WITHDRAWAL TIME DETERMINATION

WHAT

Withdrawal times are established durations that must pass before a treated animal or its products can enter the food supply. These are based on determination of the duration of time that a drug or its metabolites are detectable after specific dosing regimens. All antimicrobial use in food animals must be accompanied by an appropriate withdrawal time.

WHY

Establishment and adherence to withdrawal times are important to facilitate the use of antimicrobials while avoiding the risk of antimicrobial residue in food. Antimicrobial residues in food are of concern because of the potential for allergies, direct toxic effects, impacts on food processing (e.g. fermentation of milk), and antimicrobial resistance selection pressure. Antimicrobial residues can therefore have potential health and economic impacts. Economic impacts on producers can be substantial.

KEY POINTS

- Label withdrawal times only apply to the labelled species and dosing regimens.
- Written withdrawal time information must be provided for any extra-label antimicrobial use.
- Label withdrawal times may vary between countries.
- CgFARAD can be contacted at https://cgfarad.usask.ca/home.html or (306) 966-2543

How to determine withdrawal times?

Product Label

Drugs approved for use in food animals will have withdrawal times listed the approved species and indications:

- Withdrawal times on the label are species specific. If the drug is not approved for use in the species of the patient, the label time does not necessarily apply.
- Some withdrawal times differ between countries. If a foreign product is administered, the Canadian withdrawal times must be used.
- Increasing the dose, shortening the dosing interval or changing the route of administration will likely impact (and usually prolong) the required withdrawal time. Label withdrawal times do not apply to dosing regimens that are not listed on the label.
- Certain disease states might impact withdrawal times. For example, while neomycin is poorly absorbed after oral administration, intestinal inflammation and mucosal damage can lead to increased absorption and a greater risk of detectable residues in kidneys.