



Youth and 4-H Producing Safe Food Includes No Residue in Show Animals

4-H'ers are among the people who produce food. Doing so in a safe way gives consumers confidence that the food they buy is wholesome and safe to eat. **It's more than Safe Food – it's the law.** So exhibitors must follow label instructions on all animal drugs, including those given to livestock that are brought to the fair.

People expect food to be pure and free of harmful residues. A residue is a substance that remains in an animal's body tissues after the animal has been exposed to that substance. The substance can enter the animal's body as a feed or water additive, as an injection or external treatment, or simply by accident. Some substances leave an animal's body tissues a few hours after exposure, but other may remain several months, some may never entirely leave certain tissues.

To protect our food supply, the Food and Drug Administration (FDA) establishes and enforces rules about acceptable levels of particular residues. For some substances, no amount of residue is acceptable. The FDA also establishes withdrawal times for products to ensure that unacceptable residues are not in a product when it is marketed. It is illegal to sell animals or animal products that contain residues exceeding FDA limits.

This is the key to residue avoidance: use approved animal drugs according to their label instructions. By law, every animal drug must be approved by the FDA for all uses before it is available for producers to buy. Part of this scientific approval process involves determining how long it takes for illegal drug residues to leave the treated animal.

Producers must consider each product separately because each product, route of administration, or dosage may have a different withdrawal time to meet the FDA requirement. You will always find the withdrawal times printed prominently on the label.

In some cases, a drug given by one route may have a short withdrawal time, but the same product administered by another route may have a withdrawal time of weeks or months. This difference may result from the product being selectively tied up by one organ or tissue, i.e. oral aminoglycosides have a short withdrawal time, but if injected, withdrawal time can be months because of accumulation in kidney tissues. Therefore, using a different route or administering the drug to a different species can lead to unpredictable results and increase risks of residues.

FDA considers the presence of an illegal drug residue in an animal that is presented for slaughter to be *prima facie* (absolute, compelling) evidence that a drug was used in an illegal manner. **So exhibitors must follow label instructions on all animal drugs, including those given to livestock that are brought to the fair.**

USDA Food Safety and Inspection Service (FSIS) examines, and where necessary, tests slaughter animals to ensure that violative residues have not occurred. Random tests at slaughter or processing facilities indicate which food producers are not following the regulations. If illegal levels of a residue are found in the tissue of a slaughtered animal, or in milk, the U.S. Department of Agriculture will require a facility not to accept animals or products from the noncomplying producer until tests indicate products from that producer are safe. **Perhaps the worst consequence of violating the FDA guidelines is loss of consumer confidence in food products from animals.**

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USDA-FSIS uses two types of animal sampling procedures – objective and subjective. The objective phase is designed to randomly sample enough animals to detect a residue problem in all animals sold at one time. This program is an ongoing activity at all federally inspected plants. The subjective phase tests specific animals that may have a higher risk of violative residues. Animals with injection sites or other evidence of recent medication, animals from high-risk populations, and animals from high-risk situations may be targeted for increased residue testing.

Nationally and in Iowa, animals from exhibitions are considered to be a high residue risk populations, so they are tested at higher rates than other animals. In both the objective and subjective sampling phases, the owners of animals found to contain violative residues are subject to regulatory actions by FDA. Any residual amount of some illegal drugs (i.e. Clenbuterol, Chloramphenicol, DES, Iprnidazole, Fluoroquinolones, Nitrofurans) in food animals will result in significant regulatory actions including substantial fines and incarceration. **Residue avoidance is serious business for all animal exhibitors.**

Violative residues may occur from improper uses of antibiotics (injectable, water, powder, bolus forms), feed medications, and pesticides near slaughter. Treatment of animals before or during the fair requires careful selection of products to avoid those with extended withdrawal periods. Common errors that may lead to illegal residue include inadvertently feeding a medicated feed requiring a withdrawal period and improper selection of therapeutic drugs immediately before or during the fair. Use of tranquilizers or sedatives to calm animals during the fair or exhibition is illegal because none have been approved in food animals and use of tranquilizers can result in violative tissue residues. Using tranquilizers is also unfair to other exhibitors. Clenbuterol, a repartitioning agent not approved for any use in food animals in the USA, has been used in some exhibit animals. National news articles were written about this illegal activity. Heightened awareness of using a harmful illegal substance has

stimulated a more intensive testing program for all livestock originating from fairs and exhibits. A very sensitive test has been introduced this year that will detect Clenbuterol usage for extended periods (one report estimated at least 150 days) after withdrawal. Previous tests could detect prior use for several days to weeks. This heightened scrutiny already has resulted in regulatory actions, including incarceration, at exhibitions where illegal Clenbuterol residues have been found.

Because of the greater regulatory activity and very unfriendly press reports about animals with residues being slaughtered at their facilities, some packers will no longer accept exhibition livestock for slaughter. A few more exhibition animals with violative residues may encourage other packers to stop purchasing these show animals. If others follow this lead, it is conceivable that terminal livestock exhibition, derby, and carcass shows would be impossible to conduct.

All exhibitors must be part of the solution to this problem by presenting residue-safe animals to the fair. Several easy steps can greatly reduce the risk of violative residues:

1. Use only legal animal drugs according to the approved label instructions.
2. Read the label to determine the appropriate withdrawal time
3. Ensure sufficient time to complete the withdrawal period before animals will be marketed.
4. Review all medications and feeds to be brought to the fair, and avoid those products requiring withdrawals.

Because of the increased regulatory and packer concerns, some fair committees may require exhibitors to sign an affidavit stipulating that withdrawal times are known and have been met for all treated animals. The four steps above should enable you to meet the requirements of any affidavit.

Prepared by James D. McKean, extension veterinarian:
Melva L. Berkland, communication specialist

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