ASEAN Biological Threats Surveillance Centre (ABVC)

Initial Risk Assessment

Human Avian Influenza A(H5N1) in Cambodia

With Support by:

Canada in partnership with Korea Disease Control and Prevention Agency

Date and version of current assessment : June 18, 2025, v1

Date(s) and version(s) of previous assessment(s) : -

Overall risk and confidence

Overall risk	
National	**Regional**
Moderate	**Low**

Confidence level of available information
Moderate

Risk statement

The objective of this Initial Risk Assessment (IRA) is to assess the regional public health risk associated with the recent confirmed case of human infection with avian influenza A(H5N1) in Cambodia, within the broader context of five confirmed human cases and four deaths in 2025 (CFR = 80%). This assessment considers Cambodia's existing preventive measures and response capacity, the ongoing coordination between human and animal health sectors, and the absence of confirmed human-to-human transmission to date.

Exposure

Avian influenza A(H5N1) was detected for the first time in Cambodia in December 2003, initially affecting wild birds. From then until 2014, sporadic human cases were reported due to transmission from poultry to humans, either directly or indirectly through contaminated environments. Between 2014 and 2022, there were no reports of human infection with A(H5N1) viruses. However, the re-emergence of human infections with A(H5N1) viruses in Cambodia was reported in February 2023, involving six cases.

In 2024, Cambodia confirmed 10 human cases of influenza A(H5N1) with nine involved persons under 18 years of age. Of those, two were fatal, bringing the case fatality rate (CFR) to 20%.

In 2025, five cases, including four deaths have been reported so far (CFR=80%). GISAID labelled the first three 2025 cases as clade 2.3.2.1c and assumed to be the newly classified 2.3.2.1e. Genomic results for the current case are pending.

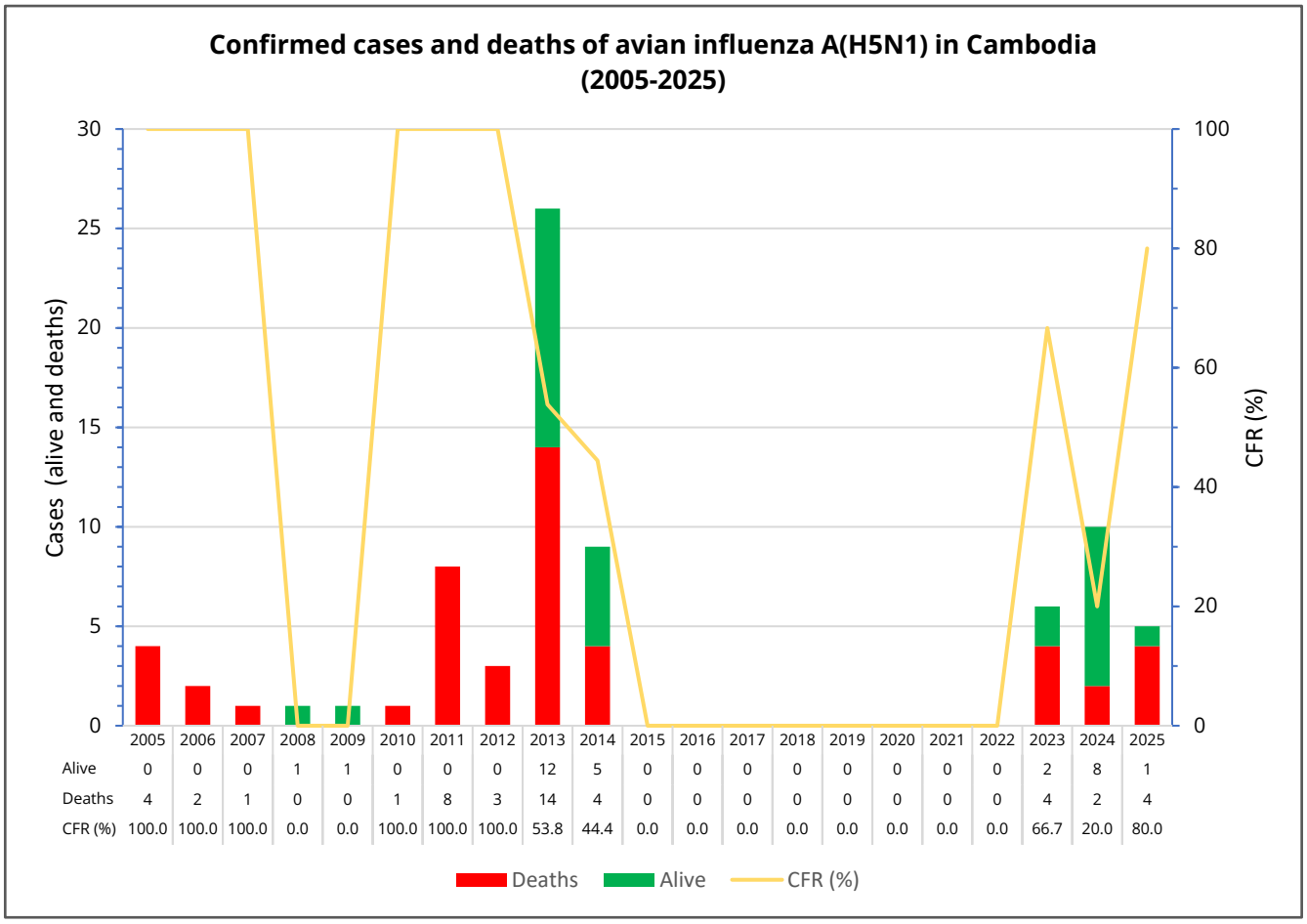


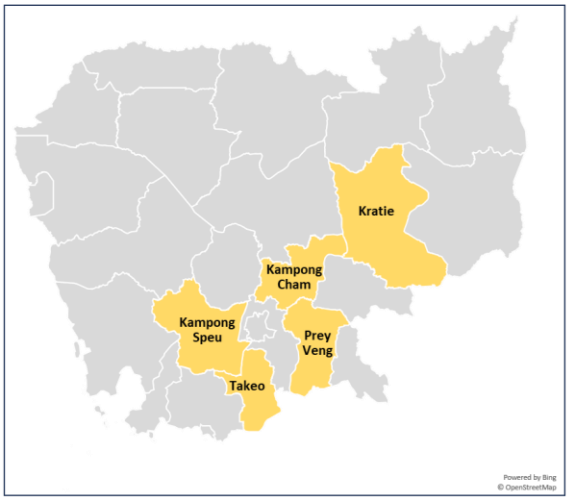
Figure 1. Confirmed Human Cases and Deaths of Avian Influenza A(H5N1) in Cambodia, 2005–2025
Source: WHO and Ministry of Health Cambodia

Severity

In 2025, Cambodia has confirmed five cases of human avian influenza A(H5N1) with four deaths (CFR=80%). From 2005 to June 2025, Cambodia has confirmed 77 cases resulting in 30 deaths, bringing the overall CFR to 61.04%. Similarly, a high fatality rate is also reported globally, with 976 human cases including 420 deaths have been reported (CFR=48.2%) during the period of 2005 to 2025. Based on the situation, the disease is categorized as severe and poses a serious risk to human health in affected areas.

Spread Potential

The detection of five confirmed human cases of avian influenza A(H5N1) across five adjacent provinces in 2025 indicates geographically dispersed, sporadic infections. This pattern raises concerns about the probability of undetected viral circulation in poultry or environmental sources across broader areas of Cambodia. Moreover, three of the cases had a history of close contact with poultry, including two cases resided around chicken farms with reported recent deaths among chickens.



Case	Information
Case 1 (Jan 9, 2025)	A 28-year-old man from Chamkar Leu District, Kampong Cham Province. The patient died despite receiving treatment. Patient's family raised chickens and that the man was the caretaker and cooked sick chickens for food
Case 2 (Feb 25, 2025)	A 2-year-old boy from Preah Sdach District, Prey Veng Province. The patient died upon arrival at the hospital in very serious condition. Patient's family had a chicken farm, of which 15 chickens were dead.
Case 3 (Mar 22, 2025)	A 3.5-year-old child in Chet Borei district, Kratie Province. The patient died despite receiving treatment.
Case 4 (May 27, 2025)	An 11-year-old child from Samraong Tong District, Kampong Speu Province. The patient died upon arrival at the hospital in very serious condition.
Case 5 (Jun 12, 2025)	A 65-year-old woman from Prey Kabbas District, Takeo Province. The patient is currently undergoing treatment. The patient's neighbour has a chicken farm. No sick or dead chickens reported in the village.

Figure 2. Distribution of Confirmed Human Cases and Deaths of Avian Influenza A(H5N1) in Cambodia, 2025
Source: Ministry of Health of Cambodia

Health Capacity

In response to the confirmed case of avian influenza A(H5N1), Cambodia has demonstrated strong coordination mechanisms between the human and animal health sectors. Through its national and sub-national rapid response teams, the Ministry of Health is actively implementing technical protocols, including case investigation, contact tracing, risk communication, and distributing antivirals to close contacts. The response also includes collaboration with provincial agriculture departments and local authorities, reflecting an operational one health approach.

Laboratory confirmation was achieved through the Pasteur Institute of Cambodia, which indicates the presence of reliable national diagnostic capabilities. The patient is currently receiving intensive clinical care, which suggests that referral facilities have the capacity to manage severe respiratory infections.

Clear preventive guidance regarding hygiene, food safety, and poultry handling has been widely disseminated through health education and public risk communication. Multiple communication platforms are utilized, including the CDC Department's official social media channels and Facebook page, as well as a toll-free emergency hotline (115).

Despite these efforts, the limited detection of poultry morbidity or mortality in proximity to human cases and the potential for unrecognized exposure routes suggest the need for enhanced surveillance and coordination with animal health sectors. Additionally, the high case fatality rate in 2025 underscores the importance of early case detection, prompt treatment, and public awareness to strengthen outbreak response outcomes.

Initial Risk Assessment Results

The occurrence of five confirmed cases of H5N1 in Cambodia in 2025, with a high case fatality rate, signals a significant zoonotic threat. This requires heightened national alert and international monitoring. Although there is no evidence of sustained human-to-human transmission, the severity and recurrence of the cases, coupled with the patients' limited exposure histories, suggest potential undetected viral circulation in poultry or the environment. Therefore, the ABVC assesses the current risk of avian influenza A(H5N1) in Cambodia as moderate.

Proposed Actions:

- **Enhance coordination** between the human and animal health sectors for prevention and control efforts, including enhanced surveillance, joint investigations, and joint risk assessments.
- **Strengthen laboratory capacity and case management** across both human and animal health sectors.
- **Increase vigilance** in provinces with no reported Avian Influenza cases.
- **Empower communities** to actively engage in prevention efforts.
- **Ensure the availability and supply** of essential materials, diagnostics, vaccines, and therapeutics.

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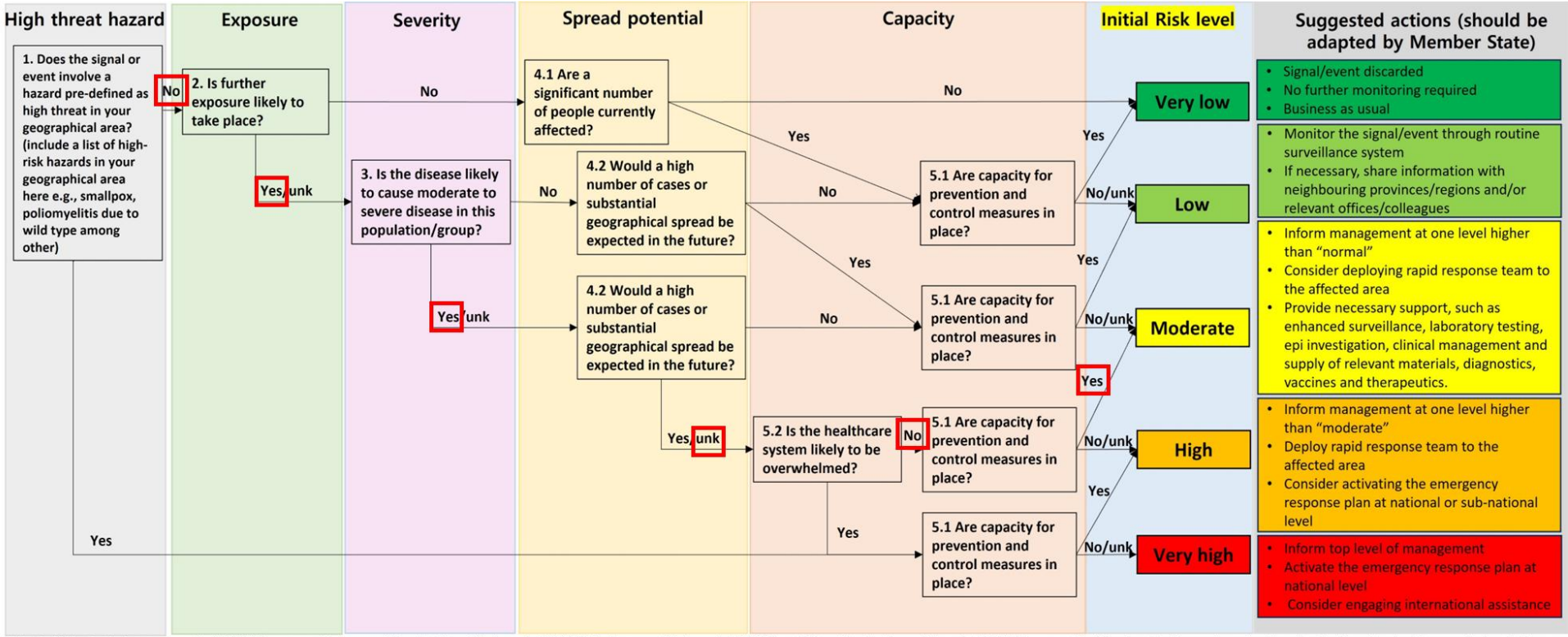
Annex 1. Initial risk assessment algorithm



1. Member States should always use Annex II of IHR (2005) for any event that may meet the criteria for notification under IHR (2005). Decisions on notification under IHR (2005) are **NOT** conditional on the results from the Initial Risk Assessment. 2. If there is a risk of the event spreading internationally, information should be promptly shared with neighbouring countries and areas. Neighbouring countries are encouraged to assess the risk associated with the possible importation of the diseases. 3. If there is high level of public concern or political sensitivities, the event may require faster speed of information release, more intensive risk communication, & more engagement of higher-level management. 4. If the hazard is not pre-defined as high threat in your geographical area in the domain 'High threat hazard', consider other domains in the logical flow of the algorithm by taking the 'No' arrow. 5. If the hazard is novel or unknown, the risk assessment team should decide whether to take the 'Yes' or 'No' arrow for the domain 'High threat hazard'