

## REPORT OF THE USAHA/AAVLD COMMITTEE ON ENVIRONMENT AND TOXICOLOGY

Chair: Larry Thompson, MO

Vice Chair: Tim Evans, MO

David Ailor, DC; A. Catherine Barr, TX; Karyn Bischoff, NY; Francis Galey, WY; Tam Garland, TX; L. Wayne Godwin, FL; Ramesh Gupta, KY; Jeffery Hall, UT; William Hare, MI; Brent Hoff, ON; Stephen Hooser, IN; Laurent O'Gene Lollis, FL; Travis Mays, TX; David Meeker, VA; Gavin Meerdink, IL; Sandra Morgan, OK; Michelle Mostrom, ND; Eileen Ostlund, IA; Gary Osweiler, IA; Robert Poppenga, CA; John Rathje, IA; Jane Robens, MD; Wilson Rumbelha, IA; Nick Schrier, ON; Lori Smith, KY; Patricia Talcott, WA; Gary Weber, MD.

The Committee met on October 19, 2013 at the Town and Country Hotel, San Diego, California, from 3:30 until 6:25 PM. There were 15 members and 22 guests present. Dr. Tim Evans welcomed the group and provided a background of the Committee work, including the mission statement.

Dr. Thompson led the discussion of old business.

A short proficiency testing update was given by Dr. Hall on trace mineral analysis in bovine liver, including background information on the clinical case of lead toxicosis in the adult cow whose liver was used. The animal was also deficient in copper as well as selenium. The full report had just been presented at the American Academy of Veterinary and Comparative Toxicology (AAVCT) meeting on the preceding day. The Committee thanks Dr. Hall, the Utah State Diagnostic Laboratory and the USDA Poisonous Plants Research Laboratory for processing (including freeze drying, repeat homogenization steps and initial validation of homogeneity) and distributing the samples by to the participating laboratories. A total of 21 laboratories participated, supplying 24 data sets for evaluation. Data sets ranges from analysis of only 1 element up to analyses for 28 different elements. Specific results had been distributed and discussed at the AAVCT meeting. Dr Hall mentioned that additional samples remain if laboratories wish to use them as in-house standards.

Dr. Poppenga gave the update and background on the next proficiency test which would concern anticoagulant rodenticides in liver. Cases submitted to CAHFS Laboratory will be composited, homogenized, divided and shipped frozen to participating laboratories. Several anticoagulants are expected in the composite sample. Information about this proficiency test will be distributed following the first of the new year. Dr. Poppenga will be requesting funds for processing and distribution from VET-LIRN.

Dr. Thompson updated the group on the request to USDA for additional funds for processing and mailing of samples. The request is to go to Dr. Beth Lautner of the National Veterinary Services Laboratory (NVSL) in Ames.

There was no update on the Vet-LIRN activities because scheduled speaker Dr. Renate Reimschuessel of FDA-CVM could not attend the meeting due to the government shutdown that was resolved just earlier in the week. However, several in the group mentioned there were continuing problems with results submission. Dr. Thompson will discuss with Dr. Reimschuessel at the next opportune time.

Dr. Jeff Hall then made the following motion, "The Committee move forward with the planned proficiency test for anticoagulant rodenticides in liver." Seconded by Dr. Steve Hooser. Motion passed. Dr. Poppenga will lead in the information dissemination and sample handling. The Committee thanks Dr. Poppenga and the CAHFS Lab at UC-Davis for their work.

Dr. Poppenga reported to the Committee of FDA VET-LIRN grants recently awarded for method development. Granting was reported as totaling \$99,000 for each of 5 years and 5 laboratories of the 7 funded were toxicology laboratories. Test methods include various metals and carbamate insecticides. Methods will be available to other labs participating in VET-LIRN once validated.

Under New Business, it was noted that 12 participating VET-LIRN laboratories were present at this Committee meeting. Dr. Hall suggested the minutes reflect the Committee and each laboratories appreciation to Dr. Renate Reimschuessel for her continuing work for VET-LIRN and her continuing work to liaison with this Committee. So noted in the minutes and Dr. Thompson will extend the Committee's appreciation personally to Dr. Reimschuessel at the next opportune time.

New business then turned to the roundtable discussion on the topic of toxicology and residue incidents as reportable diseases and applicable state regulations and reporting these incidents to the respective State Veterinarian. Dr. Cynthia Gaskill related a poisoning incident involving cattle and

chlorinated hydrocarbon ingestion. The full case report had been presented at the AAVCT meeting. Although the University of Kentucky Veterinary Diagnostic Laboratory had diagnosed a chlorinated hydrocarbon intoxication and residue concern in the affected animals, there was no guidance coming from the state veterinarian's office or USDA officials on quarantine requirements of the herd or testing requirements for the animals to be released for markets. It was only through Dr. Gaskill's concerted efforts to contact appropriate FSIS officials that such guidance could be obtained.

A presentation by Dr. Brent Hoff from the University of Guelph outlined the procedures set up in Ontario, Canada for reporting hazardous exposure incidence causing chemical food safety concerns in animals. Specific authority and guidance is given by the Animal Health Act of 2009. The one-page flow chart that provides veterinarians and diagnostic laboratories guidance on the process is included in the attached report. It is suggested that this be explored as a template for each state or diagnostic laboratory as state guidelines are developed.

Dr. Hall then presented results of his questionnaire to state veterinarians concerning their states regulations on reportable disease status of toxicology and residue considerations. As of three years ago, only six states of the 18 states responding to the survey had reporting requirements. Twelve states responding had no reporting requirements for incidents involving toxicology. Immediately following the meeting one additional state was added to those that have reporting requirements. Thus final tally would be seven states out of 19 surveyed have toxicology or residue reporting requirements.

Dr. Hall gave a summary of each states language, and inexact or potentially confusing language was noted in several instances. Further discussion ensued including the current AAVLD privacy policies on release of client information. A motion was made by Dr. Gaskill to "The Committee to develop a draft document providing model language for a State regulation concerning toxicology or residue incidents to be reportable to the State Veterinarian." Seconded by Dr. Poppenga. Motion carried. Dr. Hall volunteered to develop initial draft within 30 days of meeting, to then be reviewed by Committee Co-chairs within 30, before being sent to all Committee members for comment and approval. As a component of this motion, Dr. Gaskill volunteered to develop a one-page document for proper handling of such a toxicology or residue situation, based on her experience and utilizing the Ontario model provided by Dr. Hoff. A Draft to be completed within 30 days of meeting, forwarded to Co-chairs to be reviewed within 30 days, and then forwarded to Committee members for review, comment and final approval.

Following this Committee's approval of the above two draft documents, it was suggested that both documents will be forwarded to the USAHA Governmental Relations Committee for their review. Motion made by Dr. Hall that "This Committee forward both final draft documents generated concerning development of State Regulation and reporting of toxicology and residue incidents to the USAHA Governmental Relations Committee for their comments and suggestions." Dr. Gaskill seconded. Motion carried. Dr. Thompson will contact Chair of that Committee with background information.

A quick discussion then ensued on the incidents of mycotoxins in member states as seen by member laboratories. Ergot was reported in increased rates this year and quite widespread, as reported by Dr. Tim Evans of Missouri. Following this all members were encouraged to review their toxicology cases and prepare to give a summary next year of all cases involving toxicology. Co-chairs will send a reminder via email to Committee with guidance on suggested formats. Formats and reporting structure will be placed on next year's agenda.