

Making Responsible Choices about Antibiotic Drug Usage in Dairy Cows



Reducing the Risk of Residues in Milk and Meat

Background

The occurrence of antibiotic residues found in milk and meat in the dairy industry is rare. For example, in 2012, less than 0.02 percent of milk tanker loads in the U.S., had detected levels of volatile residues, and this percentage continues to decrease annually. Though residues are rarely detected, mistakes still occasionally occur. Antibiotics and other products that have milk withholding times are used on most conventional dairy farms to maintain welfare of sick cows. Understanding the different types of allowable drug usage and correctly following treatment protocols ensure that animals receive appropriate care and food produced from these animals will be safe for human consumption. Poor treatment records, missing identification of treated animals, lack of communication between those treating the cows and those handling the cows, and inadequate training of personnel who will be administering these medications are reasons why antibiotic residues show up in our food supply. Human error is the foremost cause of residues in milk and meat. This factsheet reviews the practical aspects that will help reduce the risk.

Reducing the Risk of Residues

There are six principles that can reduce the risk of residues in milk and dairy beef.

Have a strong relationship with your veterinarian

Your veterinarian should be involved enough in your dairy that he or she can be involved in helping with animal health decisions. Have discussions with your veterinarian, your farm workers and yourself to agree upon treatment protocols for the variety of diseases that can occur on your dairy. Ideally, these treatment protocols should be written to provide an extra layer of safety so that the people administering the treatment will have written instructions to follow.

Understand differences in allowable types of drug usage

Read the labels on every product used on your dairy herd and follow those labels exactly. If the labels are not to be followed exactly, then the rules for extra-label drug usage are applied. All extra-label drug usage must be supervised by your Veterinarian of Record.

Provide good animal health care

Providing good animal health care is the most important principal to reduce the risk of residues. Overall good animal husbandry will help prevent disease and reduce the need to use antibiotic drugs for treatment. Providing healthy diets, appropriate housing, and routine veterinary visits creates a system in place that allow diseases, when they do occur, to be detected early. When an animal develops a disease, be sure to treat not based on symptoms, but that each ill animal receives an examination and a diagnosis before treatment is administered.

Decide and limit who is allowed to treat animals

Training animal health managers on the farm is essential. During training, health managers should work alongside the Veterinarian of Record for proper supervision to ensure that drugs are administered to the right cows in the right dosages and in the right routes of administration. After training, farm managers and veterinarians need to be able to monitor drug usage to ensure that the amounts of the drugs actually used on the farm match the expected amounts in the established treatment protocols of disease occurring on the dairy.

Identify all animals using permanent identification

It may be obvious to use permanent identification to identify individual animals in the herd, but nevertheless errors do occur. Being able to keep track of individually treated cows is necessary. Treatment records should be easily accessible to those treating and handling the cows, and need to be provided for every cow for every treatment. Two types of records should be kept: a temporary, cow-side record (like a chalkboard in the parlor or clipboard) that clearly indicates which cows have been treated with what drug; and a permanent record made up of all the filed temporary records to create a life history report for each cow.

Double check records and history of cull cows

A simple way to reduce the occurrence of residues in dairy beef is to create redundancy in recordkeeping and cull management. For example, having two people responsible for deciding whether a cow leaves the farm and into the dairy beef chain creates a system where decisions are double-checked and mistakes are limited.