AHCA/NCAL Infection Preventionist Hot Topic Brief

Key Points and Resources for H5 Bird Flu Preparedness

This "Hot Topic" edition provides the Infection Preventionist (IP) with a brief overview of the H5 Bird Flu illness along with access to the primary CDC links for IP reference as infection prevention and control programs (IPCP) ready their infection control emergency response plans to include the potential of having residents, visitors and staff with current or recent exposure or illness related to H5 Bird Flu. The two links included below will guide IPs easily to the primary CDC resources for H5 Bird Flu and healthcare related applications.

CDC: H5 Bird Flu — Current Situation | H5 Bird Flu: Current Situation | Bird Flu | CDC

CDC: Index of CDC Bird Flu resources per topic and audience | Site Index | Bird Flu | CDC

About H5 Bird Flu

H5 bird flu is an illness caused by a specific influenza virus (H5N1 Avian influenza A) that usually spreads between birds or other animals infected with the virus, but not between people. People rarely get bird flu, but when they do, it's most often through direct unprotected contact (no gloves, protective wear, facemasks, respirators or eye protection) with infected animals. People most often can become infected by contact with infected birds by touching surfaces contaminated with infected bird mucous, saliva or feces and then touching the mucous membranes of their eyes, nose or mouth,

or by breathing the virus in droplets in the air or possibly dust.

Background

Although human infections with Highly Pathogenic Avian Influenza A (HPAI) A(H5N1) virus are rare, having unprotected exposure to any infected animal or to an environment in which infected birds or other infected animals are or have been present increases the risk of infection. Therefore, people with work or recreational exposures to H5 virus-infected animals are at increased risk of infection and should follow recommended precautions.









A "panzootic" is an outbreak that involves an infectious disease in animals that spreads across a large geographic region or even worldwide, often affecting animals of more than one species. A similar global outbreak of infectious disease in humans is called a "pandemic." The panzootic of HPAI A(H5N1) viruses in wild birds has resulted in outbreaks among commercial poultry and backyard bird flocks and has spread to infect land and marine mammals, as well as domesticated animals. Sporadic human infections with HPAI A(H5N1) virus have been reported in 23 countries since 1997 with a case fatality proportion of >50%, but since 2018 most of the reported human infections have been mild and only a small number of H5N1 cases having been reported in humans since 2022.

Most human infections with H5N1 virus have occurred after unprotected exposures to sick or dead infected poultry. Since the spring of 2024, sporadic human infections that have been reported in the United States have been associated with poultry exposures or with dairy cow exposures associated with the ongoing multi-state outbreaks of HPAI A(H5N1) virus among dairy cattle and poultry. There is no evidence of sustained human-to-human H5N1 virus transmission in any country.

The H5 bird flu virus infects the respiratory and gastrointestinal tracts of birds causing birds to shed the virus in their saliva, mucus, and feces. Influenza A viruses can also infect the respiratory tract of mammals and cause systemic infection in other organ tissues. Human infections with avian influenza A viruses can happen when enough virus gets into a person's eyes, nose, or mouth or is inhaled. People with close or prolonged unprotected contact with infected birds (e.g., sick/dead poultry) or other infected animals (e.g., dairy cows) or their contaminated environments are at greater risk of infection. Illnesses in people from H5 bird flu infections have ranged from mild (e.g., upper respiratory symptoms, conjunctivitis) to severe illness (e.g., pneumonia, multi-organ failure) that can result in death.

Latest Concerns

There is a growing concern in the United States being voiced regarding the rapidly expanding outbreaks in dairy cattle in the US over the past several weeks. As of January 2, 2025, there are 16 states reporting a total of 915 dairy operations with infected cows. Even though there are human cases reported which were a result of exposure to the infected cows, they cases have been limited to mild symptoms that included conjunctivitis.



One subtype of bird flu, caused by avian influenza A(H5) virus, is spreading worldwide in wild birds and causing sporadic outbreaks in U.S. poultry and dairy cows. In addition to spreading to an increasing number of mammals, H5 bird flu has caused some rare human infections. As of January 17, 2025, there have been 67 cases in humans in the U.S. reported to CDC, all considered mild cases with the exception of one severe case reported recently in Louisiana.





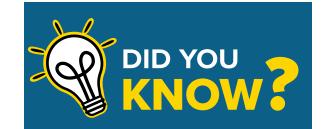


The California Governor recently declared a <u>State of Emergency</u> as more cases in the state's dairy cow population are being seen. The written declaration was issued to assist with providing more flexibility in resources in staffing and contracting for state and local agencies to incorporate into their current response plans being used to control the spreading outbreak situation in the state and for including flexibility related to current rules.

Also reported recently was the first severe case of H5 bird flu in a human in the U.S. An individual from Louisiana was reported to have become infected after an exposure to ill poultry in a backyard flock. Because of this, the CDC has issued recommendations for backyard flock owners, hunters and other bird enthusiasts for taking precautions against infection, including avoiding contact with sick or dead animals, wearing personal protective equipment when contact cannot be avoided, and not touching surfaces or materials contaminated with saliva, mucous or animal feces from birds or other animals with confirmed or suspected bird flu related illness.

Role of the Infection Preventionist and the Infection Prevention and Control Program

- It is important that Infection Preventionists (IPs) review current CDC recommendations along with any state or local public health requirements and develop any needed policies, procedures, or educational related H5 bird flu resources for the facility. Being aware and staying updated on new or emerging threats related to infectious diseases is part of the role of the IP.
- By staying abreast in what is happening with the H5 bird flu on a regular basis, the IP can provide current information to leadership as well as make recommendations for policy change when CDC recommendations are updated or changed.
- By providing the healthcare workers (HCWs) with easily understood updates and significant changes it allows them to fully understand how it applies to their roles and helps assure that any necessary prevention strategies and precautionary needs are able to be met by them as part of the emergency preparedness aspect of IPCP. It is important to provide factual, meaningful and easy to understand information on the emerging pathogen for staff, residents, families and visitors.
- Outbreak Readiness: this includes being aware of any type of outbreaks in the facility and being prepared with adequate levels of PPE and related supplies for transmission-based precaution needs. Refer to the following <u>CDC document</u> in the reference section below if needed: "Monitor and Manage III and Exposed Healthcare Personnel."



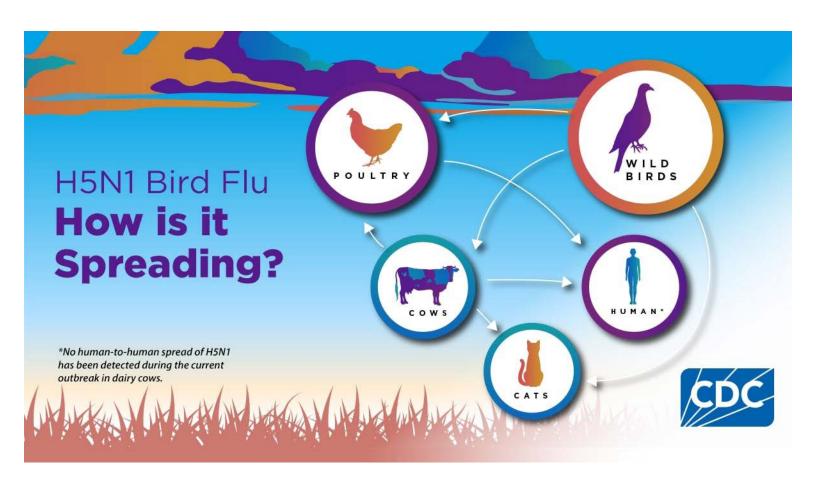
Bird flu is a disease caused by avian influenza A viruses that usually spread between birds, not people. There has been no known human to human transmission of H5 bird flu virus.







- All healthcare infection prevention and control programs (IPCPs) should review the current CDC recommendations and healthcare guidelines for clinical aspects of H5 bird flu and incorporate those that are applicable into facility infection control related policies, procedures, and resource material. This includes:
 - Management and prevention aspects of H5 bird flu in individuals who have reported exposure to an H5 bird flu infected source (as defined by CDC guidance)
 - Management and prevention of spread of H5 bird flu in confirmed or suspected cases in residents,
 visitors and staff
 - Education and training for facility staff on H5 bird flu illness including signs and symptoms. Additionally, training on proper use of Standard Precautions and Transmission-based Precautions related to H5 bird flu and when to use different aspects as related to those with illness, those with exposure or those in recovering phase for residents, visitors or staff members.
- Standard, Contact, and Airborne Precautions are recommended for patients presenting for medical care or evaluation who have illness consistent with influenza and recent exposure to birds or other animals potentially infected with H5N1 bird flu virus. This information and more can be found at the CDC link: <a href="InterimGuidance 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 | Bird Flu | CDC.









General Prevention: Avoid sources of exposure

The best way to prevent H5 bird flu is to avoid sources of exposure whenever possible. Infected birds shed avian influenza A viruses in their saliva, mucous, and feces and other infected animals may shed avian influenza A viruses in respiratory secretions and other body fluids (e.g., cow milk). Avian influenza A viruses also can infect the respiratory tract of mammals and cause infection in other organ tissues. People rarely get avian influenza A virus infection; however, human infections with avian influenza viruses can happen when enough virus gets into a person's eyes, nose or mouth, or is inhaled. This can happen when virus is in the air (in droplets or possibly dust) and a person breathes it in, or when a person touches something that has virus on it and then touches their mouth, eyes or nose. Avian influenza A virus infections in people happen most often after close, prolonged and unprotected (no gloves or other protective wear) contact with infected birds or other animals. People with close or prolonged contact with infected birds or animals or their contaminated environments are at greater risk of infection.

What to do to protect yourself

- As a general precaution, whenever possible, people should avoid direct contact with sick or dead wild birds, poultry, and other animals and observe them only from a distance.
- If you must have direct/close contact with sick or dead wild birds, poultry, or other animals, wear recommended personal protective equipment (PPE). Wild birds can be infected with avian (bird) influenza (flu) A viruses even if they don't look sick.
- Do not touch surfaces or materials (e.g., animal litter or bedding material) contaminated with saliva, mucous, or animal feces from wild or domestic birds or other animals with confirmed or suspected avian bird influenza A virus infection.
- Do not touch or consume raw milk or raw milk products, especially from animals with confirmed or suspected avian influenza A virus infection.

What to do if you are exposed

Contact your state or local health department if you have been potentially exposed for directions on what to monitor for. Signs and Symptoms are very similar to human influenza and other respiratory viruses. The incubation period can be up to 10 days so individuals with an exposure should be monitored for 10 days after your last exposure for the following symptoms:

- Fever (Temperature of 100°F [37.8°C] or greater)
- Feeling feverish/Chills (fever may not always be present)



The current general public health risk is low for H5 bird flu, and CDC is watching the situation carefully and working with states to monitor people with exposures to animals that are infected or potentially infected with avian influenza A viruses. CDC is using its flu surveillance systems to monitor H5 bird flu activity in people.







- Cough
- Sore throat
- Difficulty breathing/shortness of breath
- Eye tearing, redness or irritation
- Headaches
- Runny or stuffy nose
- Muscle or body aches
- Diarrhea

It is important to watch for symptoms and follow your local or state health department's instructions even if your contact was short and you took safety measures. Report any symptoms to your state or local health department right away. Healthcare personnel should report to their employee health department as well and follow current public health recommendations for medical leave and return to duty criteria and instructions.

Resources/References:

- 1. CDC: H5 Bird Flu: Current Situation (accessed 12/26/24).
- 2. CDC: Index of CDC Bird Flu resources per everyone/healthcare personnel/public health lists Site Index | Bird Flu | CDC (accessed 12/26/24).
- 3. CDC: Bird Flu Exposure Handout What To Know About Bird Flu (accessed 12/26/24).
- 4. CDC: Prevention and Antiviral Treatment of Avian Influenza A Viruses in People Bird Flu | CDC (accessed 12/26/24).
- 5. New York Times: California Declares State of Emergency over Bird Flu in Cattle (accessed 12/26/24).
- 6. CDC: Infographic of Bird Flu Spread H5N1 Bird Flu How Is It Spreading?
- 7. American Society of Microbiology, July 2022: Avian Influenza: Past, Present, Future.
- 8. 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 | Bird Flu | CDC (accessed 1/6/2005).

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