

USAHA/AAVLD COMMITTEE ON ANIMAL HEALTH SURVEILLANCE AND INFORMATION SYSTEMS

Chair: Marianne, Ash, IN
Vice Chairs: Leticia Linhares, IA
Maria Cooper, IN

Bruce Akey, TX; Carissa Allen, MN; Celia Maria Antognoli, CO; Marianne Ash, IN; Rich Baca, CO; Lisa Becton, IA; Wendy Black, OR; Charlie Broaddus, VA; Leticia Caldas-Monterio-Linhares, IA; Craig Carter, KY; Matt Cochran, TX; Maria Cooper, IN; Marie Culhane, MN; Barbara Determan, IA; Anita Edmondson, CA; Dee Ellis, TX; François Elvinger, NY; Tam Garland, TX; Joseph Garvin, VA; Alicia Gorczyca-Southerland, OK; Kristin Haas, VT; Patrick Halbur, IA; Charles Hatcher, TN; Ashley Hill, CA; Annette Jones, CA; Rebecca Jones, CO; Diane Kitchen, FL; Elizabeth Lautner, IA; Scott Leibsle, ID; Donald Lein, NY; Jim Logan, WY; Kevin Maher, IA; Rodger Main, IA; Stu Marsh, WY; Michael Martin, SC; Beatriz Martinez Lopez, CA; Patrick McDonough, NY; Miranda Medrano, VA; Shelley Mehlenbacher, VT; Gay Miller, IL; Kate Mueller, IA; Greg Onstott, MO; Roger Parker, TX; Elizabeth Parker, TX; Maryn Ptaschinski, TX; Mo Salman, CO; Stacey Schwabenlander, MN; Julie Sinclair, GA; Jonathan Sleeman, WI; David Smith, NY; Justin Smith, KS; Diane Stacy, LA; Patricia Stonger Lonsdale, WI; Nick Striegel, CO; Jerry Torrison, MN; Alex Turner, CO; Binu Velayudhan, NC; Bruce Wagner, CO; Elizabeth Warren, DE; Patrick Webb, IA; Nora Wineland, MI; Thach Winslow, WY; Katie Woodard, IA.

The Committee on Animal Health Surveillance and Information Systems (CAHSIS) met from 3-6 pm on 10/27/19 at the Rhode Island Convention Center in Providence, Rhode Island. There were 29 committee members and 25 guests present. Dr. Ash welcomed those present and gave a short presentation on basic housekeeping. The audience was also informed of the approved status of all five of the committee's 2018 resolutions.

Presentations & Reports

CAHSIS Subcommittee on Data Standards

Michael Martin, DVM, MPH, DACVPM, Clemson Livestock Poultry Health

Dr. Martin announced that the version 2 eCVI data standard is gaining wide acceptance. A few issues were addressed over the last year that brought the standard up to version 2.2. Work this year included two substantive updates that involved address-block elimination and allowance of repeatable group-lot-IDs. There were also a few typographical and documentation updates made during the year. Outstanding issues were discussed and included such things as: Canadian and Mexican RFIDs, Tribal Nation's addresses, Group-Lot inspection dates, total number in consignments, multi-species CVIs and various other loopholes. Dr. Martin noted that there are still challenges out there; however, the standard is alive and well, participation has improved and there is pressure to move on.

Update: Subcommittee on eCVI standards National Assembly of State Animal Health Officials' Traceability and Technology Committee.

Stacey Schwabenlander, DVM, MPH, DACVPM - Senior Veterinarian Minnesota Board of Animal Health

A brief history of the eCVI Standards Subcommittee was presented as follows. On October 20, 2018 the concept of an eCVI standards subcommittee was presented to the National Assembly on behalf of the Traceability and Technology Committee (TTC) during the annual USAHA meeting. A request was made for the National Assembly to approve a group to develop eCVI standards for all eCVI vendors in an effort to support national approval of eCVIs and thus advance electronic data sharing, animal disease traceability, and streamline eCVI use for states, accredited veterinarians, airlines, and others who utilize the information conveyed on CVIs. This request was approved and led to the development of the eCVI Standards Subcommittee under the TTC. Standards were then developed by a group of State Animal

Health Officials representing different regions of the country. These standards were presented to the National Assembly in April 2019 and approved.

The XML data exchange standard developed by the eCVI Data Standards Subcommittee of the AAVLD/USAHA Animal Health Surveillance and Information Systems Committee is only one of many standards included in the eCVI standards developed by the eCVI Standards Subcommittee of the TTC. There are six different areas the standards cover, and the members of the subcommittee use these standards to guide review of vendor platforms that produce eCVIs. As of October 2019, one vendor platform has been reviewed and approved. A second has been reviewed and approval is being recommended (recommendation will be made to the National Assembly on 10/26/2019). A third vendor platform is still under review. In total, 13 vendors have been contacted and made aware of the review process.

VS Integration Systems Update

Orlando R Baca, Director, Information Management and Analytical Support Unit, USDA, APHIS

Rich Baca provided an update covering recent accomplishments at USDA, APHIS, VS regarding enhancements and additions to information systems. He covered tools used for data collection, integration, reporting, and analytics. New systems now running include the VS Messaging Services, Data Integration Services, and Tableau reporting. On the horizon for FY20 are modernization of the mobile information management system and enhancements to the VS Process Streamlining System (VSPS). A notable feature of the VS Message Service is its ability to receive a USAHA compliant eCVI message. Enhancements to VSPS requested in the 2018 resolutions 7 and 11 have been considered and included in the current scope of work for VSPS enhancements. The combination of the VS Message Service and VSPS enhancements will meet the requested features in these two resolutions

ASF/CSF Surveillance Update National and Global

Gericke L Cook APHIS Center for Epidemiology & Animal Health

Swine hemorrhagic fevers such as classical swine fever (CSF) and African swine fever (ASF) are highly contagious viral diseases that affect domestic and feral pigs, as well as wild boar. USDA APHIS has prepared extensively in several scientific areas to ready the U.S. in the event of an ASF or CSF incursion. These preparations include global monitoring for situational awareness, entry assessments, in-depth risk assessments, drafting and updating national surveillance plans, training and exercises, enhancing diagnostic capacity, and collecting surveillance data.

High Quality Veterinary Diagnostic Laboratory Data Streams: Missed Opportunities for Animal Health!

Craig N. Carter, DVM MS PhD Dipl. ACVPM DSNAP Director & Professor, Epidemiology

The day-to-day (non-FAD) diagnostic testing data generated by our AAVLD Accredited NAHLN member laboratories (42) is of very high quality and quantity (re "big-data"). Unfortunately, this data is under-utilized for valuable regional and national animal health studies due to the time needed to collect and standardize data sets for summarization and analysis. Requiring NAHLN labs to map their testing data to an international standard such as SNOMED CT, would make it much easier and faster to summarize, report and analyze this big-data set. The 2018 USDA APHIS NAHLN Antimicrobial Resistance Pilot Project is a case in point. In order to do this pilot study, the NAHLN had to initiate a joint working group to standardize the susceptibility data and port it to a centralized data base. Despite the aggressive effort by the AAVLD and the USDA to garner participation, only 19 diagnostic laboratories contributed antimicrobial susceptibility testing data for four pathogens. If all NAHLN LIMS diagnostic data elements were mapped to a standard, the ability to conduct similar studies by etiology, sensitivity, or diagnosis would be unlimited and could be done in near-real-time.

The Farm and Ranch Planner - A functional web-based system to collect and securely store data for livestock premises

Shaun Kennedy Food Systems Institute LLC

The Farm and Ranch Planner (<https://www.farmandranchplanner.com>) was developed as part of a broader effort by the Minnesota Board of Animal Health to support improved preparedness for foreign animal disease events following the Agriculture Response Management and Resources (ARMAR) Exercise in 2018. Overseen by the Minnesota Beef Council and the Minnesota Cattleman's Association, the Food System Institute and the University of Minnesota have collaborated to develop a platform that builds off prior efforts to develop a similar system for the poultry industry. The earlier project was funded by the U.S. Poultry and Egg Association and the Foundation for Food and Agricultural Research (<https://poultrydiseaseplanning.com/login>).

The Farm and Ranch Planner provides various tools to assist cattle and dairy farmers in assembly and maintenance of data on their operations. Outputs can range from maps of their operations and general services down to individual animal treatment and movement information. It also provides a cloud-based approach for maintaining records and assessments for the Secure Beef Supply and Beef Quality Assurance programs. Beyond its utility for cattle and dairy producers, it also provides outreach and emergency contact tools for the Minnesota Board of Animal Health, the Minnesota Department of Agriculture, Minnesota Beef Council and Minnesota State Cattleman's Association. The goal is to provide a range of tools that support cattle and dairy producers during their normal operations so that they are comfortable using them in the case of a foreign animal disease event, natural disaster, fire or other disruption. Importantly, the platform utilizes state-of-the-art security tools to ensure that cattle and dairy producers are always in control of their data. They determine who and when others can access it. This builds from experience in development and hosting of the National Animal Health Laboratory Network (<https://www.nahln.org/>) and the Food Emergency Response Network (<https://www.fernlab.org/>) collaboration platforms which both require high levels of data security. The platform also has built-in extensibility such that extension to other states or geographies is a very low-cost option as very little new coding would be required.

National List of Reportable Animal Diseases (NLRAD) and National Animal Health Reporting System (NAHRS) updates

Rebecca Jones, DVM Surveillance, Design and Analysis, USDA APHIS VS STAS CEAH

The National List of Reportable Animal Diseases (NLRAD) is a proposed regulation that will create an obligation to report detections of animal disease to the Animal and Plant Health Inspection Service (APHIS) and to State Animal Health Officials. The joint effort of many stakeholders, including the United States Animal Health Association (USAHA), the American Association of Veterinary Laboratory Diagnosticians (AAVLD), and the National Assembly of State Animal Health Officials (NASAHO) resulted in the creation of the NLRAD. The purpose of the NLRAD is to have consistent animal disease reporting across the United States and to help animal health officials protect the U.S. agriculture infrastructure. The NLRAD also supports domestic and international commerce; helps meet international reporting obligations to the World Organization for Animal Health (OIE) and trading partners; supports the creation of export certifications; contributes to the knowledge of zoonotic and endemic animal diseases; and aids in the response to an emerging disease or issue in the United States. The national animal disease list is based on the OIE list of reportable diseases and is intended to complement and supplement State reportable disease lists. The NLRAD builds on the current National Animal Health Reporting System (NAHRS) that facilitates voluntary disease occurrence reporting by State animal health officials to APHIS. The NLRAD includes two categories: 1) Notifiable Diseases and Conditions and 2) Monitored Diseases. The term 'disease' includes disease agents and pathogens. Notifiable diseases and conditions (notifiable diseases) consist of emergency incidents, emerging disease incidents, and regulated disease incidents. Any animal health professional who suspects or diagnoses a notifiable disease will be required to report it immediately to the State Animal Health Official and to APHIS. Monitored diseases generally are those

that are endemic in the United States and are required to be reported in 6-month and annual reports to the OIE. APHIS also uses data gathered to monitor changes in disease occurrence over time. States and laboratories will be required to report occurrence information (yes/no) on monitored diseases monthly; laboratories will report to State Animal Health Officials and States will report to APHIS. Stakeholder collaboration and feedback has been important in the development of the NLRAD and APHIS would like to continue with this engagement into the future. Additional information about the stakeholder engagement process will be made available on the APHIS website when the proposed rule is published for public comment in the Federal Register. APHIS encourages and welcomes all stakeholders to review and comment on the proposed rule when it is published.

The NAHRS is designed to provide summary-level data on the presence/or absence of all U.S. National List of Reportable Animal Diseases in the United States. Reporting occurs monthly by States on the presence of NLRAD-listed diseases for which occurrence has been identified with a high level of certainty. NAHRS is a voluntary, collaborative effort between participating States, the AAVLD, the USAHA, and APHIS. NAHRS functions under the direction of the NAHRS Steering Committee, which includes representatives from the AAVLD, USAHA, APHIS, participating States, and experts representing each major commodity group: cattle/bison, cervid, sheep and goats, equine, swine, avian, and aquaculture. NAHRS is managed by APHIS. The NAHRS is an important component of comprehensive and integrated surveillance in the United States and its primary objectives are:

- To demonstrate the integrated and transparent nature of disease surveillance and reporting in the United States and ultimately help protect the global market share of U.S. animals and animal products sold.
- To provide the primary source of information used in the completion of OIE reports by APHIS. This disease occurrence information is critical for the facilitation of U.S. international trade and for the United States to meet its reporting obligations as a member of OIE.
- To provide reporting that reflects the comprehensive summary-level animal disease status of the United States, and individual State reporting that reflects the summary-level disease status in that State.
- Contribute to the assessment and reporting of listed zoonotic and endemic animal diseases.

Forty-two states have submitted at least one report to NAHRS for FY 2019 so far, and 19 States have submitted all 12 reports. We expect the number of reports for FY 2019 to increase in the coming months. Reporting to NAHRS can be difficult due to participant password issues, State personnel changes, and limited State resources. To help facilitate reporting, APHIS developed a new web reporting tool for NAHRS. The new NAHRS web reporting tool integrates with State animal disease data received through other APHIS systems, provides dashboards to see reporting histories, and is flexible to accommodate any future NAHRS changes. The new NAHRS system will require level 2 e-authentication access, which is an increase in security from the old system. The old NAHRS system will be retired on January 1, 2020.

Committee Business:

No resolutions were presented to the membership this year.