REPORT OF THE USAHA/AAVLD COMMITTEE ON ANIMAL HEALTH SURVEILLANCE AND INFORMATION SYSTEMS

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The Committee met on October 16, 2016 at the Sheraton Greensboro Hotel in Greensboro, North Carolina from 3:00 to 5:45 p.m. There were ten members that were present as determined by their initials on the roster. There were 17 guests present. Dr. Ash gave a short presentation about basic housekeeping and the purpose of the CAHSIS committee. The 2015 minutes/report were approved unanimous vote by all members present.

Presentations and Reports

Update from the Subcommittee on Data Standards
Michael McGrath, Trace First
The subcommittee on data standards has been working the past year on a review of outstanding issues and addressing feedback since the electronic Certificate of Veterinary Inspection (CVI) standards were published. They believe they are about 2/3 of the way through the review process. The subcommittee will be continuing to work on the review of the standards through the end of the year and then will be able to look into what they need for starting to create a second version. Version two of the standards will incorporate feedback and address weaknesses from version one. In addition to the actual details within the standards, the committee will need to decide what should be changed about the process of developing standards. Two points to discuss are 1) the schema needs to be tighter—less subject to interpretation, clean up ambiguities and 2) state animal health officials need to put pressure on vendors to participate in the actual standard meeting process so they can have input and address issues upfront.
Questions:
1. Who are vendors?
   a. No specific answer to the question, but talked about how they want vendor input. Often vendors think that when the committee is working on a draft that they can't participate or have a say in the development process. However, the term "draft" still means that it is open for vendors to give input.
2. Is the working group made up of the same people as last year?
   a. Yes, but open participation by any/all members is encouraged. One exception: cannot take formal votes on resolutions without representation from consumers and producers of CVI.
3. Will this eventually be able to work for laboratory messaging data standards?
   a. It is much easier to create laboratory messaging because we have a human standard to begin with, whereas we did not for CVIs. Michael suggested they keep them separate. Additionally, one listener encouraged that it be considered to incorporate small animal CVI standards.

Update from the National List of Reportable Animal Diseases (NLRAD) and the National Animal Health Reporting System (NAHRS) Reportable Diseases List
Maria Celia Antognoli, Center for Epidemiology and Animal Health (CEAH)

NLRAD update: Dr. Antognoli described what NLRAD is and its purpose. It provides consistency and transparency of the health status of an animal population. The history of NLRAD was presented. It started in 2006 when a need of reportable diseases list was identified. Five working groups were described. The framework was also described—a current list of U.S. reportable animal diseases, laboratory case classification and reporting requirements, structure and procedures, list maintenance, communication, data management, and information release. There are two categories within NLRAD— monitored diseases and notifiable diseases (emergency incidents, emerging disease incidents, and regulated disease incidents). How does this fit into comprehensive and integrated surveillance? It provides sources of information to make decisions about the health status of animal populations. Next steps for NLRAD: review framework comments, draft a purposed rule, publish for comment, publish final rule, and implement. Processes are in place.

NAHRS update: Dr. Antognoli gave an overview of what NAHRS is, why it was created, and its structure. She encouraged the committee to reassess responsibilities to reinvigorate NAHRS participation. 2015-2016 activities: VS NLRAD-NAHRS working group was formed, a web reporting tool was created, USDA eAuthorization access was implemented, and website updated. Next year's actions include continuing to coordinate NLRAD, expanding to all states and territories prior to NLRAD regulatory implementation, training, transitioning of equine infectious anemia (EIA) testing reporting from NAHRS to EIA laboratories in 2017-18, enhancing communications with states to coordinate training, and renewing involvement of AAVLD/USAHA CAHSIS Steering Committee.

Questions:
1. Mike Martin: NLRAD framework includes suspect cases but NAHRS only includes confirmed positive cases. How do we line that up?
    a. Need to have a platform for remarks to be able to include that, work with information technology (IT) to have a more robust way to communicate/report

EMRS2GO: Mobile Application for Remote Data Capture and Upload to EMRS2
Fred Brougeois, USDA-APHIS, Veterinary Services (VS)

Dr. Brougeois introduced a new application for all foreign animal diseases (FAD) inputs. He described the problem with the current system in place—lag time, training, data entry, and people wanting a single form to fill out for investigations. The solution: EMRS2GO—offline data entry using tablets, laptops, etc. It accommodates groups of animals or single animals. Downloadable lookup information makes this tool easy and quick to use—standard dropdowns, date defaults, stores information/maps, sites/locations visited previously, etc. The tool collects Global Positioning System (GPS) coordinates, contact info, sample collection, clinical signs, etc. Laboratory submission forms can be filled out and printed to mail in along with premID barcode to the laboratories. Brougeois described the initial contact report (ICR), which is user-friendly for veterinarians who do not have to do FAD investigations very frequently. EMRS2GO will be the preferred method. Training will be provided through instruction materials and webinars. The tool can be expanded to handle other items such as inspection tasks—focused interfaces with easy input. Planned production release = Jan 2017.

Questions:
1. Justin Smith—When an ICR is filled out, will in-house databases be able to get that information as well?
    a. Technology is there, discussions around security/politics/etc. will need to take place. Ideally, yes. Potentially through a simple comma-separated values (csv) file? We need to look into this more.
2. What platforms are used?
    a. Windows only – tablet, laptop. Not on phone currently.
3. A member approved this effort because they, along with many others, have been dealing with incomplete data for years. Agree that there is a need for a way to get information from accredited veterinarians to laboratories to Emergency Management Response System (EMRS)
4. Nick Striegel – how can we take something like this to use for Veterinary Services Process Streamlining (VSPS)? Can we build something for VSPS? How do we get this to be a priority?
    a. Brougeois just did what he could on his own and had others help – he took the initiative (didn't ask, would still be asking). Could same technology work for VSPS?

Probably. Need resources and prioritization. Input from others in the audience is that there is a need to start looking at this same platform for other uses now.
5. Rodger Main—can the laboratory see the information from EMRS2GO and map it to make into a laboratory submission form?
    a. We have an order message but haven't used it for years—need to revitalize this. This is where we want to be and where we should be. Are the laboratories' Laboratory Information Management Systems (LIMS) advanced enough now to do this? If yes, then we need to discuss this with National Animal Health Laboratory Network (NAHLN) information technology (IT).
6. Mike Martin – are specimen barcodes globally unique within EMRS?
    a. EMRS2GO just transcribes the specimen identification (ID) into the barcode so laboratories can scan it to reduce entry error.
7. Once the form is filled out by a veterinarian who does not have an account, can that information be forwarded/emailed/etc. to someone with credentials to upload if they are not within driving distance?
    a. Need to look into this more, but would be vital to have a system in place.
8. Laboratories would like to see a way that the information we message to Laboratory Management Systems (LMS) be accessible to states by some mechanism so laboratories don't have to manually send to state health organizations, etc. who are interested in the data.
    a. Potentially can develop another database or central point that laboratories with correct credentials can go into to grab the data that they are associated with.

New Planet Technologies—New Methods for Electronic CVIs
Tyson Hartshorn, New Planet Technologies
    New version of SmartICVI—updated and increased capabilities, RxExpress, intuitive workspace, eliminate manual overhead, automated document processing, and four different ways to receive ICVIs. November 10, 2016—virtual demonstration (RSVP by 10-21-16).
    Questions:
    1. Can this data be messaged into our own animal health information management systems?
        a. Yes

Swine Diagnostic Data Standardization Project (Swine Health Information Center (SHIC) and USDA Funded Effort)
Marisa Rotolo, Iowa State University Veterinary Diagnostic Laboratory
    This is a multi-laboratory collaboration (Iowa State University (ISU), Kansas State University (KSU), University of Minnesota (UMN), South Dakota State University (SDSU), Clemson, and USDA) to take laboratory results, send them to a third-party database, pool those results, and use them. This requires laboratory data standardization. Results can then be analyzed, summarized and sent to end-users. Using a common language/message system such as Logical Observation Identifier Names and Codes (LOINC) or Health Level Seven (HL7) so laboratories can effectively communicate results. Priorities are working on getting the most important test list standardized first, then moving on to other levels of testing. The intent of this is to be completely consistent with the National Animal Health Laboratory Network (NAHLN) schema. Project completion estimate late Fall 2017.

Data Integration in Real World Situations: Colorado's Use of Ag-Connect Linked to USAHerds – Values Realized
Nick Striegel, and Christy Dice, Colorado Department of Agriculture
    AgConnect can take data and upload it from USAHerds and other places, making it very functional. Colorado has used it for emergency management, movement of animals, preparedness planning, training and animal traceability for vesicular stomatitis virus (VSV). Examples were presented of how AgConnect was used. Example #1 was the heavy metal contaminated water incident in a river in Colorado (the Gold King Mine incident) and they were able to map all premises in Colorado affected by the contaminated river. Example #2 – VSV hold, quarantine, and quarantine release premises were mapped in AgConnect. This was useful in doing follow up on over 500 cases per year. Example #3 – 6,000 acres' wildfire in 2016 summer; used AgConnect to help the Incident Management Team (IMT) with Emergency Management and have IMT work closely with ranchers and farmers to have access to the ranches and

roads to increase safety of the people and animals in the area. Example #4 – a highly pathogenic avian influenza (HPAI) scare; used AgConnect to map premises and then used that in training for commercial poultry operations in the state to show how things would look if a real HPAI outbreak were to occur in Colorado.

Using Geographic Information Systems to Support Animal Health Surveillance – Minnesota's Development of an Interactive Mapping Tool to Respond to an Animal Disease Emergency
Marie Culhane, University of Minnesota
   Dr. Culhane gave an update on how Minnesota used the interactive mapping tool to respond to the highly pathogenic avian influenza (HPAI) outbreak last year as well as some actions they performed after the outbreak was contained. She demonstrated the mapping tool including layers of access and control zone functionalities. After the outbreak, Minnesota collaborated with other states involved in the outbreak to improve some of the mapping and response tools, which included standardizing symbols used and improving some of the mapping capabilities.

Committee Business:
   Lisa Becton presented a resolution titled "Sustained Fiscal Year 2017 Funding for APHIS /Influenza A Virus – Swine Surveillance Activities"**.** This will likely also be presented tomorrow to the swine committee. A motion to approve was offered by Bruce Akey and seconded by Francois Elvinger.
CAHSIS discussed the resolution, and the resolution was approved by a unanimous vote of all members present.

New Business:
   Western States informed CAHSIS of a resolution urging the USDA-APHIS-VS to work collaboratively with State Animal Health Officials (SAHO) and private commercial database vendors to provide direction and goal setting for states as they move forward to establish or improve their data transfer capabilities. This resolution was sent to USDA and a response was given. This is not an active resolution for this committee at this time, but was something they wanted the committee to be informed about.
   Motion to adjourn, motion seconded.