

Influenza A (H5N1) in Cattle– April 4,2024

- **USDA initially announced H5N1 detections in Kansas and Texas Dairy Herds on March 25, 2024; since that time several other states have reported cases. In all affected states, the herds are recovering or have completely recovered.**
- **HPAI is not a food safety concern**
 - Commercial milk supply remains safe due to State and Federal regulations and industry practice.
 - Sick cows *must* be removed from the milking string
 - Pasteurization kills the virus
 - It is standard practice to isolate sick cows in the hospital pen
 - Consumers cannot contract H5N1 from properly prepared meat
 - Sick animals that may pose a human health threat are not to enter the human food chain; mandatory inspection is in place at harvest facilities in the U.S.
 - Proper food handling prevents HPAI transmission and includes: washing hands before handling raw meat products; preventing cross-contamination of raw meat with other foods; washing materials used to cut and prepare meat with hot, soapy water; using a food thermometer to ensure that meat is cooked to an internal temperature sufficient to kill foodborne germs, including viruses like HPAI, prior to consumption.
- **Movement of cattle coming into California is carefully monitored and cattle exposed to or affected with H5N1 are prohibited:**
 - Required for *all* cattle potentially moving into California herds – a Certificate of Veterinary Inspection signed by an accredited veterinarian that assures the cattle included are not sick and not exposed to disease.
 - Required for dairy cattle moving into California from a state with confirmed or suspect cases of H5N1 in cattle – a Certificate of Veterinary Inspection signed within 7 days of shipment that assures that the cattle are free from disease and not exposed to cattle that test positive for or show signs consistent with H5N1.
 - Entry Permit (all cattle, including direct to harvest)
- **Wild migratory birds are believed to be the source of infection with evidence of some lateral spread within a herd after introduction;** however, viral testing and epidemiologic efforts continue, and these studies take time.
- **To date, no HPAI H5N1 infections have been identified in cattle in California,** but HPAI is known to be carried by wild birds in California (esp. migrating waterfowl), so vigilance is warranted. Remove any dead birds promptly from areas where cattle are present and report bird mortalities to CDFA.
- **Spread of HPAI H5N1 between cows is being evaluated,** there is emerging evidence that there is some lateral (cow to cow) spread (studies are on-going).
 - Until more is known, continue enhanced biosecurity, particularly related to introducing new cattle (know disease status of origin herd; isolate and observe additions for at least 21 days) and movements onto and off a farm or ranch. Sick animals should be separated from the herd.
- **Cattle owners who notice clinical signs consistent with this illness (see following bullet) should contact their veterinarians for evaluation and diagnostics.**
 - The California Animal Health and Food Safety Laboratory can run diagnostics for H5N1 in cattle at no charge to the veterinarian; instructions for sample submissions are available from the CDFA Animal Health Branch.

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- **Clinical signs in affected herds: Reduced feed consumption, significantly reduced milk production, most often affects mature cows, may have elevated temperature, may have manure changes, 5-20% of group affected, normally recover within weeks**
 - Not clear if signs are due to HPAI or a combination of pathogens and other stressors; investigation is on-going
 - Most affected cattle fully recover
 - Best water trough management practices speed herd recovery. Keep clean and fresh.
- **The current risk to humans is estimated to be low although people with close or prolonged exposure to infected livestock have increased risk of infection.**
 - CDC has [confirmed](#) that one dairy worker in Texas has tested positive for [avian influenza](#) (HPAI) A(H5N1). The worker had direct contact with dairy cattle in Texas infected with HPAI A(H5N1) virus. CDC has been monitoring for illness among people exposed to H5 virus-infected birds since the virus was first detected in U.S. wild birds and poultry in late 2021. Previous human influenza A(H5N1) infections are uncommon but have occurred sporadically worldwide in persons who had contact with infected birds. These illnesses have ranged from mild (e.g., eye infection, upper respiratory symptoms) to severe illness (e.g., pneumonia), including occasional deaths.
- **Transmission of this virus from livestock to humans is possible; therefore, employers should take measures to protect workers if livestock become symptomatic with illness suspected or confirmed to be due to avian influenza infection.**
 - Respiratory protection and other personal protective equipment (PPE) should be provided to and worn by dairy workers who enter the hospital pen, or go into any buildings that currently or previously housed sick or dead animals, carcasses, feces, or litter from potentially infected animals. Consumption of raw milk on- or off-site should be prohibited.
 - Respirators must be at least as effective as an N95 respirator. Other PPE including Impermeable gloves, indirectly vented goggles (or full face respirators), and [other personal protective equipment](#) should also be provided and worn as a precaution to prevent infection, particularly for workers who have direct contact with ill cows or their milk. Workers must be included in a respiratory protection program including medical clearance, training, and fit testing on their respirators. See Cal/OSHA's publication: Respiratory Protection in the Workplace: www.dir.ca.gov/dosh/dosh_publications/respiratory.pdf.
 - If workers are known to have exposures to livestock infected with avian influenza A (H5N1), advise them that they will be contacted by their local public health department. Public health officials will monitor an exposed worker for symptoms of illness for several days following the worker's last possible exposure. Public health officials will also arrange for testing if an exposed worker develops symptoms suggestive of influenza.
- **Other resources and references**
 - Cal/OSHA Publications: www.dir.ca.gov/dosh/PubOrder.asp
 - Respiratory Protection in the Workplace: www.dir.ca.gov/dosh/dosh_publications/respiratory.pdf
 - [vs-recommendations-hpai-livestock.pdf \(usda.gov\)](#)
 - Link to sampling instructions: [Testing Recommendations for Influenza A in Cattle](#)
- **CDFA will continue to monitor the situation and communicate developments as appropriate.**