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OIE updates on Avian Influenza - 2021



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Topics

1. Global AI disease update
2. OIE Code 2021
3. OIE Manual 2021
4. OFFLU updates



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HPAI events (March – September 2021)

Region	Subtype	Countries
Asia	H5N1	India , Viet Nam
	H5N2	Chinese Taipei
	H5N5	Chinese Taipei
	H5N6	Viet Nam, China and Laos
	H5N8	Afghanistan, Korea, Japan, Iran, Kuwait, China, Nepal, Israel, Iraq, Viet Nam
Africa	H5	South Africa, Lesotho, Ghana and Benin
	H5N1	Niger, Nigeria, Mali, South Africa, Ghana, Togo, Cote d'Ivoire and Botswana
	H5N8	Algeria, Burkina Faso, Nigeria
Europe	H5	Bulgaria, Sweden, Austria, Ukraine, Belgium, Sweden and Russia
	H5N1	UK, Denmark, Netherlands, Germany, France, Hungary, Slovakia, Estonia, Germany, Finland and Latvia
	H5N3	Germany and Denmark
	H5N4	Germany, Netherlands, Switzerland and Sweden
	H5N5	Austria, Czech Republic, Denmark, Germany, Hungary, Romania, Sweden and Switzerland
	H5N8	Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Russia, Poland, Sweden, UK, Ukraine, Croatia, Netherlands, Norway, Serbia, Albania, Lithuania, Kosovo, Romania and Luxembourg



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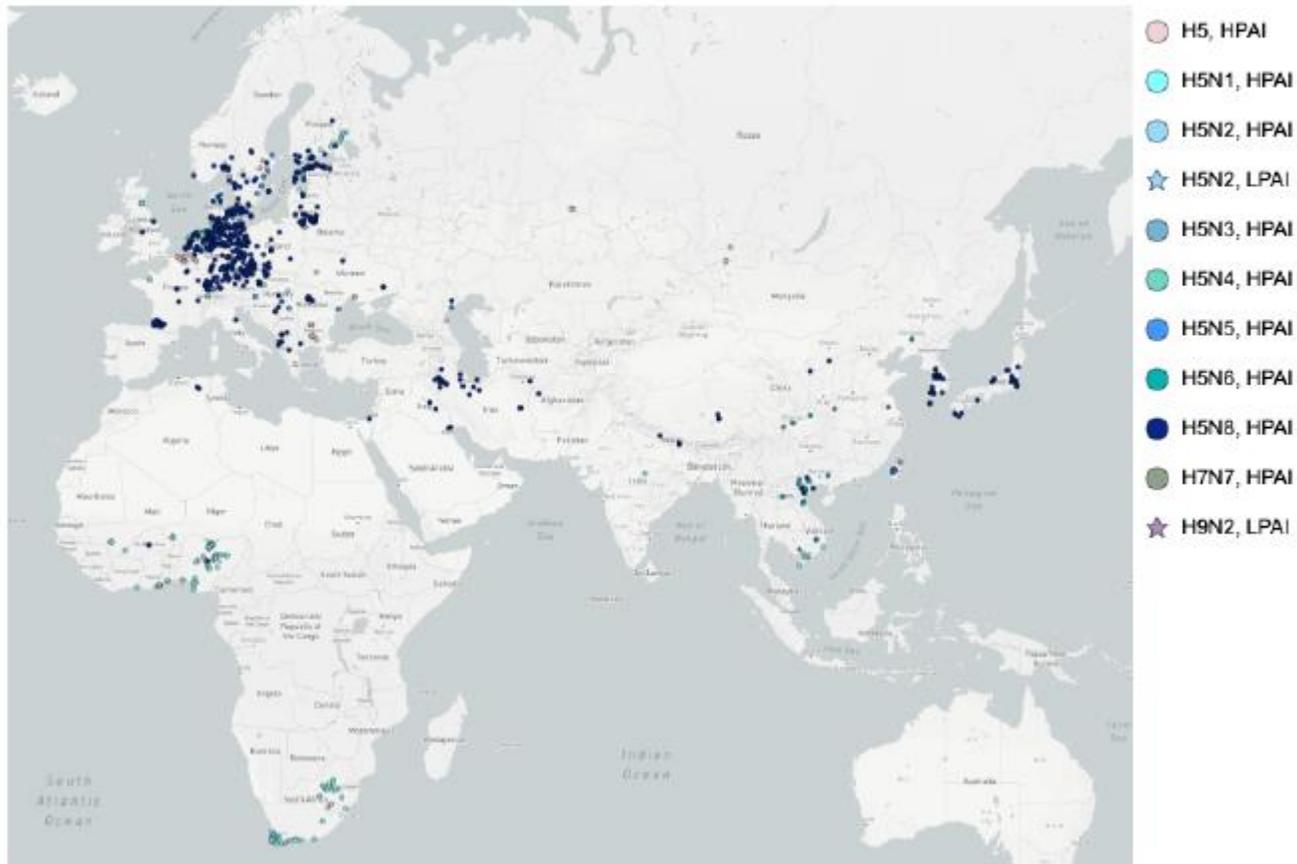
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Summary of H5, H7 and H9 events (March to September 2021)

Avian influenza regional geographic summary and context

A(H5), A(H7), A(H9) activity



- Majority of H5 events - Goose/Guangdong (GsGD) H5 clades of HPAI
- H5Nx clades have been steadily evolving since 2008 constituting an antigenically and genetically broad series of isolates.
- The vast majority of outbreaks were caused by H5 HPAI 2.3.4.4b
- Continued H5N8 circulation: There have been numerous subsequent and continuing outbreaks throughout Europe, Asia and more recently Africa which appear genetically closely related.
- H5N1 outbreaks occurred in Western Europe and Western Africa and subsequently in parts of Europe and additionally Viet Nam and India.
- Sporadic cases of
 - o H5N2 were seen in Chinese Taipei in May
 - o H5N3 in Denmark in April
 - o H5N4 in Germany and Sweden
- Cases of H5N5 have been seen throughout the year in Europe and Asia and since April H5N6 has been seen in China and Viet Nam
- H7 was reported only in wild birds in Lithuania
- H9 subtype viruses, although not reportable were known to be circulating in Cambodia and China in March and April respectively

Revised OIE Standards related to Avian influenza viruses adopted at 88th General Session - May 2021

- Chapter 1.3 Diseases: Infections and infestations listed by the OIE
- Terrestrial Code Chapter 10.4: Infection with high pathogenicity avian influenza viruses
- Glossary definition for 'Poultry'
- Terrestrial Manual Chapter 3.3.4: Avian influenza (including infection with high pathogenicity avian influenza viruses)



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Review process – *Terrestrial Code*

- February 2017: Code Commission agreed a major revision of Chapter 10.4
- 2017 – 2020: OIE *ad hoc* Group on Avian influenza met three times to undertake a comprehensive review of this chapter and to consider comments received from Members.
- 2020: OIE *ad hoc* Group assessed low pathogenicity avian influenza against the Criteria for the inclusion of diseases, infections and infestations in the OIE list (Chapter 1.2.)
- Code Commission consulted the Scientific Commission and the Biological Standards Commission to address specific issues.
- The revised chapter was circulated five times for comments (!!)
- Discussed and adopted in May 2021 at the 88th OIE General Session



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Review process – *Terrestrial Manual*

- Revision of the Code chapter has an impact on the Manual chapter
- OIE Biological Standards Commission started the revision process in February 2020
- OIE Reference Laboratory experts on Avian influenza undertook comprehensive review:
 - to align it with Code chapter revision
 - thoroughly updated all sections of the chapter to include scientific information
- The revised chapter was circulated four times for comments
- Discussed and adopted in May 2021 at the 88th OIE General Session



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Chapter 1.3 - Diseases, infections and infestations listed by the OIE

Article 1.3.6 (avian diseases)

- Two current entries in the list have been modified:
 - Infection with **high pathogenicity** avian influenza viruses
 - Infection of birds other than *poultry*, including *wild* birds, with influenza A viruses of high pathogenicity ~~in birds other than *poultry* including wild birds~~
- And a new one was added:
 - **Infection of domestic and *captive wild* birds with low pathogenicity avian influenza viruses having proven natural transmission to humans associated with severe consequences**

Chapter 10.4 Infection with high pathogenicity avian influenza viruses

Revised scope, title, and new articles

- Title and scope amended to Infection with high pathogenicity avian influenza (HPAI) viruses.
- Impact on notification obligations and surveillance requirements, notably for LPAI viruses
- New and revised articles
 - Safe Commodities
 - Definition of compartment free from HPAI and recommendations for its establishment,
 - Recovery of free status
 - Amendments to the recommendations for safe trade and for inactivation of HPAI viruses

Chapter 10.4 Infection with high pathogenicity avian influenza viruses

New Article on Safe commodities

When authorising importation or transit of the following commodities, Veterinary Authorities **should not require any conditions related to high pathogenicity avian influenza**, regardless of the high pathogenicity avian influenza status of the exporting country or zone:

- **heat-treated poultry meat products** in a hermetically sealed container with an F0 value of 3 or above;
- **extruded dry pet food** and coated ingredients after extrusion;
- **rendered** meat-and-bone-meal, blood meal, feather meal, and poultry oil;
- **washed and steam-dried feathers** and down from poultry and other birds.

Other commodities of poultry and other birds can be traded safely if in accordance with the relevant articles of this chapter

Chapter 10.4 Infection with high pathogenicity avian influenza viruses

Revised provisions for the **recovery of free status**

If infection with high pathogenicity avian influenza virus has occurred in poultry in a previously free country or zone, **the free status may be regained after a minimum period of 28 days** (i.e. two flock-level incubation periods)

- after a stamping-out policy has been completed (i.e. after the disinfection of the last affected establishment),
- provided that surveillance in accordance with the relevant articles has been carried out during that period and has demonstrated the absence of infection.
- If a stamping-out policy is not implemented provisions for freedom apply.

N.B. OIE Members have the opportunity to self-declare HPAI status



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Chapter 10.4 Infection with high pathogenicity avian influenza viruses

New and revised provisions for surveillance

- New and revised recommendations on principles of surveillance for avian influenza,
- Surveillance for early warning of high pathogenicity avian influenza,
- Surveillance for demonstrating freedom from infection with high pathogenicity avian influenza,
- Surveillance of wild bird populations,
- Monitoring of low pathogenicity avian influenza in poultry populations.

Glossary definition for 'Poultry'

- Revision of Chapter 10.4. included the revision of the definition for Poultry contained in its Article 10.4.1.
- Several rounds of comments from Members
- Code Commission proposed to replace the Glossary definition for Poultry by the revised definition in the chapter.
- The revised definition provides more clarity on the different kind of birds covered by the definition, based on their epidemiological significance.

POULTRY

Means all birds reared or kept in captivity for the production of any commercial animal products or for breeding for this purpose, fighting cocks used for any purpose, and all birds used for restocking supplies of game or for breeding for this purpose, until they are released from captivity.

Birds that are kept in a single household, the products of which are used within the same household exclusively, are not considered poultry, provided that they have no direct or indirect contact with poultry or poultry facilities.

Birds that are kept in captivity for other reasons, including those that are kept for shows, racing, exhibitions, zoological collections and competitions, and for breeding or selling for these purposes, as well as pet birds, are not considered to be poultry, provided that they have no direct or indirect contact with poultry or poultry facilities.



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- Amended in line with updated Terrestrial Code AI chapter
- All sections extensively updated to reflect the latest scientific information:
 - Summary
 - Introduction
 - Diagnostic techniques
 - Samples for virus isolation,
 - Virus isolation,
 - Virus identification,
 - Assessment of pathogenicity,
 - Molecular techniques,
 - Serological tests
 - Requirements for vaccines
- Harmonise sampling and initial testing in both the AI and ND chapters

- Deleted the definition of disease for notification purposes and referred to Code chapter
- Elaborated the information to clearly state that the presence of multiple basic amino acids at the cleavage site remains the genotypic standard for designating high pathogenicity
- Removed references to specific biosafety containment levels as these are determined by biological risk analysis



NETWORK OF EXPERTISE ON ANIMAL INFLUENZA



OFFLU activities 2020 - 2021

- Collection of six monthly zoonotic avian influenza and swine influenza data for contribution to WHO VCM.
 - Data for 252 H5 and 4 H9 sequences were contributed to OFFLU by animal health laboratories in countries representing Europe, Asia, Africa, Oceania, and the Americas to which 637 H5 and 261 H9 sequences from Genbank and GISAID were added. Thanks to all laboratories/Members support!
- Guidance on Influenza A Cleavage Sites document regularly updated
- OFFLU avian, swine, equine influenza experts met virtually to discuss and execute the workplans of various technical activities
 - Avian influenza technical activity –
 - H9N2 (phylogeny, antigenic characterization, diagnosis)
 - network reactive to discuss spread/threat, zoonosis, risk assessment, training
 - OFFLU proficiency testing – led by ACDP, Australia
 - Generated global swine influenza situation in pig populations by sharing regional and country-specific epidemiological and research data
 - Expert surveillance panel activities for update of vaccine recommendations for equine influenza



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In conclusion ...

- **Comprehensive update** of OIE international standards relating to avian influenza
- **OIE review process** with oversight from elected Specialist Commissions and strong engagement from Members during consultation
- **Alignment of public and animal health risk** with risk management approach, in particular seeking to **minimize trade impacts** when not warranted by risk
- Continue to **promote surveillance, monitoring and notification** that has proven so valuable in **maintaining an active situational awareness** of the international epidemiology
- Promoting Member transparency and responsibility through **publication of Self-Declarations** in conformity with the international standards



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