



How to determine appropriate animal health product withdrawal times in pigs

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Introduction

A primary food safety responsibility of pork producers is to market pigs without violative chemical residues to the market(s) they serve. This involves knowing where animal health product withdrawal time information can be found, and how to apply this knowledge every time a drug is used. All animal caretakers must be committed to preventing the marketing of animals with violative residues. The commitment includes reading and following label directions, identifying treated animals and keeping records and protocols that assure the withdrawal time has elapsed before marketing a treated animal. Proper drug usage is everyone's responsibility.

General Information on Withdrawal Times

The withdrawal time is the period required for an animal health product to be metabolized, broken down, or excreted so that the level remaining in the meat and organs is below the level established as safe for human consumption. The withdrawal time is dependent on how fast the animal clears the drug from its body and the dose of the drug administered. Withdrawal periods in the United States are established by the Food and Drug Administration (FDA) based on extensive product testing, and can vary for the same active ingredient with different formulations. Other countries may have different withdrawal times for the same products. Producers should check with their packer(s) about where their products are marketed in and adjust withdrawal periods if needed.

If a drug is used in an extra-label manner, the herd veterinarian must assign a withdrawal time that prevents violative residues at animal harvest, and producers must comply with it.

The Food Animal Residue Avoidance Databank (FARAD) is a national food safety project administered through the U.S. Department of Agriculture (USDA). The purpose of FARAD is to provide livestock producers, Extension specialists and veterinarians with practical information on how to avoid violative drug, pesticide and environmental contaminant residues. In addition to the Web site www.farad.org, more specific residue avoidance information can be obtained from FARAD by calling (888)USFARAD (873-2723), or via e-mail to farad@ncsu.edu.

Domestic

Failure to observe pre-harvest withdrawal times following treatment of food animals is the major cause of violative tissue residues in the United States. If the animal health product has a withdrawal time, this information will be found on the label, package insert or the feed tag.

Nearly all vaccines are labeled with a 21-day withdrawal time. If there is a possibility that a pig will soon be sold as food, it should not be vaccinated unless the withdrawal time can be met.

Other sources of withdrawal time information

A list of FDA-approved animal drug products, called the "Green Book," is compiled and maintained by the FDA. Electronic copies of the Green Book are available on the FDA Web site at http://www.fda.gov/cvm/Green_Book/greenbook.html. The database also can be searched online at <http://www.accessdata.fda.gov/scripts/animaldrugatfda/index.cfm?gb=1>.

International

Other countries may require withdrawal times different than those for the United States. For example, if a packer exports pork to Japan, the packer's supplier of pork must know and comply with the withdrawal times required by the Japanese market before using animal health products. One source for withdrawal time information to satisfy the Japanese maximum residue levels (MRL), is the Pork Checkoff's Web site at <http://www.pork.org>.

Calculating Withdrawal Times

Each withdrawal day is a full 24 hours starting with the last time the pig is treated or has access to medicated feed or water. If a pig is treated for the last time at 9 a.m. on Friday with a drug having a 5-day withdrawal, the withdrawal would be completed at 9 a.m. on the following Wednesday. In the case of medicated feed or water, the withdrawal starts at the time the pig is removed from the medicated feed or water, not the last time the feed bin was filled with medicated feed or medication was put in the water supply. The withdrawal time begins when all the medicated feed is removed from the feeder or the water supply has been cleaned and flushed.

Maintaining Medication and Treatment Records

Keeping and maintaining medication and treatment records also is a basic expectation of regulatory officials. Medication records provide documentation that demonstrates a drug was used properly. In instances where a residue found at harvest has been traced to a farm, the producer will be expected to provide complete records to if an investigation is conducted.

Treatment records also can be useful as a management tool. Reviewing records can provide insight into the use of animal health products one year versus another, the efficacy of certain products and other information that can be important when formulating disease-control strategies.

FDA Compliance Policy Guide (CPG) 7125.37 – Proper Drug Use and Residue Avoidance by Non-veterinarians outlines the practices and procedures the FDA would expect to find in an operation's standard operating procedure for using animal health products. As one part of this CPG, the FDA expects producers to maintain medication and treatment records that will indicate:

1. The animals that were treated
2. The date(s) of treatment, including last date of administration
3. The drug(s) administered
4. The route of administration
5. The person who administered each drug
6. The amount of each drug administered
7. The withdrawal time prior to harvest

Last Date of Treatment	Animal ID	Product Name	Dose (cc)	Route	Given By	Withdrawal (Days)
10-16	129	LA 200	7	IM	John	28
11-29	267	Excede	4.5	IM	Mike	14

Example of FDA suggested information

Suggested Information for Tracking Treatments

There is no penalty for documenting more information than that required by the FDA's CPG. Other medication and treatment records that may be helpful can include:

1. The approximate body weight of the animal treated to verify the amount of drug given was appropriate.
2. The route the medication was given to verify you followed the labels directions
3. The medical problem that prompted treating the animal, such as pneumonia, diarrhea, etc
4. Calculated date the withdrawal was complete.
5. The name of the veterinarian who has a veterinarian/client/patient relationship and directed extra-label drug use when appropriate.

Date	Animal ID	Body Wt	Condition Treated	Product Name	Dose (cc)	Route	Given By	Withdrawal (Days)	Date Withdrawal Complete	VCPR Veterinarian if extra-label drug use	Outcome of Treatment
10-16	129	155	Pneumonia	LA 200	7	IM	John	28	11-13	Dr. Paul	Better
11-29	267	180	Pneumonia	Excede	4.5	IM	Mike	14	12-13	Dr. Paul	Died

Example of suggested information