Report of the **USAHA/AAVLD Committee on Animal Health Surveillance and Information Systems**
Chair: Marie Culhane, MN
Vice Chair: Marianne Ash, IN

Sara Ahola, CO; Bruce Akey, TX; James Averill, MI; Rich Baca, CO; Karen Beck, NC; Karen Becker, DC; Tammy Beckham, KS; **Lisa Becton, IA**; Charlie Broaddus, VA; Dwight Bruno, NY**; Stan Bruntz, CO;** Craig Carter, KY; Mal Cartwright, AB; Matt Cochran, TX; Anita Edmondson, CA; François Elvinger, VA; Tam Garland, TX; Joseph Garvin, VA; Alicia Gorczyca-Southerland, OK; Kristin Haas, VT; Patrick Halbur, IA; Neil Hammerschmidt, MD; William Hartmann, MN; Charles Hatcher, TN; Kristi Henderson, IL; Ashley Hill, CA; John Huntley, WA; Marv Jahde, KS; Annette Jones, CA; Jamie Jonker, VA; Ellen Kasari, CO; **Diane Kitchen, FL;** Elizabeth Lautner, IA; Donald Lein, NY; Anne Lichtenwalner, ME; Janet Maass, CO; **Kevin Maher, IA;** Rodger Main, IA; Stu Marsh, AZ; **Michael Martin, SC;** Rose Massengill, MO; Patrick McDonough, NY; **Shelley Mehlenbacher, VT**; Gay Miller, IL; Roger Parker, TX; John Picanso, MD; Barbara Porter-Spalding, NC; **Margaret Rush, MD;** Mo Salman, CO; David Scarfe, IL; **Stacey Schwabenlander, MN;** Marilyn Simunich, ID; David Smith, NY; **Patricia Stonger, WI**; Jessie Trujillo, IA; James Watson, VIC; Patrick Webb, IA; Steve Weber, CO; Michelle Willette, MN; Nora Wineland, MO.

The Committee met on 10/25/2015 at the Rhode Island Convention Center in Providence, Rhode Island from 3:00 PM to 5:45 PM. There were 10 members that were present as determined by their initials on the roster and indicated above by their names in bold. There were 34 guests present (please see the bright yellow sheets of paper that include the roster.

2014 minutes/report were approved via motion by Bruce Akey, Second by Pat Stonger, and unanimous vote by all members present.

Presentations & Reports

Update from the Subcommittee on Data Standards

Michael McGrath (Trace First, Ireland) and Sara Ahola
(USDA-APHIS-VS-STAS-CEAH)(CO), co-chairs

Summary of presentation – the Subcommittee on Data Standards was formed in 2012. In 2014-2015, the plan of the subcommittee was to test the schema for data standards so that there could be electronic transfer of health certificates; however, not a lot of testing has been completed. Currently there is no compelling reason to revise the data standards, the data standard was written but there is no pressure to adopt it and has yet to be widely adopted. There is a question of fit for purpose. There is a recommendation that this Subcommittee on Data Standards does exist so we can encourage standardized data wherever it is needed. Michael Martin supported the Data Standards and mentioned that Data Standards are being used and used well in his system. Marianne Ash mentioned that in IN they only approve eCVI vendors ONLY if they meet the Data Standards. The Data Standards are fair and easy to use. Bruce Akey mentioned there's a need for data standards for syndromic data, reason for submission, a catalog of tests and standardized LOINC codes. All these are pieces that are needed for pulling data in from multiple laboratory systems and getting good epidemiological analyses. In general the Data Standards Subcommittee could do a lot of these additional projects but others would need to be on the Subcommittee, in particular Subject Matter Experts (SME). *Recommendations: there should be an eCVI working group and some sort of "laboratory cross-talk / lab epi data" working group within the Subcommittee for Data Standards.* Michael Martin stated that there is lack of consensus in industry for what data comes out of an ultra high frequency electronic ear tag, so if the Traceability Committee needs help, there is consulting availability.

Update from the National List of Reportable Animal Diseases (NLRAD) and the National Animal Health Reporting System (NAHRS) Reportable Diseases List

Stanley Bruntz, Science, Technology and Analysis Services (STAS) Office of STAS Interagency Coordination (OSIC) USDA APHIS VS, Fort Collins, CO USA

Dr. Bruntz' presentation is included as a PDF, titled "USAHA 2015_NLRAD Update Bruntz." YES it is okay to share and append to this report. A brief summary of his presentation is as follows: NLRAD will help us meet international reporting obligations and required export certification; it's been available for comments via USDA, and it should improve disease reporting in the USA. Many

comments and feedback on the NLRAD Concept Paper have been received from industry, vets, laboratories, gov't and the international community. In general there has been broad support but a few questions on how new diseases will be added or how the list will be edited need answers. A joint NAHRS-NAHLN group was formed to address lab implementation issues of the NLRAD, but a lot of activity on that has been delayed due to re-directed personnel time going to the HPAI outbreak. Plans for 2015/2016 are to continue working to finalize recommendations for implementation, continue to review the NLRAD, continue to develop SOPs, and we may initiate the regulatory implementations process in late 2016 – but all of these need stakeholder input. Steve Hoosier (IN) mentioned that toxicants could be listed and Stan Bruntz responded they are seeking toxicology expert input and there needs to be a standard process to review toxicants included.

The Swine Health Information Center (SHIC) - An overview of how SHIC can help move the information on diseases of swine to the right people

Paul Sundberg, Swine Health Information Center, Perry, IA, USA

Dr. Paul Sundberg is the Executive Director of the newly formed Swine Health Information Center. The Center's mission is to monitor swine diseases globally and domestically, to provide research resources needed to prepare and respond to these diseases and to foster producer communication about swine health issues to improve the health of the national herd. Previously he was the Senior VP of Science and Technology with the National Pork Board.

Summary of presentation, also see appended to this report the PDF of his powerpoint presentation titled, "2015 USAHA_SHIC_Sundberg" (YES OKAY TO SHARE).

SHIC formed in July 2015. Prior to the formation of SHIC, ad hoc committees of pork producers (NPB) and swine veterinarians (AASV) were formed to address different outbreaks as they occurred. SHIC is a separate 503C corporation. This is a swine focused effort to bring multiple parties together to do targeted research. Example, for Seneca Valley Virus outbreak, the SHIC helped get diagnostic assays up and running by funding VDLs via the Swine Disease Matrix Project. SHIC also funds the Swine Health Monitoring Project (SHMP) – voluntarily shared disease data through researchers at the University of Minnesota – is important in that the goal is to increase the health of the US Swine Breeding Herd. SHIC also seeks input of vets in development of research and preparedness needs. Communication efforts are also key activities.

Ag-Connect and its use in approving swine movement permits based on the criteria from the Secure Pork Supply Plan

Keith Biggers, Ph.D.
Director of the Computing and Information Technology
Texas Center for Applied Technology,
Texas A&M Engineering Experiment Station,
The Texas A&M University System

Dr. Keith Biggers is the theme leader for Information Analysis Systems at the Institute for Infectious Animal Diseases. He also serves as the Director of the Computing and Information Technology Division at the Texas Center for Applied Technology, part of the Texas A&M University System. Dr. Biggers has led the development of AgConnect™, a suite of customizable data-sharing tools designed to enhance real-time situational awareness and decision support for endemic, emerging, zoonotic, and/or transboundary animal diseases.

A summary of Dr. Biggers;' presentation is as follows: AgConnect integrates data from disparate data sources with the goal of continuity of business. Continuity of business plans are actively being developed at the national, regional, and state levels. These plans are tailored and specific for the disease agent, industry, and/or commodity in question. They provide a framework and set of guidelines to help manage the movement for uninfected premises in a regulatory Control Area, and to facilitate movement out of the Control Area during an outbreak. A summary of AgConnect work was described. A demonstration of how AgConnect would help support the Secure Pork Supply plan was

displayed and it included maps of animal movements (traceability) and veterinary diagnostic lab results.
(DO NOT SHARE PDF OF PPT). Marianne Ash asked if the AgConnect would incorporate a permit generating tool. Keith Biggers answered that it was more a decision support tool and that EMRS would be the permitting tool but there should be an opportunity to distribute the information.

Panel Discussion on Permitted movement of animals out of control areas during outbreaks: lesssons learned, future opportunities.
Stacey Schwabenlander (MN); Greg Onstott (MO); Julie Helm (SC); and Fred Bourgeois (USDA)

A permit connects one origin to one destination for one item. A permitted movement document can be produced to cover more than one movement.

Dr. Stacey Schwabenlander is from the Minnesota Board of Animal Health. Dr. Schwabenlander's presentation summary is included at the end of this report and attached as a MS Word Document.
Dr. Jon Zack asked for the audience to really consider the impacts and the database needs of having 1872 premises that were under control zones and 3 plants under the control zones and permitting / approving all those movements. MN committed to EMRS because a database is essential to permit that many movements.

Greg Onstott is from the Missouri Department of Agriculture; MO uses USA Herds and it proved to work well during their outbreak of HPAI. They issued over 500 permits in 2 months time and they were one of the first states to have an outbreak of HPAI in 2015. The permitting process was labor intensive. They had a single staff member lead the permitting process and that would likely not have been sustainable in the long haul but it certainly gave the permitting process some continuity. They will streamline the process in the future to allow more than just one way to receive data.

Dr. Julie Helm is from Clemson University in South Carolina. South Carolina received poultry meat products from a processing plant and eggs as well. There were times when they didn't know who approved the permit and didn't have the test results. Dr. Helm recommends only allowing the state vet or his/her deputized authority to approve the permitted movement. SPS and EMRS got better the more and more it was used but sometimes the sync or timing of data was off. It was noted that the data flow and messaging needs to be better.

Dr. Fred Bourgeois is a veterinarian with the USDA, APHIS, VS, Surveillance, Preparedness and Response Services, National Preparedness and Incident Coordination staff living in Lake Charles, LA. He received his DVM from Louisiana State University School of Veterinary Medicine in 1985. Before joining the USDA, Dr. Bourgeois owned and operated a mixed veterinary practice in southwest Louisiana from 1985 to 1990. Dr. Bourgeois' USDA career began in 1990 with FSIS in Palestine, Texas as a Veterinary Inspector in Charge at Calhoun Pack, a cull cow and horse plant, then continued at Green Acres Poultry plant in Nacogdoches , Texas before he joined VS in 1993. He served as a field veterinary medical officer for VS in LA for 15 years. While with VS he has led the development of the premises ID system and EMRS1 and 2 and has worked in all aspects of disease control and information management. As the National EMRS Coordinator since 2007, Dr. Bourgeois supports the Veterinary Services and state field operations in the development and utilization of EMRS for routine FAD and outbreak control activities along with the EMRS IT team and the 3 EMRS Staff Specialists.

A summary of Dr. Bourgeois presentation is as follows and attached as an MS Word doucument:
The Premises, Lab Results and Permitting Information Triad.
In order to promote a better understanding of how we managed the premises and associated information, test results and the permitting of product and live animals Dr. Bourgeois shared some of the challenges they had the past year and where they have made improvements in the process from a USDA and EMRS perspective. Companies and FSIS do internal tracking for food

safety purposes, and so the plants were not permitted one by one and it is low risk because it is not live product. Dr. Jon Zack mentioned that tracking the conveyance might be a better use of time and resources. It was different from END in CA where during END most every bird or bird product stayed in CA. In contrast, during HPAI in 2015, there were 400 movements of poultry products out of a plant in one day (for example).

There was discussion that permits should be focused on high risk movements like live birds and hatching eggs. Dr. Bourgeois mentioned that EMRS tool provided a pipeline/conduit of data for state to state movements. Continuity of Business needs to run smoothly when birds are going from a diseased state to a disease free state. The home state has to be aware of a movement out of a control zone and the receiving state has to approve the movement into the receiving state. We need approval from both sides. For multiple movements, there's a standing permit, so movement has to be verified and requirements have to be met, but there's no need to recreate a permit. Recording the movements however, is maintained.

Marianne Ash mentioned that there would be a need to integrate the lab data and the permit electronically. A question on the known/unknown status of a premise as to whether it was in a control zone came from the audience and was answered by Dr. Bourgeois that premise status will now be in EMRS2. In EMRS2, making changes to permits was originally not allowed once approved. However, there was discovery of necessary adjustments to the permits due to errors in input, attributable to the need for rapid response and just in time training. Therefore, some changes were allowed and those changes were then applied across all permits linked to the changed permit.

The validity of premises location and PINs is perhaps the biggest issue. Data must be accurate or there is a delay in movements. There is a concerted commitment by industry to get the PIN and valid premises into EMRS2. FL and SC made it clear that only premises with a valid PIN would be allowed to move IF there was quarantine in place.

Committee Business:

These are the recommendations from the CAHSIS:

> There should be an eCVI working group and some sort of "laboratory cross-talk / lab epi data" working group within the Subcommittee for Data Standards.

The minutes/report from 2014 were approved via a motion by Bruce Akey, seconded by Pat Stonger and unanimous committee vote.

The actions of the Subcommittee on Data Standards were approved and the above recommendation was made for that subcommittee.

Dr. Marie Culhane has been serving as co-chair/vice-chair/chair of this committee since the 2012 meeting. She needs to be replaced by a member of the AAVLD. Kate Mueller (IA) expressed interest. AAVLD executives or board members should appoint a new co-chair from AAVLD membership.

Dr. Stacey Schwabenlander's presentation:

Animal Health Surveillance and Information Systems Committee (CAHSIS) meeting 10/25/2015

HPAI Permitting in MN

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

HPAI in MN Summary

-MN is the nation's #1 turkey producing state
-9,024,632 birds were affected in 23 counties and on 108 farms

- 5,236 square miles in 10 km control zones
- 1,872 premises in control area
- 1,599 backyard poultry premises
- 264 commercial poultry premises

Looking at MN EMRS2 data entry from March 29, 2015 (start date of first EMRS2 permit) through July 28, 2015 (the day all control zones were released)
-Average of 7 FTEs needed (this does not include federal staff time or indirect state time)
-931 permits (excluding feed and product) were entered into EMRS2 and 3,074 movements were entered against those permits.
-553 feed permits were entered and 5,587 movements were entered against these permits

Challenges

-Verifying accurate poultry locations
-Entering all poultry premises by hand into EMRS2
-Knowing which premises were in control zones
-Verification of permit conditions, testing requirements
-Confusion over which state should issue interstate permits

Solutions

-Interactive map pulling live data – used to verify control zone premises
-Determine the time test results are needed
-Dedicated email inbox and telephone lines
-Common workspace
-Streamlines permit request process

Unmet Needs

Data Analysis: Data extracted from EMRS2 doesn't always match data within the corresponding tables within EMRS2; Limited abilities for QA/QC of data
Knowledge: Were all appropriate items permitted? Were any items missed?
Impact: Did permitting decrease disease spread? Did it contribute to disease spread?