



CgFARAD™ NEWSLETTER

FALL 2017

NEW CgFARAD™ DATABASE LAUNCHED

Dr. Trisha Dowling, Co-director, CgFARAD™

The new CgFARAD™ webpages and database were rolled out over the summer. In our 15 years of operation, the identification of residue issues has prompted a number of important drug residue studies. With the improved data capture, the CgFARAD™ will be better able to identify issues of concern and promote antimicrobial stewardship. The new webpages are at www.cgfarad.usask.ca and include information on the service, the personnel (Drs Dowling, Johnson and Enouri), links to published research resulting from CgFARAD™ inquiries, and links to our financial supporters.

**CgFARAD™ responded
to 2,257 withdrawal
requests in 2016-2017**

The CgFARAD™ online request service is only for Canadian licensed veterinarians to submit specific requests for withdrawal information when they prescribe extra label drug use in food animals. In order to submit information requests, each veterinarian needs to establish an account and set a password. Once their account is established, veterinarians can log in to request withdrawal information, to check on the status of a request or review all of their previous requests in the database. This web based service is available 24/7 and has been configured to work with cell phones.

CgFARAD Home



The CgFARAD is a national food safety database that provides expert-mediated advice to veterinarians on the disposition of drugs and chemicals in food producing animals. If approved veterinary drugs have been or are going to be used in specific animals in an extralabel manner or if there is accidental exposure to drugs, Canadian veterinarians can use this online request service to receive withdrawal information for food animal products such as meat, milk and eggs.

If the request involves non-veterinary approved drugs or chemicals, or involves general information on drug residues, or if you are not a Canadian licensed veterinarian, please contact us by email or phone for further information.

Login to CgFARAD

The CgFARAD database has recently been updated to use accounts and passwords. To continue using an email address already used by CgFARAD, [click here](#)

[Not a member of CgFARAD? Register instead](#)
 [Forgot your password? Click here to reset it](#)

English français

Legitimate extra label drug use in Canada is to be on a case by case basis. That is why we require the identification of drugs used in a specific animal or herd/flock for a specific disease situation. A separate request needs to be entered for each animal or group of animals receiving the extra label treatment(s). For example, an antimicrobial and a coccidiostat may be incorporated in to one batch of feed for a poultry flock, so both drugs would be included in one request. But if in a dairy herd, one cow is going to receive an antimicrobial and another

cow is going to receive an anti-inflammatory drug, then two separate requests need to be submitted. The CgFARAD™ service does not provide blanket withdrawal recommendations for routine extra label drug use. The disease state of the animal(s) will impact the withdrawal recommendation that we provide, and our advice is specific to that situation on the day that we give it. Use of our recommendations for future/different cases is a veterinarian's prerogative, but we highly discourage such practice as the disease states may be different and we are always acquiring new information that may change our recommendations. This policy is shared by the US FARAD as well.

Veterinarians will notice a number of new features of the database when logging in a request. To better identify trends and residue issues that stimulate research by the co-directors, the new database captures information much more precisely by using a number of drop down menus. The reason for the extralabel drug use is now divided into "treatment, accidental exposure, feed mill error, metaphylaxis, prophylaxis, and research". Dosage regimen information and species-specific choices of diseases organized by system affected are arranged in drop down menus. The new database sends an email confirmation when the veterinarian submits the request. When CgFARAD™ personnel respond, the veterinarian receives an email containing the response in the body of the email along with a pdf file attachment.

Non-prescribing veterinarians or veterinarians with general inquiries should contact us by phone or email for assistance. The phone number and email link is featured on all of the webpages for convenience.

CGFARAD™ AND FOOD SAFETY RELATED RESEARCH

Dr. Ron Johnson, Co-director, CgFARAD™

CgFARAD™ secured a Growing Forward 2 grant (2016-2017) through the Livestock Research Innovation Corp. to establish a state of the art tissue culture suite in the Department of Biomedical Sciences at the Ontario Veterinary College, University of Guelph. An article and photos from the open house were included in the Fall 2016 newsletter. The lab will be instrumental in conducting CgFARAD™ research relating to factors including drug-drug interactions, genetics, husbandry practices, nutrition and environment that could affect the fate of drugs (metabolites) in food producing animals and result in violative residues or animal welfare issues.

Current research projects in the new lab involve the evaluation of risks of violative drug residues in poultry from extra label drug use combinations administered in feeds. The project is being funded by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Food Safety Research Program and CgFARAD™ stakeholders. The initial objective of the project is to establish functional poultry (turkey, chicken) hepatocytes in vitro.

Three-Year Trend – CgFARAD Requests			
	2014-2015	2015-2016	2016-2017
Broiler Chickens	720	801	825
Turkeys	560	446	482
Dairy Cattle	251	266	232
Goats	91	90	196
Sheep	82	61	125
Broiler Breeders	80	101	79
Layers	60	69	92
Swine	49	56	40
Beef Cattle	48	48	88
Ducks	28	13	6
Quail	19	9	5
Horses	15	19	10
Chukar Partridges	13	19	8
Veal Calves	11	48	23
Rabbits	10	21	21
Bison	3	7	11
Pheasants	3	4	6
Deer	1	5	1
Fish	1	1	1
Other	12	21	6
	2057	2105	2257

In the second objective, isolated hepatocytes from control (drug-free) birds will be seeded onto multi-well culture dishes. Drugs of interest determined from review of the CgFARAD™ database that are used in combination in poultry feed and are not considered compatible in the Compendium of Medicating Ingredients Brochure of the CFIA will be applied alone and in combination at varying concentrations. Drug depletion (hepatic clearance) from the media will be measured over time using validated HPLC or HPLC-MS/MS assays. Results of this project will assist the CgFARAD™ pharmacology service with identifying combinations of drugs being requested for use in poultry feed that are at risk of violative residues from drug-drug interactions.

In addition to the research being conducted in the new lab, there are several other CgFARAD™ related research studies of note:

- **Depletion of the antiparasiticide Fenbendazole in turkeys;** supported by the OMAFRA Food Safety Research Program and Turkey Farmers of Ontario.
- **Risks of violative milk residues following topical tetracycline therapy for digital dermatitis (*Treponema spp*) in dairy cattle;** funded by the OMAFRA Food Safety Research Program, Dairy Farmers of Ontario and Vetoquinol. The project is being conducted in conjunction with Dr. Gerard Cramer (Veterinary Population Medicine, University of Minnesota).
- **Drug depletion of injectable Trimethoprim Sulfa in lactating dairy does;** funding proposed by the OMAFRA Food Safety Research Program, Ontario Goat, Small Ruminant Veterinarians of Ontario, and Merck Animal Health (funding decision pending). The project is in conjunction with Dr. Cathy Bauman (Population Medicine, University of Guelph).

CgFARAD™ Role and Mandate

- CgFARAD™ protects the Canadian food supply from unsafe or violative drug and chemical residues by providing expert advice to veterinarians on recommended withdrawal intervals.
- Veterinarians are legally permitted to prescribe drugs in an extra label manner but must provide new withdrawal guidelines.

CgFARAD™ personnel also assist:

- veterinarians in determining safe recommended withdrawal intervals when animals are accidentally exposed to pesticides, heavy metals or other chemicals;
- feed mills and processors when accidental contamination of feeds occur; and,
- regulatory agencies seeking clinical pharmacological expertise regarding drug residues.

OTTAWA STAKEHOLDER MEETING

Susan Fitzgerald, CgFARAD™ Administrator

Thirty people attended the half-day CgFARAD™ stakeholder information session held on November 28, 2017 in Ottawa in conjunction with the National Farmed Animal Health and Welfare Forum. Attendees heard presentations on the new database and tissue lab (see previous articles) as well as a governance and financial update, an overview of CgFARAD™ service activity, and a presentation from the Canadian Veterinary Medical Association on prudent antimicrobial use education and outreach.

The previous stakeholder session was held in May 2015. Based on feedback received from stakeholders at that time, a number of changes have been made to the governance structure of CgFARAD™. In January 2016, a three-way agreement was signed between the University of Guelph, the University of Saskatchewan and Susan

Fitzgerald, Fitzgerald & Co. The universities provide the pharmacological expertise and Fitzgerald & Co. looks after the administration and finance.

An industry stakeholder Advisory Board was also formed to provide guidance and strategic advice to the CgFARAD™ co-directors on business and finance matters. The Advisory Board approved a CgFARAD™ Business Plan covering 2016 to 2019. The Advisory Board is comprised of the two CgFARAD™ co-directors, three commodity association representatives, two directors from veterinarian associations, and one representative each for pharmaceutical companies, the Canadian Animal Health Institute, feed and processing industry, and the Canadian Food Inspection Agency.

Feedback from attendees at the 2017 meeting was very positive and supportive of the changes enacted over the past two years. Looking forward, they identified several challenges for CgFARAD™ including:

- As antimicrobial use moves to prescription only and farmers engage veterinarians for the first time, there will be growing demand on services such as CgFARAD™;
- Rising costs/fees at Health Canada may result in fewer product registrations also leading to more demand for extra label drug use;
- Increasing number of submissions on a yearly basis and not enough human resources at CgFARAD™ to handle larger caseloads;
- The need for a succession plan to ensure long-term sustainability; and,
- Would like to see a link in Quality Assurance Programs at the commodity level with CgFARAD™, i.e. advise that veterinarians prescribing extra label are to utilize CgFARAD™ advice.

PROTECTING THE CGFARAD™ NAME

Susan Fitzgerald, CgFARAD™ Administrator

You will notice that we have started using the trademark symbol, ™, after the CgFARAD acronym. We were concerned that another group might start using the acronym for something totally unrelated to food animal residue avoidance; the use of the full name is less likely. The use of ™ signifies an unregistered trademark whereas ® refers to a registered trademark. Most countries require formal registration of a trademark as a precondition for pursuing legal action against trademark infringement. However, Canada, the U.S. and some other countries also recognize common law trademark rights, which mean action can be taken to protect an unregistered trademark if it is in use. However, common law trademarks offer less legal protection than registered trademarks.