



Veterinary Research News

News of the Profession

How to submit samples, report cases related to adulterated pet food

One of the most common questions being directed to the Food and Drug Administration during the pet food recall has been about data on the number of cats and dogs that have died after ingesting products formulated with adulterated wheat gluten.

But as Dr. Stephen F. Sundlof, director of the FDA Center for Veterinary Medicine, explained at an April 5 press conference, a prerequisite for estimating the deaths is defining what constitutes a confirmed case—referred to as a case definition.

The criteria for defining a case did not yet exist at press time, but the American Association of Veterinary Laboratory Diagnosticians, in consultation with the Food and Drug Administration, was refining a working definition.*

As a starting point, the AAVLD Veterinary Analytical Toxicology Committee is seeking data on cases that meet certain criteria for a Web-based survey that was launched April 6. Through the survey, the AAVLD will gather scientific data from diagnostic laboratories and—directly and indirectly—from veterinarians on cases of possible pet food-induced nephrotoxicosis.

The organization is asking AAVLD laboratories, along with other laboratories and private practitioners who wish to participate, to report incidents in the United States and Canada, using this survey tool.

The survey is accessible to AAVLD laboratories on the members-only area of the Web site, www.aavld.org. Nonmembers can enter case data via the public area by clicking on News and then on AAVLD Pet Food Toxicity Survey.

Cases should meet two of the following four criteria: (1) known expo-

sure to one of the recalled pet foods, (2) histologic lesions consistent with crystal-induced tubular nephrosis (pictures are posted on the AAVLD Web site), (3) urinalysis with crystals (also posted on the site), and (4) chemical confirmation of the presence of melamine or other marker chemicals in pet food, tissues, or urine.

Drs. Wilson Rumbelha and Dalen Agnew at the Michigan State University Diagnostic Center for Population and Animal Health are coordinating the survey. Dr. Brent Hoff of the Animal Health Laboratory at the University of Guelph is a collaborator.

In a post-survey follow-up, pathologists will review cases in which association with adulterated pet food is questionable, including those meeting the least number of criteria.

Dr. Barbara Powers, AAVLD president and director of the Colorado State University Veterinary Diagnostic Laboratory, said that the survey goal is to distinguish true cases of nephropathy unique to this recall, hopefully resulting in a set of criteria defining a true case.

Other survey objectives are to characterize the spectrum of lesions; the temporal and geographic distributions of the suspected intoxications; the species, breeds, and ages of affected animals; and when possible, the brands, lot numbers, and UPC numbers of pet food involved in the toxic exposure, and results of chemical analyses.

The data will be made available to the FDA for its investigations and will form the basis for a retrospective study to be presented at the AAVLD meeting in October.

Veterinarians who want to submit relevant samples can go to and click on www.aavld.org. Accreditation to access a list of AAVLD-accredited veterinary diagnostic laboratories.

For other laboratories, Dr. Claire Andreasen, chair of the Department of Veterinary Pathology at Iowa State University, is hosting the AAVLD survey on the American College of Veterinary Pathologists' Web site, www.acvp.org.

The three best options for veterinarians who suspect a pet food-related death or illness, Dr. Andreasen said, are to contact a state veterinary diagnostic laboratory, a veterinary teaching hospital, or the veterinary laboratory with which they have a professional relationship. She urges veterinarians to inquire about the laboratory's protocol for submission of samples.

"Some laboratories accept the whole animal, and some will just do tissues, so it's important to call the laboratory they use, and they'll direct them appropriately," she said.

Dr. Powers encourages practitioners to submit a full complement of tissues for pathology and analytic chemistry analyses. A full complement of formalin-fixed tissues should be submitted for histologic evaluation after an animal is necropsied. Although kidney is the main organ of interest, it is the bare minimum.

Similarly, a full complement of fresh tissues from dead animals, or urine and serum samples from live animals, should be collected and frozen for future analytic chemistry analyses. Any recalled product that is brought to a veterinary clinic should be collected and frozen.

Thorough notes on these cases should be kept in patient medical records. It is important that veterinarians adhere to the record-keeping requirements of their state veterinary practice act, including those for record retention.

Veterinarians can also contact the FDA consumer complaint officer in their state with files and necropsy results for cases that involve re-

nal failure in a pet after the owner fed it food that has been recalled. The officers are listed at www.fda.gov/opacom/backgrounders/complain.html. The FDA Emergency Operations Center is disseminating this incoming information to scientists and inspection teams.

To avoid double reporting, veterinarians who report cases to the FDA should let the agency know if they have reported the same ones on the AAVLD survey, and vice versa.

* Consult the AVMA Web site for the latest information.

From the AVMA

DeHaven named AVMA executive vice president

The Department of Agriculture's top veterinarian, Dr. W. Ron DeHaven, has been chosen as the next AVMA executive vice president.

Dr. DeHaven, administrator of the USDA Animal and Plant Health Inspection Service for the past three years, was approved by the Executive Board March 23 following a nationwide search to replace Dr. Bruce W. Little, who is retiring this year. It wasn't yet known at press time when Dr. DeHaven would begin in his new role at the AVMA.

"This position at the AVMA will provide me an exciting opportunity to give back to the profession," Dr. DeHaven said. "I will be in a leadership position in the organization that represents 75,000 veterinarians at a time when the profession is at a crossroads. We are facing a future where the intersection of animal health and public health, and food supply veterinary medicine, is becoming critical to meeting the needs of a global society."

As head of APHIS, Dr. DeHaven ran the agency responsible for protecting U.S. agricultural and natural resources from exotic pests and diseases, administering the Animal Welfare Act, and implementing wildlife damage management activities.



Dr. W. Ron DeHaven

AVMA President Roger K. Mahr is "supremely confident" in the selection of the Executive Board, noting that Dr. DeHaven's entire professional career has demonstrated his commitment to the AVMA mission of improving animal and human health and advancing the veterinary medical profession.

Dr. Larry M. Kornegay, chair of the search committee said candidates went through a rigid and thorough interview process. Dr. DeHaven is endowed with both a scientific mind and the ability to communicate well with other veterinarians and public health professionals, as well as the media and the general public, Dr. Kornegay said.

Dr. Little's accomplishments as executive vice president have been numerous, including his contributions to a growth in membership of more than 30 percent and an increase in AVMA assets by more than double from \$19 million in 1996 to \$41.6 million today, Dr. Kornegay said. His legacy will provide both an inspiration and model for Dr. DeHaven.

Dr. Little has been executive vice president since 1996 and was assistant executive vice president from 1986-1995.

Dr. DeHaven joined APHIS in 1979. He served in various capacities there, including as deputy administrator of Veterinary Services and deputy administrator of the Animal Care unit. He was also Animal Care's Western regional director based in California. In April 2004, then-Agriculture Secretary Ann Veneman chose Dr. DeHaven to lead the agency.

As the USDA's chief veterinary officer, Dr. DeHaven gained national prominence in 2003 and 2004 when CWD and BSE were making headlines. His leadership during both events earned him the Agriculture Secretary's Honor Award twice. He has also twice received the Presidential Rank Award, which is granted to career senior executives for exceptional, long-term accomplishments. The AVMA honored Dr. DeHaven's contributions to the veterinary profession with the Meritorious Service Award in 2004.

Through the years, Dr. DeHaven has worked closely with the AVMA. He represented APHIS on the Panel to the House of Delegates and was the APHIS consultant to the Animal Welfare Committee. Additionally, he has been a featured speaker at the Association's Veterinary Leadership Conference and the biennial Executive Board and House Advisory Committee legislative visits to Washington, D.C.

After receiving his DVM degree from Purdue University in 1975, Dr. DeHaven spent four years as an officer in the Army Veterinary Corps before joining APHIS. Several years later, in 1989, he earned an MBA from Millsaps College in Jackson, Miss.

Krehbiel elected to AVMA board

On March 15, Dr. Janver D. Krehbiel of Mason, Mich., was elected District V representative to the AVMA Executive Board. He and Dr. Jeffrey F. Powers of Peck, Mich., were vying for the seat currently held by Dr. James O. Cook, whose term ends this July. District V comprises Kentucky, Michigan, Ohio, and West Virginia.

Dr. Krehbiel is a professor in the Pathobiology and Diagnostic Investigation Department at the Michigan State University College of Veterinary Medicine. He is director of International Programs and previously served as senior associate dean for administration and associate dean for academic affairs at the college.

A 1962 graduate of Kansas State University College of Veterinary Medicine, Dr. Krehbiel is a diplomate of the American College of Veterinary Pathologists.

For years, Dr. Krehbiel has had an ongoing interest in organized veterinary medicine. He is a former president of the Michigan VMA and was a member of the AVMA Council on Education and Committee on Veterinary Medical Informatics, which he chaired. Dr. Krehbiel also chaired the National Board of Veterinary Medical Examiners.

Now, he's ready to help shape the AVMA's agenda. "Being involved with the AVMA for a decade, I've learned some things about it," he said. Dr. Krehbiel identified three areas he believes the AVMA should be involved in to

further advance veterinary medicine: communications, public relations, and education.

AVMA accredits four schools

Two North American veterinary institutions were raised from limited to full accreditation by the AVMA Council on Education, meeting March 18-20.

The council reviewed two focused site visit reports and granted full accreditation status to the Iowa State University College of Veterinary Medicine and the University of Montreal Faculty of Veterinary Medicine.

The council also reviewed two site visit reports of evaluation and granted continued full accreditation status to The Ohio State University College of Veterinary Medicine and Tuskegee University College of Veterinary Medicine.

At the ISU veterinary college, Dean John U. Thomson said, "The progress we have made reflects the support provided by the legislature, university administration, and constituents who understand the important role this colleges plays in meeting society's needs for the veterinary medical profession, and endorse our plan for the future."

Iowa State's full accreditation status covers a new professional program developed over the past two years by ISU and the University of Nebraska-Lincoln. Beginning this August, 25 Nebraska students per year will receive their first two years of the veterinary curriculum at UNL and then complete their education at Iowa State.

Research in Progress

Morris Animal Foundation launches cancer campaign

The Morris Animal Foundation has kicked off the Canine Cancer Campaign, a large-scale, \$30 million initiative to find cures for cancer in dogs within 10 to 20 years, the equivalent of a dog's lifetime. The initiative will involve multiple institutions as well as independent scientists and researchers from around the globe.

The MAF will take the lead role in securing financial contributions and

managing research grants to help fund the initiative. Headquartered in Denver, the foundation has funded more than 100 cancer studies in dogs with funds approaching \$7 million since its establishment in 1948.

To reach its \$30 million goal by April 2012, the MAF plans to raise funds by encouraging every dog-owning, U.S. household to donate a minimum of \$50 and by contacting corporate organizations for sponsorship. One recent donation to the campaign came from Pfizer Animal Health, which donated \$1.1 million toward the establishment of a national canine tumor biospecimen bank.

The tumor bank falls into the sample collection and archiving part of the initiative. The other two parts are prevention and treatment.

Although the foundation's mission is solely to advance animal health and welfare, humans may also benefit from progress in cancer research in dogs. Canine malignancies are similar to those in humans.

To learn more about the Canine Cancer Campaign or to make a donation, call toll-free (877) DOG CURE (364-2873), or visit www.curecaninecancer.org. Information can also be found on the foundation's revamped Web site, www.morrisanimalfoundation.org, which now includes interactive features such as Webcasts and online communities.

CSU team earns equine research award

Led by associate professor Dr. Chris Kawcak, a team at Colorado State University College of Veterinary Medicine & Biomedical Sciences was designated the recipient of the first Elastikon Equine Research Award, earning the team \$80,480 for a two-year project. The award is made possible by a grant from Johnson & Johnson Consumer Products Company to the Grayson-Jockey Club Research Foundation.

Dr. Kawcak's project will address how minute differences in the shape of the fetlock joint of horses may be related to condylar fracture, a common injury in racehorses. By developing patient-specific computer modeling, the researchers seek to help

horse trainers and managers differentiate between normal progression and the shape and type of change that indicates oncoming injury.

Research Results

Banning antimicrobials not effective, study says

A team of University of Georgia scientists suggest that curbing the use of antimicrobials on poultry farms will do little to reduce rates of infection with antimicrobial-resistant bacteria that have the potential to threaten human health.

Dr. Margie Lee, professor at the UGA College of Veterinary Medicine, and her colleagues have found that chickens raised on antimicrobial-free farms, and even those raised under pristine laboratory conditions, have high concentrations of bacteria that are resistant to common antimicrobials. Her findings, published in the March issue of the journal *Applied and Environmental Microbiology*, suggest that poultry come to the farm harboring resistant bacteria, possibly acquired as they were developing in their eggs.

The study was funded by grants from the Food and Drug Administration and the Department of Agriculture.

"This issue of antibiotic resistance is more complicated than once thought," Dr. Lee said. "These findings suggest that banning antibiotics at the farm level may not be as effective as assumed. We need further studies to identify which management practice would be effective."

Informational Resources

Euthanasia guidelines for nondomestic animals available

The American Association of Zoo Veterinarians is making its "Guidelines for euthanasia for nondomestic animals" available for purchase.

In addition to sections covering aspects of euthanasia and methods of euthanasia, the guidelines include taxon-specific recommendations for invertebrates, fish, amphibians, reptiles, birds, monotremes (egg-laying mammals), marsupials, bats, nonhuman primates, rodents and small

mammals, marine mammals, sea otters, carnivores, hoofstock, swine, and megavertebrates.

The guidelines have been endorsed by a number of groups, including the American Association of Wildlife Veterinarians, American Board of Veterinary Toxicology, American College of Zoological Medicine, Association of Avian Veterinarians, Association of Reptilian and Amphibian Veterinarians, Canadian Association of Zoo and Wildlife Veterinarians, and the Wildlife Disease Association.

Veterinarians in practice who may have occasion to euthanize nondomestic animals should consider having the 111-page document on their bookshelves, according to the AAZV.

The AVMA has taken a lead role in developing criteria for euthanasia of domestic and captive nondomestic animals. These and other existing guidelines have been developed primarily for domestic animals, but include limited information on laboratory and nondomestic animals. There is a need, according to the AAZV, to more specifically address euthanasia in the broad range of taxa and circumstances for euthanasia of captive nondomestic species and free-ranging wildlife. The information in the guidelines is an extension of general information and principles that are found in previously published guidelines.

The "Guidelines for euthanasia for nondomestic animals" can be ordered only online at the AAZV Web site, www.aazv.org. Price is \$75 per copy, plus shipping and handling charges of \$10 for North American addresses and \$15 for addresses outside North America. For more information, contact Dr. Robert Hilsenroth, AAZV executive director, at (909) 225-3275 or rhilsenrothAAZV@aol.com.

AAHA revises canine vaccine recommendations

The American Animal Hospital Association revised its 2006 Canine Vaccine Guidelines in February to recommend that the last vaccine dose for canine parvovirus be given to puppies

at 14 to 16 weeks of age or older, as opposed to the earlier recommendation of 12 weeks of age or older.

The AAHA was prompted to make the change following findings from professionals in the field, and from Ronald D. Schultz, PhD, a professor and chair of the Pathobiological Sciences Department at the University of Wisconsin-Madison School of Veterinary Medicine and a member of the AAHA Canine Vaccine Task Force.

"The canine parvovirus vaccines are extremely effective, yet we were still seeing cases of parvovirus in well-vaccinated dogs," Dr. Schultz said. "What we found is that some mothers had exceptionally high antibody titers against parvovirus, which were rendering the puppy vaccines ineffective."

He said that by delaying the final vaccine dose, 98 percent of puppies can be effectively immunized.

Funding Announced College, school to contribute to influenza research centers

The University of California-Davis School of Veterinary Medicine and the University of Minnesota College of Veterinary Medicine will fill key roles in a recent expansion of the influenza research and surveillance program at the National Institute of Allergy and Infectious Diseases.

Part of the National Institutes of Health, the NIAID announced in April that it would award \$23 million per year for seven years to establish six Centers of Excellence for Influenza Research and Surveillance, one of which will be housed at the University of California-Los Angeles and another at the University of Minnesota.

The goal of the centers is to provide the federal government with useful information and public health strategies for controlling the impact of seasonal influenza as well as an influenza pandemic.

As a partner with the center at UCLA, the UC-Davis veterinary school will coordinate testing for the presence of influenza viruses in tens of

thousands of samples from wildlife, especially wild birds, on the U.S. and Asian sides of the Pacific Ocean.

The U of M veterinary college will work with the university's school of public health and external partners to perform influenza surveillance in eight countries. Most of diagnostic testing and virus characterization will be done at the veterinary college's Veterinary Diagnostic Laboratory and Genomic Center.

The four other Centers of Excellence for Influenza Research and Surveillance will be established at St. Jude Children's Research Hospital in Memphis, Tenn.; Emory University in Atlanta; Mount Sinai School of Medicine in New York; and the University of Rochester in Rochester, N.Y.

The Veterinary Community Johnston steps into new position

Dr. Shirley D. Johnston, founding dean of the Western University College of Veterinary Medicine, has accepted the position of vice president for university advancement. She will assume her new role with the university July 1. The university will begin a search for a new dean at a later date and time, according to a university spokesperson.

As vice president, Dr. Johnston will spearhead fundraising efforts for an upcoming capital campaign, which will be instrumental in supporting the university's strategic plan and the launching of three proposed new colleges in 2009.

Dr. Johnston joined WesternU in 1998 as the founding dean for the veterinary college. She has served as a professor and the chair of the Department of Veterinary Clinical Sciences at Washington State University, which is also where she earned her DVM degree in 1974. Dr. Johnston spent 22 years as a professor at the University of Minnesota. She is a diplomate of the American College of Theriogenologists.



Dr. Shirley D. Johnston