Detection of Highly Pathogenic Avian Influenza in Dairy Herds: Frequently Asked Questions

As of Friday, March 29, USDA’s Animal and Plant Health Inspection Service (APHIS) has confirmed the detection of highly pathogenic avian influenza (HPAI) in dairy herds in Texas, Kansas, and Michigan. APHIS’ latest update on the HPAI detections can be found in this press release.

APHIS is also investigating possible connections to other herds with cows exhibiting similar signs of illness, including additional herds in New Mexico, Texas, and Idaho. This is a rapidly evolving situation and USDA, as well as state and federal partners, are committed to sharing updates as information becomes available. Here, we are answering some of the most frequently asked questions about these detections.

How did these cattle contract HPAI?

Wild migratory birds are believed to be the source of infection. However, the spread of the illness among the Michigan herd also indicates that HPAI transmission between cattle cannot be ruled out.

Initial testing has not found changes to the virus that would make it more transmissible to humans. While cases among humans in direct contact with infected animals are possible, this indicates that the current risk to the public remains low.

Is this the same strain that has been in circulation among wild and commercial flocks in recent months, or is this a different strain?

Tests so far indicate that the HPAI detected in dairy cows is H5N1, Eurasian lineage goose/Guangdong clade 2.3.4.4b. This is the same strain and clade that has been affecting wild birds and commercial poultry flocks and has been detected in some wild animals.

How is a case of HPAI in cattle confirmed by USDA?

USDA encourages producers to work with their veterinarians to report cases of sick cattle to State Animal Health Officials and their APHIS Veterinary Services Area Veterinarian in Charge. Veterinarians should submit samples to a National Animal Health Laboratory Network (NAHLN) laboratory for initial testing. Samples with non-negative test results are then submitted to the National Veterinary Service Laboratories (NVSL) in Ames, Iowa for confirmatory testing. USDA considers a positive test result from NVSL tests as confirmation, and NVSL carries out viral genome sequencing, as needed.

What types of samples from cows have been tested?

USDA and our NAHLN partner laboratories have tested unpasteurized, clinical samples of milk, swabs and tissue samples collected from sick cattle.

Should we assume that other cattle that are showing similar symptoms, including decreased lactation, have also contracted HPAI?

We encourage producers to work with their veterinarians to pursue testing if their herds are demonstrating clinical signs of the current cattle illness event. Federal and state agencies continue to test samples from sick animals and conduct viral genome sequencing, to assess whether HPAI or another unrelated disease may be part of the clinical picture.

Combined with the recent detections of HPAI in baby goats in Minnesota, is there reason to be concerned HPAI may spread to mammals more commonly than previously believed?

HPAI has been found in wild birds, poultry flocks, several species of wild mammals, and neonatal goats in the United States. A full list can be found here. Many species are susceptible to influenza viruses, including wildlife that often come into direct contact with wild birds. Many of these animals were likely infected after consuming or coming into contact with birds that were infected with HPAI. In the case of the neonatal goats in Minnesota, they were exposed to domestic birds (ducks and chickens) infected with HPAI through shared pasture and a sole water source. However, recent testing indicates that HPAI transmission between cattle cannot be ruled out.

Why is USDA recommending caution when moving cattle? And, has the department considered requiring movement restrictions?

The spread of the HPAI within the Michigan herd indicates that bovine to bovine spread cannot be ruled out. As a result,
we are encouraging producers and veterinarians to minimize dairy cattle movement. At this time, we expect that minimizing movement, upholding good biosecurity practices, and testing animals before necessary movements will limit disease spread sufficiently to avoid the need for regulatory restrictions or quarantines. Unlike in poultry flocks where HPAI is fatal, among the dairies whose herds are exhibiting symptoms, the affected animals have recovered with little to no associated mortality reported.

How is this cattle illness affecting the nation’s overall milk production? What effect might this have on consumer prices?

At this point, we are not aware of impact on milk supply or consumer prices. Based on information available at this point, we do not anticipate that this will impact the availability or the price of milk or other dairy products for consumers. In addition, the U.S. typically has a more than sufficient milk supply in the spring months due to seasonally higher production. Markets continue to reflect normal movements. Surplus loads of milk for the past week are selling significantly below market value indicating supply remains very long.

What are the latest trends in HPAI detections and virus mitigation?

Recent detections of HPAI in poultry have slowed. So far in 2024, there have been 21 detections of HPAI in commercial poultry facilities, which is similar to the number in January-March of 2023 (17 detections). Both years are showing significant decreases in the number of detections compared to 2022, when we saw 59 detections in the January-March period, indicating that biosecurity practices and virus management have played a significant role in reducing impacts to commercial flocks.

What is the species of deceased wild birds that were found on the Texas farms?

At this time, three species have been identified among these cases: pigeons, blackbirds, and grackles.

Will the HPAI detection require herds to be depopulated, as is the case with detections in poultry flocks?

At this stage, we do not anticipate the need to depopulate dairy herds. Unlike HPAI in birds which is typically fatal, little to no mortality has been reported and the animals are reportedly recovering. The affected cows on the dairy farms are currently being isolated from other animals. We are continuing to learn more about the situation. Transparency and collaboration with and by dairy producers will be important to mitigate broader potential impacts to the industry.

Has this impacted beef cattle or the beef supply?

USDA is confident that the meat supply is safe. As always, we encourage consumers to properly handle raw meats and to cook to a safe internal temperature. Cooking to a safe internal temperature kills bacteria and viruses, like influenza, in meat.

How can farmers prevent the spread of HPAI to their animals?

It is critically important that farmers practice good biosecurity measures. We are also encouraging producers with concerns to reach out to their veterinarian, State Animal Health Official, and/or Area Veterinarian in Charge.

If an animal is displaying signs of illness or tests positive for HPAI, the animal should be separated from other animals on the farm and heightened biosecurity measures should be taken to ensure HPAI does not spread to other species. Additionally, farmers are advised to avoid housing multiple species of animals together at any time.

More specific information on biosecurity practices are available:
- Specific to dairy herds;
- Specific to poultry flocks; and
- General influenza biosecurity.

What signs of illness should farmers look out for in their herds?

Producers should report animals with the following clinical signs to their state veterinarian immediately:

Decreased herd level milk production; acute sudden drop in production with some severely impacted cows experiencing thicker, concentrated, colostrum-like milk; decrease in feed consumption with a simultaneous drop in rumen motility; abnormal tacky or loose feces, lethargy, dehydration, and fever. Initial cases indicated older cows in mid-lactation may be more likely to be severely impacted than younger cows and fresh cows or heifers. Additional data indicates younger cattle have been affected; more data and reporting from impacted producers will help to clarify the range of animals affected.

Will there be a milk recall?

Based on the information and research available to us at this time, a milk recall is not necessary. Because products are pasteurized before entering the market, there is no concern about the safety of the commercial milk supply, or that this circumstance poses a risk to consumer health. Pasteurization has continuously proven to inactivate bacteria and viruses, like influenza, in milk.

Could the consumption of raw milk from these states impact human health?

FDA’s longstanding position is that unpasteurized, raw milk can harbor dangerous microorganisms that can pose serious health risks to consumers, and FDA is reminding consumers of the risks associated with raw milk consumption in light of the HPAI detections. Food safety information from FDA, including information about the sale and consumption of raw milk, can be found here.