Equine Health Business Plan Fiscal Year 2017 USDA, APHIS, Veterinary Services

Veterinary Services (VS) protects and improves the health, quality, and marketability of our nation's equines by preventing, controlling and/or eliminating equine diseases, conducting surveillance and monitoring, promoting equine health and productivity and regulating veterinary biologics.

I. Program Description

a. Industry Overview

The equine industry is large, vigorous, and diverse. A 2005 study commissioned by the American Horse Council (AHC) reported 9.2 million horses in the United States with \$39 billion in direct economic impact. The industry supports 453,000 direct jobs and 1.4 million total jobs, paying \$1.9 billion in taxes. In 2015, the United States was the world's second leading exporter of horses by value with 16 percent or \$363 million of a \$2.3 billion worldwide market. The USDA Foreign Agricultural Service's Global Agricultural Trade System (GATS) showed the value of U.S. live, exported equines in 2016 was \$376 million, which was four times the value of corresponding cattle, swine, sheep, and goats combined, and was double the value of all exported live poultry. Page 10 million with the same page 11 million with the same page 12 million with the same page 13 million with the same page 14 million with the same page 15 million with the same page 16 million with the same page 16 million with the same page 17 million with the same page 18 million with the same page 19 million with the

Equine diseases can have a significant financial impact on the industry. Equine infectious anemia (EIA) testing alone cost the industry over \$55 million in 2015.³ A 2009 contagious equine metritis (CEM) outbreak was estimated to cost the industry between \$11-16 million, not including lost market opportunities due to export restrictions. Also in 2009, an outbreak of equine piroplasmosis (EP) resulted in \$3 million in direct costs to a single equine operation, not including lost market opportunities due to export restrictions.⁴ Thus it is clear that protecting this large and vigorous U.S. industry is economically justified and imperative.

b. Core Program Objectives

- **Objective 1**: Prevent the introduction of foreign animal disease and facilitate trade.
- **Objective 2**: Conduct comprehensive disease and health monitoring and surveillance.
- **Objective 3**: Prepare for and respond to high consequence diseases or events that threaten the herd, industry or public health.
- **Objective 4**: Conduct education and outreach to provide science-based equine health and disease information to decision makers and stakeholders.

¹ AHC-sponsored Deloitte report "2005 Economic Impact of the Horse Industry on the United States." AHC is planning an updated economic impact study in 2017.

² Global Trade Atlas by Global Trade Information Services & U.S. Census Bureau Trade Data.

³ NAHMS Equine 2015 and 2015 USDA EIA summary data.

⁴ Unpublished, from APHIS VS data and calculations, available upon request.

- **Objective 5**: Provide veterinary support and consultation to the APHIS/Bureau of Land Management (BLM) Wild Horse and Burro Partnership.
- **Objective 6**: Protect the health and well-being of equines through enforcement of the regulations of the Commercial Transport of Equines to Slaughter Act (CTESA).

c. Program Components

The VS Equine Health business plan summarizes the equine priority and projected activities of the Surveillance, Preparedness and Response Services (SPRS), the National Import Export Services (NIES), and the Science, Technology and Analysis Services (STAS). The activities highlighted here cannot be accomplished without the significant resources and infrastructure that exist within VS, the larger APHIS and USDA, and other U.S. governmental departments.

Disease Surveillance, Preparedness and Response Activities (SPRS)

Surveillance and Response Activities. The Equine Health Program provides national level surveillance and coordinates response between States, provides disease-specific technical guidance, epidemiological expertise, and national-level situation reporting with a focus on domestic activities. Recent or ongoing support for disease response includes equine infectious anemia (EIA), equine piroplasmosis (EP), equine viral arteritis (EVA), equine herpesvirus myeloencephalopathy (EHM), vesicular stomatitis virus (VSV), and contagious equine metritis (CEM). While the equine surveillance plan is part of the APHIS core mission, it is also a fundamental part of the National Equine Health Plan.

Outreach and Educational Activities. The Equine Health Team cooperates extensively with the equine industry to conduct outreach and education. The centerpiece of these efforts is the National Equine Health Plan, an ongoing cooperative effort between industry, States, Federal partners and APHIS. The component of the National Equine Health Plan that is most publicly visible is the Equine Disease Communication Center (EDCC). It serves as the common voice of industry and regulators with regard to equine disease and biosecurity. More generally, APHIS publishes, posts or otherwise helps to disseminate equine health and disease information. The Equine Health Team provides expertise to the National Assembly of State Animal Health Officials (NASAHO), the U.S. Animal Health Association (USAHA) and its associated equine committee and subcommittees, the AHC, the National Institute for Animal Agriculture (NIAA), the American Association of Equine Practitioners (AAEP), the Equine Disease and Traceability Forums, the National Equine Industry conference call and multiple other venues for sharing information with our private and public stakeholders.

APHIS/BLM Wild Horse and Burro Partnership. The APHIS/BLM Wild Horse and Burro Partnership provides the BLM with veterinary consultation and support in the areas of animal health, welfare and research for the BLM Wild Horse and Burro Program. These activities support the care, humane management and related policy development for America's wild horses and burros that are under BLM authority.

Commercial Transport of Equines to Slaughter Act. APHIS VS is tasked with enforcement of the Commercial Transport of Equines to Slaughter Act (CTESA)

regulations, designed to protect the health and well-being of these horses. Under the Consolidated Appropriations Act, 2017, APHIS may not use funds to inspect horses being commercially transported for slaughter. Our activities therefore include training, compliance outreach, and specific, permitted enforcement activities.

National Import and Export Services (NIES)

APHIS is committed to work to increase international trade opportunities for the equine industry and to prevent the introduction of foreign animal diseases to the United States. APHIS facilitates the export of horses and equine germplasm by negotiating trade protocols with foreign governments and assisting U.S. owners and veterinarians in meeting the receiving country's import requirements. APHIS safeguards the U.S. equine population by maintaining requirements for import quarantine and testing for equines entering the United States, as well as negotiated protocols for equines transiting foreign countries for international events.

Science, Technology and Analysis Services (STAS)

STAS assists the Equine Health Program to conduct activities and continue to build capacity in several secondary components: evaluation and design of comprehensive integrated disease surveillance; conduct and publish equine health and management studies through the National Animal Health Monitoring System (NAHMS); and monitor global animal health for foreign, emerging and zoonotic disease prevention, preparedness, and response.

d. Funding Sources

The SPRS Equine Health Program is funded through the Equine, Cervid, and Small Ruminant (ECSR) line item. The FY 2017 ECSR funding is \$20 million. Other VS equine-related activities, such as trade facilitation, import/export of equines, laboratory support and equine health studies, are funded in whole or in part through other line items and/or user fees.

II. Key Accomplishments FY 2016

- Coordinated with States and industry to respond to and prepare for findings of EIA, EP, VSV, CEM, and other equine diseases of high impact or concern.
- Collaborated with USDA Agricultural Research Services (ARS), State and Federal officials
 and accredited veterinarians to conceive, refine and successfully implement treatment of
 EP-infected horses. Forty-eight *T. equi* cases were treated and proven cleared of the
 organism in FY 2016.
- Assisted the VS Center for Epidemiology and Animal Health (CEAH) with publication of NAHMS 2015 Equine Baseline report.⁵
- Provided planning, lecture and monetary support to the Equine Disease Forum held in January 2016. This new outreach event was sponsored by NIAA and USAHA, and was attended by 86 industry, State and Federal officials. A white paper is available on the NIAA website.⁶
- Provided \$75,000 cooperative agreement support to the EDCC. Additionally, provided

https://www.aphis.usda.gov/animal health/nahms/equine/downloads/equine15/Eq2015 Rept1.pdf.

⁵ Available on the APHIS Web page at

⁶ Available on the NIAA Web page at http://www.animalagriculture.org/resources/Documents/Conf%20-%20Symp/Symposiums/2016%20Equine/Equine%20Diseases%20Forum%20Whitepaper%20PDF%2006.08.16.pdf.

- equine disease subject matter expertise to the EDCC, including messaging coordination with the States and development and revision of equine disease fact sheets.
- Published a concept paper to assess the level of stakeholder support for the publication of an EIA proposed rule and to seek feedback on regulatory concepts presented in the paper.
- Facilitated the 2016 Equine Sector meeting with APHIS Administrator Kevin Shea in cooperation with APHIS Legislative and Public Affairs.
- Successfully supported the care, humane management and related policy development for America's wild horses and burros under the APHIS/BLM Wild Horse and Burro Partnership.
- Provided draft frameworks for the Emerging Animal Disease Preparedness and Response Plan and the U.S. National List of Reportable Animal Diseases (NLRAD) for stakeholder comment.
- Provided extensive outreach to internal and external stakeholders.

III. FY 2017 Priority Activities and FY 2018 - FY 2020 Projected Activities

Objective 1: Prevent the introduction of foreign animal disease and facilitate international trade

FY 2017 Priority Activities

- **Activity 1.1**: Review current import testing protocols (EIA, EP, Glanders and Dourine) and implement changes as appropriate based on the review.
- **Activity 1.2**: Collaborate with international partners to facilitate travel of competition horses to high priority international equine events, to remove import/export obstacles that could negatively affect the competitors, while protecting countries from possible introduction of diseases.
- **Activity 1.3:** Deliver a training course for State CEM coordinators in April 2017, to provide an update on guidelines for testing at State managed CEM-quarantine facilities.

Projected Activities (FY 2018 – FY 2020)

Projected Activity 1.1: Partner with State Animal Health Officials and industry to prepare and support successful importation of over 500 horses, as well as develop appropriate biosecurity and quarantine measures, for the 2018 World Equestrian Games in Tryon, North Carolina.

Objective 2: Conduct comprehensive disease and health monitoring and surveillance

FY 2017 Priority Activities

- **Activity 2.1**: Engage internal and external stakeholders and provide feedback on the draft Equine Comprehensive and Integrated Surveillance (CIS) Plan. Finalize the draft after receiving stakeholder input and post to VS Equine Health website.
- Activity 2.2: Assist in the completion of Phase II of the NAHMS 2015 Equine study.

Activity 2.3: Issue VS Guidance Document 15201.1, "Approval of Laboratories to Conduct EIA Testing". Conduct educational and compliance outreach to laboratories, State and Federal Officials. Begin collection of new EIA testing data from approved EIA laboratories.

Activity 2.4: Contribute equine expertise to VS' implementation of the Emerging Animal Disease Preparedness and Response Plan and the U.S. National List of Reportable Animal Diseases (NLRAD) Framework.

Activity 2.5: Continue to support active EP surveillance testing in high-risk equine populations and issue quarterly national situation reports (or as warranted by the level of disease activity).

Activity 2.6: Provide equine disease expertise and general equine expertise for the 2018 World Equestrian Games in Tryon, NC.

Activity 2.7: Collaborate with State, Federal, and Tribal animal health officials and other stakeholders, including international trading partners, international and regional organizations and APHIS International Services to monitor the global animal health landscape for potential threats, assess the risk posed by a possible emerging equine disease in the United States, and gather information upon which to base the response.

Projected Activities (FY 2018 – FY 2020)

Projected Activity 2.1: Develop specific surveillance strategies for the collection, standardization, and analysis of surveillance data for the identified disease/syndromes in the Equine CIS Plan. These strategies should ensure the information collected meets the surveillance objectives for each disease or health concern. Such development may include piloting different approaches to determine if they meet the objectives and are cost effective.

Projected Activity 2.2: Publish Proposed EIA rule and associated Program Standards for public comment.

Projected Activity 2.3: In cooperation with the VS Office of the Chief Information Officer, facilitate a data needs and gap analysis to ensure equine specific concerns are included in the overall VS data management strategy; ensure that equine disease priorities are included when crafting comprehensive solutions to multiple surveillance data issues.

Projected Activity 2.4: Implement new comprehensive surveillance components for equidae and begin compiling comprehensive data from existing surveillance components.

Projected Activity 2.5: Evaluate the Equine CIS plan regularly to assess alignment with stakeholders' needs, changes in disease priorities, and plan performance (efficiency and effectiveness). Revise the Equine CIS plan accordingly.

Projected Activity 2.6: Collaborate with ARS and the National Veterinary Services Laboratories (NVSL) to investigate and develop EP strain-typing technology as an

epidemiologic tool to identify clusters and confirm sources of infection for EP-infected horses in the U.S.

Projected Activity 2.7: Directly and through the USAHA Infectious Diseases of Horses Committee's (IDOHC) CEM subcommittee work to evaluate potential methods of increased surveillance testing in U.S. active breeding stallions including, but not exclusively, a proposed voluntary certification program for U.S. stallions.

Projected Activity 2.8: Include expanded information and improve reporting timelines for annual, national EIA reports; provide quarterly reports.

Projected Activity 2.9: As funding and staffing resources permit: begin epidemiological and statistical analysis of EIA data sets.

Projected Activity 2.10: Continual monitoring of the global animal health landscape for potential threats to U.S. equine populations.

Objective 3: Prepare for and respond to high consequence equine diseases that threaten the equine population, industry or public health

FY 2017 Priority Activities

Activity 3.1: Plan, investigate, respond and assist States and industry in response to findings of EIA, EP, VSV, CEM and other equine diseases of high impact or concern.

Activity 3.2: Continue to assist NVSL efforts to improve diagnostic capabilities for *Taylorella equigenitalis* detection in swabs and semen.

Activity 3.3: Continue the use of the approved high-dose imidocarb treatment program to permanently eliminate transmission risk from known *Theileria equi*-infected horses and continue to support the States in quarantine release of treated horses that meet the APHIS-VS established criteria for release.

Projected Activities (FY 2018 – FY 2020)

Projected Activity 3.1: Improve EP diagnostic capabilities by collaborating with ARS on continued development and validation of EP diagnostics.

Projected Activity 3.2: Evaluate additional mitigation strategies to reduce spread of *Theileria equi* in the Quarter Horse racing population.

Projected Activity 3.3: Draft and finalize EP Program Standards to incorporate all relevant EP guidance documents, memos, notices, and VS policies.

Objective 4: Conduct education and outreach to provide science-based equine health and disease information to decision makers and stakeholders

- **Activity 4.1**: Produce comprehensive reports and situation reports, and serve as a coordination center and clearing house for information on equine regulatory or high impact disease outbreaks such as EIA, EP, VSV and CEM.⁷
- **Activity 4.2**: In partnership with public health authorities, provide national level information on zoonotic disease that can affect equidae (such as rabies; glanders; West Nile virus; Eastern, Western and Venezuelan Equine Encephalitis).
- Activity 4.3: Provide equine expertise and cooperative agreement funding to the EDCC.
- **Activity 4.4**: Assist industry in monthly planning, provide monetary support and lecture support for the 2017 Equine Forum "Advancing Identification, Technology and Electronic Health Records" held January 17-18, 2017 in Denver, CO.
- **Activity 4.5**: Assist industry in development of the National Equine Health Plan. Outline, describe and clarify existing structure and procedures; identify roles and responsibilities.

Activity 4.6: Provide equine expertise and outreach as described in the chart below:

Audience	Activity	Occurrence
USAHA leadership and members	Contribute equine expertise to USAHA annual meetings, IDOHC committee and subcommittees.	October 13-19, 2016
AAEP members and leadership	Provide equine expertise to AAEP Annual Meeting and multiple Committees	December 3-7, 2016
State and industry representatives	Provide support, planning and equine disease and regulatory expertise to Equine Forum and organizing committee.	January 17-18, 2017
Equine industry representatives and producers	Facilitation, planning and support for annual Equine Sector meeting with APHIS Administrator Kevin Shea.	March 29, 2017
CEM laboratory technicians	Provide overview of equine import update and CEM testing guidelines.	April 2017
CEM State Coordinators	Provide overview of equine import regulations pertaining to CEM quarantine facilities.	April 19-20, 2017

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⁷ These reports are available on the APHIS Web page at health/equine-health.

Audience	Activity	Occurrence
АНС	Provide equine disease and regulatory expertise to the Health and Regulatory Committee on an ongoing basis and at the annual meeting.	June 12-15, 2017
USAHA regional members	Contribute equine expertise to USAHA regional meetings (Western, Southern, etc.)	June 19-22 & April 25-27, 2017
AHC personnel and VS Equine Health team	Host teleconference to provide communication venue and respective status updates every month.	2 nd Monday of every month
VS personnel	Host teleconference to provide communication venue and status updates on equine health.	2 nd Monday of every month
State and industry representatives	Provide teleconferencing support and equine disease and regulatory expertise to the National Equine Industry Call.	2 nd Thursday of every month
EIA laboratories, State Animal Health Officials, VS field personnel	EIA Laboratory Approval Guidance outreach: stakeholder announcements; webinars for VS/State partners, State partners, and EIA laboratory directors and staff.	Multiple dates
USDA and external stakeholders	Maintain the Equine Health APHIS Web page.	Continuous

Projected Activities (FY 2018 – FY 2020)

Projected Activity 4.1: Cooperate with States and industry to improve and expand education and outreach activities for owners, trainers, breed registries and racing organizations of known high-risk equine population to prevent ongoing EP transmission via iatrogenic means.

Projected Activity 4.2: Publish more complete data from recent EP outbreaks and the ARS/APHIS treatment research program.

Projected Activity 4.3: Assist in dissemination of CEAH's report on equine health management practices in the United States (NAHMS Equine 2015).

Projected Activity 4.4: Review and revise existing VS education and outreach materials available on the VS website on equine diseases and biosecurity practices.

Projected Activity 4.5: Review and revise NVAP module on the regulations concerning the Commercial Transportation of Equines to Slaughter.

Projected Activity 4.6: Explore appropriate venue to establish and maintain contact with State personnel covering equine health and management.

Objective 5: Provide veterinary support and consultation to the APHIS/BLM Wild Horse and Burro Partnership

FY 2017 Priority Activities

Activity 5.1: Provide expert consultation and veterinary support to the BLM in the areas of animal care, health, handling, research and welfare, as requested.

Activity 5.2: Coordinate partnership activities, conduct field activities and advise BLM on a national and local basis.

Activity 5.3: Renew the 5-year Interagency Agreement for the APHIS/BLM Wild Horse and Burro Partnership.

Objective 6: Protect the health and well-being of equines through enforcement of the regulations of the Commercial Transport of Equines to Slaughter Act (CTESA)

FY 2017 Priority Activities

Activity 6.1: Conduct a VS level Business Process Improvement plan for VS' enforcement of the regulations of the CTESA.

Activity 6.2: Conduct compliance and enforcement of the regulations of the CTESA as permitted under Congressional Appropriations legislation.

Activity 6.3: Upon request conduct outreach to State personnel, Livestock and Brand Inspectors and Department of Transportation Commercial Truck Inspectors to increase awareness of CTESA regulations and ensure the humane and safe transport of equines for slaughter.

Activity 6.4: Maintain enforcement of CTESA through rapid and thorough referrals for investigation of violations involving equine welfare or safety or purposeful attempts to circumvent the regulations.

Projected Activities (FY 2018 – FY 2020)

Projected Activity 6.1: Implement CTESA Business Process Improvement recommendations.