

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

Co-Chairs: Francois Elvinger, VA
Lisa Becton, IA

Bruce L. Akey, NY; Marianne Ash, IN; Debbie Barr, CAN; Karen M. Becker, MD;; Laurence J. Berry, CA; Stan D. Bruntz, CO; Craig N. Carter, KY; Neville P. Clarke, TX;; Xingnian Gu, NSW; William L. Hartmann, MN; John P. Huntley, WA; Brady James, TX; Elizabeth A. Lautner, IA; Donald H. Lein, NY; Francine Lord, CAN; Janet E. Maass, CO; Kevin D. Maher, IA; Rodger Main, IA; Michael K. Martin, SC; Michael F. McGrath, ; James D. McKean, IA; Greg Onstott, MO; Andres Perez, CA; Tom Ray, NC; Emi K. Saito, CO; Mo D. Salman, CO; A. David Scarfe, IL; Jack L. Schlater, IA; David Smith, NY; Fred Stevens, CA; Patricia Stonger, WI; Victor L. Velez, CA; Patrick Webb, IA; Stephen E. Weber, CO; Annette M. Whiteford, CA; Preben W. Willeberg, CA; Gary W. Wilson, OH; Nora E. Wineland, CO.

The USAHA/AAVLD Committee on Animal Health Surveillance and Information Systems (AHSIS) met on November 14, 2010 at the Minneapolis Hilton Hotel in Minneapolis, Minn., from 3 p.m. to 6 p.m. There were 56 total members and guests present.

The co-chairs, Dr. François Elvinger, Virginia Tech, and Dr. Lisa Becton, National Pork Board, introduced the agenda and committee mission statement, inviting comments for updates. Dr. Mo Salman, Colorado State University, introduced guests from the Republic of Georgia and a group of epidemiologists from Caribbean countries. Both groups are at the Annual Meeting to observe function and functioning of the USAHA and AAVLD and to gain awareness on how the United States debates and organizes animal health issues. There were no time-specific papers.

Two subcommittees are appointed within the Committee, the National Animal Health Surveillance System (NAHSS) Subcommittee, and the National Animal Health Reporting System (NAHRS) Steering Committee. Dr. Aaron Scott, Director, U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS), Centers for Epidemiology and Animal Health (CEAH) National Surveillance Unit (NSU), and Dr. Ellen Kasari, Veterinary Epidemiologist, VS-CEAH-NSU presented the annual update on the NAHSS and the NAHRS.

In the presentation entitled “National Animal Health Surveillance System: An Evolution of Changes through 2015,” Dr. Scott presented the components of comprehensive integrated surveillance and evolution of the NAHSS framework from the concept of support tool for eradication program to a standardized NAHSS to a 2015 model of stream based surveillance. The NAHSS should describe the national health status, be flexible to any disease or condition, be rapidly implementable and be cost efficient under concurrent budget constraints. The “temple of surveillance” concept is progressing to a flow process of multiple surveillance streams whose flow of data can be adapted to particular needs and objectives for integration, analysis, interpretation and reporting for action. Examples of data streams include disease programs, slaughter plants, National Animal Health Laboratory Network (NAHLN) laboratories, livestock markets, accredited veterinarians, interstate movement and others. “Enhanced passive” surveillance in slaughter plants (condemnations), livestock markets, laboratory submissions can be readily modified to become disease specific if needed, if incoming data was to trigger further investigation when needed. This stream based surveillance has to be flexible and apply to emerging, foreign and endemic infectious animal disease outbreaks as well as for toxin related outbreaks, has to have high sensitivity, benefit producers and facilitate veterinary practice work, as well as be cost effective. Three action levels for enhanced surveillance and for action triggers are to be considered, first at the producer/herd manager/veterinary practitioner level, second at the State level triggering a coordinated response and third, for federal information at the national level. The essential is to develop a multitude of flexible surveillance streams that can be integrated for maximum efficiency and effectiveness.

Discussion following Dr. Scott’s presentation focused on standards for data collection and information management. Standards have to find wide acceptance by all stakeholders and need to be functional for all contributors. Effective standards will not only facilitate data collection, movement and analysis, but also improve access by stakeholders.

Dr. Ellen Kasari, in her update, first provided an overview of goals and organizational structure of the NAHRS. The NAHRS is a reporting system that collects data through State animal health officials on the occurrence of OIE reportable diseases in the U.S. and is VS' primary tool for regularly recording the status of OIE reportable diseases. It provides temporal information on disease events and occurrences in the U.S. NAHRS is coordinated through the National Surveillance Unit and guided by the NAHRS steering committee which includes representatives of the USAHA, AAVLD, VS and participating States, and is informed by commodity working groups including cattle, small ruminants, swine, poultry, horses and aquaculture. The NSU produces an annual NAHSS NAHRS report which includes information on reporting, on NAHSS activities related to the World Organization for Animal Health (OIE) reportable diseases, the U.S. OIE reportable disease status, as well as summary information regarding OIE reportable disease events during the year.

State representation in the NAHRS is now close to including all States – indeed only one State is currently non-reporting, but is in the planning process for participation. The NSU has produced an on-line reporting tool and currently is addressing some IT security issues associated with the tool. Other issues being addressed include updating State EIA testing data capture, updating the NAHRS crustacean list to coincide with the OIE list and enhance aquaculture reporting. One of the major focuses currently is the establishment of a U.S. National List of Reportable Animal Diseases. Such a list has been discussed since the 1990's, however, through action of USAHA and AAVLD which identified the need for such a list in 2006, has now progressed from a needs assessment to feasibility studies and the production of a National List of Reportable Animal Diseases White Paper illustrating all aspects, challenges and benefits of such a list. Veterinary Services will further pursue the establishment of such a list, with NAHRS proposing further development of case definitions, enhanced aquaculture reporting, increased communications with stakeholders, update of the NAHRS Operation Manual, finalization of the NAHRS electronic brochure, exploration of inclusion of U.S. Territories into NAHRS, and given its 10 years of operation, an in-depth review of the NAHRS.

Questions following Dr. Kasari's presentation addressed the establishment of the national list of reportable animal diseases, the design of case definitions and the type of changes in reporting that such a list would entail. Attendants agreed with the principle of having a national list.

Dr. François Elvinger, co-chair of the NAHSS Subcommittee, reported on the 2001 Animal Health Safeguarding Review (AHSR) NAHSS review project that the subcommittee engaged in since beginning 2010. The AHSR through formulation of 9 principles and 21 recommendations has guided the development and deployment of the NAHSS. The NAHSS subcommittee's 14 members initiated an evaluation of NAHSS progress on each of the 21 recommendations that were formulated in the AHSR.

The principal tool and arm for development of the NAHSS has been the National Surveillance Unit of VS-CEAH that was established in 2003 and since has guided development, planning and deployment, restructuring and consolidation, as well as evaluation of Veterinary Services surveillance activities. The NSU provided background information for 18 of the 21 recommendations, and the leadership of the National Veterinary Services Laboratories provided background information on the two laboratory services related surveillance recommendations. Subcommittee workgroups interviewed NAHSS stakeholders and participants, mostly in federal agencies, as to developments and progress related to specific recommendations. Dr. Bruce Akey, Cornell University, co-chair of the NAHSS subcommittee, briefly reported preliminary findings on 19 recommendations, with two reviews on international surveillance activities and partnerships not yet completed. Findings were in general that either some progress, or significant progress had been achieved, with the exception of recommendation number five addressing authorities for surveillance, that still needs significant work. One preliminary finding is also the determination that one of the major challenges facing surveillance is not the generation of data from multiple surveillance streams, but the use and sharing of information from surveillance. Reporting of surveillance results is a challenge that still needs to be addressed to a significant extent. Overall, however, from preliminary assessment of the evaluation findings, it is clear that Veterinary Services and all stakeholders have made and are making significant progress towards fulfilling the recommendations issued in the 2001 Safeguarding Review.

The follow-up discussion revolved around the retained high value of the AHSR recommendations, and that the focus now needs to be on the future, with integration of these findings into planning for the next steps. Dr. Salman stated that the AHSR principles and recommendations of 2001 still have value and that

the findings of this current review should be integrated for the efforts to move surveillance towards the flexible and integrated stream-based surveillance that NSU and Veterinary Services envision for VS2015. In particular surveillance needs to be adaptive and not only in reference to the regulatory mandate of VS.

Dr. Jane Rooney, VS, National Center for Animal Health Emergency Management) reported on progress made by the VS 2015 Surveillance for Action Workgroup in defining the strategies and critical areas for surveillance in the future, in particular advocating a shift from state-centric regulatory program activities to truly nationally focused efforts. Surveillance streams at concentration points should be cornerstones for surveillance activities. The Workgroup identified six critical areas: in partnership with stakeholders, develop a well defined, flexible decision making framework for addressing appropriate responses to surveillance findings; clarification of authorities for collection and release of data, with guidance on confidentiality clarified in appropriate agreements; determination of surveillance streams for existing and emerging diseases with appropriate action planned; continued support for development of National Veterinary Services Laboratory (NVSL), foreign animal disease laboratories and NAHLN infrastructure to generate validated surveillance results, include expanded consultation of partners in laboratories and research communities to integrate new diagnostic capabilities; development with industry/stakeholder support of an integrated and cross-functional IT infrastructure for gathering, analysis and dissemination of information.

The workgroup findings are now assembled with those of the three other VS2015 workgroups by the VS Synthesis group which will coordinate and consolidate findings from all four areas to create an overall end document for VS's future direction.

Committee Business

In the business session the committee discussed, proposed and voted to forward two resolutions for the general membership vote. The first was on the establishment of a United States National List of Reportable Animal Diseases; the second was in support of NAHLN IT development. The co-chairs presented the 2010 VS request for review of changes to OIE chapters. Chapters of interest to the Committee membership would be chapters 2 – Notification of disease and epidemiological information; 3 – criteria for listing diseases; 7 – zoning and compartmentalization; 8 – application of compartmentalization. Other chapters may be of interest to some members of the committee as well.