

Thursday, February 9, 2023

Companion Animal

8:00-8:50am *Compounding-Where Do We Stand Now?* – Dr. Butch KuKanich

We will discuss the current state of veterinary compounding including some of the new regulations for compounding from bulk chemicals (CVM GFI #256) and the 503B outsourcing facilities.

9:00-9:50am *Cannabinoids in Small Animal Medicine* – Dr. Butch KuKanich

We will discuss the most recent data available on cannabinoid use in veterinary medicine.

10:30-11:20am *NSAIDs – How to Minimize Adverse Effects, But Maintain Efficacy* – Dr. Butch KuKanich

We will discuss strategies to minimize NSAID adverse effects. We will focus primarily on ways to decrease gastrointestinal and renal adverse effects, which are the most common adverse effects produced by NSAIDs.

1:00-1:50pm *Opioids – What Was Old is New & What is New Was Old* – Dr. Butch KuKanich

Opioids are an old class of drugs, but we have yet to design ideal dosage regimens. We will discuss how we can better use these drugs, new information optimizing opioid use and some of the newer formulations.

2:30-3:20pm *Glucocorticoids-Who, What, When, Where, Why & How?* – Dr. Butch KuKanich

Glucocorticoids are commonly used drugs in veterinary medicine, but they are also one of the most misunderstood drug classes we use. We will discuss what we know about these drugs and how to best use them in your practice.

3:30-4:20pm *The Opioid Epidemic & Its Impact on Veterinary Medicine* – Dr. Butch KuKanich

The opioid epidemic has worsened through COVID and has made direct impacts on the veterinary profession. We will discuss the causes, how veterinary medicine has been impacted, and some potential ways of addressing the impacts on veterinary medicine to improve patient care while upholding our duties to maintain public health.

Public Health

8:00-9:50am *Vector Born Disease Threats Through a One Health Lens* – Dr. Jenna Bjork & Dr. Lyric Bartholomay

Ticks, mosquitoes, and other vectors are a threat to people, animals, and ecosystems near and far. As our landscape changes, so do vector-borne disease risks. Be prepared to prevent, detect, and respond to vectors and the diseases they may carry. The threat of vector-borne diseases in the United States is on the rise, with ever-increasing numbers of tick-borne diseases, endemic and persistent disease associated with West Nile virus, and the promise of emerging viruses transmitted by *Aedes aegypti* and *Ae. albopictus*. The threat is compounded by an absence of effective human vaccines for vector-borne disease threats, complications with establishing scalable community-wide approaches to control ticks, and a fragmentary infrastructure available for mosquito control. A National Strategy to Address Vector-Borne Disease threats encompasses both building state and local public health capacity and research and innovation to expand the vector control armamentarium. To do so will require coordinating a national network of CDC scientists, public health and vector control professionals, state and local public health practitioners, and academic institutions. CDC has invested in this vision through funding states and territories to maintain surveillance programs and diagnostic laboratory capacity, through partnerships with industry and academia to support innovation in vector control and bite

prevention, and through university-based Centers of Excellence to train medical entomologists, foster communities of practice with public health and vector control agencies, and conduct applied research. In this session, we will draw on examples from the Midwest Center of Excellence for Vector-Borne disease to underscore the ways that the National Strategy is coming to fruition and speak to ongoing efforts to understand the threat and intervention potential for vector-borne diseases in Iowa.

10:30-11:20am *Wildlife Health & the Zoonotic Risk Landscape in Iowa* – Dr. Rachel Ruden

This session will cover key pathogens affecting Iowa's free-ranging wildlife populations and illuminate potential impacts to public health.

1:00-1:20pm *Proposed CDC Healthy Dog Importation Act* – Dr. David Schmitt

The CDC estimates that up to 1.245 million dogs are imported into the U.S. each year, most of these dogs are personal pets. For the estimated 113,000 imported from countries that are at a high-risk for rabies transmission, CDC requires a rabies vaccination certificate, but no other health documentation or identification. As the number of imported dogs increases, so does the risk of importing nonnative parasites and zoonotic diseases. In the past five years, dogs have been imported with rabies, canine influenza, canine distemper, leptospirosis, screwworm, and canine melioidosis. The legislation provides the U.S. Department of Agriculture (USDA) with additional tools to monitor and safeguard the health of dogs being imported into the U.S. to ensure that all dogs entering the country are healthy and not at risk to spread dangerous diseases that could adversely impact animal and public health. The AVMA supports this legislation which promotes improved dog importation standards to help prevent the introduction and spread of diseases impacting animal and human health. This bill (H.R. 4239) was introduced in 2021 by OR Congressman Kurt Schrader (who is also a veterinarian) and SD Congressman Dusty Johnson and in the Senate (S. 2597) sponsored by IA Senator Chuck Grassley and MN Senator Tina Smith.

1:20-1:50pm *Canine Brucellosis-A Public Health Threat* – Dr. David Schmitt

Brucellosis in dogs is a zoonotic disease and a reportable disease in Iowa. *Brucella canis* is transmitted among dogs primarily through ingestion, inhalation, or contact with aborted canine fetuses or placenta, vaginal secretions, or semen. Reproductive problems are the primary way Brucellosis manifests in dogs and can cause serious illness in humans, especially in pregnant women, immunocompromised individuals, infants and the elderly. Canine Brucellosis has a complicated testing process, it is difficult to diagnose and it can have a long incubation period. A dog can be Brucellosis-positive for years before it exhibits clinical signs. It can still spread the bacteria to both dogs and humans during this time. *B. canis* is most common in kennels and breeding facilities. In 2019 several cases of canine brucellosis were reported in Iowa.

2:30-3:20pm *Hot Milk: "Re-emerging" Hot Topics & Hot Takes* – Dr. Delaine Quaresma

Raw milk consumption and sale are increasing despite years of evidence demonstrating the positive health outcomes of pasteurization. Legislative attention on this topic grows as consumer preference challenges food safety. This session focuses on debunking myths about pasteurization and raw milk consumption.

3:30-4:20pm *2023 Legislative Hot Topics: Veterinarians & Public Health* – Ms. Jennifer Dorman

Legislative advocacy including public health issues: permissive reporting, raw milk & other public health legislation.

Swine

- 8:00-8:30am *US Swine Health Improvement Plan, Enroute to Codification in 2024* – Dr. Rodger Main
- 8:30-9:00am *Update & Progress Report on CSSC Training Program* – Dr. Justin Brown
An update on the Certified Swine Sample Collector training program including an overview of the curriculum and program standards.
- 9:00-9:30am *Research Report* – Dr. Greg Tarasiuk
Dr. Tarasiuk will report on his research regarding the Effect of Pen Size on Pig Behavior Related to Oral Fluid Sampling
- 10:00-10:30am *Use of Aggregate Samples for Swine Disease Surveillance* – Dr. Betsy Armenta-Leyva
This is a general overview of infectious disease surveillance on swine farms based on sampling and testing of aggregate specimens, i.e., oral fluids, processing fluids.
- 10:30-11:00am *ISU VDL Update – Progress in Building Our Future Today!* – Dr. Rodger Main
- 11:00-11:30am *What We Are Seeing at the ISU VDL* – Dr. Mike Rahe
A discussion of new & emerging pathogens of swine focused on porcine astroviruses & coronaviruses & why these viruses matter for all of veterinary medicine.
- 1:00-1:30pm *IDALS Regulatory Update* – Dr. Jeff Kaisand
This session will provide attendees with a regulatory update from the State Veterinarian as well as the disease prevention efforts and response plans currently being exercised in Iowa.
- 1:30-2:00pm *Delivering Dramatic Health Improvement through Gene Editing-The PRRS Resistant Pigs* – Dr. Matt Culbertson
In this session we will briefly highlight the tremendous potential that new technologies, such as gene editing, might deliver to improve the health and well-being of animals while helping exceed future focused society trends.
- 2:00-2:30pm *Feeding the E. coli Challenged Pig: What We Have Learned to Date* – Ms. Amanda Gerhart
Over the past couple of years there has been a marked increase in the amount of E. coli outbreaks observed during the nursery phase of production. This is a multi-disciplinary issue and requires a holistic understanding of all possible contributing factors and input from production, vet, and nutrition teams.
- 3:00-3:30pm *Creating a Path to More Sustainable Pork* – Dr. Chris Hostetler
Pig farmers have a great sustainability story to tell as over the past 50 years they have done increasingly more with less. The National Pork Board is building robust tools to help pig farmers tell this story. This presentation will highlight some of those tools that veterinary practitioners can share with their clients to bring added value.
- 3:30-4:00pm *Science of Pathogen Mitigation in Livestock Feed* – Dr. Jordan Gebhardt
Improvement in feed biosecurity practices has been robust in recent years, but further work needs to be done to continue to refine and improve the application of these techniques to maintain animal health. Information will be shared highlighting the key findings and latest information available related to feed biosecurity.
- 4:00-4:30pm *Precision Livestock Farming (PLF) Technology: How Do Swine Farmers & Veterinarians Perceive It?* – Dr. Anna K. Johnson
PLF allows for automatic monitoring and surveillance on an individual and group level. PLF can mitigate labor problems, tailor management and simultaneously improve pigs' production

efficiency, health and welfare, which are often seen as contradictory goals. This study aims to understand awareness and identify PLF usage barriers on swine farms.

Veterinary Technicians

8:00-9:30am *The Inside Look of Radiology* – Ms. Amanda J. Pitts RVT

X-rays, CTs and MRIs are often used to diagnose and treat patients. Doctors look at the images very carefully to plan their course of care. In this lecture we are going to look even farther into how those images are obtained properly to give the best resource for doctors to use.

10:00-11:30am *The Inside Look of Radiology (cont)* – Ms. Amanda J. Pitts RVT

1:00-1:50pm *Cytology Techniques* – Dr. Denise Wunn

This event is designed for general veterinary practitioners or veterinary specialists seeking information about how to improve their diagnostic skills, including when to utilize cytology, how to obtain a high-quality specimen, and how to interpret their own cytology specimens. The format of the seminar will be a lecture at the beginning of the seminar, with more interaction between the audience and speaker during the latter portion of the seminar. The seminar features numerous practical images of lesions and microscopic findings.

2:00-2:50pm *The ABCs of the CBC: What, When & Why* – Dr. Kimberly Scully

The complete blood count (CBC) is one of the most sensitive means of determining deviation from health in the patient as well as characterizing severity of abnormalities in the clinically obvious sick patient. This discussion on what is included in the CBC; when and why a CBC should be performed; and information about the red blood cells (erythrogram), white blood cells (leukogram), and platelets (thrombogram) to assure complete understanding, which is essential to maximize the value of the CBC.

3:30-4:20pm *The ABCs & 123s of the CBC* – Dr. Denise Wunn

Educational seminar for veterinarians or veterinary technicians in clinical practice desiring improved understanding of hematology microscopy.

Exotics

8:00-8:50am *It's a Gut Thing I: GI Anatomy, Physiology & Nutrition of Exotic Companion Herbivores-Rabbits, Guinea Pigs & Chinchillas* – Dr. Micah Kohles

The Gastrointestinal function of ECH species is complex and dependent on proper nutrition. The anatomy and gastrointestinal physiology of rabbits, guinea pigs, and chinchillas are different than other exotic companion mammals. Having an understanding of the GI anatomy and physiology of ECH species is key to properly educating owners, in addition to treating/diagnosing many common diseases as most we see in clinical practice are directly or indirectly related to nutrition.

9:00-9:50am *It's a Gut Thing II: GI Anatomy, Physiology & Nutrition of Exotic Companion Mammals-Ferrets, Hedgehogs, Hamsters, Rats & Everyone Else!* – Dr. Micah Kohles

The Gastrointestinal function of ECM species is complex and dependent on proper nutrition. The anatomy and gastrointestinal physiology of ferrets, rats, hamsters, hedgehogs and other are different than other exotic companion mammals. Having an understanding of the GI anatomy and physiology of ECM species is key to properly educating owners, in addition to treating/diagnosing many common diseases as most we see in clinical practice are directly or indirectly related to nutrition.

10:30-11:20am *Food for Thought! Foraging Enrichment in Exotic Companion Animals* – Dr. Micah Kohles

To put it simply, life in the wild is all about eating and avoiding being eaten, predator or prey. While somewhat raw in context, this natural process is, by definition, providing enrichment for all involved species. Understanding the natural behaviors of exotic companion mammal species is important and enables veterinary professionals to better interpret common presenting clinical signs and correlate those to an owner's history and concerns. One of the most common and important natural behaviors found across many species is the act of foraging. Foraging is both physically and mentally stimulating for exotic companion mammal (ECM) species and something all owners and care givers should be aware of and attempt to emulate in captivity. The act of foraging is natural enrichment. Enrichment is a commonly used term and many different definitions exist. Most simply put, enrichment involves any change to an animal's life or environment which is beneficial for welfare and which provides for appropriate and 'naturalistic' or 'wild' behavioral opportunities.

1:00-1:50pm *Exotic Companion Mammal Critical Care Nutrition: How to Know When, What & How Long...* - Dr. Micah Kohles

Exotic companion mammals require unique diets specifically formulated for their nutritional needs. During times of anorexia or poor nutritional status assist feeding may be required. Powdered recovery diets mixed with water provide essential hydration as well as routes to administer medication and nutritional support. In this lecture we will cover case-specific calculations of feeding amounts using animal body weight, appropriate metabolic factors, and activity/growth multipliers to determine the specifics of how best to provide Critical Care Nutrition.

2:00-2:50pm *Rabbit Hemorrhagic Disease Virus (RHDV2): What You Need to Know About the US Outbreak* – Dr. Micah Kohles

Rabbit hemorrhagic disease (RHD), caused by a calicivirus, is a serious and contagious viral disease of the European rabbit (*Oryctolagus* spp.) that causes high morbidity and mortality. It is endemic in many parts of the world including Europe and Australia. A new variant of RHD, RHDV2, emerged in 2010 and is now spreading in the United States affecting both domestic (*Oryctolagus* spp.) and several wild rabbit species. RHDV2 is a reportable disease and is not contagious to nonrabbit species or humans and therefore not a public health concern.

3:30-4:20pm *What is That? Exotics in Your Practice! Why & How to Establish & Build Exotics in Your Practice & What Unique Exotic Species Might Visit Your Practice Soon!* – Dr. Micah Kohles

While the popularity and ownership of exotic animal species continues to grow, many veterinarians have been slow to capitalize on this important segment of the market. We will discuss some ideas, thoughts and tips on how to establish and build this aspect of your practice. As interest in exotic pet ownership continues to increase and so does the desire to own something unique and different. We will also cover some of the more unique and different species that are currently or could be soon a part of the pet trade and therefore walking through your clinic door.

Federal Accreditation

8:00-8:50am *Module 7: Foreign Animal Disease Detection in Category I Animals* – Dr. Andrea Holmes

This module addresses the important role companion animal practitioner's play as it relates to detecting foreign animal diseases (FADs) in Category I animals (dogs, cats). In all, information about ten FADs affecting Category I animals is included. Each disease also has a one-page reference source (Disease Briefs) as a resource for practitioners. FAD incursions in the U.S. that were detected by private sector veterinarians are described (screwworm and rabbit hemorrhagic disease). Finally, a scenario culminates what was taught in this module regarding how a veterinarian should appropriately handle a suspected FAD in a patient at their clinic.

9:30-10:20am *Module 5: Vesicular Diseases* – Dr. Bailey Goos

The first part of this module addresses the importance of foot-and-mouth disease, vesicular stomatitis, swine vesicular disease, and vesicular exanthema of swine in the United States. Clinical signs associated with the four vesicular diseases and specific biosecurity measures are included. The second part of this module takes the veterinarian through an interactive scenario investigating a possible vesicular disease outbreak on a swine farm. Veterinarians learn the process of reporting a possible vesicular disease case and the chain of events that occur in a foreign animal disease investigation.

10:30-11:20am *Module 12: Animal Disease Traceability* – Dr. Andrea Holmes

This module reviews the aspects of the Animal Disease Traceability (ADT) regulation including official identification devices and methods, required documentation for interstate movement of livestock, and the responsibilities of accredited veterinarians as it pertains to ADT. This module concludes with a scenario involving cattle movement to emphasize some important aspects of ADT. Several handouts are provided for future reference.

1:00-1:50pm *Module 1: Introduction to the New National Veterinary Accreditation Program* – Dr. Jessica Young

This module introduces veterinarians to the new National Veterinary Accreditation Program. A brief history of the veterinary accreditation program, the importance and benefits of being an accredited veterinarian, the duties and responsibilities of accredited veterinarians, and information on the Category I or II level accreditation and program certification opportunities are described.

2:30-3:20pm *Module 11: Sheep and Goats: Disease Awareness and Health Certificates* – Dr. Bailey Goos

This module begins with an overview of the sheep and goat industries and a review of eight diseases that impact the industry. Veterinarians should be aware of these important conditions, especially when inspecting animals prior to interstate or international movement. The National Scrapie Eradication and the Scrapie Flock Certification Programs are reviewed highlighting the genetic components and identification requirements. Finally, examples of properly completed health certificates for sheep and goats are provided to help veterinarians avoid common errors that can lead to delays or refusal of entry for their client's animals.

3:30-4:20pm *Module 8: International Movement of Horses* – Dr. Jessica Young

This module illustrates the scope of international horse travel and the economic factors associated with its growth, including examples of disease outbreaks that have occurred throughout the world. Proper completion of health certificates for temporary or permanent movement is included. An interactive scenario that demonstrates the process for permanently exporting a horse internationally is presented. Emphasis is placed on the role

of the accredited veterinarian, isolation procedures, the required laboratory tests, and accurately completing an international health certificate.