



Africa at risk from H5 highly pathogenic Avian Influenza (HPAI)

FAO recommends countries in Africa to be on alert for incursion of H5 highly pathogenic avian influenza (HPAI), following increasing reports from European countries of detections in wild birds over the past week. Countries and farms should have in place enhanced measures for prevention, early detection and diagnosis, and for outbreak response. Given the extent of infection in wild birds in Europe, the Middle East, the Russian Federation, and Kazakhstan, the risk of disease introduction into other countries along wild bird migratory paths is regarded as high. Moreover, it is likely that the virus has already arrived in parts of West and North Africa but remained undetected so far.

CONTEXT

An H5N8 HPAI virus that differed from strains circulating earlier in 2020 was detected in late July 2020, affecting domestic poultry and wild birds in parts of Southern Russia, close to the border with Kazakhstan. Most of these outbreaks occurred in small household flocks.

In July 2020, die-offs in *Corvidae* (common crows) and *Anatidae* (ducks) were observed in neighbouring Kazakhstan, followed in September by official outbreak reports of H5 HPAI in backyard poultry.

By mid-October, H5 HPAI was detected in the Netherlands (wild birds) and Israel (both wild and domestic birds), while reports of the disease continued in the Russian Federation.

Since then, H5 HPAI has spread in Western Europe, namely the Netherlands, Germany, and the United Kingdom, leading to over 70 notified events, especially in wild bird populations but also affecting commercial poultry, including some broiler breeder farms. The original H5N8 HPAI virus has also reassorted with other wild bird influenza viruses to form new strains of H5N5 and H5N1 HPAI virus.

The rapid and extensive geographic distribution of the current H5 HPAI epidemic as well as the species affected and timing of outbreaks indicate introduction and spread through migratory wild birds. Onward spread between farms may also occur due to movement of poultry, people, vehicles, farm equipment and faeces. So far, these H5 HPAI viruses have shown good adaptation to domestic and wild birds and have already demonstrated pathogenicity in various species.

August to early December is the period when migratory birds leave their spring-summer breeding sites in Russia in search of feeding grounds in warmer locations, stopping over at multiple resting sites in Europe and Western Asia. Certain species also extend their range to southern latitudes, as far as sub-Saharan Africa.

Information shared via [FLI](#), [GISAID](#) and [OFFLU](#) indicate that the H5N8 viruses currently circulating in the Russian Federation and Kazakhstan fall within H5 Clade 2.3.4.4.b. This particular clade has been circulating across Eurasia and into Africa since 2016.

To date, there is no evidence of human infection caused by clade 2.3.4.4b viruses of the H5N8 subtype; nevertheless, precautions should always be taken to reduce human exposure as a zoonotic potential cannot be excluded. FAO reminds countries about the importance to share genetic sequences and virus isolates with the scientific community for further analysis and research so that epidemiological links between outbreaks can be established and the zoonotic potential of emerging viruses assessed.

FAO ADVISES COUNTRIES AT RISK TO:

- Increase surveillance efforts in areas identified to be at higher risk of introduction through wild birds by immediately testing sick or dead domestic poultry as well as dead/hunted wild birds for the presence of HPAI virus.
- Limit direct and indirect contact between domestic poultry, including ducks, and wild birds (e.g. keep poultry indoors, use fences or nets to reduce contact between domestic poultry and wild birds); pay particular attention to sources of poultry drinking water to ensure it cannot be contaminated or it is treated appropriately before use.
- Raise awareness among poultry keepers, the general population, marketers, hunters, and any other relevant stakeholder about HPAI, precautionary measures as well as reporting and collection mechanisms for sick or dead birds.
- Ensure implementation of biosecurity measures along the value chain, including farms, live bird markets, slaughter points, etc. to limit further spread of the disease.
- Ensure means for testing and diagnosis of H5N8 HPAI are in place in laboratories.
- Provide mechanisms for reporting sick or dead birds (hotlines, collection points).

- On infected farms, 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.
- Upon detection of outbreaks timely alert neighbouring countries as well as international organizations, including the World Organisation for Animal Health (OIE).
- Share genetic sequences, studies on antigenic characterization and virus isolates with the scientific community for further analysis and research.
- Initiate/reactivate a compensation policy and allocate financial resources; ensure compensation for poultry culled as part of control measures during an HPAI outbreak is provided in a timely manner, see GEMP pp. 18-19: <http://www.fao.org/3/a-ba0137e.pdf>.
- If vaccines are being used to prevent avian influenza, assess antigenic characteristics of any new viruses detected using antisera from vaccinated birds; ensure antigenic assessments are done on any H5 HPAI viruses detected in well vaccinated, clinically affected flocks.
- Action against wild birds, particularly indiscriminate hunting or destruction of habitat, should not be taken.

FAO'S ROLE IS TO:

- 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 Reference Centres and partner organizations to assess virus characteristics and provide laboratory protocols for detection.
- Raise awareness about important epidemiologically or virologically findings and their implications.
- Provide recommendations for affected countries and those at risk addressing preparedness and disease control.
- Provide support for risk assessment and mapping to identify hot spot 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 (contact: EMPRES-Shipping-Service@fao.org)

To contact FAO for further information or support please write to Keith Sumption, FAO Chief Veterinary Officer at CVO@fao.org.

Important links

[Global Avian Influenza Virus with Zoonotic Potential situation update](#) – (available through e-mail distribution; if interested please contact: EMPRES-Livestock@fao.org)

[OFFLU report: Highly Pathogenic Avian influenza in Republic of Kazakhstan – 26 October 2020](#)

[IZSVe – Highly Pathogenic Avian Influenza in Europe: update](#) (last updated: 11/11/2020)

[DEFRA Updated Outbreak Assessment #4: Highly pathogenic avian influenza \(HPAI\) in the UK, and Europe – 10 November 2020](#)

[FSA Avian influenza overview May – August 2020](#)

[WHO Vaccine Composition Meeting Report – October 2020](#)

[FAO Focus On: 2016–2018 Spread of H5N8 highly pathogenic avian influenza \(HPAI\) in sub-Saharan Africa: epidemiological and ecological observations. FOCUS ON, No. 12, Aug 2018. Rome](#)

[EMPRES Watch: Highly Pathogenic Avian Influenza \(H5N1 HPAI\) spread in The Middle East: risk assessment – available in French](#)

[FAO Focus on: Highly pathogenic H5 avian influenza in 2016 and 2017 – observations and future perspectives](#)

[EMPRES Watch: H5N8 highly pathogenic avian influenza \(HPAI\) of clade 2.3.4.4 detected through surveillance of wild migratory birds in the Tyva Republic, the Russian Federation – potential for international spread – available in French](#)

[FAO Animal Health Manual: Good Emergency Management Practice: The Essentials – available in French](#)

[FAO Animal Production and Health Guidelines: Biosecurity guide for live poultry markets – available in French](#)

FAO Animal Health Manual: [Biosecurity for Highly Pathogenic Avian Influenza](#) – [available in French](#)

FAO Animal Health Manual: [Preparing for Highly Pathogenic Avian Influenza](#) – [available in French](#)

FAO Animal Health Manual: [Wild Birds and Avian Influenza](#) – [available in French](#)

[Focus On: Carcass management for small- and medium-scale livestock farms Practical considerations](#) – [available in French](#)

[Focus On: Rational use of vaccination for prevention and control of H5 highly pathogenic avian influenza](#) – [available in French](#)

[FAO's Avian Influenza webpage](#)

[OIE Avian Influenza page](#)

[WHO Avian Influenza page](#)