Veterinary Researchers Working With Feedlots, Dairies Nationwide

The Food and Drug Administration has greenlighted a pilot project by veterinary researchers at Kansas State University to monitor antibiotic use in beef feedlots and dairies with a \$1.5 million grant — \$300,000 per year for five years.

"Our long-term goal is to establish a functional and efficient antibiotic use monitoring system in beef and dairy production systems, which will support continued advancement of antibiotic stewardship in the United States," said <u>Michael Apley</u>, Frick professor of production medicine and clinical pharmacology in the <u>College of Veterinary Medicine</u>.

Apley is working with <u>Brian Lubbers</u>, director of the Clinical Microbiology Laboratory in the Kansas State Veterinary Diagnostic Laboratory, and Sandra Godden, a veterinary professor at the University of Minnesota.

"This funding opportunity was issued because of one of the biggest challenges facing our human and animal health care systems today — that of antibiotic resistance," Apley said. "This challenge threatens to impair, or perhaps remove in many cases, the relatively recent ability to dramatically change the course of bacterial infectious disease."

The research team is collaborating with the U.S. Department of Agriculture's Center for Epidemiology and Animal Health, or USDA CEAH, on data-gathering design structures for industry representation. Data will be collected from 30 feedlots and 32 dairies in states such as California, Kansas, Texas, Colorado, Nebraska, Iowa, Pennsylvania and Minnesota. Participation in the study is both voluntary and anonymous.

"We are fortunate to have the collaborative assistance of both the beef and dairy industries, and the USDA CEAH," Lubbers said. "With their help, we aim to create usable systems that can be adopted by agriculture to understand and continuously improve our antibiotic use practices."

Apley said that a primary goal of the research team is to provide detailed benchmarking data so that individual producers and veterinarians can evaluate their antibiotic uses in comparison to their peers.

"This process will open multiple opportunities to study how we can continue to advance antibiotic stewardship in food animal production systems, making our data the starting point for multiple other studies," Apley said. "Participation by producers is yet another indication that food animal producers take seriously the health of both the animals in their care and the consumers of the food products which they produce."