BACKGROUND INFORMATION:

The Commercial Aquaculture Health Program Standards (CAHPS) were initiated by the National Aquaculture Association and developed with the United States Department of Agriculture (USDA) in 2014. The standards set forth a model framework for the health of commercially farmed aquatic animals. CAHPS recognized and built upon current activities and existing guidelines for health of aquatic animals by establishing uniform standards for U.S. farmed aquatic animal health and movement.

The United States Animal Health Association applauds the efforts of the USDA, Animal and Plant Health Inspection Service (APHIS) for working with the National Aquaculture Association to develop CAHPS. We believe that the program must further evolve to benefit commercial aquaculture especially with regards to national and international trade. The effectiveness and success of the program requires the cooperation of not only industry but also State and federal entities including the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration.

RESOLUTION:

The United States Animal Health Association (USAHA) encourages USDA, APHIS to continue to work with industry, State Departments for aquaculture/aquatic animal health, and other entities to explore viable, nationally and internationally recognized strategies to implement the CAHPS.

FINAL RESPONSE:

USDA, APHIS, Veterinary Services recognizes the interest of the USAHA regarding the CAHPS and appreciates the opportunity to respond. In 2019, APHIS engaged industry, State, and other stakeholders in strategic discussions about the future direction of, including but not limited to, alignment of CAHPS with stakeholder objectives, international standards, and current science.

APHIS will continue to explore the implementation of CAHPS in fiscal year 2020 in cooperation with industry, State, and external stakeholders.
RESOLUTION NUMBER: 4  Combined with 8, 12, 17, 21 and 37  APPROVED

SOURCE: COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT
USAHA/AAVLD COMMITTEE ON ANIMAL HEALTH SURVEILLANCE AND INFORMATION SYSTEMS
USAHA/AAVLD COMMITTEE ON NAHLN COMMITTEE ON FOREIGN AND EMERGING DISEASES COMMITTEE ON SWINE COMMITTEE ON GLOBAL ANIMAL HEALTH AND TRADE

SUBJECT MATTER: AFRICAN SWINE FEVER (ASF) SURVEILLANCE PROGRAM AND TISSUES FOR OFFICIAL ASF TESTING IN NATIONAL ANIMAL HEALTH LABORATORY NETWORK LABORATORIES

BACKGROUND INFORMATION:

African Swine Fever (ASF) virus is highly contagious (for swine; people are not affected) and can spread rapidly in swine populations. ASF virus can be transmitted to swine by ticks, direct contact, fomites (including vehicles, feed, and equipment), or consumption of uncooked pork. Other bloodsucking insects such as mosquitoes and biting flies may also transmit the virus mechanically.

ASF has a clinical predilection for the macrophage. Post mortem clinical indications include splenomegaly and swollen and hemorrhagic lymph nodes. At this time, the United States Department of Agriculture (USDA) has approved only whole blood and tonsil for official Polymerase Chain Reaction (PCR) testing.

The National Pork Board (NPB) and the Swine Health Information Center (SHIC) have funded a negative cohort study to validate ASF nucleic acid detection by PCR performed on swine oral fluids. The NPB, the SHIC, and USDA are funding the positive cohort study needed to complete the validation of oral fluid testing.

There is no vaccine or treatment currently available for ASF, and it is unlikely that an effective vaccine will become available to aid in the control of an outbreak. This increases the importance of rapid detection and aggressive measures to stamp out infected herds. Unlike Foot and Mouth Disease and Classical Swine Fever, for which effective vaccines exist, there is no potential use in vaccination to suppress an outbreak of ASF before entering the final phase of disease eradication.
ASF virus isolates vary in virulence from highly pathogenic strains that cause near 100 percent mortality to low–virulence isolates that can be difficult to diagnose. An outbreak of high virulence ASF virus will likely be detected sooner and be easier to trace and stamp out. In the absence of an effective surveillance program, low virulence strains may become widespread before detection and will be more difficult to trace based on clinical signs alone.

USDA has no formal active ASF surveillance program in the United States (U.S.). Currently, USDA allows an official ASF PCR test to be done only on whole blood submitted to the National Animal Health Laboratory Network veterinary diagnostic laboratories (VDLs). The Iowa State University (ISU) VDL reports that fewer than 200 whole blood samples have been submitted from approximately 50,000 diagnostic case investigations into clinically ill swine that involved the submission of a case history and tissues for histopathological evaluation by a diagnostic pathologist at the ISU VDL, over the course of the past 5 years.


The State pork producer associations of Arizona, Colorado, Florida, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Mississippi, Montana, Nebraska, New York, North Carolina, Oklahoma, Ohio, Pennsylvania, South Dakota, Texas, and Wisconsin recognize the need for an effective ASF surveillance program as a key element for protection of the U.S. Swine herd. Additionally, they support the approval of additional tissues for official ASF testing.

**RESOLUTION:**

The United States Animal Health Association (USAHA) and American Association of Veterinary Laboratory Diagnosticians (AAVLD) urge the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) to immediately begin an active formal African Swine Fever (ASF) surveillance program in the United States and approve tonsil, spleen, and lymph nodes as additional tissues for official ASF testing in the National Animal Health Laboratory Network (NAHLN) laboratories.

**FINAL RESPONSE**

USDA,APHIS, Veterinary Services recognizes the concerns of the USAHA and appreciates the opportunity to respond. USDA worked with the NAHLN laboratories to increase its overall diagnostic capabilities for ASF. The NAHLN increased the number of laboratories approved to conduct the testing and laboratory personnel proficiency tested, as well as increasing the types of samples that can be tested. As of August 23, 2019, the NAHLN has increased the number of ASF-approved laboratories from 13 to
47. Laboratories can now test four sample types (lymph node, spleen, tonsil, and whole blood) instead of just whole blood, which can be difficult to obtain at necropsy. Additional sample options make it easier to submit samples for testing. With these improvements in capability and capacity, USDA implemented enhanced, comprehensive ASF/classical swine fever active surveillance efforts, with a full program beginning June 1, 2019, utilizing 10 of the 47 approved NAHLN laboratories. The surveillance effort tests samples from sick swine submissions to veterinary diagnostic laboratories and sick or dead swine at slaughter.
RESOLUTION NUMBER: 5 Combined with 9, 13, 18, 22, and 36  APPROVED

SOURCE:  COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT
          USAHA/AAVLD COMMITTEE ON ANIMAL HEALTH
          SURVEILLANCE AND INFORMATION SYSTEMS
          USAHA/AAVLD COMMITTEE ON NAHLN
          COMMITTEE ON FOREIGN AND EMERGING DISEASES
          COMMITTEE ON SWINE
          COMMITTEE ON GLOBAL ANIMAL HEALTH AND TRADE

SUBJECT MATTER:  ENHANCING CLASSICAL SWINE FEVER SURVEILLANCE
                 IN NATIONAL ANIMAL HEALTH LABORATORY
                 NETWORK DIAGNOSTIC LABORATORIES

BACKGROUND INFORMATION:

Classical Swine Fever (CSF) is a highly contagious and economically significant viral
disease of pigs. The severity of the illness varies with the strain of the virus, the age of the
pig, and the immune status of the herd. Acute infections, which are caused by highly
virulent isolates and have a high mortality rate in naive herds, are likely to be diagnosed
rapidly. Infections with less virulent isolates, however, can be more difficult to recognize,
particularly in older pigs. The range of clinical signs and similarity to other diseases can
make classical swine fever challenging to diagnose.

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection
Services (APHIS) now has funding to use the tonsil as part of a routine surveillance
program to detect CSF and is offering incentives to encourage practitioners to submit
samples for surveillance.

Tests using the tonsil have been developed by the Foreign Animal Disease Diagnostic
Laboratory (FADDL) at USDA’s Plum Island Animal Disease Center to aid in detection
and diagnosis of CSF. USDA’s Classical Swine Fever (CSF) Surveillance Procedure
Manual includes tonsil, tonsil scrapings, and nasal swabs as appropriate samples for CSF
detection if collected and submitted properly. As an incentive for producers and
veterinarians to submit tonsils, the USDA will credit the submitter with 50 dollars to be
applied to the diagnostic workup for cases tested by one of the following National Animal
Health Laboratory Network (NAHLN) laboratories: Arizona, California, Florida, Georgia,
Iowa, New York, North Carolina, Texas, or Washington.
The National Pork Board (NPB) and the Swine Health Information Center (SHIC) have funded a negative cohort study to validate CSF nucleic acid detection by Polymerase Chain Reaction testing performed on swine oral fluids. The NPB, the SHIC, and USDA are funding the positive cohort study needed to complete the validation of oral fluid testing.

The Iowa State University Veterinary Diagnostic Laboratory reports that outside of the USDA CSF surveillance testing, over the past 5 years only 383 diagnostic tests were performed on porcine tonsils submitted with the approximately 50,000 diagnostic case investigations into clinically ill swine that involved the submission of a case history and tissues for histopathological evaluation by a diagnostic pathologist.

In the absence of an effective surveillance program that includes official CSF testing of tissues routinely submitted to the NAHLN laboratories for diagnostic case investigations, low virulence CSF strains may become widespread before detected.


The State pork producer associations of Arizona, Colorado, Florida, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Mississippi, Montana, Nebraska, New York, North Carolina, Oklahoma, Ohio, Pennsylvania, South Dakota, Texas, and Wisconsin recognize the need for an effective CSF surveillance program as a key element for protection of the United States swine herd. To ensure effectiveness, they support the approval of additional tissues for official CSF testing.

RESOLUTION:

The United States Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD) urge the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) to approve tonsil, spleen, and lymph nodes as additional tissues for official Classical Swine Fever (CSF) testing in the National Animal Health Laboratory Network (NAHLN) laboratories.

FINAL RESPONSE:

USDA, APHIS, Veterinary Services recognizes the concerns of the USAHA and appreciates the opportunity to respond. As of August 23, 2019, there are 47 NAHLN laboratories approved to test for CSF. Laboratories can now test three sample types, including lymph node, spleen, and tonsil. With these improvements in capability and capacity, USDA was able to implement enhanced, comprehensive African swine fever/CSF active surveillance efforts, with a full program beginning June 1, 2019, utilizing 10 of the 47 approved NAHLN laboratories. The surveillance effort tests samples from sick swine submissions to veterinary diagnostic laboratories and sick or dead swine at slaughter.
RESOLUTION NUMBER: 6  Combined with 10, 14, 19, 23, and 38  APPROVED

SOURCE:  COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT
USAHA/AAVLD COMMITTEE ON ANIMAL HEALTH
SURVEILLANCE AND INFORMATION SYSTEMS
USAHA/AAVLD COMMITTEE ON NAHLN
COMMITTEE ON FOREIGN AND EMERGING DISEASES
COMMITTEE ON SWINE
COMMITTEE ON GLOBAL ANIMAL HEALTH AND TRADE

SUBJECT MATTER:  IMPLEMENTATION OF PSEUDORABIES VIRUS
DEOXYRIBONUCLEIC ACID DETECTION (POLYMERASE
CHAIN REACTION) IN NATIONAL ANIMAL HEALTH
LABORATORY NETWORK VETERINARY DIAGNOSTIC
LABORATORIES

BACKGROUND INFORMATION:

Pseudorabies virus (PRV) was eradicated from domestic swine in 2004. Vaccination
was discontinued at that time, leaving the United States herd vulnerable to infection and
outbreak. Although eradicated from U.S. domestic swine, PRV remains endemic in U.S.
feral swine.

A virulent strain of PRV in China, different than the strain eradicated from the United
States, emerged in Asia in 2011, where it is causing high morbidity and mortality.
Research has shown that PRV could survive in feedstuffs under time, temperature, and
humidity conditions mimicking those during shipment from China, revealing a potential
path for introduction in the United States.

Early detection of the virus and understanding the pathways of potential PRV
transmission are critical to containing virus spread and preventing economic losses,
should the virus arrive in the United States. U.S. PRV surveillance now relies solely on
antibody detection.

Capable, rapid response will necessitate the use of nucleic acid detection (polymerase
chain reaction - PCR) to enable detection of the virus in tissue samples sent to
veterinary diagnostic labs (VDLs). The National Animal Health Laboratory Network
(NAHLN) VDLs currently do not have the direct ability to detect PRV in submitted tissue
samples with a validated PCR.
The National Pork Board’s Swine Health Committee believes there is a rational urgency for the United States Department of Agriculture to prepare the NAHLN laboratories for the possibility of the re-emergence of PRV.

The State Pork Producer Associations of Arizona, Colorado, Florida, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Mississippi, Montana, Nebraska, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Dakota, Texas, and Wisconsin recognize the need for an effective PRV surveillance program as a key element for protection of the U.S. swine herd and support the implementation of PRV Deoxyribonucleic Acid detection, proficiency testing in the NAHLN laboratories, and validation of their use with oral fluids.

RESOLUTION:

The United States Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD) urge the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) to actively pursue validating a Pseudorabies Virus (PRV) polymerase chain reaction assay for the detection of PRV Deoxyribonucleic Acid in swine oral fluids and other appropriate samples to be used in National Animal Health Laboratory Network (NAHLN) laboratories as is currently being done with Foot and Mouth Disease Virus, Classical Swine Fever Virus, and African Swine Fever Virus.

FINAL RESPONSE

USDA, APHIS, Veterinary Services recognizes the concerns of the USAHA and appreciates the opportunity to respond. In 2018, the NAHLN Methods Technical Working Group (MTWG) evaluated three protocols for conducting PRV PCR. The MTWG tentatively selected one protocol for recommendation, pending a final side-by-side laboratory comparison to be conducted by the National Veterinary Services Laboratories’ Diagnostic Virology Laboratory. The anticipated completion date for the comparison and identification of a preferred PCR protocol is end of calendar year 2019.
RESOLUTION NUMBER: 7 APPROVED

SOURCE: AAVLD/USAHA COMMITTEE ON ANIMAL HEALTH SURVEILLANCE AND INFORMATION SYSTEMS

SUBJECT MATTER: ADOPTION OF XML DATA STANDARD FOR EXCHANGE OF ELECTRONIC CERTIFICATE OF VETERINARY INSPECTION DATA

BACKGROUND INFORMATION:

The Animal Disease Traceability (ADT) program relies heavily upon animal movement data contained in certificates of veterinary inspection (CVIs). Much of this data is digital or is being digitized. Effective use of these data, while minimizing the expense of repeat data entry, depends on the ability of dissimilar information systems to exchange CVI data in a standard format.

A robust marketplace of electronic CVIs (eCVIs) has emerged. In order to achieve a standard format that would have broad acceptance in this market, the Data Standards Subcommittee of the United States Animal Health Association Committee on Animal Health Surveillance and Information Systems used an industry consensus standard development process to create the “XML Data Standard for Exchange of eCVI Data.” Version 1 of this standard underwent three years of trial use as a draft standard followed by an intense year of edits to resolve issues discovered during trial use. Version 2 of the standard is now available.

Effectiveness of a standard depends upon its adoption by a critical mass of data producer and consumer applications. Many of the most important ADT applications are implemented in United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) programs.

RESOLUTION:

The United States Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD) urge the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) to: 1) endorse version 2 of the AAVLD/USAHA XML Data Standard for exchange of eCVI data as the preferred means of eCVI data exchange, and; 2) as soon as is practicable, implement the standard as the primary means for export and import of eCVI data in all USDA, APHIS, VS applications that produce or use such data.
USDA, APHIS, VS recognizes and applauds the work of the Data Standards Subcommittee in the collaborative development of a standard for exchange of electronic certificates of veterinary inspection (eCVIs). VS intends to endorse the Version 2 standards for VS-developed software tools related to eCVIs. VS leveraged its standard information technology governance process to determine the best path forward for adjusting current or identifying new tools to implement the new standards.

VS committed funding to an agreement for a contractor to make modifications to the Veterinary Services Process Streamlining (VSPS). The work will begin in fiscal year (FY) 2020. The contractor will deliver VSPS enhancements in the third quarter of the fiscal year 2020.

An additional advancement to support data exchange is to implement the VS Enterprise Messaging Service, part of the Mobile Information Management system modernization project. This messaging capability will be in production October 2019 to enable receiving, routing, and queuing USAHA-compliant eCVI messages between State, Federal, and third-party systems. Messages received for VSPS will stay in queue until contractors complete the modifications in VSPS to allow the receiving and sending of USAHA-compliant eCVI messages in FY 2020.
RESOLUTION NUMBER: 11 Combined with 33 APPROVED

SOURCE: USAHA/AAVLD COMMITTEE ON ANIMAL HEALTH SURVEILLANCE AND INFORMATION SYSTEMS COMMITTEE ON CATTLE AND BISON

SUBJECT MATTER: IMPROVEMENTS NEEDED TO THE UNITED STATES DEPARTMENT OF AGRICULTURE’S VETERINARY SERVICES PROCESS STREAMLINING DATABASE

BACKGROUND INFORMATION:

The United States Department of Agriculture’s (USDA) Veterinary Services Process Streamlining (VSPS) database is one option accredited veterinarians may use to issue electronic Certificates of Veterinary Inspection (eCVIs). VSPS allows State Animal Health Official (SAHO) staff to log into the system to retrieve issued eCVIs. Additionally, VSPS allows for the retrospective entry of information from paper CVIs or other sources into the searchable database module (RetroCVI). Once logged in, SAHO staff must download one eCVI at a time. A request was made to VSPS staff to allow for bulk download of issued eCVIs and this request was confirmed by VSPS staff as submitted for review in September 2016. As of September 2018, no bulk download abilities for eCVIs have been integrated into VSPS.

VSPS has not been upgraded to allow either an XML eCVI output that meets the draft data standards developed by the Animal Health Surveillance and Information Systems’ subcommittee on eCVI Data Standards, or the ability to upload XML data into the RetroCVI module used by some States. Consequently, VSPS currently does not have the ability to send data electronically to any SAHO-desired destination (e.g. CVI Central, SCS, StateVet.com, USAHerds, other State database, or designated email address).

Many States elect to have all traceability data, including all CVIs, accessible within their own offices and/or captured in their own databases. The current process for SAHO staff accessing VSPS issued eCVIs is extremely inefficient, creating a barrier to animal disease traceability and prohibiting advancements towards SAHOs data sharing goals. SAHOs are expected to provide summary information to USDA as part of accomplishment reports for Cooperative Agreements and for other specific queries yet gathering the required information out of VSPS is often very inefficient and cumbersome. Separately, several SAHOs have suggested additional VSPS upgrades to USDA information technology helpdesk personnel. The upgrades are necessary to perform work more efficiently, but the suggestions have gone mostly unimplemented.

The USDA Secretary of Agriculture Dr. Sonny Perdue has remarked that one of his
highest priorities is running an efficient agency that prioritizes customer service. It is past time that these concerns with VSPS are addressed in line with this priority.

RESOLUTION:

The United States Animal Health Association (USAHA) and the American Association of Veterinary Diagnosticians (AAVLD) urge the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) to immediately prioritize upgrading VS Process Streamlining (VSPS) to better address the needs of State and federal animal health officials as well as accredited veterinarians utilizing the system. Upgrades should at minimum include 1) ability to download all issued electronic Certificates of Veterinary Inspection (eCVIs) for user specified issue dates in bulk, with each eCVI document as an individual PDF file; 2) upgrade VSPS to allow an eCVI XML output that meets, and continues to meet, the current eCVI standard developed by the Animal Health Surveillance and Information Systems’ eCVI Data Standards Subcommittee; 3) expand the species list within VSPS to include all species included in the eCVI schema from the Animal Health Surveillance and Information Systems’ eCVI Data Standards Subcommittee; 4) upgrade VSPS to allow acceptance of XML input, compatible with the previously referenced standard, from non-VSPS issued eCVIs into the VSPS RetroCVI module; 5) develop a mechanism for issued eCVIs, in PDF form and accompanying XML data, to be sent electronically to a designated email address or a State database (e.g. CVI Central, SCS, StateVet.com, USAHerds, or other State database); 6) allow export of RetroCVI data in bulk; and 7) allow searchability of data across both the eCVI and RetroCVI modules. All upgrades should be implemented in VSPS prior to the 2019 USAHA and AAVLD annual meetings. Additionally, resources should be budgeted both short term and long term to allow for necessary improvement, updates, and modifications to the system as is needed and requested by the National Assembly of State Animal Health Officials and other traceability partners.

FINAL RESPONSE:

USDA, APHIS, VS recognizes and applauds the work of the Data Standards Subcommittee in the collaborative development of a standard for exchange of electronic certificates of veterinary inspection (eCVIs). VS intends to endorse the Version 2 standards for VS-developed software tools related to eCVIs. VS leveraged its standard information technology governance process to determine the best path forward for adjusting current or identifying new tools to implement the new standards.

VS committed funding to an agreement for a contractor to make modifications to the Veterinary Services Process Streamlining (VSPS). The work will begin in fiscal year (FY) 2020. The contractor will deliver VSPS enhancements in the third quarter of the fiscal year 2020.

An additional advancement to support data exchange is to the VS Enterprise Messaging Service, part of the Mobile Information Management system modernization project. This
messaging capability will be in production October 2019 to enable receiving, routing, and queuing USAHA-compliant eCVI messages between State, Federal, and third-party systems. Messages received for VSPS will stay in queue until contractors complete the modifications in VSPS to allow the receiving and sending of USAHA-compliant eCVI messages in FY 2020.
RESOLUTION NUMBER: 15 APPROVED
SOURCE: COMMITTEE ON EQUINE
SUBJECT MATTER: NATIONAL EQUINE COMMUNICATION CENTER

BACKGROUND INFORMATION:

The collaborative efforts of the American Association of Equine Practitioners, American Horse Council, United States Department of Agriculture, National Assembly of State Animal Health Officials, and other equine industry representatives, have led to establishment of the Equine Disease Communication Center (EDCC).

The EDCC has been extremely successful in providing real-time notification about infectious disease cases to the equine industry in North America. Additionally, the online educational resources of EDCC have assisted horse owners, venue managers, industry associations, and State Animal Health Officials in development of effective infectious disease management and communications plans. EDCC has expanded its efforts into the development of a comprehensive database to capture case and incident data which will assist with the understanding of equine disease outbreaks in the United States.

EDCC’s current challenges are raising funds to guarantee continuation of EDCC and continued reporting of equine disease incidents from State Animal Health Officials.

RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA) to continue to provide subject matter expertise and resume financial support to maintain the established Equine Disease Communication Center (EDCC). Furthermore, USAHA urges State Animal Health Officials to report confirmed cases of equine diseases reportable in their respective State to EDCC.

FINAL RESPONSE:

USDA, Animal and Plant Health Inspection Service, Veterinary Services values and recognizes the importance of the Equine Disease Communication Center (EDCC) and appreciates the opportunity to respond. USDA continues to support EDCC by providing subject matter expertise from the VS equine health staff.

USDA will consider the request to resume financial support for EDCC and evaluate related options in fiscal year 2020.
BACKGROUND INFORMATION:

The National Animal Health Monitoring System (NAHMS) is a program through which national studies are conducted through collaboration of multiple government agencies, producers and other industry representatives, academic institutions, and public and animal health professionals. These efforts are organized by a multidisciplinary group within the United States Department of Agriculture, Animal and Plant Health Inspection Service’s Center for Epidemiology and Animal Health. This unit is composed of veterinary epidemiologists, livestock commodity specialists, statisticians, and technical support staff.

There have been five previous national swine studies (1990, 1995, 2000, 2006, and 2012) and each has provided estimates of critical industry benchmarks through a series of reports generated by surveys and biologic sample collections. All respondent identification is strictly confidential. The use of National Agricultural Statistics Service (NASS) list frames has allowed survey estimates generated by these studies to be extrapolated to over 90 percent of swine operations with more than 100 pigs. These estimates have documented management system progress in disease management and other factors related to swine health over the years. These studies have thus served to support export markets and have given researchers baseline estimates, biologic samples, and hypotheses to develop industry supported studies.

NAHMS data on antimicrobial use has provided baseline population estimates that can be used to compare use before and after recent Food and Drug Administration guideline implementation. Use estimates and bacterial isolate susceptibility test findings have been used at Congressional hearings on antimicrobial resistance. These national swine studies are unique in the world and provide an opportunity for a high level of cooperation between federal and industry sectors. Plans for the current study include collections of feces for traditional fecal pathogen isolation and sensitivity testing, and oral fluids collections. The latter can provide an incentive for participation and also affords opportunities for research such as validation of existing or new oral fluids tests.

Benefits that can be derived from past and future NAHMS surveys include: sound statistical representation of the industry; modeling of surveys to meet industry priorities;
clear communication of industry trends; resources for further research; estimates upon emerging pathogens and biological samples to be banked for future study.

RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS), National Animal Health Monitoring System (NAHMS) to coordinate planning, key objective development, timely reporting, and outreach activities for the 2020 National Swine Survey with industry organizations, producers, National Agricultural Statistics Service, and State Animal Health Officials.

FINAL RESPONSE:

USDA, APHIS, VS appreciates USAHA’s interest regarding the development of the National Animal Health Monitoring System (NAHMS) Swine 2020 study. NAHMS conducted a needs assessment and several focus group sessions with representatives of the swine industry, universities, and Federal partners to identify target populations, timelines, key study objectives, and biologic testing priorities.

NAHMS is planning for the launch of the Swine 2020 study, its seventh national study of U.S. swine operations. There will be two components to the Swine 2020 study. Beginning in July 2020, the Small Enterprise study will examine unique marketing, risks, and health challenges faced by operations with fewer than 1,000 pigs in 38 States conducted through a mail-out questionnaire. The Large Enterprise study will take an in-depth look at health, management, preparedness, and biosecurity practices on operations with 1,000 or more pigs in the 13-top swine-producing States. The Large Enterprise study will involve two phases. Phase I will include an on-site National Agricultural Statistics Service (NASS)-administered questionnaire. As part of Phase II, VS field veterinary medical officers will visit operations that agree to continue in the study for a second questionnaire and an opportunity for biologic testing.

VS submitted the study design and all supporting documents to the Office of Management and Budget for approval. NAHMS is working with industry organizations, NASS, university extension, and State Animal Health Officials to develop marketing plans and outreach materials to increase producer awareness of the importance of this data collection.
SIGNIFICANCE:

The Dual Path Platform (DPP) is a blood test that uses antibody-based technology to detect tuberculosis (TB) in farmed cervids. It is a significant advancement in TB testing for these species, reducing the need for handling and increasing interest among producers. The test was licensed by the United States Department of Agriculture, Animal and Plant Health Inspection Service, Center for Veterinary Biologics in October 2012, for farmed cervids.

RESOLUTION:

The United States Animal Health Association (USAHA) requests that the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) evaluate the Dual Path Platform for use as an individual animal blood test in farmed cervidae for interstate commerce in the Tuberculosis Eradication Program.

FINAL RESPONSE:

USDA, APHIS, VS recognizes the concerns of the USAHA and appreciates the opportunity to respond. The Code of Federal Regulations (CFR) specifies that each State is classified as modified accredited; and, therefore, the interstate movement of captive cervids must meet the bovine tuberculosis testing requirements in accordance with 9 CFR Parts 77.20 and 77.27. Currently, there is no exception to testing requirements for the interstate movement of individual cervids that would eliminate the need for a whole herd test. VS will continue to evaluate and consider this resolution as we determine next steps for the proposed rule for brucellosis and bovine tuberculosis.
RESOLUTION NUMBER: 27 APPROVED

SOURCE: COMMITTEE ON SHEEP, GOATS, AND CAMELIDS

SUBJECT MATTER: NATIONAL ANIMAL HEALTH MONITORING SYSTEM 2019
GOAT STUDY – BIOLOGICAL TESTING

BACKGROUND INFORMATION:

The United States goat industries have been the subject of only one National Animal Health Monitoring System (NAHMS) goat study, in 2009. In that study, a lack of resources resulted in the inability to carry out the planned biological testing portions of the NAHMS 2009 goat study. No national studies, including biological testing, have been conducted to assess the prevalence of pathogens and diseases in United States goats.

RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) assures full completion of the biological testing components of the National Animal Health Monitoring System (NAHMS) 2019 Goat Study by making necessary resources available.

FINAL RESPONSE:

USDA, APHIS, Veterinary Services (VS) recognizes the interest from the USAHA regarding the planned NAHMS 2019 Goat study biological testing and appreciates the opportunity to respond. NAHMS worked with goat industry representatives, universities, and other Federal agencies to determine the highest priorities and identified research partners to conduct the biologic testing. NAHMS plans, in collaboration with Federal and university partners, to conduct the following biologic tests as part of the NAHMS 2019 Goat study: fecal egg count reduction testing for gastrointestinal parasites and anthelminthic resistance; genotyping for scrapie resistant alleles; fecal culturing for enteric microbes, including generic E coli, E coli 0157:H7, Salmonella, Enterococcus, and Campylobacter; fecal examination for Cryptosporidium and Giardia; antimicrobial susceptibility for Salmonella, Enterococcus, and Campylobacter, Mycoplasma ovipneumonia identification; and Coxiella burnetii identification and strain typing.

Phase I data collection for NAHMS 2019 Goat study was conducted by National Agricultural Statistics Service enumerators from July 1 - August 9, 2019. Phase II began September 9, 2019, with an on-site questionnaire administration by VS, and in some States, State veterinary professionals. VS will offer producers who complete the second
questionnaire the opportunity to participate in biologic sampling. VS extended phase II data collection through April 2020 because of field resource constraints from the extended response to virulent Newcastle disease in California.
RESOLUTION NUMBER: 28  APPROVED

SOURCE: COMMITTEE ON SHEEP, GOATS, AND CAMELIDS

SUBJECT MATTER: GENETIC SCRAPIE RESISTANCE - GOATS

BACKGROUND INFORMATION:

Genotype selection for scrapie resistance in sheep has been proven to be a great asset to the eradication of scrapie in sheep. Genetic tools for goats should have similar benefits. Based on information presented by the United States Department of Agriculture, Agricultural Research Service researchers, sufficient data exists to support further efforts toward testing for goat scrapie genotype resistance and development of field applications in the National Scrapie Eradication Program. Additional studies are needed to assess the frequency of goat scrapie genotypes and assist producers in adopting these tools. It is important the upcoming National Animal Health Monitoring System 2019 Goat Study and other studies include scrapie genotyping components. Additionally, continuation of long-term follow up studies and other research relating to scrapie transmission and scrapie diagnostics are vital to successful scrapie eradication.

RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Services (APHIS) to pursue efforts to develop pilot projects to explore the use of goat scrapie genotype testing in the National Scrapie Eradication Program. USAHA also requests that USDA’s APHIS and Agricultural Research Service conduct surveys to assess the frequency of resistant genotypes in U.S. goats, including National Animal Health Monitoring System (NAHMS) 2019 Goat Study. We further urge USDA to increase efforts to enhance the availability of resistant genotypic information to U.S. goat producers and ongoing studies related to transmission and diagnostics related to scrapie.

FINAL RESPONSE:

USDA, APHIS, Veterinary Services (VS) recognizes the interest of the USAHA regarding the use of goat genotyping in the Scrapie Program and appreciates the opportunity to respond. VS recognizes the potential benefits and is exploring options to leverage goat genotyping as a disease management and eradication tool. VS is currently piloting a process to genotype slaughter goats submitted for scrapie testing.
If the pilot is successful, we plan to genotype about 3,000 slaughter goats submitted for scrapie testing to understand the distribution of resistant genotypes in the slaughter goat population. VS will publish the slaughter genotyping data at the end of the project. VS will also work with State Animal Health Officials to evaluate the use, and potentially pilot, genetic-based herd clean-up plans in suitable infected goat herds. VS will provide updates on these activities through the monthly and annual Scrapie Program reports published on the VS scrapie web page.

NAHMS is offering genotyping as part of the 2019 Goat Study to examine the distribution of resistant alleles in U.S. goats. Phase I data collection began in July 2019 in the top 24 goat-producing States. Producers, that continue in the study and complete a second questionnaire, will be offered genotype testing as part of the biologic sample collection in Phase II. This phase began in September 2019. VS will publish study results in collaboration with researchers once all testing is complete.
BACKGROUND INFORMATION:

The National Scrapie Eradication Program (NSEP) relies greatly on owner compliance to identify their animals as they leave the farm for exhibition or sales. No-cost official ear tags have greatly encouraged identification (ID) and thus program compliance. There have been a multitude of problems noted with the use of official metal program tags such as infection, poor retention, difficulty in accurately recording the numbers, and safety hazards when shearing. With the expected publication of the interstate movement rule which will require the same ID requirements of goats as currently exist for sheep, the next few years are critical in encouraging goat and sheep producer compliance regarding ID and tagging. The industries feel strongly that, at a minimum, the provision of a limited number of no-cost official plastic tags will incentivize new goat and sheep producer compliance. In addition, the industries do not want to compromise the NSEP that has been built over the past 17 years at an expense of more than $250 million.

RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) to provide, at a minimum, a limited number of no-cost official plastic tags to producers enrolling in the National Scrapie Eradication Program for the first time. USDA, APHIS would provide the no-cost ear tags, but producers would be responsible for acquiring an applicator. Further, USAHA urges USDA, APHIS to continue to provide no-cost tags to markets and dealers.

FINAL RESPONSE:

USDA, APHIS, Veterinary Services (VS) recognizes the interest regarding Scrapie Program tags provided by VS and appreciates the opportunity to respond. Since February 2019, VS provided up to 80 no-cost official plastic tags to sheep or goat producers requesting a flock identification and tags for the first time. (Producers are responsible for acquiring an applicator.) VS will continue this practice through fiscal year (FY) 2020. Through August 2019, VS provided up to 100 no-cost metal ear tags to producers. VS will also continue to provide no-cost metal tags to markets and dealers through FY 2020. VS plans to allocate $300,000 for FY 2020 to continue to provide scrapie tags.
In order to protect the Nation from terrorist attacks, Select Agent regulations restrict possession, transfer, and use of select agents and toxins. The restrictions have been highly effective in limiting access to dangerous agents and toxins by unauthorized individuals. Unfortunately, these same restrictions have limited opportunities for important research on Brucella spp., including B. abortus, B. melitensis, and B. suis. B. abortus is a disease endemic in Greater Yellowstone Area (GYA) wildlife, while B. suis is endemic in feral swine populations throughout the United States, and B. melitensis is a foreign animal disease that has successfully been kept out of domestic livestock and wildlife populations in the United States.

A recent paper published by Olsen et. al documents that Brucella spp. can be removed from the biological select agent and toxins list based on clinical, biological, and epidemiological properties of the bacteria. In particular, the paper highlights that Brucella spp. are readily available in endemic areas, thus easily attained by individuals or groups with nefarious intentions. Previous reports estimating human morbidity and mortality in the event of a Brucella bioweapons attack did not adequately consider the fact that Brucellosis is the most common zoonotic infection reported in humans annually. Humans are considered dead end hosts for Brucella and are typically infected from exposure to animal reservoirs or animal products. Additionally, previous reports have listed the infectious dose for Brucella to be 10 to 100 bacteria, but research in closed environments indicate that aerosol exposure to a much higher concentration of bacteria is required to result in infection; thus, use of Brucella under natural conditions as a bioweapon would likely result in a limited to negligible rate of infection in humans or animals.

Costs associated with the effective eradication of swine and bovine brucellosis in the United States between 1934 and 1998 are conservatively estimated to be over 3 billion dollars. The persistence of Brucellosis in wildlife reservoirs with an expanding terrain both within the GYA and the greater United States has resulted in potential incursions of the disease into the national domestic cattle and swine herds. A limitation on research due to the select agent status of Brucella spp. has reduced the capacity of research institutions to study Brucella under field conditions, a necessary step to develop...
effective vaccines and diagnostic tools. The continued expansion of wildlife reservoirs of *Brucella* spp. without efficient vaccines and sensitive, specific diagnostic tools will result in additional costs to producers, and State and federal governments for disease control programs.

**RESOLUTION:**

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) and the United States Department of Health and Human Services (HHS), Centers for Disease Control and Prevention to remove *Brucella abortus*, *Brucella suis*, and *Brucella melitensis* from the biological select agent and toxins list, thereby enabling needed *Brucella* spp. research.

**FINAL RESPONSE:**

USDA, APHIS, VS recognizes the interest of the USAHA and appreciates the opportunity to respond. The Agriculture Select Agent Services recognizes the importance of *Brucella* spp. research to develop effective vaccines and diagnostic tools. We also understand the financial impact of the disease-spread for producers and agencies involved in disease control activities.

USDA continues to collaborate with HHS in consideration of delisting these agents. Throughout 2018, USDA collaborated with Federal partners, including the Department of Justice, Department of Homeland Security, Department of Defense, and others to complete the mandated biennial review of the biological select agents and toxins list. In early 2020, USDA plans to issue an *Advanced Notice of Proposed Rulemaking* to solicit broader input into the proposed removal of the Brucella agents and other potential changes to the regulations. We strongly encourage USAHA to provide comments and insight into the proposed revisions to the list of select agents and toxins.
RESOLUTION NUMBER: 32  APPROVED

SOURCE: COMMITTEE ON CATTLE AND BISON

SUBJECT MATTER: FIELD TRIAL NEEDED TO EVALUATE ULTRA HIGH FREQUENCY RADIO-FREQUENCY IDENTIFICATION CATTLE BACK TAG FUNCTIONALITY WHEN COMBINED WITH AND COMPARED TO OTHER CATTLE IDENTIFICATION DEVICES

BACKGROUND INFORMATION:

The United States Department of Agriculture (USDA) Official Cattle Back Tag has been an essential tool for many decades in traceability efforts through the Market Cattle Identification (MCI) program which focused on the eradication of brucellosis and tuberculosis. It is still USDA approved identification (ID) for cattle moving direct to slaughter from livestock markets or farm of origin and for various types of disease affected cattle moving under permit to slaughter. During this long period of usage, the back tag has been thoroughly integrated into the business processes of the livestock markets by creating a link between the seller and buyer, an essential component of the Animal Disease Traceability (ADT) program. When backtags are correlated with permanent official ID, it completes the circuit allowing traceability of official ID from seller to buyer. This is essential to transitioning from traditional forms of permanent official ID to futuristic models where all program animals have permanent ID readable at the speed of commerce.

In recent years, an electronic ultra-high frequency (UHF) radio-frequency identification (RFID) version of the tag has been developed that retains the visual and physical attributes of the existing back tag but can also be read accurately at the speed of commerce in virtually all cattle venues including feedlots, load outs, sale barns, and slaughter facilities. By correlation, this provides the capacity for cattle with traditional official permanent ID that typically cannot be read without going through a chute or narrow alley (Ex. National Uniform Identification System tags and low frequency RFID tags) to be read and recorded at the speed of commerce.

The field trials conducted thus far have been limited in duration (1-3 days) and have been mainly directed at testing tag readability at various distances and facility settings with different reading devices. These trials have shown that the UHF back tag can be read with very high accuracy at whatever movement speeds are typical for that facility.
To expand the cattle industry’s understanding of the enhanced UHF backtags’ capabilities and to evaluate their potential to improve ADT, more field trials are needed in which animal ID’s are read at the speed of commerce and captured in facility software and then used for animal management and traceability purposes in livestock markets, slaughter facilities, and other animal movement activities. To support such an extended field trial(s) funds were appropriated in the 2017 USDA, Animal and Plant Health Inspection Service budget to provide funding for the ADT program to develop cooperative agreements with the various State Animal Health Officials or grants to cattle industry related organizations or entities, if appropriate. These are “no-year” funds that are still available since these trials have not yet occurred.

The information such trials generate could be extremely helpful to the decisionmakers in the cattle industry to determine what ID tools would be most useful in attaining the ADT goals of the future and transitioning to such.

These studies would not only serve as a proving ground for UHF backtags to bridge the gap found with traditional permanent ID and the speed of commerce, in essence providing tomorrow’s traceability today, but additionally they could pave the way for the potential use of UHF eartags as the next generation of permanent official ID through the installation of readers, creation of a working familiarity with the technology, and by integrating software systems with readers at key locations.”

**RESOLUTION:**

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) to prioritize the development of cooperative agreements or grants with States or appropriate cattle industry organizations utilizing the designated appropriated funds to conduct long term field trials using ultra high frequency radio-frequency identification cattle back tags in selected livestock markets and subsequent downstream slaughter facilities to evaluate the usefulness of these enhanced back tags as animal disease traceability tools.

**FINAL RESPONSE:**

USDA, APHIS, VS appreciates the recommendation from the USAHA and the opportunity to respond. As USAHA notes, the integration of ultra-high frequency (UHF) backtags into animal handling processes could positively affect the ADT program priorities, particularly related to processes that traditionally required the use of a chute or alley.

USDA values the opportunity to collaborate with industry and State. In June 2019, USDA solicited and awarded project proposals using 2017 Omnibus funding for cooperative agreements to fund projects that demonstrate the capability of UHF backtags, correlated with other official identification devices, to collect animal movement and disease program...
data without unduly affecting business operations (i.e., “the speed of commerce”). The selected cooperators—Texas, Florida, Wisconsin—represent the collaborative efforts of the livestock industry, State, and academic partners. We look forward to the outcomes of these projects to evaluate the usefulness of enhanced backtags as a method for improving ADT.
RESOLUTION NUMBER: 34  APPROVED

SOURCE:  COMMITTEE ON CATTLE AND BISON

SUBJECT MATTER:  TWO-PRONGED APPROACH NEEDED FOR ADVANCING CATTLE TRACEABILITY

BACKGROUND INFORMATION:

From the traceability efforts of the Market Cattle Identification (MCI) program focused on the eradication of Brucellosis and Tuberculosis to the United States Animal Identification Plan (USAIP) initiated with the eradication of Brucellosis and phasing out of MCI, to the National Animal Identification System (NAIS) following the finding of Bovine Spongiform Encephalopathy (BSE) and to the current Animal Disease Traceability (ADT) program, traceability of the United States breeding cattle herd has been an ongoing effort framed by State and federal regulations outlining identification and movement documentation requirements. The specific purpose of this program is to allow rapid and accurate traceability of diseased cattle allowing identification, containment and removal of these animals for control purposes or to achieve or maintain disease eradication. A key component to the success of each of these programs is efficiency through full MANDATORY compliance for eligible animals thereby providing pinpoint traces and eliminating unnecessary quarantine testing or depopulation of herds implicated from a broad swath approach.

In parallel, the feeding sector of the United States beef industry has independently pursued VOLUNTARY traceability efforts through private alliances and the United States Department of Agriculture (USDA) Process Verified Programs (PVP) and Quality System Assessment (QSA) value added programs allowing value added marketing to both local and international trade partners.

In 2017, the USDA formed a “State and Federal Working Group” with substantial experience and knowledge of animal disease traceability that “comprehensively reviewed stakeholder feedback and prepared the preliminary” fourteen recommendations for the advancement of animal disease traceability based on the feedback received from the public meetings held in April through July of 2017.

Feedback from stakeholders at these public meetings was very supportive of moving the current MANDATORY ADT program forward with enhancements to make it more efficient, yet it loudly and clearly stated that feeder cattle traceability should remain VOLUNTARY.
RESOLUTION:

The United States Animal Health Association urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) to prioritize enhancing the existing mandatory Animal Disease Traceability (ADT) program based upon the fourteen recommendations made by the State and Federal Working Group, which received feedback from the industry on those proposed directions. USDA should maintain continued support for the voluntary value-added programs and augment opportunities for the feeding sector to enhance trade and marketing.

FINAL RESPONSE:

USDA, APHIS, VS appreciates the recommendation from the USAHA and the opportunity to respond. USDA has four overarching priorities for the animal disease traceability (ADT) program: (1) electronic identification; (2) data sharing; (3) birth origin to slaughter termination tracing; and (4) electronic movement documentation. USDA is taking specific actions in each of these areas to advance ADT. We continue to review and consider additional aspects of the 14 recommendations as we develop and implement further enhancements to the mandatory ADT program. USDA also appreciates the benefit of the voluntary programs in the feeder sector, continues to support participation in USDA programs, and encourages public-private partnerships to enhance trade and marketing efforts.