The Food Animal Residue Avoidance Databank (FARAD) is supported by the USDA National Institute of Food and Agriculture and is staffed by highly-trained veterinary pharmacologists, toxicologists and food animal specialists. FARAD provides open access to comprehensive up-to-date information and data resources for food animal drugs and science-based estimates of safe withdrawal intervals for food-producing animal species that have been treated with or exposed to drugs or other chemicals.

Find more information on the Kansas Drug Residue Avoidance program, which promotes the prevention of illegal drug residues in food producing animals through educational outreach and training, improved communication, and effective management practices. Resources include species-specific presentations and videos.

Find the latest information regarding Veterinary Feed Directives (VFDs) for producers, feed mill employees, veterinarians, or distributors. Resources include sample VFD forms and sector-specific informational modules, which answer many common questions about VFDs.
**INTRODUCTION**

The swine industry raises hogs or pigs for the production of pork and other by-products. Swine producers are committed to raising a safe and high-quality product for consumers.

Animal drugs are used in the swine industry for production (feed efficiency or growth promotion) and therapeutic (treat, control, or prevent disease) purposes to reduce mortality and morbidity.

There are two major concerns related to their use: drug residue and drug resistance.

Swine producers take precautions to ensure that sick animals requiring treatment do not have contaminated meat enter the food supply.

**DRUG RESIDUE**

Drug residue refers to the presence of veterinary pharmaceutical products such as antimicrobials and deworming products in meat or milk.

These substances enter into an animal's body by the following routes: feed, water, injections, external treatments or by accident. The residue may remain in the tissue up to several months.

The risk of violative drug residues can be minimized if treatment protocols are carefully followed and approved drugs are used for the class of animal being treated.

Well-maintained treatment records and proper drug administration all contribute to successful management practices, reducing the risk of drug residues in meat.

**ILLEGAL DRUG RESIDUE**

An “illegal drug residue” is any drug found above the allowable range in an animal sent to slaughter.

**IMPORTANCE OF DRUG RESIDUE**

Contaminated meat is a major concern for human health. Any adulterated product may result in drug residue allergies or other adverse effects in humans.

Producers found guilty for illegal drug residue may face the following:
- financial penalties,
- criminal penalties,
- refusal at sale barns and packing facilities, or
- negative public perception.

**DRUG USE**

Sulfa drugs or sulfonamides are one of the most commonly used drugs in pig feeds.

Sulfa residues have been found in the livers of slaughtered swine. Extensive testing and research has demonstrated that sulfa residue is *not* commonly due to illegal drug use or improper withdrawal time; rather, it is the result of cross-contamination between medicated and non-medicated feeds.

Therefore, a high importance is placed on the flushing and cleaning methods by producers who mix their own feed.

**RESIDUE PREVENTION CHECKLIST**

- Establish a positive Veterinary-Client-Patient Relationship
- Adopt a Quality Assurance Program
- Supply fresh water
- Clean feeders
- Clean manure and bedding
- Clean equipment to prevent cross-contamination
- Practice proper injection site techniques
- Identify individually treated animals
- Keep good records
- Follow established withdrawal times
- Avoid Extra-Label Drug Use
- Practice proper feed mixing practices
  - Read and follow label instructions
  - Use proper dosage
  - Avoid using a single feeder for both medicated and non-medicated feeds
- Do not mix hogs receiving sulfa with market animals
- Prevent feed delivery errors by clearly marking medicated and non-medicated bins and feeders