to those antibiotics used in animal agriculture," Martin said. "While the strain involved in the recall is resistant to [antibiotics including ampicillin, streptomycin, tetracycline, and gentamicin], they are not front-line antibiotics used to treat Salmonellosis in humans."

Levy, however, suggested it is not that simple. "It turns out that tetracycline and some of the other antibiotics being used will select for bacteria not only resistant to it, but to other drugs as well," he said.

"If you're using antibiotics in animals, don't forget you have an impact on people. We could also say reverse," added Levy. "We're all one community being affected."

http://www.huffingtonpost.com/2011/09/15/gao-antibiotic-resistance-livestock-salmonella_n_964446.html (Huffington Post)

Physiognomy of Names

Louise - famous warrior
Slaughter – butcher
Republican – red / blood

Victoria - victory
Dillon - like a lion

Cargill
Car - carn - meat
gill - fish
gil - servant

Richard - strong leader
Carnevale - meat vale / meat valet

Edward - wealthy guard
Avalos - from the vale?
abalo - shock, shake, tremble (Portuguese)
aval - endorsement (Spanish)

Justin - just, upright
Tatham - tate home
Tate - cheerful
Tate Ham - cheerful pig

Dianne - Huntress goddess - divine
Feinstein - fine stone

Michael - archangel w/flaming sword
Martin - a bird, dedicated to Mars (war)

Stewart - steward
Levy - levy / priest (will join)

Springdale - source of water
Ark - Noah's ark, with pairs of animals

Tufts – i.e. of fur or hair