The U.S. Department of Agriculture (USDA) conducts comprehensive and integrated surveillance to look for diseases in the U.S. herd. A single animal can be tested for multiple diseases, in some cases using the same samples for multiple diseases. Comprehensive and integrated surveillance enhances our efficiency and ability to know if certain diseases are or are not present so appropriate actions can be taken quickly when needed. This helps protect our Nation’s food supply and public health.

Swine surveillance includes foreign animal and emerging diseases such as swine enteric coronavirus disease (SECD), classical swine fever (CSF), foot-and-mouth disease, and African swine fever. It also includes diseases of concern already present in the United States, such as influenza, pseudorabies (PRV), and swine brucellosis. The goals are to rapidly detect these diseases if they are present, demonstrate our country’s disease freedom if they are not present, establish our disease status when needed (such as with PRV), and monitor potential disease sources.

The National Animal Health Laboratory Network (NAHLN) conducts the swine surveillance testing. Network laboratories handle a majority of the tests, but USDA’s National Veterinary Services Laboratories confirm all positive results from regulated and foreign animal disease testing.

CSF Surveillance

The CSF surveillance program began in 2006 to demonstrate that the United States was free from CSF and to rapidly detect CSF virus should it be introduced into the U.S. swine herd. The surveillance program targets five specific swine populations for testing:

- Sick pig submissions to veterinary diagnostic laboratories (VDLs)
- Slaughter swine
- Feral swine
- Swine populations in Florida, Texas, and Puerto Rico that have a higher potential risk of exposure in the event of a CSF introduction
- Swine that are part of a disease investigation and show signs of disease similar to CSF
PRV Surveillance

Surveillance for PRV began in 2009, after the disease had been successfully eradicated from U.S. commercial swine (domestic swine that are managed under biosecure conditions). PRV testing focuses on the following swine populations:

- Swine that show signs of disease similar to PRV
- Sick pig submissions to VDLs
- Herds participating in routine serology and herd profiling
- Non-commercial swine herds at high risk for PRV exposure due to close proximity with feral swine
- Cull sows, cull boars, and market swine at slaughter
- Feral swine

Influenza A Virus in Swine (IAV-S) Surveillance

The IAV-S Surveillance Program began in 2009 during the H1N1 pandemic and focused on that specific subtype of the virus. In 2010, surveillance expanded to include all influenza A viruses circulating in the U.S. swine herd. The goals of this surveillance program include monitoring how the viruses evolve, sharing isolates and data for research and analysis, and identifying the proper isolates for diagnostic tools and vaccines. The following swine populations are targeted for swine influenza testing:

- Sick pig submissions to VDLs
- Swine exhibiting influenza-like symptoms at fairs, markets, or other locations where animals commingle
- Swine populations that are linked to confirmed human cases of a variant influenza A (an influenza A virus that circulates in swine)

National Animal Health Laboratory Network

NAHLN, a State and Federal partnership to safeguard animal health
Phone: (515) 337-7731
Email: NAHLN@aphis.usda.gov
Web site: www.aphis.usda.gov/nahln

USDA is an equal opportunity provider and employer.
Revised September 2014 • APHIS 91-95-008