



USDA Surveillance Plan for Influenza A Virus in Swine

Influenza A virus (IAV) is a common respiratory pathogen of pigs. While influenza in pigs typically causes only relatively minor clinical signs, illness may negatively impact production gains. In addition to the economic burden influenza poses to the swine industry, its zoonotic potential can lead to public health concerns. IAV in swine is not a food safety concern. Influenza has been circulating in U.S. pig populations for over 85 years. Influenza A sublineages are not unexpected in swine and impact production swine worldwide. As a result, they are nonreportable, unregulated diseases in the United States.

Swine can be susceptible to infection with swine-specific influenza viruses, as well as avian (bird) and human influenza viruses. For this reason, swine are commonly referred to as “mixing vessels.” Infection of swine with multiple strains of influenza A may result in genetic reassortment, creating new influenza virus strains.

Surveillance and monitoring of IAV in swine allows for early identification of emerging strains that may be a public or animal health threat. Characterization of influenza viruses allows for updates to diagnostic tests and reagents, selection of vaccine components, and implementation of appropriate precautions to protect livestock and other species.

USDA Monitoring of IAV in Swine

Since 2009, USDA’s Animal and Plant Health Inspection Service (APHIS) has administered a voluntary national surveillance plan for IAV in swine. The plan is made up of a network of animal health, public health, research, laboratory, academic, and industry organizations working to collect, diagnose, research, catalog, and report the genetic makeup of IAV circulating in the U.S. swine population.

The surveillance program currently targets:

- Swine sample submissions to veterinary diagnostic laboratories
- Swine at first points of concentration or commingling events, such as auctions, markets, fairs, or other swine

Participating in the IAV Surveillance Program

To participate in the program, producers should:

- Monitor your herd for signs of influenza, including high fever, difficulty breathing, decreased appetite, lethargy, runny nose, red or inflamed eyes, and neurological signs such as weakness, trembling, or difficult walking.
- Report concerns about sick animals on your farm to your [State Animal Health Official](#).
- Submit eligible samples to a participating laboratory and request that your samples be tested as part of USDA’s swine influenza surveillance plan. For more details, visit [Influenza A Virus in Swine Laboratories](#).

Testing under this surveillance program is free of charge for the producer. Acceptable sample types include lung tissue or homogenate, nasal swab or nasal wipe, udder wipe, and oral fluids or oropharyngeal swab. Refer to the [surveillance plan](#) for details on who can collect and submit samples, as this is dependent on sampling stream.

Producers may be charged for testing that occurs outside of this program.

- Swine populations epidemiologically linked to a confirmed detection of a swine lineage IAV in a human

Surveillance Results

Quarterly reports of the surveillance plan results are published online. Scan the QR code to view the reports

