



Federal Order to Assist with Developing a Baseline of Critical Information and Limiting the Spread of H5N1 in Dairy Cattle: Frequently Asked Questions

April 25, 2024

On April 24, USDA announced a [Federal Order](#) as part of its ongoing efforts to protect the U.S. livestock industry from the threat posed by highly pathogenic avian influenza (HPAI or H5N1) in dairy cattle. The Federal Order requires mandatory testing prior to the interstate movement of lactating dairy cattle and mandatory reporting of positive influenza A test results in livestock. USDA is taking these actions to address any risks to animal health, public health, and the safety of our food supply.

H5N1 is a contagious viral disease of domestic poultry and wild birds. HPAI is deadly to domestic poultry and can wipe out entire flocks within a matter of days. HPAI is a threat to the poultry industry, animal health, trade, and the economy. While HPAI causes less severe illness in cattle than in poultry, the disease remains of concern for all livestock and also for humans who come into contact with infected animals.

The novel movement of H5N1 between wild birds and dairy cows requires further investigation and this Federal Order is critical to increasing the information available for USDA. Requiring positive test reporting will help USDA better understand this disease and testing before interstate movement will limit its spread.

What does the Federal Order require?

The Federal Order requires:

Mandatory Testing for Interstate Movement of Dairy Cattle

- Prior to interstate movement, dairy cattle are required to receive a negative test for Influenza A virus at an approved National Animal Health Laboratory Network (NAHLN) laboratory.
- Owners of herds in which dairy cattle test positive for interstate movement will be

required to provide epidemiological information, including animal movement tracing.

- Dairy cattle moving interstate must adhere to conditions specified by APHIS. *Guidance on these conditions are forthcoming.*
- This movement restriction will initially apply to lactating dairy cows, as described in forthcoming guidance, but may be adjusted based on an evolving scientific understanding of the disease and risks.

Mandatory Reporting

- Laboratories and state veterinarians must report positive Influenza A nucleic acid detection diagnostic results (e.g. PCR or genetic sequencing) in livestock to USDA APHIS.
- Laboratories and state veterinarians must report positive Influenza A serology diagnostic results in livestock to USDA APHIS.

When do dairy cattle producers have to comply with the Federal Order?

The federal order is effective Monday, April 29, 2024.

Why was this decision made now?

USDA is listening to what the science is telling us and continues to work actively to learn more about the detection of H5N1 in dairy cattle. USDA does not take the decision to issue a Federal Order lightly and there are emerging issues of concern that have compelled this action.

USDA researchers have determined that this virus has continued to spread between cows in affected herds and spread between herds as cattle are moved.

The Animal Plant Health Inspection Service (APHIS) National Veterinary Services Laboratories (NVSL) found H5N1 in a lung tissue sample from an asymptomatic dairy cow that originated from an affected herd. While this animal did not enter the food supply, it does demonstrate that cows without signs of illness can still test positive for the virus.

The virus that was first detected in cattle has recently been found in poultry indicating that affected dairy herds may pose a risk to poultry farms.

APHIS microbiologists identified a shift in an H5N1 sample from a cow in Kansas that could indicate that the virus has an adaptation to mammals. Centers for Disease Control and Prevention (CDC) conducted further analysis of the specimen sequence, which did not change their overall risk assessment for the general public, because the substitution has been seen previously in other mammalian infections and does not impact viral transmission.

Taken together, these findings prompt USDA to issue this Federal Order. USDA will continue to engage with producers, veterinarians, public health officials, agricultural officials, and industry representatives to assess the best path forward and to encourage more testing opportunities.

How widespread is H5N1 in dairy cattle?

As of April 24, 2024, USDA has confirmed H5N1 virus detections on 33 dairy cattle premises in 8 states (Kansas, Idaho, Michigan, New Mexico, North Carolina, Ohio, South Dakota, Texas). USDA has also confirmed - based on specific phylogenetic evidence and epidemiological information - that 8 poultry premises in 5 states (Kansas, Michigan, Minnesota, New Mexico and Texas) have also been infected with the same distinct H5N1 virus genotype detected in dairy cattle. The requirements under this Federal Order will give USDA the data and information about H5N1 in dairy cattle to help us limit its spread and impact.

Who will conduct this testing and how do we submit samples?

Producers seeking to move dairy cattle interstate must follow APHIS interstate movement guidance which will be published in the coming days. This guidance will require testing to confirm cattle are negative for H5N1 prior to movement. Producers should work with their veterinarian to report cases of sick cattle to the State

Animal Health Official and their APHIS Veterinary Services Area Veterinarian in Charge. They will coordinate with State Animal Health Officials and the [National Animal Health Laboratory Network \(NAHLN\)](#)

Veterinarians should submit samples directly to the [NAHLN laboratory system](#).

Samples submitted to NAHLN that have non-negative test results are referred to [USDA APHIS National Veterinary Service Laboratories](#) in Ames, Iowa for confirmatory testing. USDA considers a positive test result from testing performed by the NVSL as confirmation, and NVSL carries out viral genome sequencing.

How long will it take for producers to get results for their animals?

Samples submitted to a NAHLN lab are usually returned within 1-3 days, depending upon laboratory workload. If any sample is non-negative, it undergoes confirmatory testing at NVSL, which is usually completed within 1-2 days. USDA is preparing for an influx of testing requests when the Federal Order goes into effect and will work closely with our NAHLN partners to ensure timely processing.

Are producers required to isolate animals in between testing and receiving results prior to movement?

USDA recommends isolating any sick cattle. Given the possibility of asymptomatic animals, it is critical that producers follow the Federal Order requirement that animals not move interstate without a negative test for Influenza A virus.

It is always important for farmers to follow good biosecurity measures. USDA's latest biosecurity guide, available [here](#), contains more details on potential pathways for disease spread, and measures that producers can take to mitigate spread.

Are there plans to expand mandatory testing to all cattle, not just dairy cattle moving interstate?

Not at this time. USDA is closely monitoring the situation and is working closely with state partners to encourage states to implement parallel measures for the intrastate movement of animals under state authorities.

Will USDA pay for the required movement testing?

Since official testing is mandatory, APHIS will cover the cost of testing animals at NAHLN laboratories.

Can the available funding for NAHLN lab testing be used to cover other costs, such as veterinary services, testing supplies, or sample shipping?

USDA cannot currently cover the cost of additional personnel or supplies. However, USDA will continue to work closely with our industry partners to learn the needs of affected groups and evaluate any opportunity to assist within our authority.

Why is USDA focusing this order on the interstate movement of dairy cattle?

The order is being applied to dairy cattle because HPAI-affected dairy cattle have the potential to shed H5N1 virus in milk at high concentrations. Further, the available genetic and epidemiological data indicate the H5N1 virus has been spread through movements of dairy cattle. Any expansion in the application of the order to other groups of cattle beyond dairy cattle will be based on evolving understanding of science and risk profiles.

How are lactating cattle defined?

Lactating dairy cattle are defined as a cow that is producing milk, regardless of the volume of milk that she is producing. This does not include dairy calves, pregnant heifers, or dairy cows that are 'dry' or no longer producing milk. The Federal Order will be applied initially only to lactating dairy cattle.

Will dairy cattle going to slaughter or rendering be impacted by this federal order?

USDA recognizes the need to continue humanely moving cull cattle. APHIS is concurrently providing more detailed guidance that includes these cattle.

How will data gained from testing under the Federal Order be disseminated and coordinated?

Data from the pre-movement testing will flow into APHIS' current testing stream. NAHLN labs that test samples will share any non-negative results and samples with NVSL. NVSL will run PCR and subsequent sequencing and post sequences as they have been for previous clinical cases.

Data generated by private labs conducting tests will be monitored by APHIS officials and non-negative samples would be collected in cooperation with the State Animal Health Official (SAHO) and submitted for testing in the NAHLN lab. Once samples are in the NAHLN lab, they will follow the same path as clinical samples.

The current process for clinical samples is that sequences are shared in real time with the Centers for Disease Control and Prevention (CDC) and USDA's Agricultural Research Service (ARS). Then, raw sequences are loaded into National Institute of Health' (NIH) National Center for Biotechnology Information (NCBI) database within 2 days. Finally, curated sequences that are deemed to add information to the outbreak response will be uploaded to Global Initiative on Sharing All Influenza Data (GISAID) database as those sequences are finalized.

Will animals need to be quarantined after movement?

USDA and State Animal Health Officials recommend the farm of destination should isolate and observe all dairy cattle for 30 days upon arrival.

How will data gained from testing and investigations under the Federal Order be used?

All testing and sequencing results, as well as epidemiologic information will help USDA and partner agencies learn more about this virus and will inform further actions that may be necessary to control spread and eradicate this virus from our livestock population. This could include vaccine development, biosecurity recommendations, or other follow up.

How will a One Health Approach be used?

Monitoring workers with exposure to infected cattle is important to human and animal health. APHIS will continue to share information from their investigations as they coordinate with CDC, as has been standard procedure with influenza in poultry and swine. Farms with HPAI-positive herds can implement daily active monitoring using a simple symptom survey, that CDC provides to state and local public health agencies and that can also be made available directly to farmers.

On a daily basis, farms are asked to share the aggregate number of staff who may have been exposed to infected cattle to a local public health department to maintain awareness of possible spillover infection. Any individual with a positive symptom survey should be

referred to local public health for evaluation, testing, treatment, and any additional guidance.

Farms should follow CDC's guidance for workers, including the use of personal protective equipment to minimize the risk of on farm HPAI transmission.

If animals are restricted in movement due to a detection for HPAI, how long must they wait to become eligible for movement again?

The SAHO will not issue a certificate of veterinary inspection (CVI) for animals testing positive for H5N1. Animals may not move interstate until they have completed the 30-day waiting period and have retested negative.

Have similar requirements been put in place before for other viruses and/or animals?

USDA has issued Federal Orders in this past. Most recently USDA issued a similar Federal Order on June 5, 2014 (revised January 4, 2016, and rescinded March 6, 2018) to mandate reporting of novel swine enteric coronavirus disease (SECD).

For cattle that test positive, what kind of epidemiological information will be required and who do producers provide it to?

USDA has developed a National Epi Questionnaire for this event to capture critical, uniform information so that federal agencies can better understand the spread of H5N1. USDA will partner closely with state animal health officials in collection of needed information for any affected premises.

What are the penalties for not following the Federal Order requirements?

Under the Animal Health Protection Act, noncompliance with a Federal Order carries [a range of criminal and civil penalties depending on the specifics of the violation](#).

Will this Federal Order affect trade?

Based on current trade agreements in place, the Federal Order should not affect U.S. trade. USDA has seen minimal impacts on markets and continues to maintain its robust surveillance system that is designed to mitigate the spread of animal diseases, thereby protecting public health, and maintaining a safe food supply for domestic and international markets. [USDA's HPAI emergency response guidelines](#) are available on

the APHIS website and are routinely referenced by our trading partners. USDA remains committed to open and transparent communication with our international trading partners about all developments related to the emergence of HPAI in dairy cattle.