

European Centre for Disease Prevention and Control

# Update on zoonotic avian influenza and options for mitigation measures

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# Overview of human cases due to avian influenza

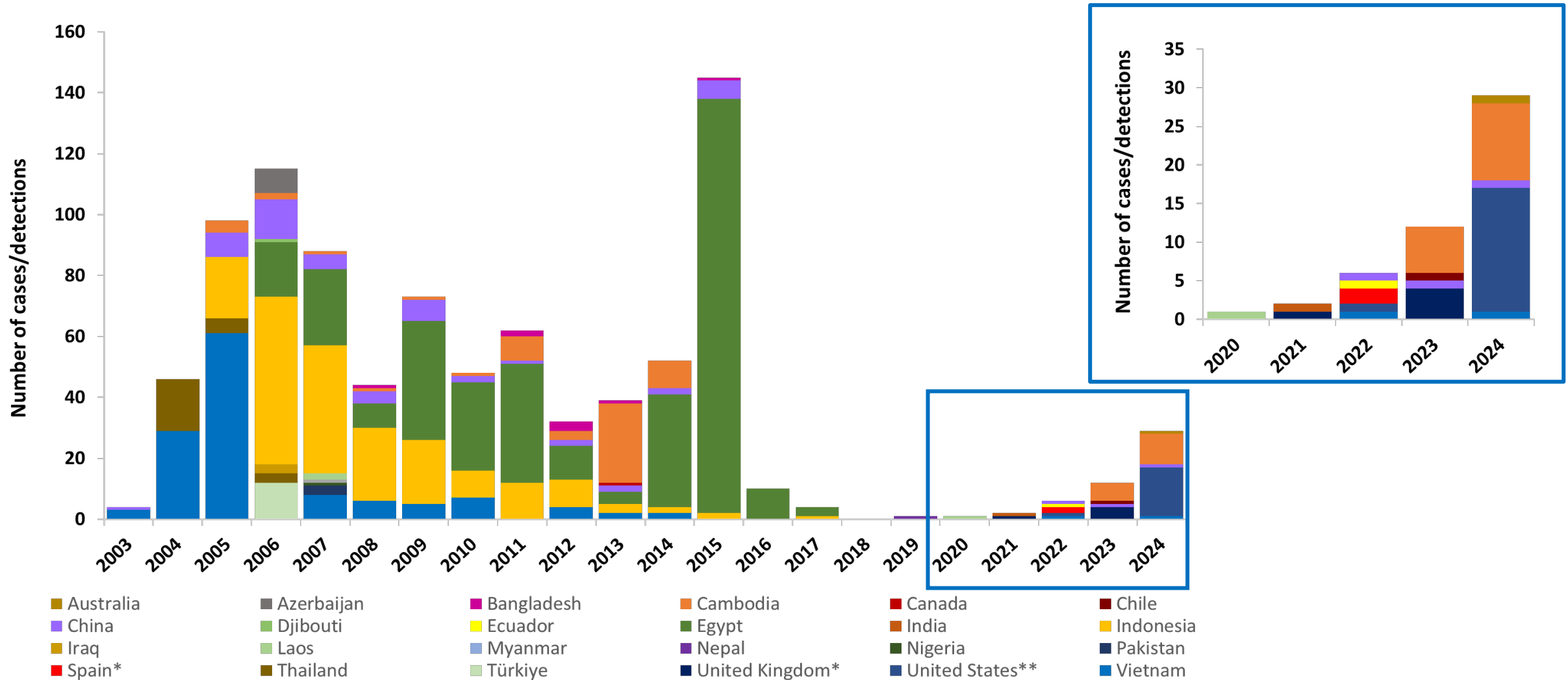


Subtype	New cases reported (deaths) 21 Jun – 4 Oct 2024	Total cases/detections (deaths)	Countries reporting human cases or detections
A(H5N1)	Cambodia: 5 (1) United States: A(H5N1): 6 A(H5Nx)*: 7	911** (464), since 2003	24 countries, including one EU/EEA country: Spain*
A(H5N2)	-	1 (1), first reported in 2024	Mexico (1)
A(H5N6)	China: 1 (1)	93 (38), since 2014	No EU/EEA country; China (92), Laos (1)
A(H9N2)	China: 1 Ghana: 1	140 (2), since 1998	No EU/EEA country; China (124), Egypt (4), Bangladesh (3), Cambodia (2), India (2), Ghana (1), Oman (1), Pakistan (1), Senegal (1), Vietnam (1)
A(H10N3)	China: -	3 (0), since 2021	China (3)
A(H10N5)	-	1 (1), first reported in 2024	China (1)

\*Seven A(H5) cases reported in the USA are epidemiologically linked to the ongoing A(H5N1) outbreak in commercial poultry and dairy farms.

\*\*includes detections due to suspected environmental contamination from Spain (2) and the United States (1) in 2022, and from the United Kingdom (3) in 2023

# Human A(H5N1) cases (all detections) 2003 – 4 Oct 2024

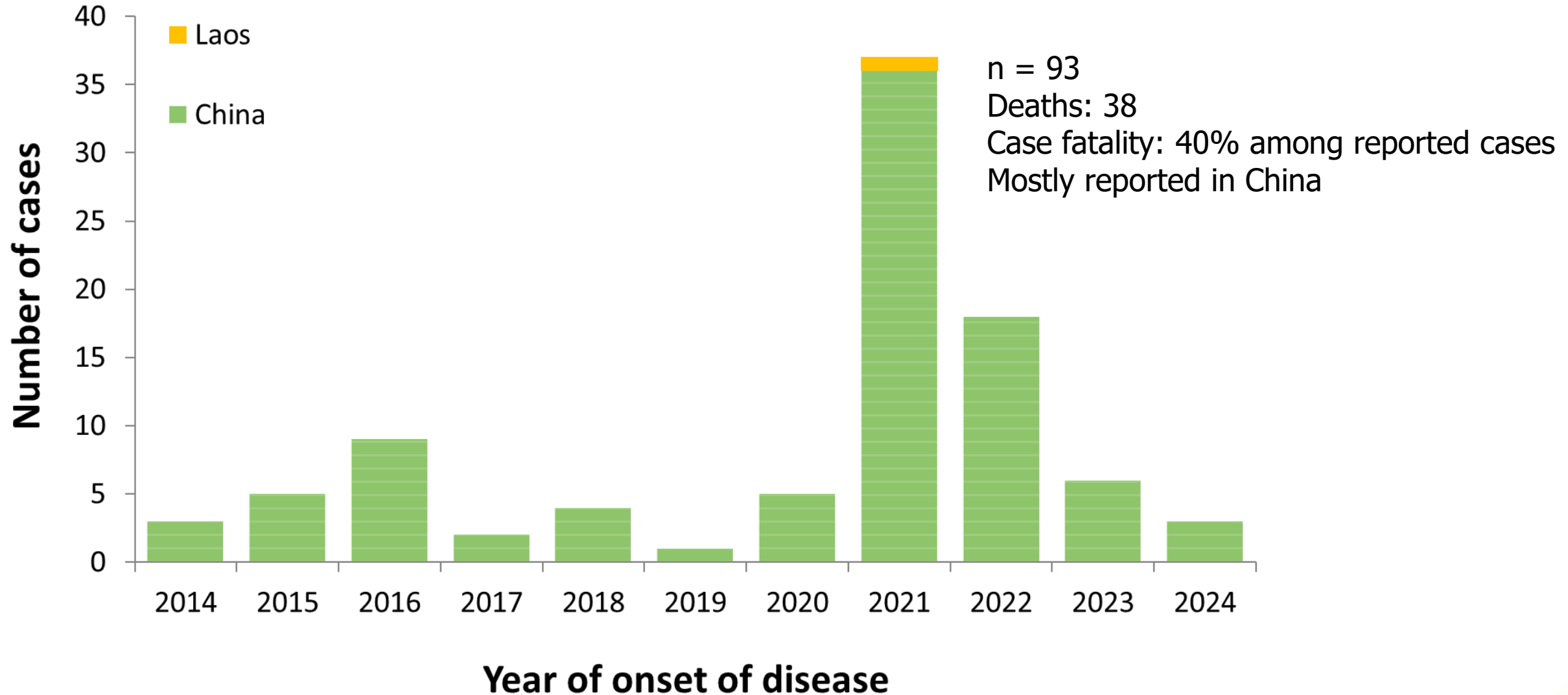


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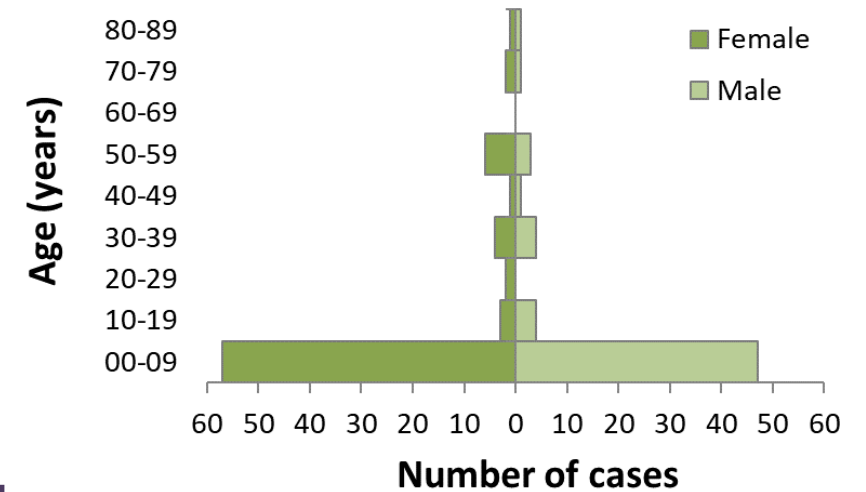
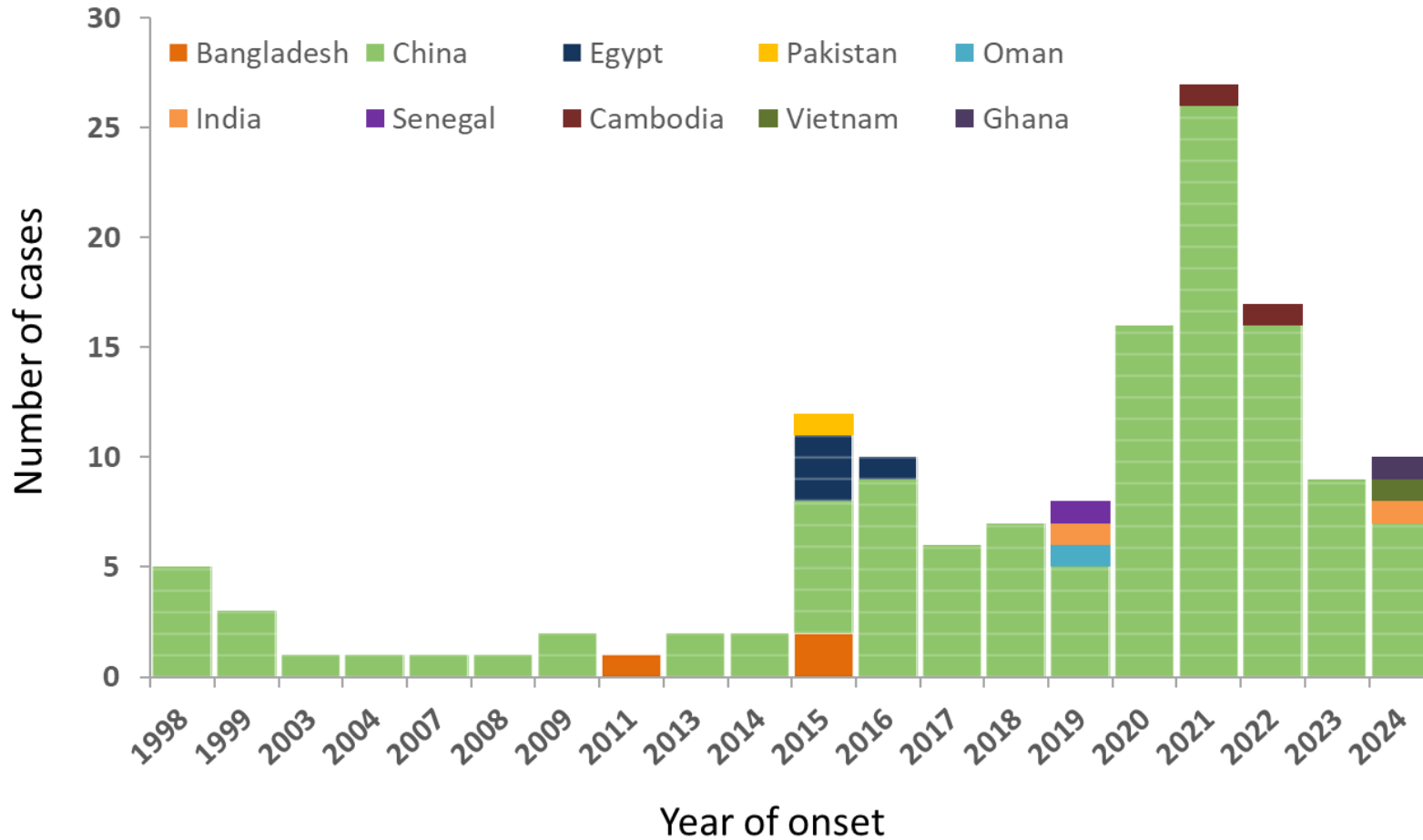
# HPAI A(H5N1) human cases – United States and Cambodia in 2024

- 16 human cases of HPAI A(H5) in the United States with exposure to presumably or confirmed infected cattle (6) or poultry (9) – one unknown
  - Multi-state event in cattle of A(H5N1) clade 2.3.4.4b, genotype B3.13 with spillover events to humans
  - Human case symptoms: conjunctivitis and/or mild respiratory symptoms
  - One hospitalised case (recovered) with underlying conditions
- 10 human cases of A(H5N1) in Cambodia with exposure to infected birds
  - Age: <18 years old: 9/10
  - Human case symptoms: respiratory symptoms, 2/10 asymptomatic
  - Case fatality: 20%
  - Recent cases reassortants of 2.3.2.1c and 2.3.4.4b

# Human A(H5N6) infections 2014 – 4 October 2024



# Human A(H9N2) infections 2013 – 4 October 2024



n = 140,  
 Deaths: 2  
 Majority of cases reported by China

# Update summary

- Transmission from infected animals to humans remains a rare event
- No sustained human-to-human transmission
- No confirmed cases of A(H5N1) infection in humans in the EU/EEA
- Majority of HPAI A(H5N1) viruses currently circulating in Europe remain susceptible to antivirals used in humans
- Viruses continue to diversify globally
  - Other avian influenza virus strains potentially carrying mutations could enter or emerge in the EU/EEA

# ECDC public health risk assessment

- Sporadic human infections likely to continue occurring in settings where people are exposed to infected animals or their environment
- ECDC risk assessment for A(H5N1) clade 2.3.4.4b viruses currently circulating in Europe
  - Risk of human infection assessed as low for general public in the EU/EEA
  - Risk considered low-to-moderate for people who are occupationally or otherwise exposed to animals infected with avian influenza or a contaminated environment
- ECDC is monitoring the situation closely and reviews the assessment accordingly



# Options for public health response

- Communication and awareness
- Minimising exposure through appropriate personal protective measures and equipment
- Enhanced surveillance
- Monitoring and testing of exposed individuals to infected animals
- Genomic analysis and sharing of sequence data
- Antiviral drug use as treatment and post-exposure prophylaxis
- Vaccination
  - Seasonal influenza: reduce risk of reassortment between avian and human seasonal influenza strains
  - Specific vaccination recommendations are under the remit of national authorities.

# ECDC and ECDC/EFSA joint reports

- [Drivers for a pandemic due to avian influenza and options for One Health mitigation measures \(europa.eu\)](#)
- [Testing and detection of zoonotic influenza virus infections in humans in the EU/EEA, and occupational safety and health measures for those exposed at work.](#)
- [Investigation protocol for human exposures and cases of avian influenza in the EU/EEA](#)
- [Enhanced influenza surveillance testing to detect avian influenza virus infections in the EU/EEA during the inter-seasonal period](#)
- [Targeted surveillance to identify human infections with avian influenza virus during the influenza season 2023/24, EU/EEA](#)
- [Avian influenza overview June–September 2024](#)

## Survey reports:

- [Survey report on laboratory capacity for molecular diagnosis and characterisation of zoonotic influenza viruses in human specimens in EU/EEA and the Western Balkans](#)
- [EU/EEA country survey on measures applied to protect exposed people during outbreaks of highly pathogenic avian influenza](#)

Acknowledgements:  
ECDC colleagues that contributed

**Thank you**