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. 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 off 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 United States swine herd. Additionally, they support the approval of additional tissues for official ASF testing.

RESOLUTION:

The United States Animal Health Association and American Association of Veterinary Laboratory Diagnosticians urge the United States Department of Agriculture, Animal and Plant Health Inspection Service 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 laboratories.

INTERIM RESPONSES

USDA, Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) recognizes the concerns of USAHA and appreciates the opportunity to respond. VS approved tonsil as an additional tissue for ASF testing in foreign animal disease investigations (FADIs) in the National Animal Health Laboratory Network (NAHLN) laboratories on October 1, 2018, spleen on December 10, 2018, and lymph nodes for
ASF testing in FADIs on January 31, 2019. Whole blood is historically the preferred sample for ASF testing in NAHLN and is a recommended sample type for FADIs.APHIS agreed to begin ASF symptomatic surveillance, an extension to the existing CSF surveillance.