

AVMA requests \$2,500,000 for the Food Animal Residue Avoidance Databank to carry out

its vital services which help keep animals healthy and the U.S. food supply safe

## **KEY POINTS:**

- FARAD helps keep milk, meat and eggs free of drug or contaminant residue (e.g., pesticides, minerals, biologic toxins) so that food is safe for human consumption.
- 9.6 million animals were impacted through nearly 3,400 direct FARAD inquiries involving drug and chemical residues in 2016.

USDA	FY	Final	P.L.
NIFA/Extension	2017	\$1,250,000	115-31
NIFA/Extension	2016	\$1,250,000	114-113
NIFA/Extension	2015	\$1,250,000	113-235
NIFA/Extension	2014	\$1,250,000	113-79
NIFA/Extension	2013	\$926,127	113-2
NIFA/Extension	2012	\$1,000,000	112-55
NIFA/Extension	2011	\$980,000	112-10
NIFA/Extension	2010	\$1,000,000	111-80
NIFA/Extension	2009	\$806,000	110-329

## **FARAD Funding**

**FARAD customers:** federal and state government agencies, veterinarians, livestock producers, animal health companies and state agriculture agencies, future professionals (undergraduate and graduate education).

**Purpose:** FARAD works to keep milk, meat, eggs and honey free of drug or contaminant residues (e.g. pesticides, minerals, biologic toxins) so that food is safe for human consumption.

The FARAD team of highly trained scientists identifies, gathers, extracts, analyzes, generates, and extends residue avoidance information to determine scientifically-based withdrawal advice in situations involving accidental contaminations, agro-terrorism or legal extra-label drug use (ELDU) in both major and minor food-producing animal species. FARAD navigates regulatory information on approved uses of food animal drugs and recommends withholding intervals following ELDU. Withholding intervals refer to the recommended period of time after an animal was last treated with a drug and before it can be sent to slaughter or its products can be sent to market. This enables food animal veterinarians to effectively treat animals with infectious disease while ensuring food safety.

**Funding increases will be used** to bolster FARAD's ability to provide expert advice in situations involving accidental or intentional contamination of food producing animals; validate higher-level mathematical approaches for determining safe withdrawal periods, validates withdrawal estimates and expand into contaminant exposure; broaden the Department of Homeland Security data elements and analyses to help mitigate the impact of intentional acts of bioterrorism on the nation's food supply; and strengthen the Global Veterinary Drug Database (GVDD) to ensure that imported foods are safe to eat and expands the U.S. domestic exports.

**FARAD and the Law:** FARAD provides the scientific basis for determining the appropriate extended withdrawal period for antimicrobials used in an extra-label manner as is required by the Animal Medicinal Drug Use Clarification Act (AMDUCA) authorized in 1994 (P.L. 103-396). AMDUCA permits veterinarians to prescribe antimicrobials in an extra-label manner to treat conditions for which there are no effective approved antimicrobials.

Congress authorized FARAD in 1998 (P.L. 105-185) as a result of a USDA Office of the Inspector General (USDA OIG) report which determined that the FSIS National Residue Program for Cattle was "not accomplishing its mission of monitoring the food supply for harmful residues." The report stated "Together, FSIS, FDA and EPA have not established thresholds for many dangerous substances (e.g., copper or dioxin), which has resulted in meat with these substances being distributed in commerce."



FARAD's leadership envisions a transparent Global Veterinary Drug Database that will serve as a resource for U.S. exporters to navigate the ever-changing rules and regulations that sometimes discourage the export of U.S. livestock products.

**The FARAD Global Veterinary Drug Database expands America's health food standards:** In 2013, FARAD began developing and implementing a Global Veterinary Drug Database (GVDD) in partnership with the multi-national NGO CABI in the United Kingdom.

The GVDD will catalog global drug availability and the proper uses of drugs to ensure that another country's maximum residue limits (MRLs) are not exceeded, which will improve food safety and protect public health. Furthermore, the GVDD will allow the United States to ensure that international trade partners are abiding by the same stringent food safety standards.

The GVDD's important responsibilities include:

By collating available MRLs, including those established by the Codex Alimentarius Commission (a body jointly established by the Food and Agriculture Organization and the World Health Organization to set international food standards) and by other entities, such as the European Union and the United States, the formal analysis of how concentrations of residues in edible tissues may vary between countries as a results of differences in dosage regimens, target animal species and disease conditions can be conducted.

Estimating extended withdrawal times helps U.S. producers sell their animal-derived foods on international markets and the United States to enhance global food safety.

Enabling a user to easily access legal requirements for specific product use and MRLs in countries that they wish to export to and simultaneously providing withdrawal times in the same web portal will enable users to avoid breaching MRL regulations. Bringing this information together in one place will benefit global food producers and facilitate international trade for U.S. producers. Simply stated, a GVDD would provide a means to relate approved drug use information in an exporting country with the regulatory requirements as mandated by an importing country.

**FARAD management structure:** Four institutions provide FARAD's full array of services to federal government agencies, veterinarians, livestock producers, state agriculture agencies, and animal health companies.

**Kansas State University (KSU)** coordinates national program, develops pharmacokinetic modeling approaches, provides pharmacokinetic support to FARAD components, trains graduate students and clinical pharmacology residents, and on a rotating schedule provides responses to drug and contaminant inquiries coming into FARAD.

University of California Davis (UCD) maintains databases for pharmacokinetic, bibliographic and the call center as well as web-based access to citation files. This region also trains food animal and veterinary pharmacy residents and on a rotating schedule provides responses to drug and contaminant residue inquiries coming into FARAD.

**University of Florida (UFL)** collects and enters data into US-AADD (approved animal drugs database), maintains FARAD website, develops and provides free mobile phone apps, manages platforms for mobile devices to access VetGRAM (Veterinarian's Guide to Residue Avoidance Management) and other mobile applications, and distributes electronic alerts via social media.

North Carolina State University (NCSU) collaborates on research projects that are necessary to validate FARAD withdrawal interval estimates, trains graduate students and clinical pharmacology residents, and on a rotating schedule provides responses to drug and contaminant residue inquiries coming into FARAD.

