Avian Influenza Detected in Dairy Cattle

On Monday, March 25th the US Department of Agriculture (USDA), Food and Drug Administration (FDA), and Center for Disease Control (CDC) issued a statement confirming the identification of Highly Pathogenic Avian Influenza (HPAI) in dairy cattle located in Texas and Kansas. They have suspected that HPAI may be a contributing factor in the unclassified illness affecting older, mid to late lactation dairy cattle in several herds in New Mexico, Texas, and Kansas over the past two months. It is not yet clear if all reports of the unclassified illness are caused by HPAI. The full press release from USDA can be found here.

The following are answers to common questions producers and the general public may have about this outbreak.

What is HPAI?

This virus is part of a type of Influenza A viruses that primarily affect birds. The *highly pathogenic* classification is based on the severity of the disease in poultry, but not in mammals such as pigs, cattle, or human. The current outbreak in domestic poultry, H5N1, has been occurring since 2022 and has been reported in 48 states, affecting over 82 million domestic birds; however, it's not yet clear if the strain currently affecting dairy cows spread from the current outbreak in poultry. Rarely, the HPAI virus can spill over to mammals, including humans, with varying severity of clinical signs. At this point, there is nothing to suggest humans are at an increased risk from this particular strain. The risk remains very low for human illness. This is only the second time HPAI has been reported in ruminants.

How do cows get the disease?

Sporadic outbreaks of HPAI have occurred in commercial poultry operations throughout the country during the last year, including in Ohio. Migrating waterfowl are the reservoirs of the disease and are believed to be the source of the infections in this instance per the USDA. This disease can be devastating to the poultry industry, causing high levels of mortality; however, this does not seem to be the case in dairy cattle where the disease tends to have the following signs:

- Decreased ruminations, feed intake, and milk production are found in second lactation and older cows typically over 150 days in milk.
- Milk from affected animals has a thick, yellow, colostrum-like appearance.
- Manure is typically firm/tacky and a fever may or may not be present.
- Typically, 10% of animals in the herd are affected with a peak incidence at 3-4 days and the outbreak lasting approximately 10-14 days.
- Few if any of the cows die from the disease with many recovering, although many cows end up being culled due to low production or mastitis.

Where is this disease being reported in cattle?

At this current time, there are no official reports of infections in dairy cattle outside of Texas, New Mexico, and Kansas. There are no reports of the disease in Ohio cattle, but producers should be vigilant for signs of the disease.

Is milk and meat safe to eat?

Yes! Abnormal milk is not allowed into the supply chain, and the commercial milk supply remains safe due to both Federal animal health requirements and pasteurization (Influenza virus gets easily inactivated through pasteurization). Beef is also safe for human consumption if properly handled and cooked. This is not considered a threat to public health.

What should farms do to protect their animals?

It is advisable that farms review their biosecurity plan with employees and other relevant personnel, as well as working closely with their herd veterinarian to help mitigate risk. In particular, farms should enhance basic biosecurity protocols. This includes:

- Limit the access of wild birds, particularly waterfowl, to the food and water sources of cattle, as well as preventing any "backyard birds" from having contact with dairy cattle.
- Reduce the frequency or eliminate non-essential visitors to the farm.
- Ensure that any farm visitors wear clean clothes and disinfect boots or use disposable boot covers.
- Minimize the introduction of outside animals into the farm, particularly those from unknown sources.
- Quarantine any new animals, especially those from the affected states, introduced to the farm for 21 days while closely monitor feed and water intakes.

Additional biosecurity resources for dairy farms can be found here.

Are there any other preventative measures that should be implemented on my farm?

Currently, there are no vaccines, drugs, or feed additives available for purchase to prevent infection. Normal measures, such as ensuring proper hygiene of pens, barns, feed, and water sources, along with providing adequate nutrition with supplemented vitamins and minerals should be in place for the general prevention of disease.

What should I do if I suspect my cattle are infected?

Should you identify signs in cattle that fit the clinical description above, contact your herd veterinarian immediately who can bring it to the attention of the state animal health officer (SAHO). They will follow the latest recommendations from the American Association of Bovine Practitioners (AABP), USDA, and Ohio Department of Agriculture (ODA) to ensure that proper steps are taken for reporting and identification. Treatment would likely consist of supportive therapy as directed by the herd veterinarian. At this point, no regulatory control actions are advised by USDA Ohio-AVIC (Area Veterinarian in Charge) or the SAHO. The State Veterinarian and USDA AVIC are monitoring the regulatory guidance from USDA APHIS Veterinary Services as the situation evolves.

This is a developing situation, and we will provide updates as more information becomes available.

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(Released March 26, 2024)