FAO ALERT ON AVIAN INFLUENZA – RISK OF UPSURGE AND REGIONAL SPREAD THROUGH INCREASED POULTRY TRADE PRIOR TO AND DURING LUNAR NEW YEAR FESTIVITIES IN ASIA

31 January 2024

Key facts:

1. Avian influenza (AI) is a highly contagious viral disease with zoonotic potential that has severe impacts on animal health, livelihoods, economy, and human health.

2. Wild waterfowls are considered the natural reservoir for AI viruses. Wild migratory bird movements are one of the main drivers for the long-distance and intercontinental spread of highly pathogenic (HP) AI viruses.

3. Local trade with live poultry and poultry products is a major driver for HPAI spread within countries and across borders.

4. In its highly pathogenic form, AI affects most severely gallinaceous birds (e.g. chickens, turkeys, quails, or guinea fowls), resulting in severe and acute systemic infection and high mortality. Domestic ducks have shown more resilience to HPAI virus infections; however, fatal outcomes may be reported even in these species.

5. HPAI has caused significant mortalities in wild bird and mammalian populations in recent epidemics, including endangered species under conservation efforts.

FAO calls for increased vigilance and preparedness for avian influenza (AI) during the traditional New Year festivities that will take place across Asia starting during the second week of February 2024.

During the past months, AI outbreaks have continued to be reported in domestic poultry and wild birds in Asia. In the past year, several AI virus subtypes, including H5N1, H5N2, H5N5, H5N6, H5N8, and H9N2 have been detected in domestic poultry and/or wild bird populations in the region. In addition, subtype H5N1 subclade 2.3.4.4b continues to circulate in both wild and domestic birds throughout the world.

Highly pathogenic avian influenza (HPAI) can lead to heavy losses for the poultry industry, in particular to livelihoods of vulnerable small-scale producers. Poultry trade and related activities play a key role in AI spread and amplification in domestic bird populations, including the trade of infected live poultry and their products, handling or slaughtering infected poultry, and limited biosecurity along the poultry value chain. Before and during New Year festivities, the risk is further exacerbated by high demand for poultry meat and products, triggering increased and intensified poultry trade and movements as well as visits to live poultry markets.

In addition, a rise in mammalian species infected with HPAI has been recorded globally, including outbreaks among farmed mink in Spain, marine mammals in the Americas, and cats in Europe and, more recently, in the Republic of Korea.

Importantly, AI virus subtypes have demonstrated their zoonotic potential, i.e. the ability to transmit from birds to humans. During 2023, human cases of influenza A(H5N1) were detected in China and Cambodia, and the Americas (Ecuador and Chile), and human cases of A(H5N6) were reported in China. In 2024, two more cases of H5N1 in humans were already reported in Cambodia. Other AI subtypes that have been detected in humans in Asia in the past year include influenza A(H3N8), A(H10N5), and A(H9N2).

Most of these cases reported exposure through close contact with infected live poultry. While human infections with AI viruses remain sporadic events, they warrant attention since symptoms observed in humans range from asymptomatic to fatal.
INCREASED AVIAN INFLUENZA RISK

There is an increased risk of AI spread in Asia due to intensified in-country travel around Lunar New Year (February 2024), specifically considering the following:

- Millions of people are expected to travel for the New Year (starting early February 2024).
- The vast majority of traffic will be within countries of the Asian region, but also to and from Asia.
- Poultry trade is increasing to serve the high demand for poultry meat and other products consumed during these festivities.
- Travel and trade increase the risk of spreading AI, since the virus can be transmitted via contact with infected animals as well as contaminated clothing, vehicles and other equipment.

RECOMMENDED ACTIONS

In light of the elevated risk, FAO is calling on all Chief Veterinary Officers (CVOs) in Asia to increase AI prevention and preparedness activities to reduce the likelihood of poultry outbreaks and subsequent impacts on livelihoods and economies, and human infections.

Specifically, FAO recommends countries to:

- **Enhance controls at national borders and along traffic routes based on risk analyses** to minimize risk of introduction of potentially infected live poultry and poultry products.
- **Promote improved biosecurity measures along the value chain**, including at farms, live bird markets, slaughter points, etc. to minimize the spread of the disease and mitigate the risk of human exposure.
- **Implement measures for early detection, timely reporting, and rapid containment** of infection, as delays can lead to rapid spread. It is important to report sick or dead birds –both wild birds and poultry– or wild mammals to local authorities. In addition, the adoption of policies that encourage disease reporting, such as providing adequate compensation following animal culling, can help mitigate these threats.
- **On infected premises (e.g. farms or live bird markets), conduct appropriate cleaning and disinfection** and take action on carcasses, slurry and faecal waste to ensure they do not pose a risk for further transmission and spread of virus. Where possible, use the period immediately following the Lunar New Year festivities for short closures of live bird markets for decontamination after all birds have been sold and processed.
- **Upon detection of outbreaks, provide timely alerts to neighbouring countries as well as international organizations**, including the World Organisation for Animal Health (WOAH). This includes rapid sharing of virus sequences with relevant partners to ensure appropriate actions are taken by countries in the region (e.g. ensuring use of adapted vaccines in countries that implement vaccination programmes against AI).
- **Implement surveillance schemes that support detection of potentially zoonotic AI viruses in both domestic and wild birds.** Provide mechanisms for reporting sick or dead birds (hotlines, collection points) and raise awareness about the importance of reporting. Farmers, hunters, or rangers should be encouraged to report to veterinary authorities once they see unusual clinical signs in birds, including sudden increased in mortalities; swelling of the head, eyelids, comb, wattles, and hocks; purple discoloration of the wattles, comb, and legs; gasping for air (difficulty breathing); coughing, sneezing, and/or nasal discharge (runny nose); stumbling or falling down; or ruffled feathers or neurological disease in water birds.
• Expand surveillance to relevant mammals to better understand their role in the epidemiology, spread and zoonotic transmission of avian influenza. A list of mammalian species affected by H5Nx is available for guidance.

• Ensure laboratories have adequate capacities to diagnose circulating H5Nx HPAI viruses and deploy point-of-need rapid tests as appropriate.

• Implement targeted sampling of animals with higher likelihood of detecting the virus. Targeting sick or freshly dead birds, as well as sampling their environment, will increase the probability of detecting AI viruses.

• Shift to active surveillance, differential diagnosis, and increased virological screening. Active surveillance in key hotspots of the poultry value chain, such as live bird markets, allows for early detection of AI virus incursion/amplification.

• Collaborate closely with forestry/environment sector and wetlands or bird reserve management authorities in contact with wild bird populations to foster information-sharing and joint AI surveillance and prevention activities well ahead of the potential introduction or spread of the virus.

• Facilitate early reporting and response by consulting closely with the private sector (i.e. producers, traders and related businesses). Preparing and sharing communication materials prior to AI virus introduction will help minimize misunderstandings and rumours.

• Reinforce awareness campaigns. High level of awareness should be maintained among poultry keepers, the general population, traders, market workers, hunters, and any other relevant stakeholders about AI, precautionary and personal protection measures, as well as reporting and collection mechanisms for sick or dead birds.

• Action against wild birds, particularly indiscriminate hunting or destruction of habitats, should not be undertaken. Further guidance can be found here.

WHAT FAO IS DOING:

• Monitor and assess the evolving disease situation. To share updates on your country situation, please do not hesitate to contact FAO at FAO-GLEWS@fao.org

• Liaise with FAO/WOAH Reference Laboratories and partner organizations to assess virus characteristics and provide laboratory protocols for detection.

• Raise awareness about important epidemiological and virological findings and their implications.

• Provide recommendations for affected countries and those at risk addressing preparedness, prevention and disease control.

• Provide support for risk assessment and mapping to identify hot spots for risk mitigation and the implementation of risk-based surveillance.

• Offer support in provision of diagnostic reagents and personal protective equipment, provided certain conditions are met (contact: EMPRES-Lab-Unit@fao.org).

• Offer assistance to national authorities for shipment of samples as well as virus sub-typing and sequencing, provided certain conditions are met (contact: EMPRES-Shipping-Service@fao.org).

• With WOAH, support the activities of the OFFLU (WOAH/FAO network of expertise on animal influenza) Network.

• To contact FAO for further information or support, please write to the FAO Chief Veterinary Officer.