

Overseas emerging respiratory virus intelligence

Influenza A(H5N1) - Situation at a glance

Oceania

Influenza A(H5N1) clade 2.3.4.4b

DETECTED in **TWO** birds in NZ and **123** birds in Australia

Global

Since the last monthly update on 16 July:

ONE NEW CASE of influenza A(H5N1) in humans (in Cambodia).

Sporadic human detections of different avian and swine influenza viruses continue.

Public health risk assessment - New Zealand



Overall public health risk of **avian influenza A (H5) Clade 2.3.4.4b** to Aotearoa New Zealand is **LOW**.

- **VERY LOW** likelihood of infection,
- Potentially **MODERATE** health impacts of the disease,
- **VERY LOW** likelihood of human-to human transmission; and
- **VERY LOW** likelihood of importation of a human case of influenza A (H5) Clade 2.3.4.4b

World Health Organization

Global public health risk for currently known viruses at the human animal interface, including influenza A(H5N1), remains **LOW**

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Major new content as of 6 August 2026 is highlighted in **green**. The next scheduled update of this report is on 27 August 2026. Please refer to the 16 July 2026 version for more detail on previously reported cases and detections available here [Digital library](#).

Highly Pathogenic Avian Influenza A(H5N1)

Clade 2.3.4.4b

New Zealand

As of 6 August, New Zealand has had no further detections of H5 high pathogenicity avian influenza in birds since the last reported detection on 17 July 2026, in a Kāhu (swamp harrier hawk) in the Wairarapa.[1] This follows the detection in in an ocean-going wild sea bird (brown skua) found on Petone beach, Wellington which was the first ever detection of H5 in New Zealand.. There is no evidence of mass mortality in wildlife, no evidence of transmission between wild birds, and no detections in poultry. [2]

Australia

As of 6 August 2026, Australia has 123 confirmed detections of H5 clade 2.3.4.4b bird flu in wild seabirds. There have been no detections in poultry or the wider agricultural industry. These cases

have come from birds found across Australia: South Australia (87 birds), Victoria (23), Western Australia (10), New South Wales (2), and Queensland (1). The risk to human health remains low.[3]

On 4 August 2026, Australia confirmed its first mass mortality event due to H5 bird flu following investigation into over 80 sick or dead wild birds. There have been no detections in poultry or other agricultural systems.[3]

Avian influenza A(H5N1) clade 2.3.4.4b has spread throughout poultry and wild birds across Africa, Asia, Europe and the Americas since 2020, and was detected in Antarctica in 2023 and a sub-Antarctic Australian territory in 2024. Before June 2026 it had never been detected in New Zealand, Australia or Pacific Island Countries or Territories. [4-8]

United States

In Idaho, USA, there has been a recent surge in H5N1 cases in dairy herds with transmission occurring between cattle, with 40 confirmed cases in the 30 days ending 29 June 2026.[9, 10]

Spillover events of influenza A(H5N1) clade 2.3.4.4b from birds into dairy cattle in the US have been reported, with genotype B3.13 first detected in cattle on 25 March 2024, and two spillovers of genotype D1.1, the predominant strain circulating in migratory wild birds in the US, were detected in February 2025.[11, 12]

As of May 2026, influenza A(H5N1) detections in terrestrial and marine mammals continue to be reported in the US, affecting 1,107 cattle in 20 states.[9] Notably, influenza A(H5) clade 2.3.4.4b was also detected for the first time in northern elephant seals in February 2026 in California, involving a virus of A3 genotype.[7]

There have been no human cases of avian influenza A(H5) detected in the US in 2026 (as of 28 May).

Since 2024, the US Centers for Disease Control and Prevention (CDC) has reported 41 human cases of infection with influenza A(H5) among dairy farm workers, mostly in California.[13, 14] The most recently detected case was reported in February 2025. The majority of cases have been due to genotype B3.13, have had mild illnesses and recovered.

The CDC has also reported 24 confirmed cases of influenza A(H5) in poultry farm or culling operations workers, with the last case reported in February 2025. [13, 14] Genotypes B3.13, D1.1 and D1.3 have been detected among these cases. [15] Three cases have also been detected in owners of infected backyard poultry flocks, with the last case reported in October 2025 [13, 14] [16].

Since 2024, the US have confirmed three human cases of infection with influenza A(H5N1) where the source of infection is unknown; one in Missouri and two in California.[17-20] There is no evidence of human-to-human transmission in any of these cases.

According to a report issued in May 2026, the first cat-to-human transmission of influenza A(H5N1) clade 2.3.4.4b was documented in Los Angeles County, California. Between November 2024 and January 2025, 19 domestic cats in five households became severely ill after consuming commercially purchased raw milk, raw poultry or raw pet food. Nine of them tested positive for influenza A(H5N1) clade 2.3.4.4b genotype B3.13, and 14 animals died or were euthanized. In

April 2025, a serosurvey conducted on 25 exposed persons demonstrated serologic evidence of A(H5N1) infection after occupational exposure in an asymptomatic veterinary professional. [21]

Canada

On 13 November 2024, the Public Health Agency of Canada confirmed their first domestically acquired human case of infection with influenza A(H5N1) in British Columbia.[22] While the source was never identified, the virus was clade 2.3.4.4b genotype D1.1, the same strain circulating in wild birds and poultry in British Columbia at the time.[23]

Canada has not reported any further cases since this one.

United Kingdom

On 27 January 2025, the United Kingdom Health Security Agency (UKHSA) reported a human case of infection with influenza A(H5N1).[24] The case was a poultry farm worker exposed to birds infected with genotype D1.2. Prior to this, the UK had detected two cases in poultry workers involved in depopulation activities.

On 24 March 2025, the United Kingdom Department for Environment, Food & Rural Affairs reported the world's first detection of influenza A(H5N1) in sheep.[25]

Mexico

On 2 April 2025, Mexico reported their first human case of infection with influenza A(H5N1), confirmed as clade 2.3.4.4b genotype D1.1, in a child with no underlying conditions, who died in hospital.[26]

Clade 2.3.2.1e (previously classified as clade 2.3.2.1c)

A reassortment of A(H5N1), with surface genes from clade 2.3.2.1.c and internal genes from clade 2.3.4.4b has been circulating in the Greater Mekong subregion, including Cambodia and Vietnam, since 2023 and has caused human infections.[27]

In 2025, Cambodia has reported 18 cases of influenza A(H5N1).[28] The majority of cases were exposed to sick poultry prior to illness onset.[29] Since February 2023, Cambodia has reported 33 cases of influenza A(H5N1) to the WHO (as of 5 November 2025), of which 14 were fatal (42%) and all cases with known clade were clade 2.3.2.1e.

On 18 April 2025, Vietnam reported a human case of infection with A(H5N1) clade 2.3.2.1e.[30] The child had an underlying health condition and developed encephalitis. They had contact with sick birds two weeks before illness onset.

Clade 2.3.2.1a

On 09 February 2026, Bangladesh notified a laboratory-confirmed human case of avian influenza A(H5N1) clade 2.3.2.1a in a child from Chattogram Division, with onset of disease on 21 January 2026. The child had exposure to household poultry, which died shortly before the case's illness onset. This is the first confirmed human case of avian influenza A(H5) reported in Bangladesh in 2026.[31]

In July 2025, Bangladesh reported its fourth human case of Avian influenza A(H5N1) in a child who has since recovered.[32] All three previous cases reported in 2025 also survived.

There have been four reported human cases of influenza A(H5N1) acquired in India to date.[33, 34]

On 22 May 2024, the Victorian Department of Health in Australia reported the retrospective identification of a human case of infection with influenza A(H5N1) clade 2.3.2.1a. The case was a child who acquired infection in India in March before returning to Australia and recovered following severe infection. There was no evidence of onwards human transmission. This clade has previously been detected among birds in India.[35]

Clade unknown

In the week ending 11 July, there was one new case of avian influenza A (H5N1) reported in a girl from Phnom Penh, Cambodia. The symptom onset date was 30 June 2026. The case was likely exposed to poultry near her place of residence. [36]

In the week ending 6 June 2026, there were two new human cases of avian influenza A(H5N1) reported, one in Bangladesh and one in India. The case in Bangladesh was a child with symptom onset 27 March 2026 and exposure to household poultry. The case in India was a child with symptom onset 19 March 2026 and indirect exposure to poultry. [37]

On 21 April 2026, a human case of avian influenza A(H5N1) was reported in a woman in her 60's from the Svay Rieng Province in Cambodia. The case had contact with poultry, and sick and dead poultry had been identified in the case's household and village. The case has been isolated and treated in hospital and close contacts have been followed up.[38] This is the fourth reported human case in Cambodia in 2026 to date.

The other three human cases of Avian influenza A(H5N1) in Cambodia in 2026 were identified on 29 March, at Oddar Meanchey province, in a 3-year-old male [39], on 15 March 2026 at Banteay Meanchey province in a 45-year-old female [40], and on 15 February at Kampot province in a 30-year-old male.[41] All cases had contact with sick or dead backyard poultry before disease onset.

No clade information is available for cases detected in Cambodia in 2026, but Clade 2.3.2.1e has been circulating among birds in Cambodia and has previously been detected in human cases. [38]

Cambodia reported 18 human cases of avian influenza A(H5N1) in 2025, mostly associated with exposure to infected poultry. [40]

On 10 May 2025, China notified the WHO of a human case of infection with influenza A(H5N1), The case was detected by routine screening on entry into the country from Vietnam.[42] The case was hospitalised and has since recovered. The most likely source of infection was domestic poultry.

On 14 November 2024, a human case of infection with A(H5) was reported in Vietnam.[43] The N gene has not been reported for this case, although A(H5N1) detections in wild birds from the area were clade 2.3.2.1c. This case was exposed to sick poultry prior to illness onset and died from their infection.

Other human cases of avian and swine influenza

From 24 to 30 July 2026, four new cases of human infection with avian influenza A(H9N2) from China were reported to the WHO. All cases had exposure to poultry, either directly (one case), or through live-poultry stalls or wet market visits (three cases). Cases were a 72-year-old female from Jiangxi Province (symptom onset 5 July), a 12-year-old male from Jiangsu Province (symptom onset 6 July), a three-year-old female from Gansu Province (symptom onset 11 July), and a 58-year-old female from Yunnan Province (symptom onset 13 July). [44]

From 10 to 16 July, three new cases of human infection with avian influenza A(H9N2) were reported from China. All three cases had exposure to live poultry. Cases were a 4-year-old male from Guangxi Province (symptom onset 26 June), a 4-year-old male from Jiangsu Province (symptom onset 22 June), and a 44-year-old male from Guangdong Province (symptom onset 26 June). [36]

On 25 June 2026, a new case of human infection with swine influenza A(H3N2)v was reported in Brazil. The case was a child with symptom onset 12 June who had contact with his grandfather who worked at a swine nursery. [45]

On 30 January 2026, the first laboratory-confirmed human infection with swine influenza (H3N2)v was reported in China. The case was a 2-year-old boy from the Yunnan Province who had symptom onset on 20 January 2026. The presence of pigs and poultry near the living area suggested the possibility of indirect environmental exposure. [46]

From 26 June to 2 July, one new case of human infection with avian influenza A(H9N2) was reported in a female child from Guangdong Province, China. Symptom onset was 12 June 2026 and the case had exposure to the live poultry market. [47]

From 5 to 18 June 2026, two new cases of human infection with avian influenza A(H9N2) were reported. The first was in a female child from Guangxi Province, China, who had regular exposure to backyard poultry and live poultry wholesale market. Symptom onset was 31 May 2026. The second was in a male child from Hong Kong who likely had indirect exposure to a poultry-contaminated environment. Symptom onset was 9 June 2026. [48, 49]

In the week ending 4 June, one new case of human infection with avian influenza A(H9N2) was reported in a male child from Yunnan Province, China, with symptom onset 17 May 2026. The case had exposure to environments where poultry were present. [50]

In the week ending 28 May 2026, one new case of human infection with avian influenza A(H9N2) was reported in an elderly female from Guangxi Province, China, with symptom onset 4 May 2026. The case had exposure to live poultry from a market. [51]

In the week ending 07 May 2026, one new case of human infection with avian influenza A(H5N6) virus was reported in a 55-year-old female from Chongqing Municipality, China, with symptom onset on 16 April. She had purchased, slaughtered and consumed poultry, with samples collected from a cutting board testing positive for influenza A(H5). [52]

A human case of swine influenza A(H1N2)v was reported week ending 2 May 2026 in a child aged <18 years in Nebraska, United States. The case had no exposure (either direct or indirect) to

swine. This is the second human infection with this variant influenza reported in the 2025-2026 season and first reported in 2026 in the United States. [53]

In May 2026, there were three cases of human infection with avian influenza A(H9N2) reported in China (with onsets in April and May). The first case, reported week ending 21 May, was in a male child from Yunnan Province, with a history of exposure to backyard poultry. [54] The second case, reported week ending 14 May, was in a three-year-old girl from Sichuan Province with exposure to a live poultry market. [55] The third case, reported at the end of April, was in a one-year-old male child with no underlying disease from the Guangxi province. Samples from the household were negative, but five samples collected from a market nearby all tested positive. [56]

Five human cases of influenza A(H9N2) were reported in China during April 2026 (with onsets in January, February and March). Four cases were in children aged 5 years and younger and one was in an adult male. The first was a three-year-old boy from Guangdong Province. The second case was a 63-year-old male from Guangxi Province. The third case was a five-year old boy in the Guangdong Province. The fourth case was a two-year-old girl in the Yunnan Province. The fifth case was a two year old boy from Jiangxi Province. [57] [38]

On 3 April 2026 an influenza A(H7N7) low pathogenic avian influenza virus was notified in Taiwan. The case is in his 70s and had exposure to poultry. This is the first avian influenza A(H7N7) reported since 2013. [58]

On 26 March, the first human case of influenza A(H9N2) was reported in the EU/EEA. The case was reported in the Lombardy region of Italy but had returned from a non-European country where the virus had previously been identified in birds. The case remains in hospital isolation. [59]

Two new human cases of swine influenza were reported in Yunnan province, China, in early 2026. The first case was of swine influenza A(H1N1)v reported on 03 February in a child with onset of mild illness on 20 January 2026. The second case was of swine influenza A(H1N2)v, also in a child, with disease onset on 30 January 2026. The case was hospitalized and recovered. Both cases had reported exposure to domestic pigs prior to illness onset and are not epidemiologically linked.[31]

In February 2026, one human case of swine influenza A(H1N1)v was reported from Catalonia, Spain. The case has no known history of exposure to pigs or a contaminated environment and was detected as part of the acute respiratory infections surveillance system. The case remains asymptomatic and epidemiological investigations are ongoing. [60]

From 13 to 19 February 2026, two new cases of influenza A(H9N2) were reported, both from China. One was in a two-year-old male in Hunan Province and one in a 73-year-old female in Guangdong Province. Both had exposure to domestic parrots and live poultry market.

On 9 February 2026, a new case of avian influenza A(H10N3) was reported in a 34-year-old male from Guangdong province in China. The case had exposure to live poultry. [61] Since 2021, a total of seven cases of human avian influenza A(H10N3) virus infection have been reported globally and all were from China.[31]

On 26 January 2026, Brazil confirmed a human case of swine influenza A(H3N2)v in a male child in Mato Grosso do Sul, with symptoms onset on 01 September 2025. The patient had no reported comorbidities or recent travel history. Epidemiological investigation reported that the individual was an agricultural school student, and while he did not have direct contact with pigs, his classmates presented with ILI symptoms during the period.[31]

On 12 December 2025, Eurasian avian-like swine influenza A(H1N1)v virus in a human was reported from China in a 60-year-old male from Yunnan province. The case reported exposure to backyard pigs.[62]

From 20 December 2025 to 22 January 2026, there were three reports of influenza A(H9N2) detections in humans. All three cases were in China and had exposure to poultry.[63]

On 14 November 2025, the Washington State Department of Health in the US reported the first known human case influenza A(H5N5) infection globally.[64] The case, an older adult with underlying conditions, was hospitalised and has died.[65] The virus has been confirmed as clade 2.3.4.4b genotype A6, which has commonly been detected in birds and mammals in North America. Investigation by public health officials identified the most likely source of infection as the case's backyard poultry flock which had exposure to wild birds. No additional cases have been detected. The WHO risk assessment is the same as other influenza A(H5) viruses; low in the general population and low to moderate in occupationally exposed individuals.[66]

On 21 November 2025, the US CDC reported a human case of infection with influenza A(H1N2) variant virus in Vermont.[67] The case recovered from their illness. The investigation did not determine whether the case was exposed to swine or other animals prior to illness onset, or whether any close contacts were symptomatic. No additional cases have been identified.

From 30 September to 5 November 2025, one human case of infection with influenza A(H5N2) was reported in Mexico and two human cases of infection with influenza A(H9N2) were reported in China.[68] The case of influenza A(H5N2) was hospitalised. Samples collected from animals at the case's residence, including birds and a dog, tested positive for influenza A(H5). Samples collected from close contacts tested negative. This is the second case of influenza A(H5N2) in Mexico since 2024. The two cases of influenza A(H9N2), reported in different provinces of China, both had exposure to poultry prior to illness onset and influenza A(H9) was detected in environmental samples collected during the investigations.

Australia has responded to 20 outbreaks of HPAI H7 in commercial and domestic poultry flocks since 2024, and is now considered free of influenza H7 in poultry.[69] There have been no associated human cases.

International risk assessment for influenza at the human-animal interface

As of 31 March 2026, the WHO advises that the overall public health risk from currently known influenza viruses at the human-animal interface remains low. Sustained human to human transmission of these viruses is currently considered unlikely; however, infections with viruses of animal origin are not unexpected at the human-animal interface wherever these viruses circulate in

animals.[31] Consistent with this, the joint FAO/WHO/WOAH assessment on influenza A(H5) virus (updated on 18 May 2026, based on data as of 1 March 2026), concludes that the global public health risk remains low. The risk for occupationally or frequently exposed individuals (e.g., those in contact with backyard poultry) is assessed as low to moderate, depending on the effectiveness of risk mitigation, hygiene measures in place, and the local avian influenza epidemiological situation. While additional human infections among exposed populations are likely to occur, the overall public health impact at the global level remains minor [7]

Middle East respiratory syndrome coronavirus (MERS-CoV)

As of 4 May 2026, no new MERS cases have been reported by the WHO or national health authorities since the beginning of 2026. A total of 2647 MERS cases, including 959 deaths, have been reported worldwide since April 2012, with the majority of cases reported in Saudi Arabia. [70]

On 3 December 2025, the French Ministry of Health reported two imported cases of MERS-CoV who travelled in the same group to the Arabian Peninsula. No additional cases were detected. These are the first cases of MERS-CoV detected in Europe since 2018.[71]

Twelve cases of MERS-CoV have been detected in Saudi Arabia in 2025 (as of 3 November).[72] This includes a cluster of seven cases, including six healthcare workers who acquired infection while caring for one patient.

As of 29 January 2026, the WHO's risk assessment remains moderate at the global and regional levels. The WHO considered that the exportation of cases from the Arabian Peninsula to France in December 2025 and the healthcare-associated clusters reported by Saudi Arabia during 2024-2025, demonstrates the ongoing risk of international spread to non-endemic countries and reflect the persistent circulation of MERS-CoV in the Middle East.[73] The WHO expects additional cases of MERS-CoV to be reported from the Middle East and/or other countries where MERS-CoV is circulating in dromedaries.

In March 2026, early evidence suggests the first documented transmission of MERS-CoV from camels to occupationally exposed individual in Somalia. This signifies a documented spillover event that warrants monitoring.[74]

To date, evidence from both molecular and serologic testing of reported cases indicates that human-to-human transmission of MERS-CoV remains limited. [75]

Situational awareness: Global response limitations

Surveillance and response capacity for emerging viruses is likely to be affected by reduced funding for global health security and One Health programmes led by international organisations such as WHO and FAO as well as national agencies overseas.[76-78]

References

1. Department of Conservation, *Bird flu work steps up – second case confirmed*. 2026.
2. Ministry for Primary Industries. *About bird flu and the risk to New Zealand*. 6 August 2026 [cited 2026 6 August]; Available from: <https://www.mpi.govt.nz/biosecurity/pest-and-disease-threats-to-new-zealand/animal-disease-threats-to-new-zealand/high-pathogenicity-avian-influenza/about-avian-influenza-and-the-risk-to-nz>.
3. Department of Agriculture, Fisheries and Forestry. *H5 bird flu updates*. 6 August 2026 [cited 2026 6 August]; Available from: <https://www.agriculture.gov.au/about/news/H5-bird-flu-updates>.
4. FAO/WHO/WOAH, *Updated joint FAO/WHO/WOAH assessment of recent influenza A(H5N1) virus events in animals and people*. 12 August 2024.
5. FAO/WHO/WOAH, *Updated joint FAO/WHO/WOAH public health assessment of recent influenza A(H5) virus events in animals and people*. 17 April 2025.
6. FAO/WHO/WOAH, *Updated joint FAO/WHO/WOAH public health assessment of recent influenza A(H5) virus events in animals and people*. 28 July 2025.
7. FAO/WHO/WOAH, *Updated joint FAO/WHO/WOAH public health assessment of recent high pathogenicity avian influenza A(H5) virus events in animals and people* 18 May 2026.
8. FAO/WHO/WOAH, *Updated joint FAO/WHO/WOAH public health assessment of recent influenza A(H5) virus events in animals and people*. 20 December 2024.
9. US Department of Agriculture. *HPAI Confirmed Cases in Livestock*. 13 March 2026 28 05 2026]; Available from: <https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/hpai-confirmed-cases-livestock>.
10. Capital Press. *Idaho is American ag's bird flu hotspot*. 30 June 2026 [cited 2026 16 June]; Available from: https://capitalpress.com/2026/06/30/idaho-is-american-ags-bird-flu-hotspot/?fbclid=IwY2xjawS6AEhleHRuA2FlbQlXMQBicmlkETFGdXU3OHc2MzhTcjFrdWJic3J0YwZhCHBfaWQQMjlyMDM5MTc4ODlwMDg5MgABHh7tFXIUDCKZVJOH3bl4bMEMG9RPoZEBO3-3MQSHSI-Vs7sDkl3KACORYWzI_aem_r3i2GndCYMEso_yBZgbArA.
11. US Department of Agriculture. *The Occurrence of Another Highly Pathogenic Avian Influenza (HPAI) Spillover from Wild Birds into Dairy Cattle*. February 2025 [cited 20 02 2025; Available from: <https://www.aphis.usda.gov/sites/default/files/dairy-cattle-hpai-tech-brief.pdf>.
12. US Department of Agriculture. *APHIS Identifies Third HPAI Spillover in Dairy Cattle*. 14 February 2025 [cited 20 02 2025; Available from: <https://www.aphis.usda.gov/news/program-update/aphis-identifies-third-hpai-spillover-dairy-cattle>.
13. US Centers for Disease Control and Prevention. *A(H5) Bird Flu Surveillance and Human Monitoring*. 25 April 2026 27 05 2026]; Available from: <https://www.cdc.gov/bird-flu/h5-monitoring/index.html?cove-tab=0>.
14. US Centers for Disease Control and Prevention. *A(H5) Bird Flu: Current Situation*. 06 March 2026 28 05 2026]; Available from: <https://www.cdc.gov/bird-flu/situation-summary/index.html>.
15. Garg, S., et al., *Highly Pathogenic Avian Influenza A (H5N1) Virus Infections in Humans*. New England Journal of Medicine, 2024.
16. US Centers for Disease Control and Prevention. *CDC A(H5N1) Bird Flu Response Update*. 26 February 2025 [cited 27 02 2025; Available from: <https://www.cdc.gov/bird-flu/spotlights/h5n1-response-02262025.html>.
17. US Centers for Disease Control and Prevention. *Technical Update: Summary Analysis of the Genetic Sequence of a Highly Pathogenic Avian Influenza A(H5N1) Virus Identified in a Child in California*. 10 December 2024 [cited 19 12 2024; Available from: <https://www.cdc.gov/bird-flu/spotlights/h5n1-response-12092024.html>.
18. San Francisco Department of Public Health. *Presumptive Bird Flu Case Identified In San Francisco Resident*. 10 January 2025 [cited 01 05 2025 01 05 2025]; Available from: <https://www.sf.gov/news--presumptive-bird-flu-case-identified-san-francisco-resident>.
19. US Centers for Disease Control and Prevention. *CDC Confirms Human H5 Bird Flu Case in Missouri*. 06 September 2024 12 09 2024]; Available from: <https://www.cdc.gov/media/releases/2024/s0906-birdflu-case-missouri.html>.

20. US Centers for Disease Control and Prevention. *CDC Report on Missouri H5N1 Serology Testing*. 24 October 2024 [cited 31 10 2024]; Available from: <https://www.cdc.gov/bird-flu/spotlights/missouri-h5n1-serology-testing.html>.
21. Vaughan A, J.A., Traub E, et al., *Serologic Evidence of Highly Pathogenic Avian Influenza A(H5N1) Virus Infection in a Veterinary Professional Exposed to an Infected Domestic Cat — Los Angeles County, California, December 2024–January 2025*. MMWR Morb Mortal Wkly Rep, May 2026. **2026;75:215–220**.
22. Public Health Agency of Canada. *Statement from the Public Health Agency of Canada: Update on Avian Influenza and Risk to Canadians*. 13 November 2024 [cited 28 11 2024]; Available from: <https://www.canada.ca/en/public-health/news/2024/11/update-on-avian-influenza-and-risk-to-canadians.html>.
23. Government of British Columbia. *Final update on human avian influenza case in B.C.* 26 November 2024 [cited 28 11 2024]; Available from: <https://news.gov.bc.ca/releases/2024HLTH0155-001601>.
24. UK Health Security Agency. *Human case of avian flu detected in England*. 27 January 2025; Available from: <https://www.gov.uk/government/news/human-case-of-avian-flu-detected-in-england>.
25. UK Department for Environment, F.R.A. *Influenza of avian origin confirmed in a sheep in Yorkshire*. 24 March 2025 [cited 27 03 2025; Available from: <https://www.gov.uk/government/news/influenza-of-avian-origin-confirmed-in-a-sheep-in-yorkshire>.
26. World Health Organization. *Avian Influenza A(H5N1) - Mexico*. 17 April 2025 [cited 01 05 2025 01 05 2025]; Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON564>.
27. Center for Infectious Disease Research & Policy. *Vietnam reports human H5 avian flu case*. 5 December 2024 [cited 19 12 2024; Available from: <https://www.cidrap.umn.edu/avian-influenza-bird-flu/vietnam-reports-human-h5-avian-flu-case>.
28. European Centre for Disease Prevention and Control, *Communicable disease threats report, 15 -21 November 2025, week 47*. 21 November 2025.
29. World Health Organization, *Avian Influenza A(H5N1) - Cambodia*. 5 July 2025.
30. Center for Infectious Disease Research & Policy. *Vietnam reports H5N1 avian flu case with encephalitis*. 22 April 2025 [cited 01 05 2025 01 05 2025]; Available from: <https://www.cidrap.umn.edu/avian-influenza-bird-flu/vietnam-reports-h5n1-avian-flu-case-encephalitis>.
31. World Health Organization, *Influenza at the human-animal interface summary and risk assessment, 31 March 2026*. 31 March 2026.
32. Hong Kong Centre for Health Protection, *Avian Influenza Report*. 15 July 2025.
33. GISAIID. *Data from India's recent fatal human H5N1 case released*. 2025 [cited 08 05 2025; Available from: <https://gisaid.org/>.
34. World Health Organization, *Influenza at the human-animal interface summary and assessment*. 1 July 2025.
35. World Health Organization. *Avian Influenza A (H5N1) - Australia*. 07 June 2024 [cited 12 09 2024]; Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2024-DON519>.
36. World Health Organization, *Avian Influenza Weekly Update Number 1053*. 17 July 2026.
37. Hong Kong Centre for Health Protection, *Avian Influenza Report*. 9 June 2026.
38. European Centre for Disease Prevention and Control, *Communicable disease threats report, Week 17, 18–24 April 2026*. 30 April 2026.
39. European Centre for Disease Prevention and Control, *Communicable disease threats report, 28 March to 3 April, week 14*. 2026.
40. BEACON. *Cambodia reports second human case of HPAI (H5N1) in 2026 linked to backyard poultry exposure in Banteay Meanchey Province*. 2026 [cited 2026 19 March]; Available from: <https://beaconbio.org/en/report/?reportid=e62976af-4dd4-4e8b-b121-8a09fa7b600d&eventid=999496bb-0b95-44ec-85c3-42e5d79b8820&page=2>.
41. ProMED. *AVIAN INFLUENZA, HUMAN - CAMBODIA: (KAMPOT) H5N1, POULTRY EXPOSURE*. 17 February 2026 [cited 2026 26 February]; Available from: <https://www.promedmail.org/alert/8730903>.
42. World Health Organization, *Influenza at the human-animal interface summary and assessment*. 27 May 2025.

43. European Food Safety Authority, et al., *Avian influenza overview September–December 2024* 18 December 2024.
44. World Health Organization, *Avian Influenza Weekly Update Number 1055* 31 July 2026.
45. World Health Organization, *Influenza at the human-animal interface Summary and risk assessment, from 13 June to 7 July 2026*. 7 July 2026.
46. Chen, L., et al., *First Human Infection with Influenza A(H1N2)v Virus — Yunnan Province, China, 2026*. *China CDC Weekly*, 2026. **8**(29): p. 920-928.
47. World Health Organization, *Avian Influenza Weekly Update Number 1051* 3 July 2026.
48. Hong Kong Centre for Health Protection, *Avian Influenza Report*. 16 June 2026.
49. WHO. *Avian Influenza Weekly Update Number 1049* 19 June 2026 [cited 2026 25 June]; Available from: https://cdn.who.int/media/docs/default-source/wpro---documents/emergency/surveillance/avian-influenza/ai_20260619.pdf?sfvrsn=6ac0ef12_1&download=true.
50. WHO, *Avian Influenza Weekly Update Number 1048*. 5 June 2026.
51. WHO, *Avian Influenza Weekly Update Number 1047*. 29 May 2026.
52. World Health Organization Western Pacific Region, *Avian Influenza Weekly Update Number 1044*. 08 May 2026.
53. US Centers for Disease Control and Prevention. *Weekly US Influenza Surveillance Report: Key Updates for Week 17, ending May 2, 2026*. 02 May 2026 [cited 28 05 2026]; Available from: <https://www.cdc.gov/fluview/surveillance/2026-week-17.html>.
54. World Health Organization Western Pacific Region, *Avian Influenza Weekly Update Number 1046*. 22 May 2026.
55. World Health Organization Western Pacific Region, *Avian Influenza Weekly Update Number 1045*. 15 May 2026.
56. World Health Organization Western Pacific Region, *Avian Influenza Weekly Update Number 1043*. 01 May 2026.
57. World Health Organization, *Avian Influenza Weekly Update Number 1040*. 10 April 2026.
58. European Centre for Disease Prevention and Control, *Communicable disease threats report, Week 15, 4–10 April 2026*. 10 April 2026.
59. European Centre for Disease Prevention and Control. *First imported human case of influenza A(H9N2) infection in the EU*. 2026 [cited 2026 26 03]; Available from: <https://www.ecdc.europa.eu/en/news-events/first-imported-human-case-influenza-ah9n2-infection-eu>.
60. European Centre for Disease Prevention and Control, *Communicable disease threats report Week 9, 21-27 February 2026*. 2026.
61. World Health Organization, *Avian Influenza Weekly Update Number 1034*. 20 February 2026.
62. World Health Organization. *Influenza at the human-animal interface summary and assessment 19 December 2025*; Available from: <https://www.who.int/publications/m/item/influenza-at-the-human-animal-interface-summary-and-assessment--19-december-2025>.
63. World Health Organization, *Influenza at the human-animal interface summary and assessment, 22 January 2026*. 22 January 2026.
64. Washington State Department of Health. *H5N5 Avian influenza confirmed in Grays Harbor County resident*. 14 November 2025 [cited 27 11 2025]; Available from: <https://doh.wa.gov/newsroom/h5n5-avian-influenza-confirmed-grays-harbor-county-resident>.
65. Washington State Department of Health. *Grays Harbor County resident dies from complications of avian influenza*. 21 November 2025 [cited 27 11 2025]; Available from: <https://doh.wa.gov/newsroom/grays-harbor-county-resident-dies-complications-avian-influenza>.
66. World Health Organization. *Avian Influenza A(H5N5) - United States of America*. 5 December 2025 [cited 17 12 2025]; Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON590>.
67. US Centers for Disease Control and Prevention. *Weekly US Influenza Surveillance Report: Key Updates for Week 46, ending November 15, 2025*. 21 November 2025 [cited 27 11 2025]; Available from: <https://www.cdc.gov/fluview/surveillance/2025-week-46.html>.

68. World Health Organization, *Influenza at the human-animal interface summary and assessment*. 5 November 2025.
69. Australian Government. *H7 high pathogenicity avian influenza*. 27 June 2025 31 07 2025]; Available from: <https://www.outbreak.gov.au/current-outbreaks/avian-influenza>.
70. European Centre for Disease Prevention and Control. *MERS-CoV worldwide overview*. 04 May 2026 28 May 2026]; Available from: <https://www.ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus-mers-cov-situation-update>.
71. European Centre for Disease Prevention and Control, *Communicable disease threats report, 29 November - 5 December 2025, week 49*. 5 December 2025.
72. European Centre for Disease Prevention and Control, *Communicable disease threats report, 1-7 November 2025, week 45*. 7 November 2025.
73. World Health Organization, *Rapid Risk Assessment-MERS-CoV, Eastern Mediterranean Region*. 29 January 2026.
74. Warsame M, A., J and Simniceanu, A et al., *First Evidence of Zoonotic Spillover of MERS-CoV into Occupationally Exposed Populations in Somalia*. SSRN, March 2026.
75. World Health Organization, *Middle East respiratory syndrome: global summary and assessment of risk*. 05 January 2026.
76. Food and Agriculture Organization of the United Nations. *Briefing to Permanent Representatives Risks to FAO's Capacity for Preventing and Responding to Transboundary Animal Diseases Opening Remarks*. 19 June 2025 [cited 23 10 2025; Available from: <https://www.fao.org/director-general/speeches/details/briefing-to-permanent-representatives-risks-to-fao-s-capacity-for-preventing-and-responding-to-transboundary-animal-diseases-opening-remarks/en>.
77. Health Policy Watch. *WHO Budget Crisis Bigger Than Previously Thought – \$2.5 Billion Gap for 2025-2027*. 02 April 2025 [cited 23 10 2025; Available from: <https://healthpolicy-watch.news/who-budget-crisis-bigger-than-previously-thought-2-5-billion-gap-for-2025-2027/>.
78. Imperial College London. *UK-US experts discuss next generation of biosecurity infrastructure*. 26 September 2025 [cited 23 10 2023; Available from: <https://www.imperial.ac.uk/news/269033/uk-us-experts-discuss-next-generation-biosecurity/>.