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## TECHNICAL BULLETIN

DATE: August 8, 2024

TOPIC: Summer Surveillance for Avian Influenza A (H5N1) Human Cases

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TO: Health Care Providers, Medical Facilities, Medical Laboratories, and Local Health Authorities

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### Key Points

- An outbreak of avian influenza A (H5N1) is affecting dairy cattle and poultry in more than a dozen states.
- Nationwide, 13 human cases have been reported among farm workers working with infected cattle and poultry in 2024.
- No currently affected livestock, poultry or people have been reported in Nevada.
- Risk to the general public is considered low.
- Those with unprotected exposures to infected animals or animal environments may be at higher risk.
- Health care providers should consider H5N1 in the differential diagnosis of patients with compatible symptoms and recent animal exposures.
- Health care providers are asked to participate in enhanced influenza monitoring during summer 2024.

### Background

Avian influenza A (H5N1) has been circulating widely among [birds](#) and [mammals](#) in the United States since 2022. In the spring of 2024, H5N1 was detected in dairy cattle for the first time. Since the initial detections in dairy cattle, [more than 170 affected herds have been reported in at least 13 states](#). As of August 5, 2024, [H5N1 has not been detected among dairy cattle in Nevada](#). H5N1 continues to affect poultry flocks across the United States, with the last reported [poultry detection in Nevada occurring in March 2023](#).

To date, [four human cases](#) have been reported among dairy workers who were exposed to infected cows in other states, suggesting probable cow-to-person spread. At least [nine additional human cases](#) have been identified among workers exposed to infected cattle and poultry in Colorado.

The people with illnesses associated with the 2024 H5N1 outbreak among dairy cattle and poultry experienced relatively mild illnesses involving conjunctivitis and/or respiratory symptoms typical of seasonal influenza infection. Historically, [human infections with H5N1 are often severe](#), with approximately 50% of cases since 1997 resulting in severe pneumonia and death.

The Centers for Disease Control and Prevention (CDC) currently considers risk to the general population from H5N1 to be low. However, individuals who have unprotected exposures to infected animals may be at higher risk of infection. Health care providers are asked to take the following actions to help ensure rapid identification and response in the event of a human H5N1 infection in Nevada.

## Actions for medical providers

*Obtain an exposure history for patients with symptoms of a acute respiratory illness or conjunctivitis.*

For patients with [symptoms compatible with H5N1 infection](#), inquire about contact with birds, livestock, or other animals within 14 days before symptom onset. [Additional detail about situations that could result in exposure is described here.](#)

The U.S. Department of Agriculture (USDA) [reports that cows without clinical signs have tested positive](#) for H5N1. Occupational or recreational exposures to infected animals could include exposures to animals that appear healthy.

The FDA has [identified infectious H5N1 in raw milk](#) produced by infected cattle. Pasteurization inactivates the virus in milk, providing strong assurance that the commercial milk supply is safe. Though none of the human cases currently identified have been reported to have consumed raw milk or dairy products, it is theoretically possible that a person could become infected with H5N1 after consuming unpasteurized dairy products from infected cattle. Consider including questions about raw milk or dairy consumption when obtaining an exposure history for patients with symptoms compatible with H5N1 infection.

*H5N1 infection is suspected.*

If a patient with symptoms compatible with H5N1 infection reports [any relevant exposures](#), that patient should be considered to have H5N1 infection until proven otherwise.

*Follow infection prevention and control (IPC) recommendations.*

Standard Precautions, plus Contact and Airborne Precautions (including the use of eye protection), are recommended when evaluating patients for infection with avian influenza A viruses. Health care personnel should wear recommended personal protective equipment (PPE) when providing patient care. Additional information regarding IPC recommendations can be found [here](#) and [here](#).

Patients not requiring inpatient admission should be advised to isolate at home away from household members and not go to work or school until it is determined they do not have avian influenza A virus infection.

*Immediately notify public health authorities.*

Per [Nevada Administrative Code 441A.225](#) subsection 2(e), a report to the public health authority must be made immediately after identifying a case having or a suspected case considered to have H5N1.

Health Department	County	Phone Number to Report
Carson City Health and Human Services (CCHHS)	Carson City, Douglas, and Lyon	(775) 887-2190 (24 hours)
Central Nevada Health District (CNHD)	Churchill, Mineral, Eureka, and Pershing	(775) 866-7535 (24 hours)
Northern Nevada Public Health (NNPH, formerly WCHD)	Washoe	(775) 328-2447 (24 hours)
Southern Nevada Health District (SNHD)	Clark	(702) 759-1300 (24 hours)
Nevada Division of Public and Behavioral Health (DPBH) Office of State Epidemiology (OSE)	All other counties	(775) 684-5911 (M-F 8 a.m. to 5 p.m.) (775) 400-0333 (after hours)

*Initiate empiric antiviral treatment as soon as possible.*

[Antiviral treatment is recommended as soon as possible](#) for outpatients and hospitalized patients who are suspected (cases under investigation), probable or confirmed cases of human infection with novel influenza A viruses associated with severe human disease, including H5N1.

Oseltamivir is recommended for inpatients and outpatients suspected of having H5N1 infection. Treatment should be initiated as early as possible after illness onset. Antiviral treatment should not be delayed while waiting for laboratory testing results.

*Collect specimens from patients with relevant exposures to send to the public health laboratory for influenza testing and subtyping.*

If signs or symptoms consistent with infection with avian influenza A virus are present in a patient with recent exposure to infected animals, contaminated environments or unpasteurized dairy products, specimens should be collected and sent to a public health laboratory. Testing for other potential causes of acute respiratory illness should also be considered.

Rapid influenza diagnostic tests are not a reliable indicator of avian influenza A virus infection, and the results should not be used to guide infection control or antiviral treatment decisions. Both commercially available rapid influenza diagnostic tests and most influenza molecular assays do not distinguish between infection with seasonal influenza A viruses and avian influenza A viruses. Testing for avian influenza A viruses must be performed at public health laboratories, and CDC.

- For outpatients, upper respiratory tract specimens should be collected.
- If conjunctivitis is present, conjunctival swabs should also be collected.
- Patients who are severely ill should have both upper and lower respiratory tract specimens collected for influenza testing.

More information on specimen collection, infection prevention and control recommendations when collecting specimens, and influenza diagnostic testing, can be found here: [Interim Guidance on Testing and Specimen Collection for Patients with Suspected Infection with Novel Influenza A Viruses with the Potential to Cause Severe Disease in Humans Testing Procedures for Laboratory Personnel](#).

Providers in Nevada can submit specimens to the [Nevada State Public Health Laboratory \(NSPHL\)](#). Providers in Clark County may submit specimens to the [Southern Nevada Public Health Laboratory \(SNPHL\)](#). Submission of specimens from patients suspected of having an H5N1 infection should be made in coordination with public health authorities. For each specimen submitted to a public health lab for subtyping, complete [this short REDCap form](#).

## **Participate in Enhanced Influenza Monitoring During Summer 2024.**

*Submit influenza A-positive specimens from hospitalized patients to a public health laboratory for influenza subtyping.*

Influenza subtyping for influenza subtype surveillance is typically performed during influenza season, in the fall and winter months. To improve the likelihood of identifying spread of H5N1 to and among people associated with the current national outbreak among dairy cattle, CDC recommends continuing subtyping of respiratory specimens during the summer months and through September.

From now through the end of September 2024, submit specimens from all hospitalized patients who test positive for Influenza A to [NSPHL](#) or [SNPHL](#) for subtyping, regardless of exposure history. For each specimen submitted to a public health lab for subtyping, complete [this short REDCap form](#) so OSE can monitor these enhanced surveillance efforts.

Laboratory capacity for influenza subtyping is limited. Specimen submissions during the summer months are not expected to exceed the labs' subtyping capacity. However, the proportion of these specimens that are subtyped will ultimately depend on how many specimens the lab receives for subtyping each week.

## Encourage seasonal influenza, COVID-19 and RSV vaccination in preparation for the fall and winter respiratory virus season.

Seasonal influenza vaccines [do not protect against H5N1](#). However, ensuring high vaccination rates for seasonal influenza, COVID-19 and RSV this respiratory virus season will:

- Facilitate the rapid identification and response to any H5N1 transmission among humans by minimizing the number of potentially confounding respiratory infections;
- Reduce the burden on the health care system of people requiring hospitalization for respiratory illnesses; and
- Reduce the chances that a person might be infected with both seasonal influenza and avian influenza at the same time, which increases the risk of viral genetic reassortment.

Encourage patients to get vaccinated this upcoming respiratory virus season. [Recommended immunization schedules can be found on the CDC's website.](#)

### Questions

For updated guidance, review [the Division of Public and Behavioral Health Technical Bulletin](#) web page regularly. Email [stateepi@health.nv.gov](mailto:stateepi@health.nv.gov) for other questions regarding avian influenza.



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