
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 and the American Association of Veterinary Laboratory Diagnosticians urge the United States Department of Agriculture, Animal and Plant Health Inspection Service 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 laboratories as is currently being done with Foot and Mouth Disease Virus, Classical Swine Fever Virus, and African Swine Fever Virus.

INTERIM RESPONSE:

The United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services recognizes the concerns of USAHA and appreciates the opportunity to respond. NAHLN Methods Technical Working Group (MTWG) is evaluating several pseudorabies polymerase chain reaction protocols, including oral fluids as well as other appropriate samples, for their scientific merit and for the potential of deploying one or more to NAHLN laboratories. The NAHLN MTWG will complete this evaluation by mid-2019, followed by a recommendation for use in the NAHLN laboratories.