Recommendations for Investigation and Management of Human Avian Influenza A(H5N1)

Executive Summary

Avian influenza A(H5N1) is widespread in wild birds worldwide causing outbreaks in poultry flocks, U.S. dairy cow herds, and humans. Confirmation of the first avian influenza A(H5N1) infections in California dairy cows occurred on August 30, 2024. On October 3, 2024, health officials confirmed the first human cases of avian influenza A(H5N1) infection in California dairy workers.

Exposure criteria include exposure to animals or persons infected with avian influenza A(H5N1) virus or unprotected exposure to the virus in the laboratory. The human infectious period is defined by CDPH as from one day before symptom onset date (Day 0) until resolution of any eye infection, including redness (excluding subconjunctival hemorrhage) or drainage; any fever has been gone for 24 hours without the use of fever reducing medication; and other symptoms are mild and improving.

Clinicians should immediately notify their local health department (LHD) if they suspect avian influenza in a patient. LHDs should immediately notify the California Department of Public Health (CDPH) of suspect cases. Clinicians and LHDs should follow healthcare facility avian influenza A(H5N1) infection prevention and control recommendations.

Testing should occur within 10 days of last exposure if a person meets the exposure criteria and develops symptoms that could be consistent with avian influenza A(H5N1) infection. Collection of specimens should ideally occur within 24–72 hours of symptom onset and no later than 10 days after symptom onset. Consideration of testing may occur on a case-by-case basis and in discussion with CDPH if more than 10 days have elapsed after symptom onset.

Case finding activities should commence if preliminary H5 subtype testing indicates a human infection with avian influenza A(H5N1) virus. Persons with suspected, presumptive, probable or confirmed avian influenza A(H5N1) infection[†] should follow CDPH isolation guidance. Clinicians and LHDs should follow recommendations for influenza antiviral treatment and chemoprophylaxis.

Outlined is information about monitoring exposed persons in non-healthcare settings. Employers with workers with exposure to animals with avian influenza A(H5N1), their raw products, fecal material or environments must provide **medical services** for employees per the California Division of Occupational Safety and Health (Cal/OSHA) Aerosol Transmissible Diseases Standard. These services include medical surveillance (health checks) as recommended by Centers for Disease Control and Prevention (CDC), CDPH, or the local health officer. The Cal/OSHA Aerosol Transmissible Diseases-Zoonotic Standard outlines these and other requirements. CDPH recommends active monitoring when exposure occurs in a farm setting as appropriate personal protective equipment use is difficult to verify.

[†] See CDPH Definitions for more information about working definitions of persons under investigation.

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Background

Avian influenza A(H5N1) is widespread in wild birds worldwide. It has caused outbreaks in poultry flocks and U.S. dairy cow herds, with recent human cases in U.S. dairy and poultry farm workers and owners of backyard poultry flocks with exposure to infected animals as well as sporadic cases in people without known exposure to infected animals. On March 25, 2024, U.S. officials first reported a multi-state outbreak of avian influenza A(H5N1) infection in dairy cows. Confirmation of the first avian influenza A(H5N1) infections in California dairy cows occurred on August 30, 2024. On October 3, 2024, health officials confirmed the first human cases of avian influenza A(H5N1) infection in California dairy workers.

For information about other variant or novel influenza viruses, please see CDPH Variant Influenza Quicksheet (PDF).

Overview of Human Avian Influenza A(H5N1) Infections

Human infections with avian influenza viruses are rare. However, H5N1 and H7N9 viruses have caused human avian influenza infections globally. Illnesses in humans from these infections have ranged in severity from no symptoms or mild illness (e.g., eye infection, upper respiratory symptoms) to severe disease (e.g., pneumonia) that may result in death. To date, most U.S. human avian influenza A(H5N1) cases have been mild, although there have been reports of severe cases in Louisiana, Canada and Mexico. There has not been detection of human-to-human transmission of avian influenza A(H5N1) virus in the United States.

Human infections with avian influenza viruses have occurred most often after close or lengthy unprotected contact (i.e., not wearing eye or respiratory protection or gloves) when working with infected cows or poultry, their saliva, mucous, milk or feces. In the current outbreak, human infections with avian influenza A(H5N1) viruses have involved contact with infected poultry (generally while culling them) or infected dairy cows and their unpasteurized (raw) milk.

Human infections with avian influenza viruses can happen when virus gets into a person's eyes, nose or mouth, or through inhalation. This can happen when a person touches something that has virus on it and then touches their mouth, eyes or nose, or possibly when virus is in the air (in droplets or possibly dust) and a person breathes it in. The spread of avian influenza viruses from one infected person to a close contact is very rare, and when it has happened in other countries, it has not led to sustained spread among people. More information about avian influenza in humans is available at Centers for Disease Control and Prevention's (CDC) webpage on Avian Influenza Virus Infections in Humans.

Clinical and Exposure Information

Clinical Criteria

Symptoms of human avian influenza A(H5N1) infection can include:

- Eye redness (conjunctivitis)
- Fever (temperature of ≥100°F/37.8°C or feeling feverish)
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue

- Shortness of breath or difficulty breathing

Less common signs and symptoms include diarrhea, nausea, vomiting, altered consciousness, or seizures.

Exposure Criteria

Within the 10 days prior to symptom onset (defined as follows):

Exposure to animals infected with avian influenza A(H5N1) virus:

- Close contact (within six feet) with infected animals. Such exposures can include, but not limited to handling, slaughtering, defeathering, butchering, culling, caring for, or milking; **or**
- Preparing or consuming raw animal products, or consuming uncooked or undercooked food or related uncooked food products, including unpasteurized milk, from infected animals; **or**
- Direct contact with surfaces contaminated with feces, unpasteurized milk or other unpasteurized dairy products, or animal parts (e.g., carcasses, internal organs) from infected animals; **or**

Exposure to an infected person:

- Close (within six feet), unprotected (without use of respiratory and eye protection) contact with a person who is a symptomatic confirmed or probable avian influenza A(H5N1) case (e.g., in a household or healthcare facility); **or**

Laboratory exposure:

- Unprotected exposure to avian influenza A(H5N1) virus in a laboratory.

Human Infectious Period

Until further data are available, the infectious period is defined by CDPH as from one day before symptom onset date (Day 0) until resolution of any eye infection, including redness (excluding subconjunctival hemorrhage) or drainage; any fever has been gone for 24 hours without the use of fever reducing medication; and other symptoms are mild and improving.

Reporting

Clinicians should immediately notify their local health department (LHD) if they suspect avian influenza in a patient. LHDs should immediately notify CDPH of suspect cases by emailing AvianInfluenza@cdph.ca.gov.

If an LHD needs assistance with a suspect, probable or confirmed avian influenza A(H5N1) case after hours, contact the CDPH Duty Officer at (916) 328-3605.

Enter all suspected, presumptive, probable and confirmed avian influenza A(H5N1) cases into CalREDIE using the "Influenza-H5N1" condition. LHDs should complete the CDPH Avian Influenza A (H5N1) Case Report Form for all probable and confirmed cases of avian influenza A(H5N1) infection as soon as possible. Access the case report form at CDPH Avian Influenza A (H5N1) Case Report Form or by emailing AvianInfluenza@cdph.ca.gov. Upload the completed form into the patient's record in CalREDIE or email it to AvianInfluenza@cdph.ca.gov.

Healthcare Facility Avian Influenza A(H5N1) Infection Prevention and Control Recommendations

If referral of a person with suspected or confirmed avian influenza A(H5N1) infection to a healthcare facility occurs, alert the healthcare facility prior to patient arrival so appropriate planning and implementation of infection control measures can occur immediately. Advise the ill person to wear a facemask on arrival.

If a patient with suspected, probable or confirmed avian influenza A(H5N1) infection presents to a healthcare setting, healthcare providers should:

- Immediately mask the patient and place them in an airborne infection isolation room (AIIR) with the door closed. Removal of the patient's mask may occur while in an AIIR.
    - If an AIIR is not available, place the patient in a single-patient room with the door closed and have the patient remain masked.
- Use personal protective equipment (PPE) that includes:
    - Respiratory protection (fit-tested N95 respirator or higher level of protection)
    - Eye protection (goggles or face shield)
    - Gown and gloves
- Use diligent hand hygiene before and after contact with the patient.
- Limit room entry to essential personnel. Limit patient transport outside their room.
- If a non-AIIR room is used, after the patient leaves, the room should not be reused and unprotected individuals should not enter until sufficient time has elapsed for airborne-contaminant removal per CDC guidance.

For additional infection control guidance, such as management of exposed healthcare workers, visitor policies, environmental cleaning, and caution with aerosol-generating procedures, please refer to:

- CDC Interim Guidance for Infection Control Within Healthcare Settings When Caring for Confirmed Cases, Probable Cases, and Cases Under Investigation for Infection with Novel Influenza A Viruses Associated with Severe Disease
- CDC Interim Guidance for Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses Associated with Severe Human Disease or with Potential to Cause Severe Human Disease, and Use of Antiviral Medications for Post-exposure Prophylaxis
- For applicable Cal/OSHA requirements in healthcare settings, please see California's Aerosol Transmissible Diseases standard.

Testing

Ideally collect specimens within 24-72 hours of symptom onset and no later than 10 days after symptom onset in persons who meet the exposure criteria and have avian influenza A(H5N1) infection symptoms. If more than 10 days have elapsed since symptom onset, then consideration of testing may occur on a case-by-case basis and in discussion with CDPH.

Refer suspect cases to healthcare facilities that are prepared to accept such patients for testing. Notify the facility **in advance** that the suspected avian influenza A(H5N1) case will be coming so that appropriate precautions can be in place.

- Referred H5-suspect cases should contact the healthcare facility prior to their visit to inform them of their exposure to "bird flu" and symptoms.

- At the very least, the referred H5-suspect case should alert the facility **immediately upon arrival.**
- Instruct H5-suspect cases to wear a mask when entering a healthcare facility.

Testing of asymptomatic exposed individuals is not routinely recommended, but may be considered on a case-by-case basis. For instance, testing may be offered to individuals with discrete high-risk exposures, such as an unprotected splash of raw milk from an infected cow into the eyes.

Polymerase chain reaction (PCR) subtype testing for H5N1 influenza is available at some local California public health laboratories (PHLs), the Viral and Rickettsial Disease Laboratory (VRDL) at CDPH, some commercial, academic and hospital laboratories, and CDC. **If a laboratory is conducting H5 subtyping, on a suspect case, the laboratory should notify CDPH VRDL about the testing by emailing clsh5fluanotification@cdph.ca.gov.**

- CDPH recommends testing via a PHL for persons who meet the symptom and exposure criteria for avian influenza A(H5N1) to expedite public health response.
- CDPH recommends testing at a commercial, academic or hospital laboratory that can perform H5 subtyping only for low suspicion cases with no known or likely exposure to infected animals or humans.
- In symptomatic people unlikely to have H5N1 infection using commercial or clinical laboratory PCR tests for influenza to rule out influenza A (and therefore H5N1) can be performed.
- If false positive H5 subtyping results are suspected, contact CDPH VRDL and CDPH Avianinfluenza@cdph.ca.gov for consultation.

Laboratories should **not** attempt to perform viral culture on specimens from patients with suspected or laboratory-confirmed avian influenza A(H5N1) infection.

For additional testing guidance, see the VRDL Test Page – Novel/Avian Influenza Virus (human) PCR (ca.gov).

Specimen collection and specimen types

Collect the following specimens for symptomatic patients with suspected H5N1 infection:

- Respiratory specimens from patients.
  - Oropharyngeal (throat) and anterior nares (nasal) swab specimens.
    - There is a preference for separate oropharyngeal and anterior nares swab specimens but combining them in one collection tube is acceptable.
    - Nasopharyngeal swabs are also acceptable, but to date have had lower yield for positive test results in cases than oropharyngeal or anterior nares swabs.
- Conjunctival swab specimens from patients with conjunctivitis.
  - If conjunctivitis is present in both eyes, collect separate swabs from each eye and combine the swabs in a single collection tube with media.
  - To date, conjunctival specimens from patients with conjunctivitis have been more sensitive for H5 detection than other specimens in the current outbreak.
- Collect specimens using swabs with synthetic tips (e.g., polyester or Dacron®) and an aluminum or plastic shaft. CDPH does not recommend using swabs with cotton tips and a wooden shaft.
  - Specimens collected with swabs made of calcium alginate are **not** acceptable.
- Place swab(s) in specimen collection tube containing 2–3 mL of viral transport media (VTM) or universal transport media (UTM). Tighten cap to prevent leakage.

- Patients with severe respiratory disease should have multiple respiratory tract specimens obtained from additional sites (e.g., endotracheal aspirate, bronchoalveolar lavage, sputum) to increase the potential for avian influenza A(H5N1) virus detection.

Specimen storage and handling

- Freeze or refrigerate specimens after collection. Ship refrigerated specimens to VRDL on cold packs. Ship frozen specimens to VRDL on dry ice.
- Specimens submitted to local PHLs should follow specimen submission procedures for those laboratories.
- Specimens submitted to VRDL must be accompanied by a hard copy of the completed form generated in the VRDL Lab Web Portal.
- Contact VRDL directly if there are any questions about transporting specimens to VRDL by email at VRDL.Submittal@cdph.ca.gov or by phone during business hours at (510) 307-8585.

Suspected case information to collect and submit

When testing for avian influenza A(H5N1) in symptomatic people with exposure risk factors, obtain the information below. When shipping the specimen to a PHL capable of performing H5 subtyping, provide this information to the CDPH Covid Control Branch and VRDL.

- Basic demographic information
  - Symptom onset date, date reported to public health, signs and symptoms, illness severity, and specimen collection date.
- Any contact with known or possibly infected animals, their products, or their environments in the 10 days prior to symptom onset and a description of contact.
- Any contact with human avian influenza A(H5N1) case in the prior 10 days.
- If there has been workplace exposure:
  - CalCONNECT exposure ID or Farm ID
  - PPE use – and if used, the specific PPE used, particularly:
    - Type of eye protection (googles or face shield)
    - Type of respiratory protection (medical/surgical mask vs. N95 or other type of respirator)
- Influenza A testing results (including subtyping results), if performed and available
- If laboratory case confirmation occurs, it will also need:
  - If case received antiviral treatment prescription
  - Household member information
    - Number and ages
    - If household member(s) receive antiviral post-exposure prophylaxis (PEP) prescription

CDPH Definitions

Final case classification should follow CDC Novel Influenza A Virus Infections 2024 Case Definitions. For working definitions of persons under investigation, see:

Suspected case

Patient who presents with symptoms consistent with avian influenza A(H5N1) and had potential exposure to an infected animal or a confirmed or probable human case.

Presumptive case

Patient who tests positive for H5 at PHL, commercial, clinical or academic lab and is awaiting CDC confirmatory testing.

Probable case

Patient who tests positive for H5 at PHL, commercial, clinical or academic lab[‡] but CDC confirmatory testing for H5 is negative.

Confirmed Case

Patient who tests positive for H5 at a PHL, commercial, clinical, or academic lab and CDC confirmatory testing is also positive for H5 (if confirmatory testing needed). CDC does not need to conduct confirmatory testing if the patient tests positive for H5 at CDPH VRDL or Tulare PHL.

Home Isolation for Persons with Suspected, Probable or Confirmed Avian Influenza A(H5N1) Infection

To date, there have been no documented instances of human-to-human transmission of the avian influenza A(H5N1) virus (clade 2.3.4.4b) currently circulating in US poultry and dairy cows. In other countries, limited human-to-human transmission of other avian influenza A(H5N1) strains has occurred rarely. In addition, animal studies suggest this virus is not capable of spreading efficiently among people via respiratory aerosols compared to seasonal influenza viruses. Based on currently available information, CDPH recommends that suspected non-hospitalized cases isolate at home until health officials rule out avian influenza A(H5N1) infection and that non-hospitalized probable or confirmed cases remain in isolation until health officials release them.

Home Isolation

Until avian influenza A(H5N1) infection is ruled out or case is released from isolation:

- Stay home unless it is necessary to see a healthcare provider or go to work if the LHD has not recommended work exclusion.
- If taking influenza antiviral medication, the ill person and their household contacts should continue to take it as prescribed unless instructed to stop.
- If living with other people (or pets), the ill person should:
    - Avoid contact with other household members and pets to the extent possible.
        - Wear a well-fitting mask for source control when avoiding indoor contact with other household members is not possible.
        - Cover any coughs or sneezes and clean hands with soap and water afterwards.
        - Try to take extra care to avoid contact with people at increased risk for complications from seasonal influenza virus infections.
    - Clean hands with soap and water frequently, particularly before contact with other household members.
        - If soap and water are not available, use a 60% alcohol-based hand sanitizer to clean hands.
        - Other household members should also clean their hands frequently.

[‡] CDPH has received false positive H5 test results from academic and commercial labs. CDPH recommends additional testing at VRDL and/or CDC if false positive results are suspected.

- Avoid touching eyes if conjunctivitis is present.
- Clean and disinfect frequently touched items and surfaces at least daily using household disinfectants or wipes.
- Avoid sharing bedding, towels and wash cloths with others, particularly if there has been contact with the eyes, and launder such items before use by others.
- Avoid sharing personal items with others, particularly items that have had contact with the eyes.

When to discontinue home isolation

Discontinue isolation for **suspected** cases when a documented negative rRT_PCR test result for influenza A and, ideally for A(H5) at a PHL, rules out avian influenza A(H5N1).

Home isolation for **presumptive, probable or confirmed** avian influenza A(H5N1) cases should continue until all the following are true:

- Any eye infection, including redness (excluding subconjunctival hemorrhage) or drainage, resolves.
- Any fever (temperature of 100°F/37.8°C or higher) is gone for at least 24 hours without the use of fever reducing medication.
- Other symptoms are mild and improving.

Modified workplace isolation in non-healthcare settings

If individuals feel well enough to work, suspected, presumptive, probable and confirmed cases may work if they and their coworkers:

- Wear appropriate recommended PPE while working.
- Wash hands frequently with soap and water or if soap and water aren't available, a 60% alcohol-based hand sanitizer to clean hands.
- Wear well-fitting facemasks when with others in breakrooms or other areas where workers typically do not wear PPE, including shared transportation to and from work.

General recommendations

- Ill persons should monitor their symptoms and seek prompt medical attention if their illness worsens (e.g., difficulty breathing).
- If ill persons need healthcare, they should inform healthcare providers that they have or are receiving evaluation for avian influenza A(H5N1) and wear a respirator or facemask when entering any healthcare facility.

Recommendations for Influenza Antiviral Treatment

For detailed guidance on dosing and treatment duration, see CDC Interim Guidance on the Use of Antiviral Medications for the Treatment of Human Infection with Novel Influenza A Viruses Associated with Severe Human Disease and the CDC-issued Emergency Use Instructions (EUI) for Oseltamivir.

Symptomatic persons with avian influenza A(H5N1) exposure

Symptomatic persons with potential exposure to avian influenza A(H5N1) should receive empiric influenza antiviral treatment with oseltamivir as soon as possible. Clinical benefit is greatest when administration of antiviral treatment occurs early, especially within 48 hours of illness onset.

Hospitalized patients

Hospitalized patients who have suspected, presumptive, probable or confirmed infection with avian influenza A(H5N1):

- Should receive antiviral treatment with oral or enterically administered oseltamivir as soon as possible regardless of time since illness onset.
    - Do not delay antiviral treatment while waiting for laboratory testing results.
    - Pending further data, consider longer courses of treatment (e.g., 10 days) for severely ill hospitalized patients with novel, including avian influenza A(H5N1) virus infections.

Additional recommendations

The CDC-issued EUI for oseltamivir that differs from those for oseltamivir treatment of seasonal influenza includes:

- Initiation of treatment beyond 48 hours following symptom onset.
- Treatment and dosing regimens for term neonates under 2 weeks of age and preterm neonates and infants.

Recommendations for Influenza Antiviral Chemoprophylaxis

Antiviral chemoprophylaxis should be based on clinical and public health considerations, including:

- Type of exposure.
- Duration of exposure.
- Time since exposure.
- Infection status of the animals the person was exposed to.
- Whether the exposed person is at increased risk for complications with seasonal influenza.
- Health authorities do **not** routinely recommend antiviral chemoprophylaxis for workers who use proper PPE and experience no breaches in recommended PPE while handling sick or potentially infected animals as well as the raw products or contaminated environments (e.g., decontaminating infected environments, disposing of infected animal carcasses).

Consider antiviral chemoprophylaxis for persons meeting exposure criteria, particularly those with unprotected discrete high-risk exposures such as a splash of raw milk from an infected cow into the eyes.

Public health officials recommend antiviral chemoprophylaxis for household contacts of probable and confirmed human cases, as well as for neonates and infants less than one year of age exposed to avian influenza A(H5N1).

If a healthcare provider prescribes antiviral chemoprophylaxis

The recommendation is treatment dosing for the neuraminidase inhibitor oseltamivir (one dose twice daily) instead of the typical antiviral chemoprophylaxis regimen. For specific treatment dosage recommendations by age group, see CDC Influenza Antiviral Medications: Summary for Clinicians. Healthcare providers should consult the manufacturer's package insert (PDF) for dosing, limitations of populations studied, contraindications and adverse effects.

Dosing

If exposure was time-limited and not ongoing

- The recommendation is for five days of medication (one dose twice daily) from the last known exposure.

If the exposure is likely to be ongoing (e.g., household setting)

- The recommendation is for a duration of 10 days because of the potential for prolonged infectiousness from the avian influenza A(H5N1) case-patient.

Close contacts of a person with avian influenza A(H5N1) infection

- The recommendation is for oseltamivir twice daily (treatment dosing) instead of the once daily pre-exposure prophylaxis dosing.
- For detailed guidance, see CDC Interim Guidance on Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses, Use of Antiviral Medications for Chemoprophylaxis.

Monitoring Exposed People in Non-Healthcare Settings

Employers with workers with exposure to animals with avian influenza A(H5N1), their raw products, fecal material or environments must provide **medical services** for employees per the California Division of Occupational Safety and Health (Cal/OSHA) Aerosol Transmissible Diseases Standard. These services include medical surveillance (health checks) as recommended by CDC, CDPH, or the local health officer. The Cal/OSHA Aerosol Transmissible Diseases-Zoonotic Standard outlines these and other requirements. For more detailed CDPH monitoring information, email AvianInfluenza@cdph.ca.gov.

Persons with exposure to infected humans or animals

Monitor all persons in close, unprotected contact with humans or animals infected with avian influenza A(H5N1) as well as the raw products or contaminated environments of infected animals for 10 days after last exposure.

Close Contacts

Monitor close contacts of persons with probable or confirmed avian influenza A(H5N1) infection daily for 10 days after their last known exposure to the case (prior to the case's release from isolation).

Fever and symptom monitoring

Monitor exposed people for fever and symptoms.

Active monitoring

CDPH and CDC recommend daily active monitoring of exposed people either daily or on a modified schedule (i.e., days 0, 5 and 10).

Monitoring of exposed people for the signs and symptoms described above should occur either daily or on a modified schedule (i.e., days 0, 5 and 10) until 10 days after their last known exposure, or at a frequency or duration recommended by CDPH or the LHD. Perform monitoring in any of the following ways:

- The LHD conducts daily health checks; **or**
- For persons exposed on farms, the farm conducts daily health checks; **and**
  - Notifies the LHD immediately about symptomatic workers or workers who call in sick; **and**
  - Helps facilitate testing of ill workers.

In a dairy farm setting

- Monitoring should continue until the authorities release the farm from quarantine.

For commercial poultry, breeder or egg layer farms

- Monitoring continues during the following:
  - Depopulation
  - Composting (if done on site)
  - Cleaning and disinfecting of the premises

Upon completion of all these steps, the California Department of Food and Agriculture (CDFA) tests for virus and establishes the initial virus elimination (IVE) date. CDFA has agreed to share this date for each site with the impacted LHD. The IVE date can be considered as the last day of exposure and the final 10 days of monitoring can begin.

Actively monitor United States Department of Agriculture (USDA) responders

If responder had exposure to infected animals or contaminated environments and is a USDA **staff** member and no breaches in PPE occurred, passive monitoring is recommended. If a breach in PPE use occurred or the responder is a USDA **contractor**[§], active monitoring is not necessary.

Passive monitoring

If active monitoring is not possible (or not necessary), passive monitoring is acceptable. Inform each exposed person at the beginning of their monitoring period about the monitoring process, the symptoms and signs of concern, and when and how to contact the LHD symptoms develop, including after hours and on weekends. LHDs may recommend more frequent contact with exposed workers.

Case Finding

Case finding activities should commence if preliminary H5 subtype testing indicates a human infection with avian influenza A(H5N1) virus.

At a minimum:

- Identify close contacts (e.g., household contacts) of probable or confirmed cases. See Clinical and Exposure Information section for more information.
- Conduct active monitoring of close contacts of cases for symptoms associated with avian influenza A(H5N1) infection for 10 days from their last known exposure to a probable or confirmed case (until 10 days following release of case from isolation for household members).
- If a close contact develops symptoms or signs consistent with avian influenza A(H5N1) infection within 10 days of their last known exposure, promptly collect specimens for testing at a PHL.
  - See Testing section for additional information.
- Advise healthcare providers to collect specimens from patients meeting the symptoms and exposure criteria for influenza testing at a PHL.

[§] Experience from past avian influenza poultry outbreaks is that some USDA contractors are temporary workers who often lack sufficient training, access to medical care and other resources.

Additional Information on Avian Influenza A(H5N1)

CDPH

- Bird Flu webpage
- Bird Flu Worker Protection Flyers
- Raw Milk and Raw Dairy Products
- Avian Influenza A(H5N1) Information for Health Professionals
- CAHAN April 2, 2025: Updated Guidance on Recommended Specimens for Human Avian Influenza A(H5N1) Testing
- CAHAN February 7, 2025: Subtyping of Influenza A in Hospitalized Patients
- CAHAN December 6, 2024: Evaluation and Testing for Human Avian Influenza A H5N1 Infection
- CAHAN October 4, 2024: First Cases of Human Avian Influenza A(H5N1) in California & Preparation for CDPH Respiratory Virus Season (COVID-19, Influenza and RSV)
- Avian Influenza A(H5N1) Information for Local Health Departments
- VRDL Novel/Avian Influenza Virus (Human) PCR

Cal/OSHA

- Protection from Bird Flu

CDC

- General Information on Avian Influenza
- Avian Influenza Information for Health Professionals and Laboratorians

USDA

- HPAI in Livestock

World Health Organization (WHO)

- WHO Influenza (Avian and other zoonotic)

World Organisation for Animal Health (WOAH, previously Office International des Epizooties)

- Avian Influenza