Common Reasons for Carcass Drug Residues

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According to the current USDA data available in 2008 cull dairy cows accounted for just over 7% of all cattle slaughtered in the US, but were responsible for approximately 90% of carcasses in which drug residues were detected.

Some of the more common reasons leading to having a carcass condemned for drug residues include:

#1 Changing the dose or route for Procaine Penicillin G: The label dose for PPG is only 1cc per 100 pounds, or about 15 cc total. When a cow is given higher doses or treated subcutaneously (under the skin), the slaughter withdraw time can increase from the label 4-10 days up to several weeks.

#2 Marketing cows treated for mastitis before completing their slaughter withdrawal: Dairy employees usually do a great job holding out milk from cows treated for mastitis, but sometimes forget that mastitis tubes also have *slaughter* withdrawal times ranging from 4 to 28 days.

#3 Marketing dry-treated cows before completing their slaughter withdrawal: While it's tempting to cull a cow who has aborted, she'll still have residues in her tissues from her dry treatment and a *slaughter* withdrawal of 14 to 60 days from the day she was dried off.

#4 Calves marketed for veal that have consumed colostrum or medicated milk replacer: Calves slaughtered shortly after birth (as bob veal) may have consumed enough antibiotic from the dry-treatment to trigger a positive carcass test. Tissue residues are also frequently caused by calves consuming milk replacer medicated with tetracycline & neomycin. Calves fed medicated milk replacer should *never* be marketed as veal.

#5 Giving pain-relievers in the muscle or under the skin: The only pain-relievers approved for cattle contain flunixin (Banamine, Flu-Nix), a drug which was only designed to be administered in the vein. Giving flunixin-containing products in the muscle or under the skin, rather than intravenously, can increase the withdrawal time from the label 4 days to more than a month.

#6 Marketing cows treated with intra-uterine boluses or infusions: Tetracycline can cross the uterine wall and be detected in the milk and at slaughter for variable periods. Some veterinary publications recommend slaughter withdrawal of up to four weeks following intrauterine treatment.

#7 Thinking there is a "zero meat, zero milk withdrawal" antibiotic: While products containing ceftiofur (Naxcel, Ceftiflex, Excenel, Excede) are attractive because they have no *milk* withdrawal, all ceftiofur-containing products have *slaughter* withdrawals ranging from 3 to 13 days when used according to label. There is no such thing as a "zero meat, zero milk withdrawal" antibiotic.

#8 Using any sulfa-drug off label: The sulfonamide ("sulfa") drugs may legally only be used exactly according to label instructions. Recent FDA investigations residues suggest that over-dosing sulfa boluses (Albon) or giving intravenous sulfa products (Di-methox) off-label in the muscle or under the skin has led to tissue residues.

While the situations above are some of the more common causes of tissue residues, virtually any drug can cause residues if it is used off label or if the drug is used on label but the label withdrawal isn't followed. With USDA stepping up enforcement on tissue residues and the potential for FDA testing of bulk tank milk in the future, now is an excellent time for dairy managers to review their treatment programs. As always, your veterinarian is your most valuable resource for information and advice about avoiding tissue and milk residues.