

Disease Outbreak News

Avian Influenza A(H5N5) - United States of America

5 December 2025

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Situation at a glance

On 15 November 2025, WHO was notified of the 71st confirmed human case with influenza A(H5) since early 2024 in the United States of America— the first human case reported in the United States of America since February 2025. On 20 November, U.S. Centers for Disease Control and Prevention (CDC) laboratory sequencing verified the virus as influenza A(H5N5), representing the first globally reported human case caused by an influenza A(H5N5) virus. The investigation by health authorities in the United States of America is ongoing. Contact tracing identified no further cases amongst contacts, and there is currently no evidence of human-to-human transmission. Due to the constantly evolving nature of influenza viruses, WHO continues to stress the importance of global surveillance to detect and monitor virological (including genomics), epidemiological and clinical changes associated with emerging or circulating influenza viruses that may affect human health and timely virus sharing for risk assessment. Based on available information, the WHO currently assesses the overall public health risk posed by A(H5) viruses as low. However, for individuals with occupational risk of exposure, the risk of infection is considered low to moderate.

Description of the situation

On 15 November 2025, WHO was notified of a confirmed human infection with influenza A(H5) in the United States of America—the first reported in the country since February 2025 and the 71st since early 2024. On 20 November, CDC laboratory sequencing verified the virus as influenza A(H5N5), representing the first human case of this subtype reported globally. The patient was an adult with underlying medical conditions residing in Washington State. The patient developed symptoms including fever during the week ending 25 October 2025. During the week ending 8 November 2025, the patient was hospitalized with a serious illness and subsequently died on 21 November.

Respiratory specimens collected at the healthcare facility tested positive for influenza A virus by RT-PCR and were presumptive positive for influenza A(H5) at the University of Washington. The specimens were sent to the Washington State Public Health Laboratory, where influenza A(H5) was confirmed using the CDC influenza A(H5) assay. The sample was received at the CDC on 19 November. Sequencing conducted at the University of Washington and at the CDC indicated this was an influenza A(H5N5) virus belonging to the H5 haemagglutinin (HA) clade 2.3.4.4b^[1].

Public health investigation revealed that the patient kept backyard poultry and domestic birds. Additional epidemiological investigations are under way and include active monitoring of anyone who was in close contact with the patient.

Epidemiology

Animal influenza viruses typically circulate within animal populations, but some have the potential to infect humans. Human infections are predominantly acquired through direct contact with infected animals or exposure to contaminated environments. Based on the original host species, influenza A viruses can be categorized such as avian influenza, swine influenza, and other animal-origin influenza subtypes.

Human infection with avian influenza viruses may result in a spectrum of illness, ranging from mild upper respiratory tract symptoms to severe, life-threatening conditions. Clinical manifestations may include conjunctivitis, respiratory, gastrointestinal symptoms, encephalitis (brain swelling), and encephalopathy (brain damage). In some cases, asymptomatic infections with the virus have been reported in individuals with known exposure to infected animals and environments.

A definitive diagnosis of human avian influenza infection requires laboratory confirmation. WHO regularly updates its technical guidance on the detection of zoonotic influenza, utilizing molecular diagnostic methods such as RT-PCR. Clinical evidence indicates that certain antiviral agents, particularly neuraminidase inhibitors (e.g., oseltamivir, zanamivir), have been shown to shorten the duration of viral replication and improve patient outcomes in some cases. This antiviral agent should be administered within 48 hours of symptom onset.

High pathogenicity avian influenza A(H5) clade 2.3.4.4b A(H5N5) viruses have been detected in North America in wild birds and wild mammals since at least 2023.^[2] This is the first laboratory-confirmed human infection with an influenza A(H5N5) virus in the United States of America and reported globally.

Public health response

The CDC and State public health officials have initiated several public health response measures:

- **Public health officials are conducting surveillance in the area, that included additional case investigations and contact tracing.**
- **Since March 2024, at least 30,100 people have been monitored, and at least 1260 have been tested after exposure to infected animals in the USA.**
- **The CDC conducts enhanced routine surveillance to detect and monitor influenza activity, including infections caused by novel influenza viruses such as avian influenza A(H5).**
- **The CDC recommends that state and local public health departments monitor individuals exposed to birds or other animals (including livestock) suspected of being infected with avian influenza A viruses for the onset of signs and symptoms for up to 10 days after their last exposure. Individuals who develop signs or symptoms of respiratory illness and/or conjunctivitis should be tested for influenza.**
- **The CDC has issued recommendations for the public to avoid unprotected contact with sick or dead animals, including wild birds, poultry, other domestic fowl, and other wild or domestic animals, as well as animal droppings, litter, or materials contaminated by birds or other animals suspected of being infected with the influenza A(H5) virus.**
- **The CDC has interim recommendations for prevention, monitoring, and public health investigations of avian influenza A(H5) virus infections in people. The CDC has also updated recommendations for occupational protection and the use of personal protective equipment (PPE).**

WHO risk assessment

Human infections with avian influenza A(H5) viruses are considered unusual, as A(H5) viruses remain primarily avian influenza viruses. However, in rare cases, individuals exposed to infected animals or contaminated environments can become infected with A(H5) viruses. Influenza A(H5N5) viruses are detected in birds, including wild birds and domestic poultry, and sometimes in non-human mammals. When avian influenza viruses circulate in poultry populations, there is an inherent risk of human infection through exposure to infected birds or contaminated environments. As such, sporadic human cases are expected. The case had underlying conditions and subsequently died. The investigation by health authorities in the United States of America is ongoing and included contact tracing which identified no further cases amongst contacts, and there is currently no evidence of human-to-human transmission.

This is the 71st confirmed human case of A(H5) in the United States of America since early 2024, and the first since February 2025. To date, no human-to-human transmission has been identified in any of the A(H5) cases reported in the United States of America. From a global perspective, while a few events with limited human-to-human transmission of zoonotic influenza A(H5) have been described between 1997 and 2007, sustained human-to-human transmission has not been detected to date.

Based on available information, the WHO currently assesses the overall public health risk posed by A(H5) viruses as low. However, for individuals with occupational risk of exposure, the risk of infection is considered low to moderate.

The risk assessment will be updated as needed, based on any new epidemiological or virological information related to this event.

WHO advice

This event does not change the current WHO recommendations on public health measures and [surveillance of influenza](#).

Given the current situation of influenza viruses at the human-animal-environmental interface, WHO does not recommend special traveler screening at points of entry or any restrictions.

Due to the constantly evolving nature of influenza viruses, WHO continues to stress the importance of global surveillance to detect and monitor virological (including genomics), epidemiological and clinical changes associated with emerging or circulating influenza viruses that may affect human health and timely virus sharing for risk assessment.

When humans have been exposed to an influenza A virus outbreak in domestic poultry, wild birds, or other animals or when a human case of infection is identified, enhanced surveillance of potentially exposed human populations becomes necessary. This surveillance should consider the healthcare-seeking behaviour of the population and may include a range of active and passive approaches, such as enhanced surveillance in influenza-like illness (ILI)/severe acute respiratory infection (SARI) systems, active screening in hospitals, and among groups at higher occupational risk of exposure. It should also consider other sources, such as traditional healers, private practitioners, and private diagnostic laboratories.

Given the observed widespread occurrence of avian influenza in poultry, wild birds and some wild and domestic mammals, the public should avoid contact with any sick or dead animals. Individuals should report deceased birds and mammals or request their removal by contacting local wildlife or veterinary authorities. Eggs, poultry meat, and other poultry products should be properly cooked and handled during food preparation. Due to potential health risks, consumption of raw milk should be avoided. WHO advises consuming pasteurized milk and if pasteurized milk is not available, heating raw milk until it boils makes it safer for consumption.

In the case of a confirmed or suspected human infection caused by a novel influenza A virus with pandemic potential, including avian influenza viruses, early clinical management, a thorough epidemiologic investigation of animal exposure history, travel, and contact tracing should be conducted even while awaiting the confirmatory laboratory results. The epidemiologic investigation should also include early identification of unusual events that could signal person-to-person transmission of the novel virus. Clinical samples collected from confirmed or suspected cases should be tested and sent to a WHO Collaborating Center^[3] for further characterization. Additional samples should be collected from animals, the environment or any foods suspected to be sources of infection.

WHO advises travelers to countries with known animal influenza outbreaks to avoid farms, live animal markets, areas where animals may be slaughtered and contact with any surfaces potentially contaminated by animal feces. Travelers should also wash their hands frequently with soap and water and should follow good food safety and good food hygiene practices. If infected individuals from affected areas travel internationally, their infection

may be detected either during travel or upon arrival. However, further community level spread is considered unlikely, as this virus has not yet acquired the ability to transmit easily among humans.

Poultry workers should take additional health precautions as they are at higher risk of exposure to avian influenza and other zoonotic diseases due to their close contact with birds and potentially contaminated environments. Farm workers who have direct or close contact with animals or materials infected or contaminated with avian influenza A(H5) virus, should wear appropriate personal protective equipment (PPE) to minimize their risk of exposure.

All human infections caused by a novel influenza A virus subtype are notifiable under the International Health Regulations (IHR,2005) and State Parties to the IHR are required to immediately notify WHO within 24 hours of any laboratory-confirmed case of a recent human infection caused by an influenza A virus due to the potential to cause a pandemic. Evidence of illness is not required for this report. WHO has updated the influenza A(H5) confirmed case definition on the [WHO website](#).

Currently, there are no readily available vaccines against influenza A(H5) virus for humans. Candidate vaccine viruses for pandemic preparedness have been selected against several A(H5) clades. Existing seasonal influenza vaccines are unlikely to provide protection to against avian influenza A(H5) viruses, based on currently available data. Close monitoring of the epidemiological situation and serological investigations are essential for assessing risk and adjusting risk management measures as needed..

WHO does not recommend any restriction on travel to or trade with the United States of America, based on the information available on the current event.

Further information

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Citable reference: World Health Organization (5 December 2025). Disease Outbreak News; Avian Influenza A(H5N5)- United States of America. Available at: <https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON590>