



DATE: December 11, 2024
TO: Healthcare Providers
FROM: Dr. Maggie Park, Public Health Officer

Please distribute to all providers and relevant medical staff in your office.

HEALTH ADVISORY **H5N1 Influenza**

Situation:

San Joaquin County Public Health Services (SJCPHS) has identified 2 cases of H5N1 avian influenza infection (presumptively positive) in the county, in individuals who had contact with infected dairy cattle.

Due to the large number of dairy farms in the Central Valley, including San Joaquin County, clinicians are advised to think of H5N1 in their differential diagnosis, especially in dairy and poultry farmworkers who may not divulge or be aware of their exposure to the virus.

Background:

The Centers for Disease Control (CDC), the California Department of Public Health (CDPH) and SJCPHS have been monitoring a multi-state outbreak of H5N1 influenza in the United States since March 2024. H5N1 influenza infections were first confirmed in California dairy cows on August 30, 2024, and the first human cases in California were confirmed on October 3, 2024.

To date there have been 58 cases of H5N1 infection in humans in the United States, of which 32 have occurred in California. All but 1 of the 32 cases have occurred in people with known contact to affected cattle.

Clinical Presentation:

Clinical manifestations can range from asymptomatic to severe. Thus far, human cases in the U.S. have been mild, and conjunctivitis has been a common feature. Symptoms may include:

- Eye redness or discharge
- Fever
- Cough
- Sore throat
- Runny or stuffy nose
- Diarrhea and/or vomiting
- Muscle or body aches
- Headaches
- Fatigue
- Difficulty breathing



Transmission:

- Contact with infected dairy cows and their unpasteurized (raw) milk, or infected poultry
- Contact with infected birds or places that sick birds or other animals, their saliva, mucous and feces have touched
- Contact with an infected person, such as in a household or healthcare facility
- Laboratory exposure

The primary risk of exposure is from handling cows and raw milk without full use of protective equipment, such as gloves, goggles or face shields.

Laboratory Testing:

Any person who has been exposed to an infected animal/person or has recent exposure to raw milk or raw milk dairy products and develops symptoms within 10 days should be tested. Ideally, specimens should be collected within 24-72 hours of symptom onset.

Specimen collection and specimen types:

- Specimens should be collected using swabs with synthetic tips (e.g., polyester or Dacron®) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shaft are NOT recommended.
- Specimens collected with swabs made of calcium alginate are NOT acceptable.
- Place swab(s) in specimen collection vial containing 2–3 mL of viral transport media (VTM) or universal transport media (UTM); tighten cap to avoid leakage. Immediately place the specimen on ice or cold packs (2-8°C /refrigerated condition) for transport to the laboratory within 3 days of testing. Please freeze the specimens for storage periods beyond 3 days.
- For all patients, collect the following respiratory specimens:
 - A nasopharyngeal swab; AND
 - If feasible, also collect separate nasal and oropharyngeal swabs combined in a single transport media vial.
- Patients with conjunctivitis should have both a nasopharyngeal and conjunctival swab specimen collected.
- If conjunctivitis is present in both eyes, collect separate swabs from each eye and combine the swabs in a single transport media vial.
- Patients with severe respiratory disease also should have lower respiratory tract specimens collected such as an endotracheal aspirate, bronchoalveolar lavage, or sputum.
- For severely ill persons, multiple respiratory tract specimens from different sites should be obtained to increase the potential for H5N1 influenza virus detection.



Please contact San Joaquin Public Health Laboratory at (209)468-3460 for questions, information, and instructions regarding submission of respiratory specimens for suspect testing, collection protocol, and kits. https://www.sjcphs.org/disease/public_health_Laboratory.aspx

Actions Requested of Clinicians:

- **Consider H5N1** in all patients presenting with H5N1 symptoms, especially “pink eye”, and ask about possible workplace exposure.
- **Immediately mask** any patient with suspected H5N1 and place them in an airborne isolation room or a single-patient room with the door closed
- **Use PPE**, including respiratory protection, eye protection, gown and gloves
- **Collect specimens** as above and arrange for them to be brought to the SJCPHS Lab
- **Immediately notify** the facility infection control program and SJCPHS Disease Control and Prevention Program (209) 468-3822. After hours, call (209) 468-6000 and ask to speak with the on-call public health nurse.
- **Prescribe oseltamivir (Tamiflu)** per CDC Emergency Use Instructions

Resources:

- CDC H5 Bird Flu Current Situation: <https://www.cdc.gov/bird-flu/situation-summary/index.html>
- CDPH Avian Influenza page, with link to H5N1 Quicksheet: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/BirdFluHP.aspx>
- CDC Emergency Use Instructions: <https://www.cdc.gov/bird-flu/hcp/emergency-use-oseltamivir/index.html>

For more information, call San Joaquin County Public Health Services Disease Control and Prevention program at **(209) 468-3822**