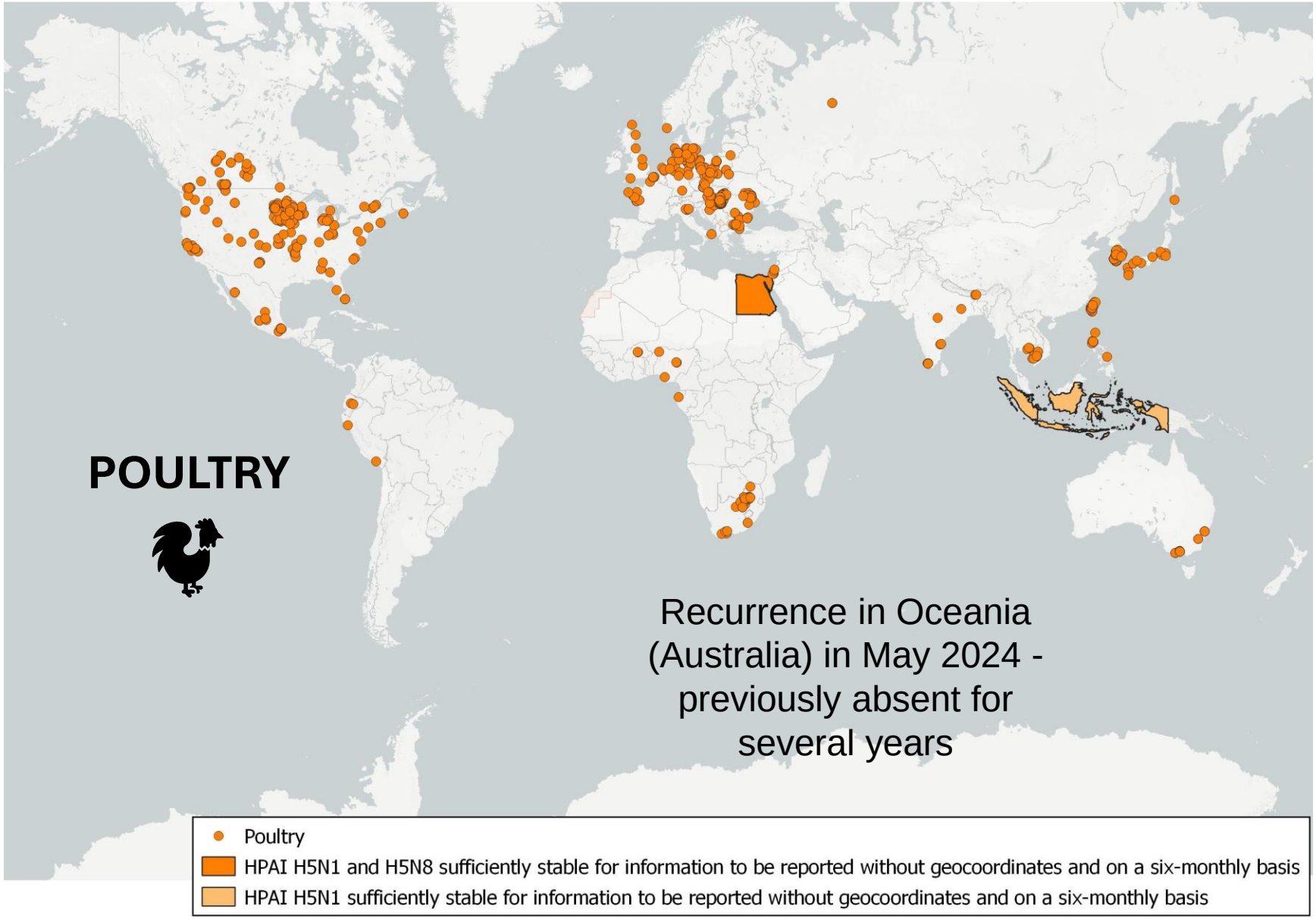
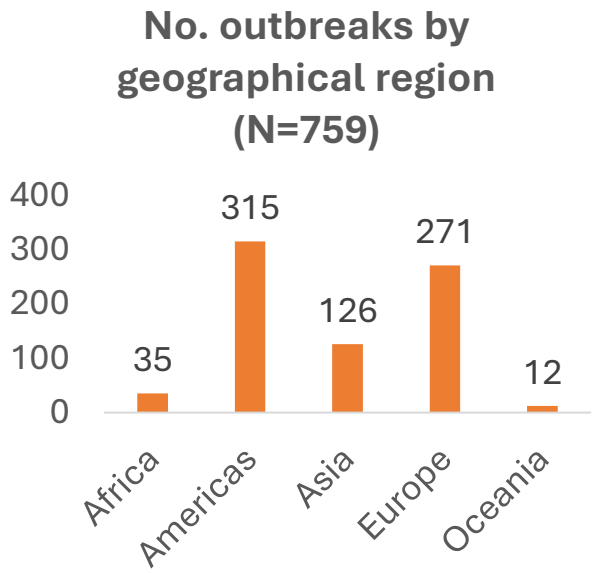
Global situation on HPAI Global activities for its control

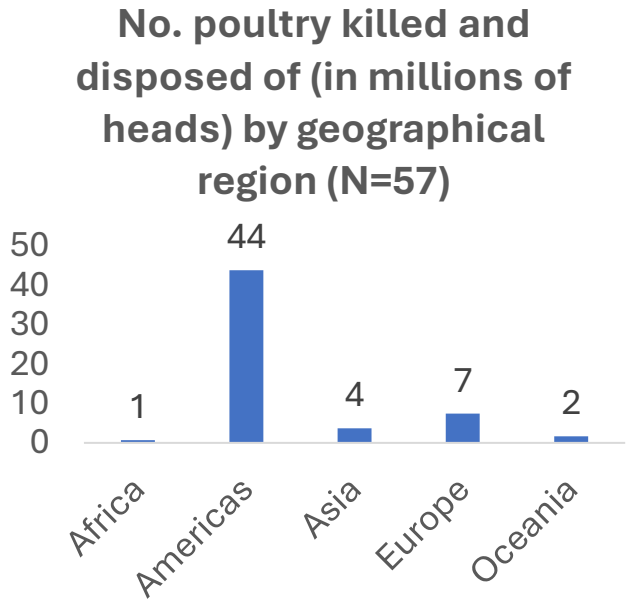
Gounalan Pavade
Science department
World Organisation for Animal health (WOAH)

10 October 2024

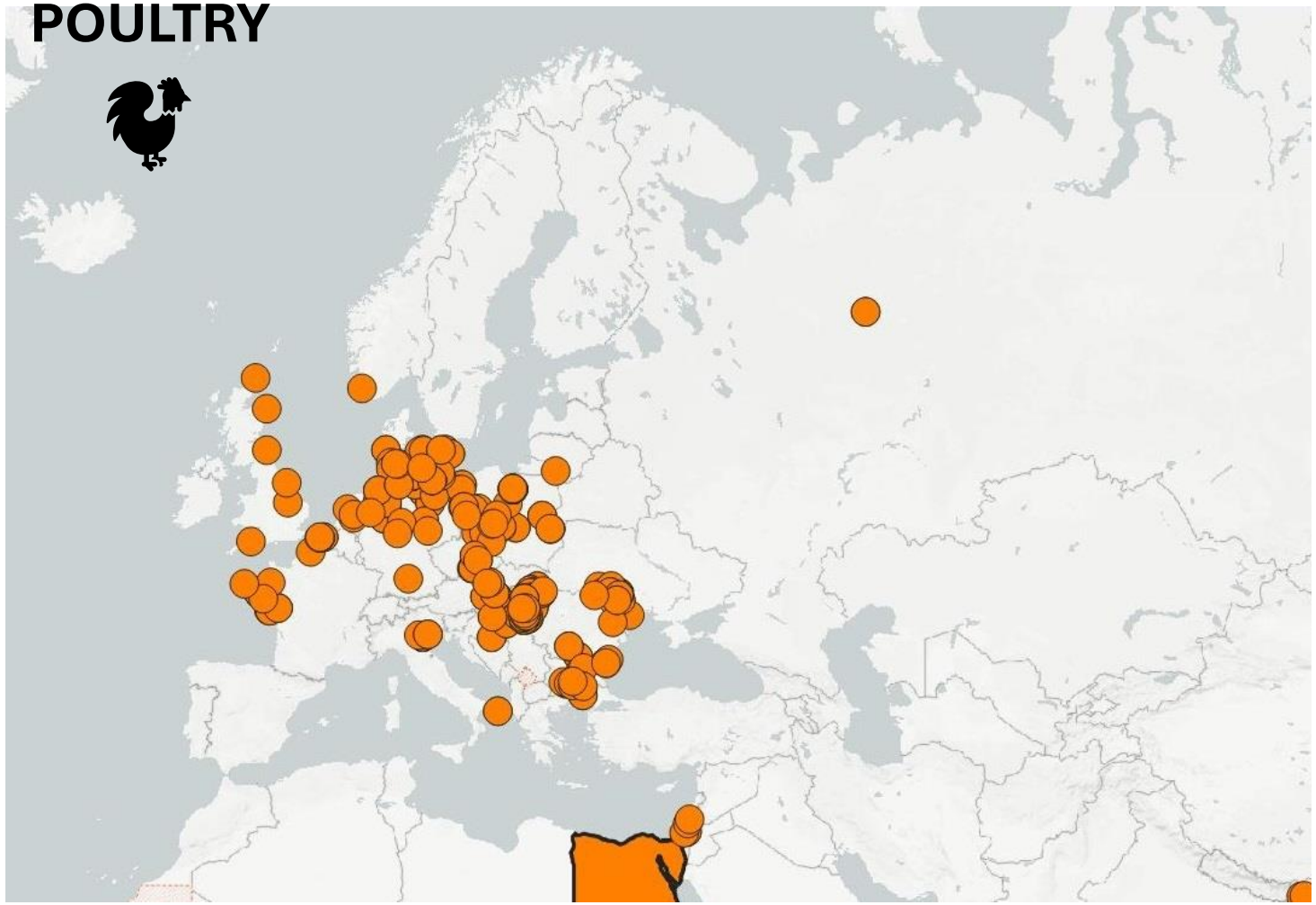
HPAI outbreaks for October 2023 – September 2024 (up to 13 September)







HPAI outbreaks for October 2023 – September 2024 (up to 13 September) - Europe

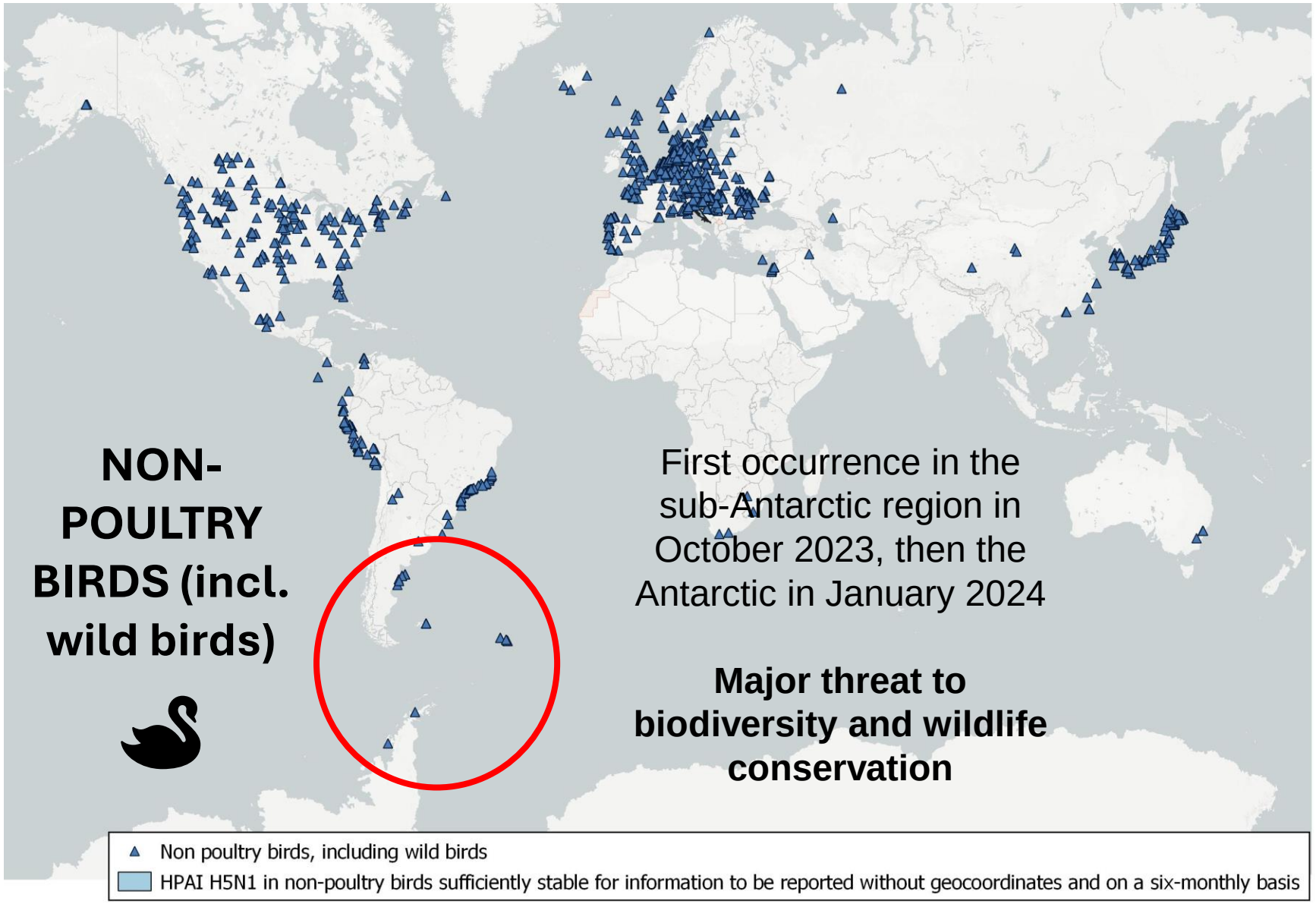


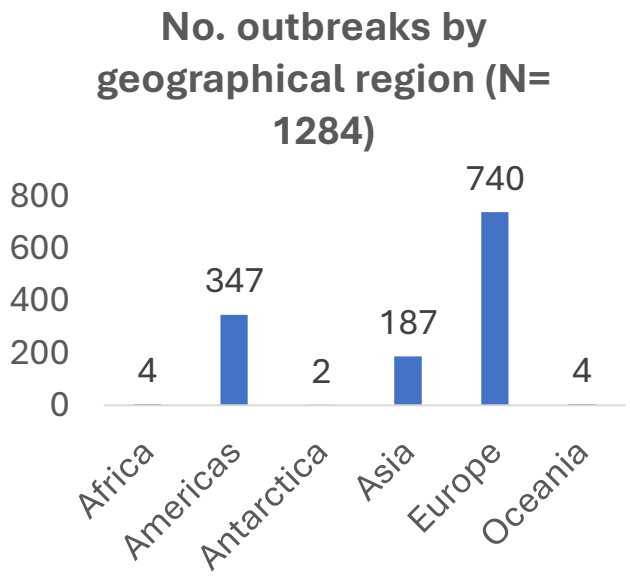
20 countries

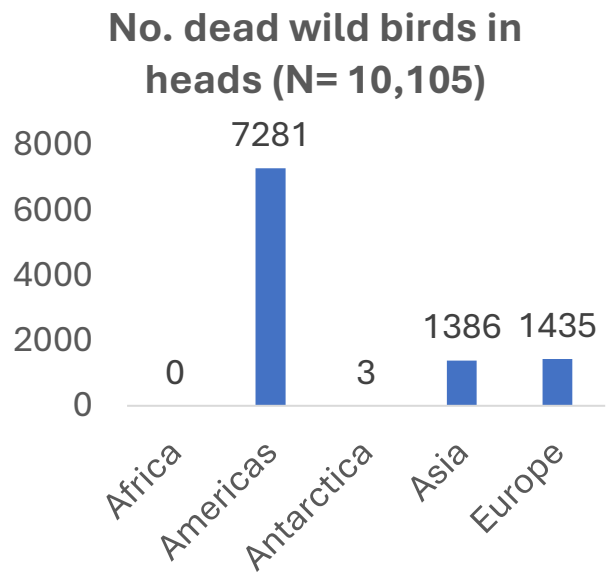
271 outbreaks

7 million poultry killed and disposed of

HPAI outbreaks for October 2023 – September 2024 (up to 13 September)







WOAH statement (13 March 2024) - HPAI in Antarctica

World Organisation for Animal Health
Founded in 1924

Animal Diseases | Avian Influenza | Antimicrobial resistance | SEARCH

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Inicio » News » **Wildlife under threat as avian influenza reaches Antarctica**

Statements

Wildlife under threat as avian influenza reaches Antarctica

Published on 13 March 2024

HPAI in mammals - impact on biodiversity

Mass mortality events (biodiversity)

More than **51,000** mammals died in South America (Oct-22 Nov-23)

More than 10,000 dead South American sea lions in Peru

offlu
WOAH FAO
network of expertise on animal influenza

21 December, 2023

Continued expansion of high pathogenicity avian influenza H5 in wildlife in South America and incursion into the Antarctic region

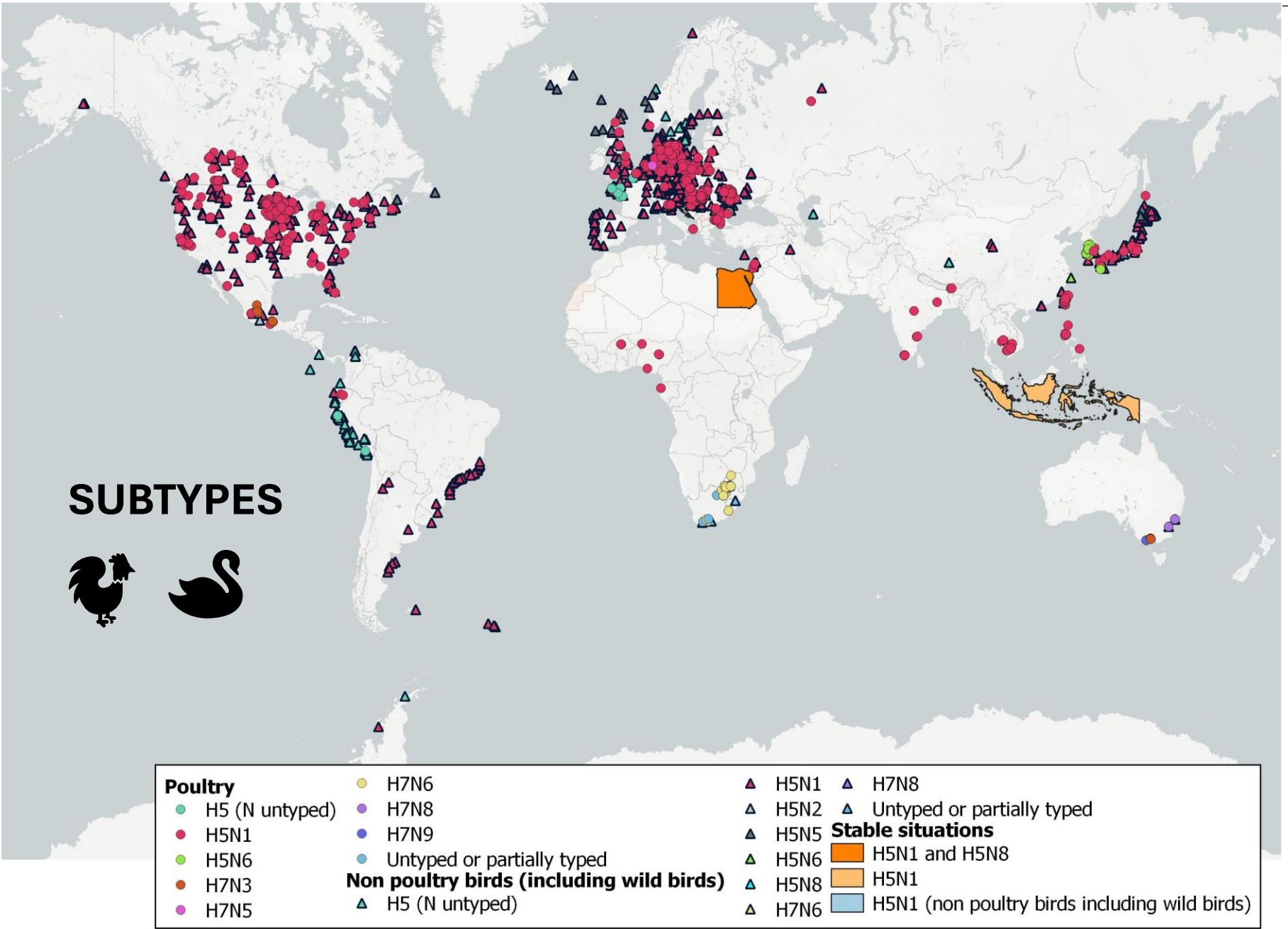
HPAI outbreaks for October 2023 – September 2024 (up to 13 September) - Europe

NON-POULTRY BIRDS (incl. wild birds)

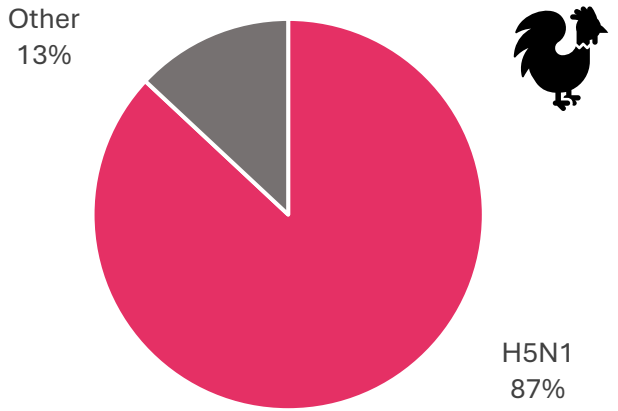
32 countries

740 outbreaks

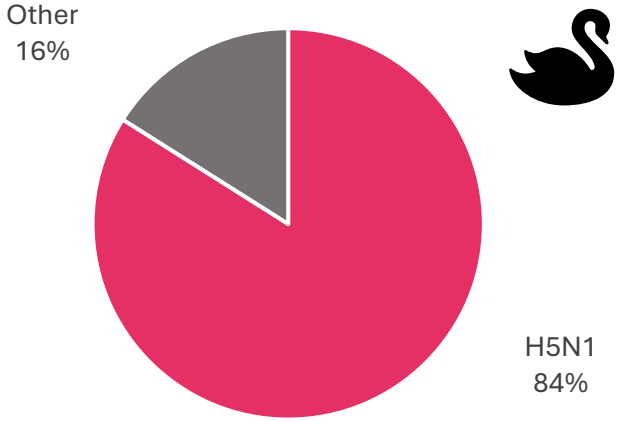
HPAI outbreaks for October 2023 – September 2024 (up to 13 September)



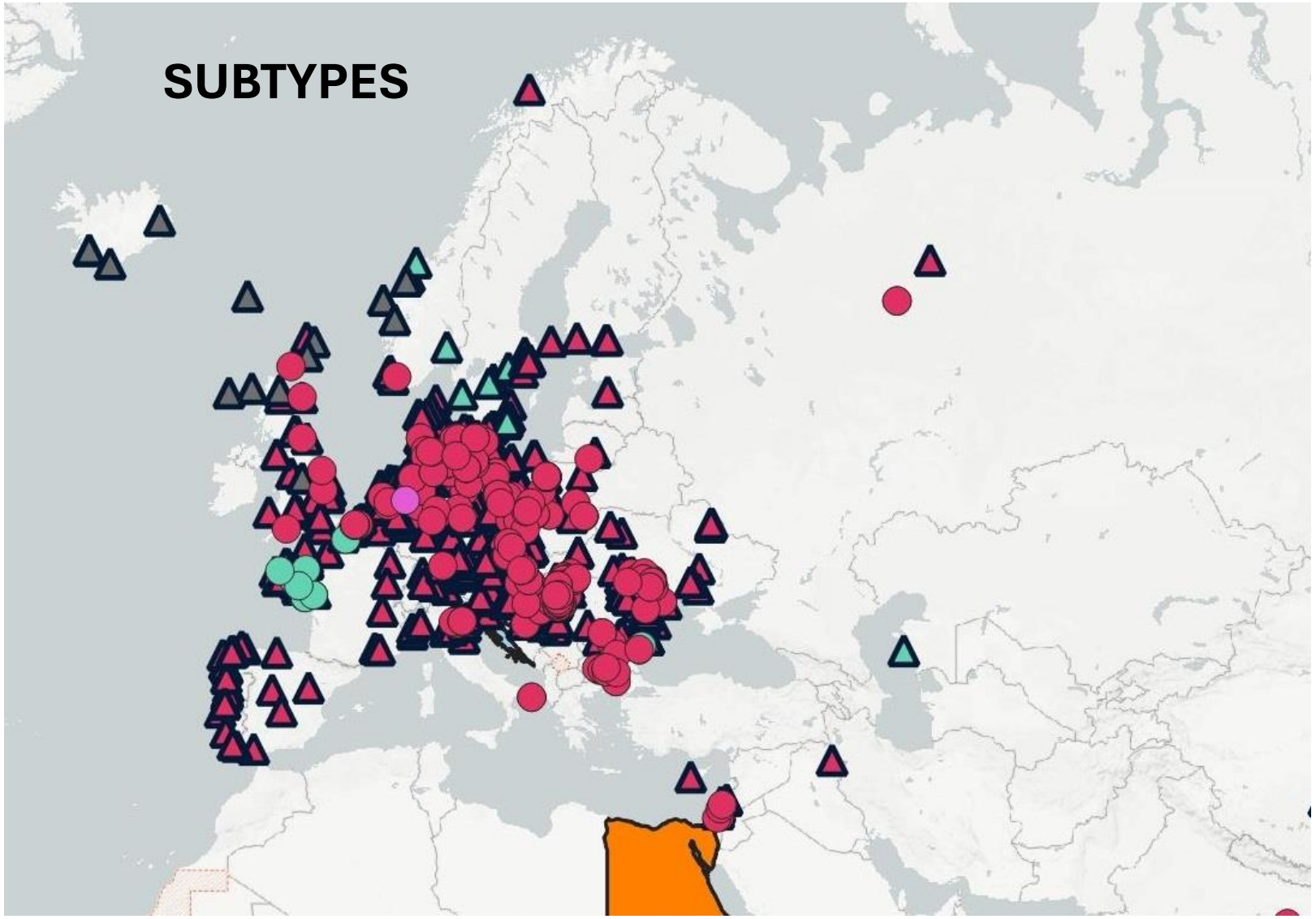
% outbreaks in poultry



No. outbreaks in non-poultry birds (incl. wild birds)



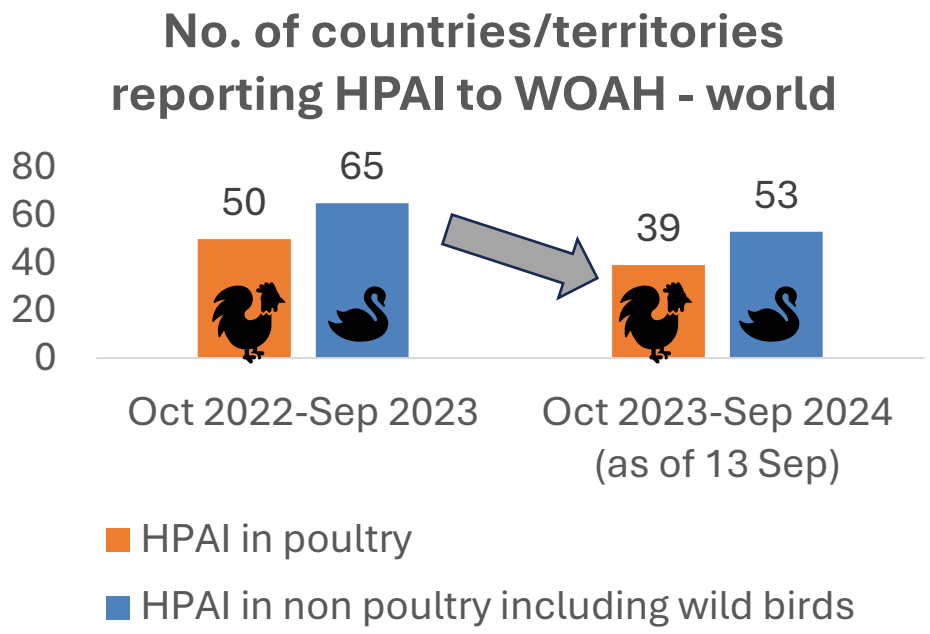
HPAI outbreaks for October 2023 – September 2024 (up to 13 September) - Europe

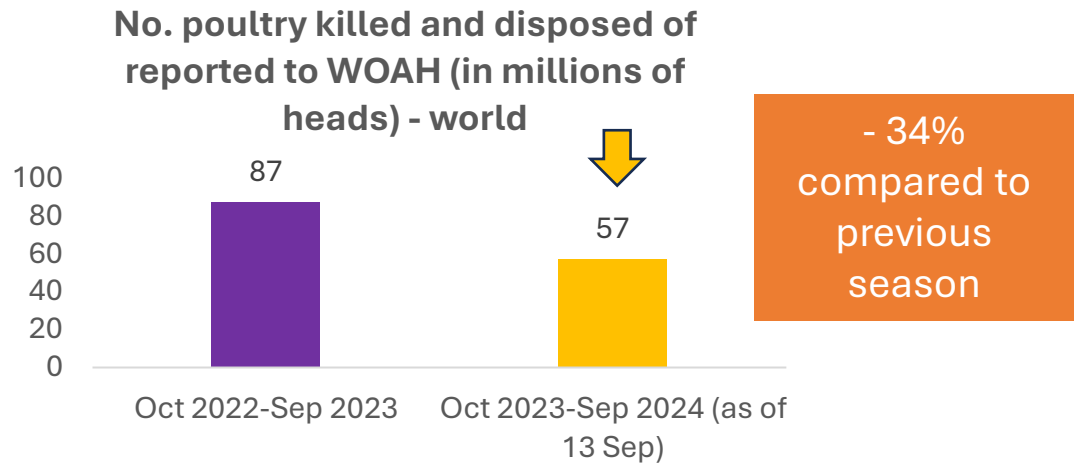


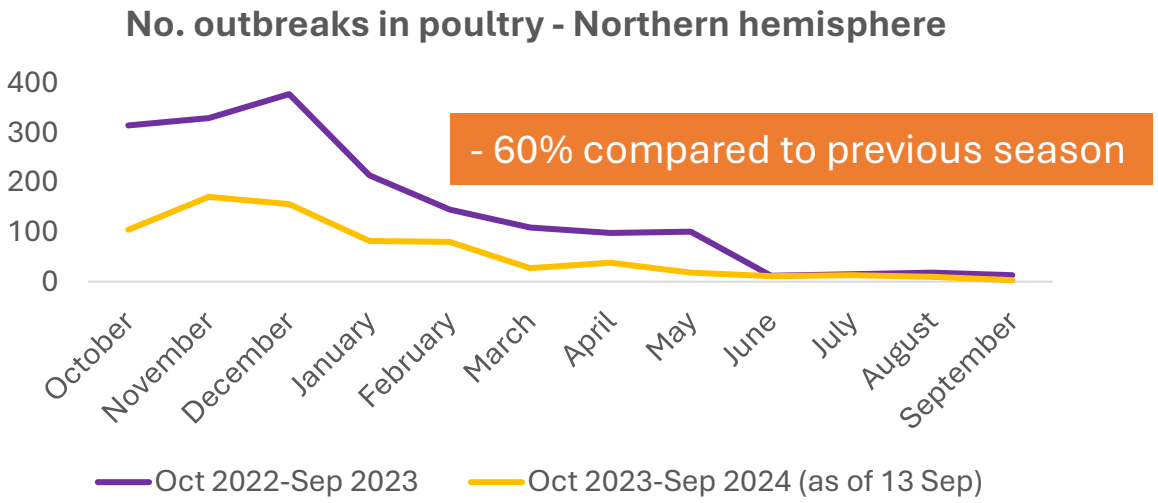
Subtype	Poultry outbreaks
H5 (N untyped)	21
H5N1	249
H7N5	1

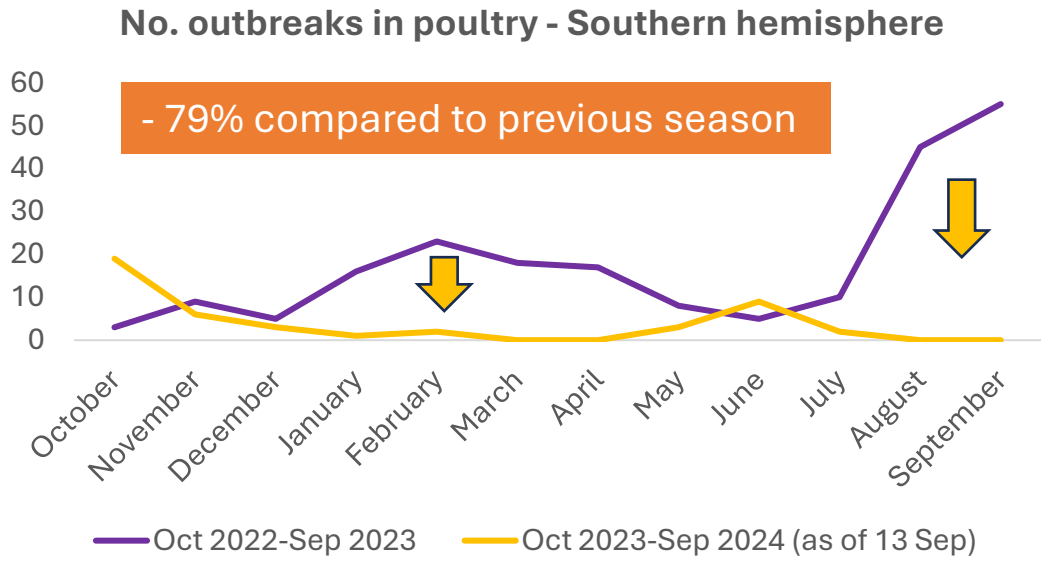
Subtype	Outbtreaks – non poultry birds
H5 (N untyped)	8
H5N1	706
H5N5	25
H5N8	1

HPAI : comparison Oct 2022- Sep 2023 vs Oct 2023 – Sep 2024 - world

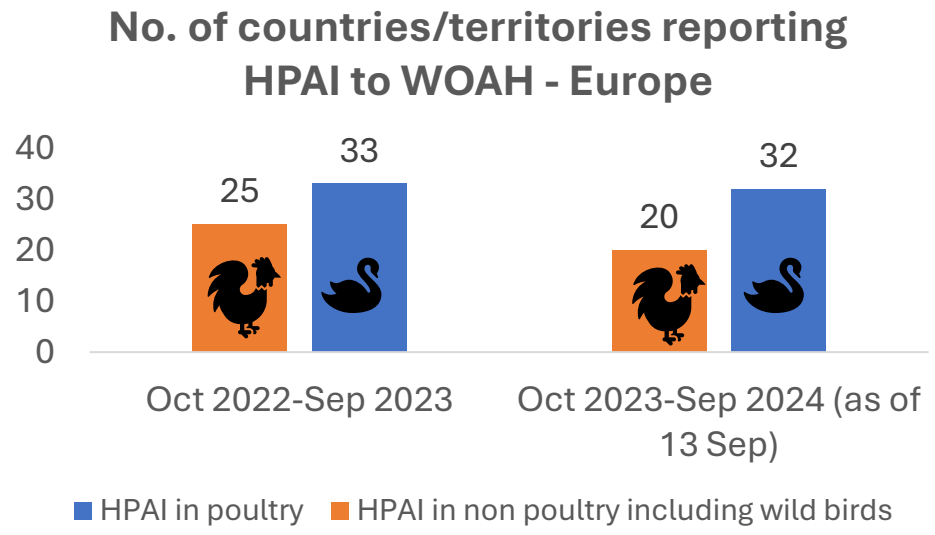


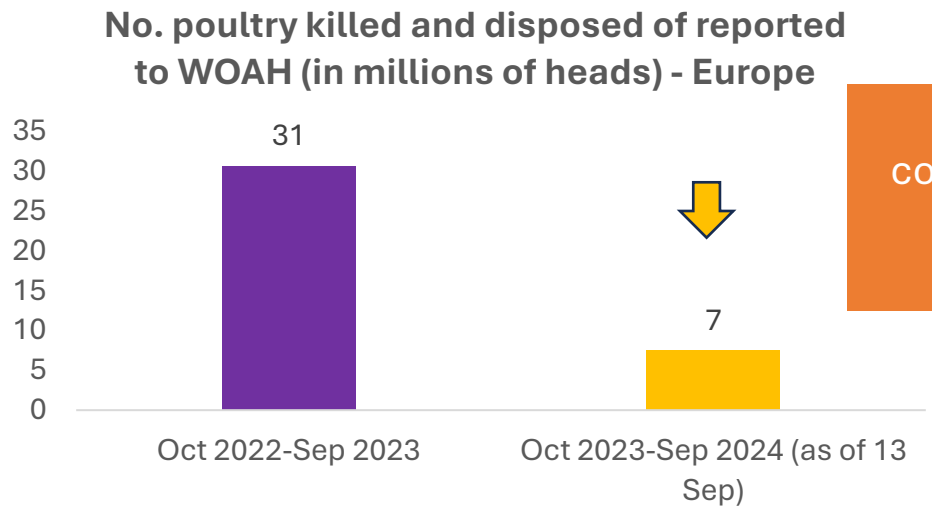




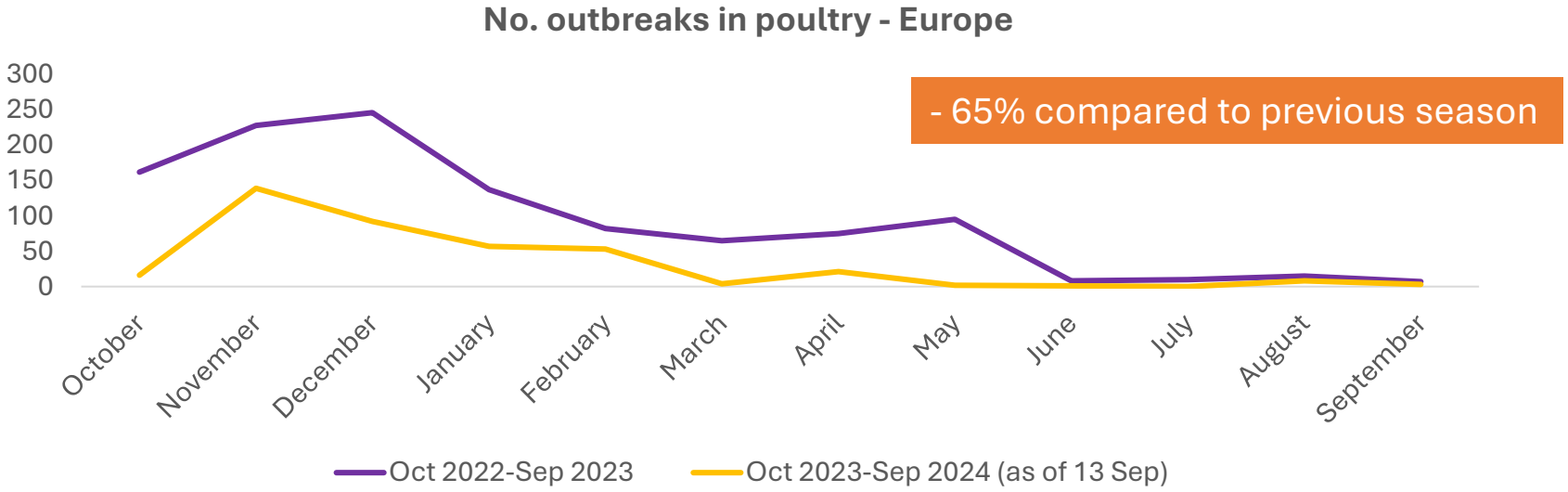


HPAI : comparison Oct 2022- Sep 2023 vs Oct 2023 – Sep 2024 - Europe





- 76% compared to previous season



- 65% compared to previous season

Cases of AI in mammals reporting to WAHIS

Reported according to *Terrestrial Code* Article 1.1.3. or 1.1.5

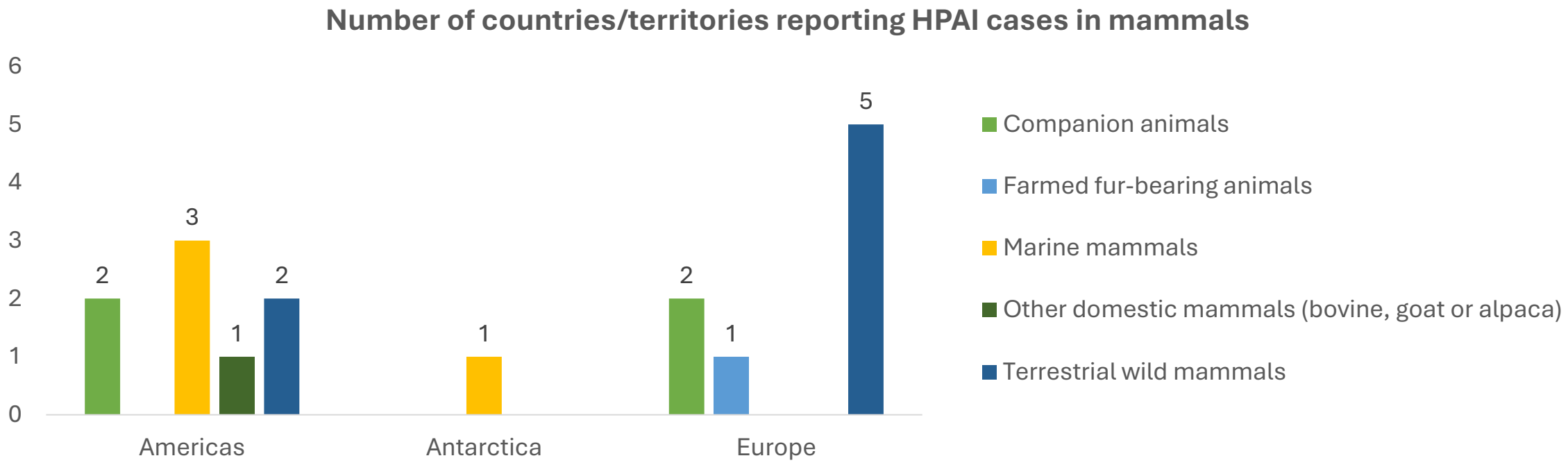
Summary of reports made according to Article 1.1.3.

Serotype, country, and species	Earliest outbreak report date	Latest outbreak report date	Number of outbreaks reported	More information
H5				
Argentina	25/08/2023	27/10/2023	18	
Chile	24/02/2023	28/07/2023	34	
Norway	23/02/2024	21/06/2024	3	
Peru	17/08/2023	17/08/2023	3	
Uruguay	10/05/2023	15/11/2023	12	
H5N1				
Brazil	05/10/2023	15/12/2023	5	
Canada	06/05/2022	26/05/2024	45	
China (People's Rep. of)	25/02/2015	25/02/2015	1	
Estonia	17/12/2021	17/12/2021	1	
Finland	13/07/2023	25/04/2024	76	
France	28/12/2022	06/03/2023	2	
Germany	02/05/2023	18/04/2024	19	
Ireland	14/02/2022	20/12/2022	2	
Italy	05/05/2023	13/07/2023	3	
Japan	11/04/2022	03/07/2023	4	
Korea (Rep. of)	26/07/2023	04/08/2023	2	
Latvia	14/07/2023	14/07/2023	2	
Norway	26/07/2023	26/07/2023	1	
Russia	28/08/2023	28/08/2023	1	
United States of America	10/05/2022	05/07/2024	332	
H5N5				
Canada	24/05/2023	13/05/2024	4	

Summary of reports made according to Article 1.1.5.

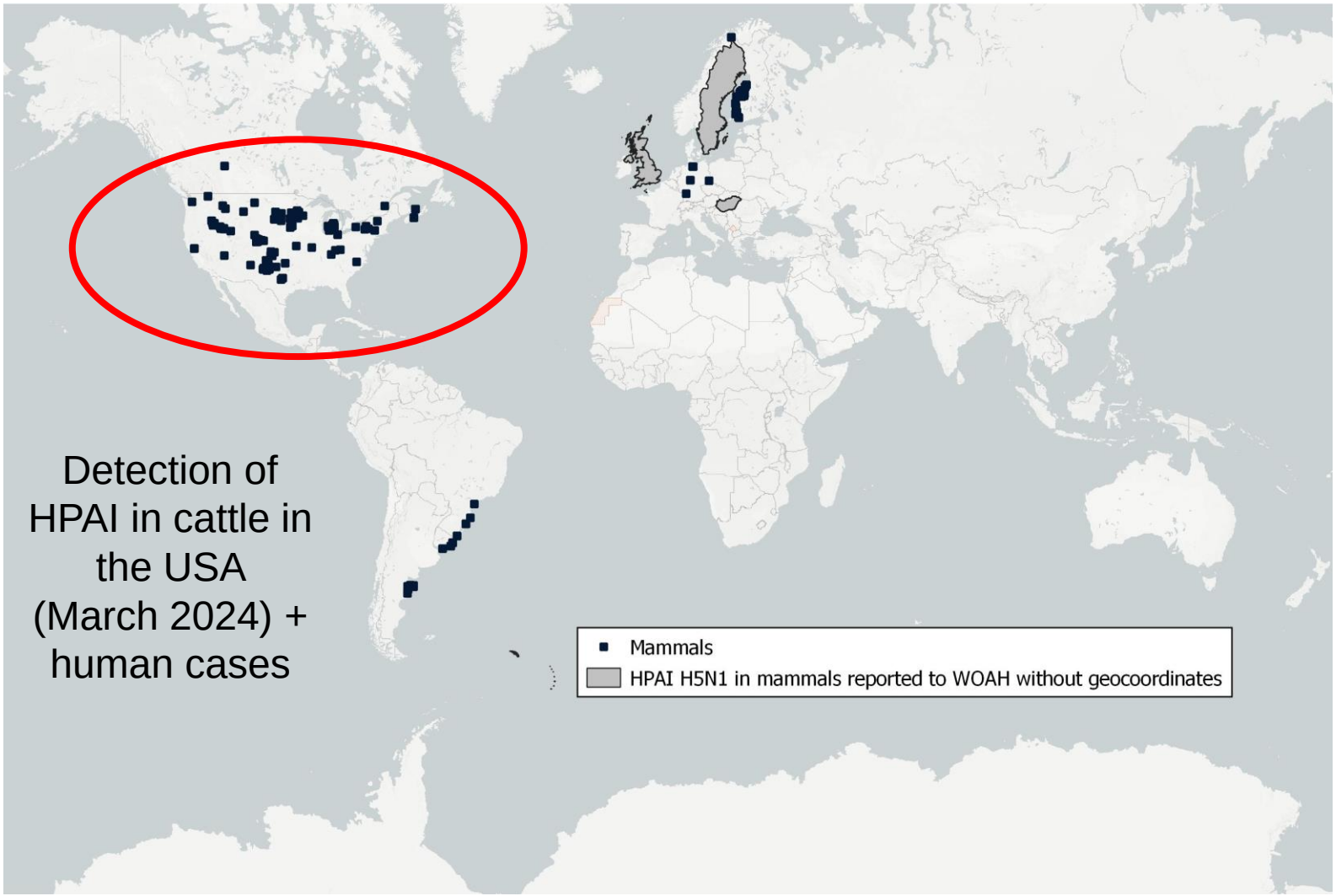
Serotype, country, and species	First report date	Latest report date	Number of reports	M
H5N1				
Chile	03/05/2023	03/05/2023	1	
Denmark	25/09/2023	25/09/2023	1	
Hungary	07/06/2024	07/06/2024	1	
Peru	07/02/2023	07/02/2023	1	
Poland	12/07/2023	12/07/2023	1	
South Georgia and the South Sandwich Islands	13/01/2024	13/01/2024	1	
Spain	21/10/2022	21/10/2022	1	
Sweden	09/08/2023	23/05/2024	3	
United Kingdom	20/12/2022	26/10/2023	8	
H5NX				
United Kingdom	23/03/2023	23/03/2023	1	

Reporting by mammal category (October 2023 – September 2024 (up to 13 September)



- **Companion animals** : cats and dogs
- **Farmed fur-bearing mammals** : 4 species *(American mink, Arctic fox, raccoon dog, sable)*
- **Marine mammals** : 4 species *(Antarctic fur seal, South American fur seal, South American sea lion, Southern elephant seal)*
- **Other domestic mammals** : 3 species *(alpaca, bovine, goat)*
- **Terrestrial wild mammals**: 13 species (e.g. raccoon, red fox, Eurasian otter)

HPAI in mammals, reported to WOAH by national authorities for October 2023 – September 2024 (up to 13 September)



Detection of HPAI in cattle in the USA (March 2024) + human cases

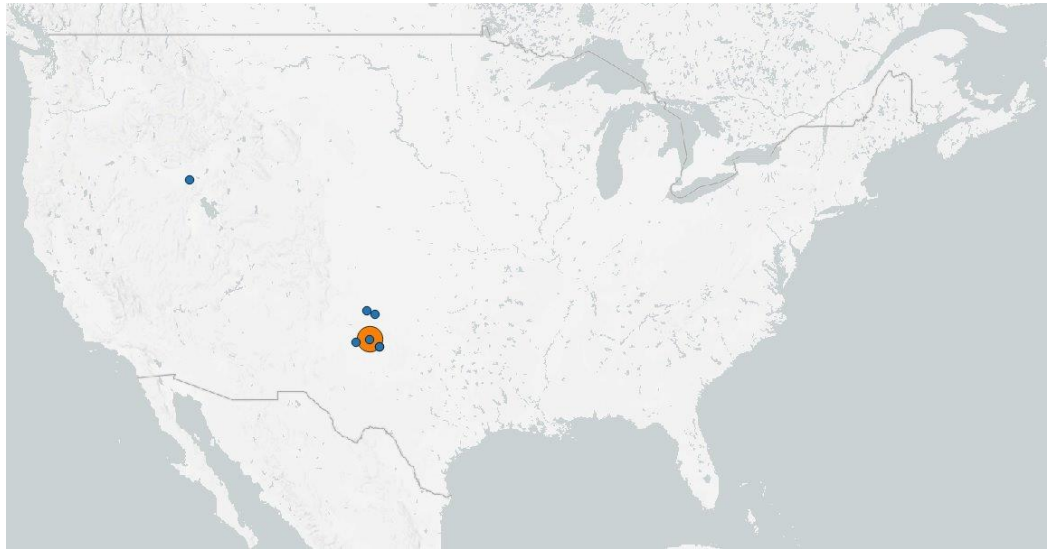
12 countries/territories

Argentina, Brazil, Canada, Finland, Germany, Hungary, Norway, United Kingdom, United States of America, South Georgia, Sweden, Uruguay

Increase in the number of cases detected in domestic and wild mammals

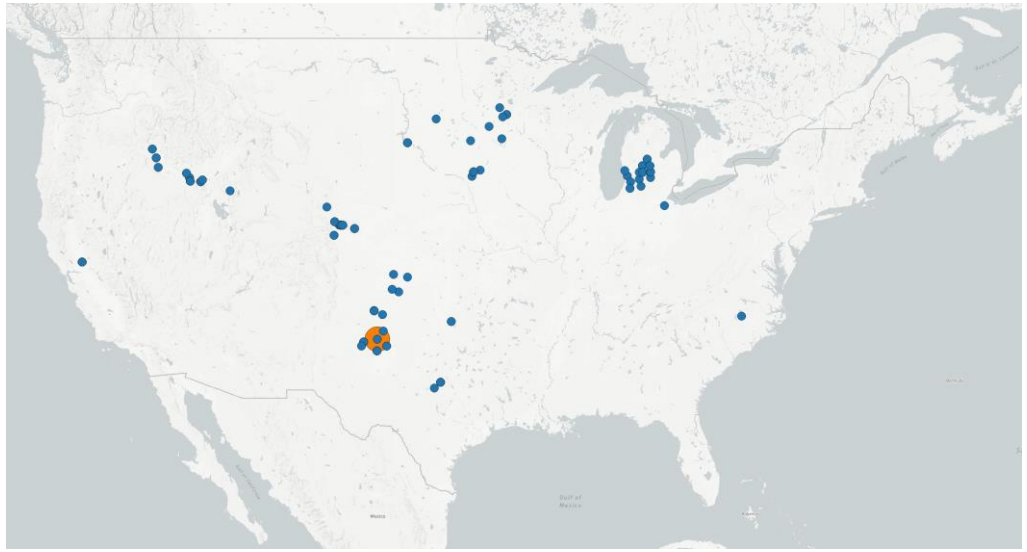
HPAI in cattle

Outbreaks reported by USA to WOAH, based on start dates (cumulative)



WEEK 1 **Start date of the first outbreak (orange dot) on 10 March 2024**

8 outbreaks
Texas, Idaho, New Mexico



WEEK 27

202 outbreaks – 14 States
Texas, Idaho, New Mexico, Michigan, Kansas, Ohio, South Dakota, North Carolina, Oklahoma, Colorado, Minnesota, Wyoming, Iowa, California

Source : WAHIS, 13 September 2024

Statements - HPAI in cattle

World Organisation for Animal Health
Founded in 1924

Animal Diseases | Avian Influenza | 91st General Session | SEARCH

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Statements

High Pathogenicity Avian Influenza in Cattle

Published on 5 April 2024

Food and Agriculture Organization of the United Nations

World Health Organization

World Organisation for Animal Health
Founded as OIE

Updated joint FAO/WHO/WOAH assessment of recent influenza A(H5N1) virus events in animals and people

Assessment based on data as of 18 July 2024

14 August 2024

Key points

At the present time, based on available information, FAO-WHO-WOAH assess the global public health risk of influenza A(H5N1) viruses to be low, while the risk of infection for occupationally exposed persons is low to moderate depending on the risk mitigation measures in place. Transmission between animals continues to occur and, to date, a limited number of human infections have been reported. Although additional human infections associated with exposure to infected animals or contaminated environments are likely to continue to occur, the overall public health impact of such infections at a global level is minor.

offlu
WOAH FAO
network of expertise on animal influenza

13 May 2024

Updated OFFLU Statement on high pathogenicity avian influenza in dairy cows

Since its inception in 2005, OFFLU (WOAH-FAO network of expertise on animal influenza) has been closely monitoring the global impacts of high pathogenicity avian influenza (HPAI), including working with multiple countries affected by the current H5N1 HPAI panzootic. Field veterinarians and OFFLU scientists in influenza Reference and Collaborating Centres play a key role in responding to novel outbreaks and characterising avian influenza (AI) viruses, including those that spillover to livestock or new and unusual hosts.

OFFLU scientists strive to share scientifically sound information for the surveillance and diagnosis of animal influenzas for Member laboratories and are closely following the current situation of AI detections in dairy cows (the first reported spillover to bovine species) and an associated human case in the USA as well as subsequent reports of viral RNA detections in milk. A case definition for HPAI H5N1 clade 2.3.4.4b in livestock is described by USDA. WOAH recommends investigation of suspected HPAI cases in non-avian species including cattle or other livestock populations with high risk of exposure to HPAI viruses.

The situation is constantly evolving, and risks must continue to be assessed regularly

FAO/WHO/WOAH continue to monitor and collaborate

Current Global situation of HPAI - H5Nx Gs/GD lineage virus.

- HPAI has led to the death and **mass slaughter of over 525 million poultry worldwide between 2005 and 2024 (as of 13 September)** with an unprecedented peak of 135 million in 2022.
  - 57 million poultry birds killed and disposed of between 1 October 2023 and 13 September 2024
- During this peak in 2022, 84 countries and territories in the world were affected with HPAI. This number continued to rise in 2023, reaching 88 countries and territories
  - 71 countries and territories so far in 2024, as of 13 September.
- HPAI is a **significant threat to biodiversity**, for both wild bird populations (the disease can decimate colonies of endangered species and has reached critical areas) and mammals (mass mortality events)
- Situation of concern in cattle in the USA, **novel risk to the cattle industry** (207 dairy herds affected as of 17 September 2024), and **implications for public health**
- In addition, up to now, humans have occasionally been infected with several subtypes of avian influenza (mainly H5N1, H7N9, H5N6, H9N2 with more than 2500 cases since 2003)
  - 38 human cases reported by 8 countries/territories (none in Europe) to WHO between 1 October 2023 and 13 September 2024 (of which 14 in the USA) – WOAH **closely monitoring evolutions and public health risk**

WOAH's response – Animal Health Forum on Avian Influenza

90th General Session
World Organisation for Animal Health
World Assembly
Paris, 21-25 May 2023
GS

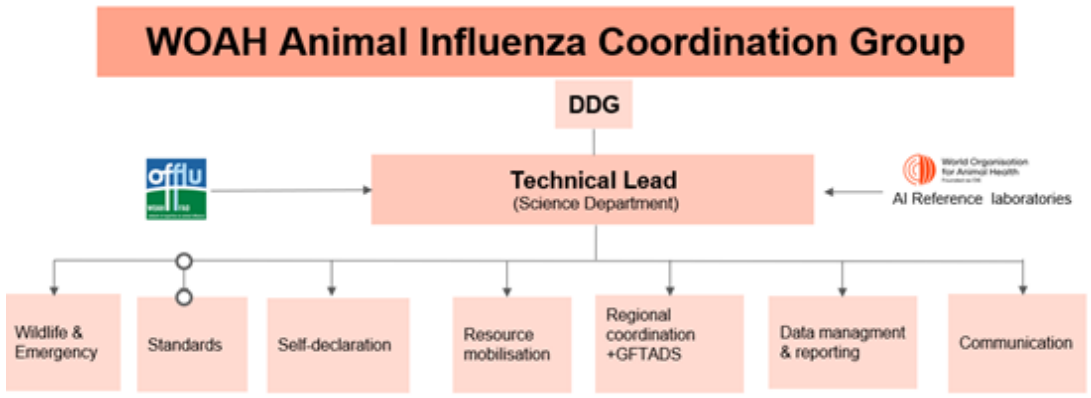
The HPAI Animal Health Forum offered an opportunity for Delegates and subject matter experts to have open discussions and agree on how to best tackle HPAI.

Technical Item: Strategic challenges in the global control of high pathogenicity avian influenza

Policy to Action: The case of Avian Influenza – Reflections for Change

Resolution 28: Strategic Challenges in the Global Control of High Pathogenicity Avian Influenza

Implementation framework
(May 2023 – May 2025)



1st year achievements of the implementation of Resolution 28

- All the 19 recommendations of Resolution 28 have at least one related activity underway.
- Of the 29 SMART indicators, 16 (55.2%) have already been achieved within the first year of implementing the framework.

OUTCOMES	1st YEAR ACTIVITIES	OUPUTS
Outcome 1 Global and regional **surveillance and monitoring** systems for **early detection and prevention** in domestic and wild animals are enhanced.	- Global OFFLU proficiency testing programme - 200 focal points trained on notification - Contributions of zoonotic influenza data to WHO Vaccine Composition Meetings - 18 Situation reports - Working group on wildlife – Guidelines for mammals	**Improved global intelligence on HPAI in domestic and wild animals**
Outcome 2 **Tools for the prevention and control** of HPAI, including vaccination, are optimized and disseminated, and the development of new tools is accelerated.	- At least 12 meetings on HPAI - OFFLU avian influenza matching project (AIM) reports published - Ongoing to draft – Surveillance guidelines for smallholder poultry settings (backyard) - Guidelines on zoning and compartmentalization	**Use of current tools to prevent and control HPAI**
Outcome 3 **Safe international trade** is being facilitated by the correct implementation of up to date and science-based standards and guidance.	- Revision of Terrestrial Manual - Chapter 3.3.4 - WOAH Policy paper of avian influenza vaccination	**Facilitation of safe trade using up-to-date and science-based standards and guidance**
Outcome 4 Global and regional **coordination** on avian influenza is achieved.	- GF TADs Global Strategy on HPAI launched - Regional GF-TAD meetings - Star IDAZ – research roadmaps	**Effective global and regional coordination in the control of HPAI**

Policy brief

Avian influenza vaccination:
why it should not be a barrier to safe trade

December 202

Executive summary

Since 2005, avian influenza has had a staggering toll, with over 500 million birds lost to the disease worldwide [1]. Its devastating impact extends beyond domestic and wild birds, threatening livelihoods, food security and public health. The recent shift in the disease's ecology and epidemiology has heightened global concern as it has spread to new geographical regions. It has also caused unusual die-offs in wild birds and led to an alarming increase in mammalian cases. The rapidly evolving nature of avian influenza and **changes in its patterns of spread** [2] require a review of existing prevention and control strategies. To effectively contain the disease, protect the economic sustainability of the poultry sector and reduce potential pandemic risks, all available tools must be reconsidered – including vaccination.

© wilkoski

Joint WOAH-FAO network of scientific expertise on animal influenzas OFFLU

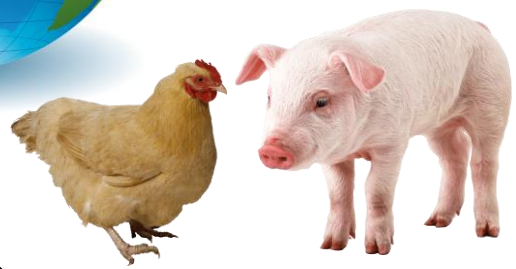
Reference laboratories
Influenza Experts

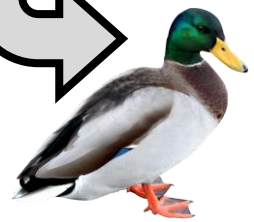
OFFLU Technical working groups:
Avian Influenza
Wildlife group
Human animal interface (VCM)
Poultry vaccination (AIM)
Applied epidemiology
Socioeconomics
Equine Influenza
Swine Influenza

Network promoting the sharing of information (and sequence data)

OFFLU GLOBAL TECHNICAL MEETING HAPPENED IN JULY 2024 to revise ToR of groups and future plan of action

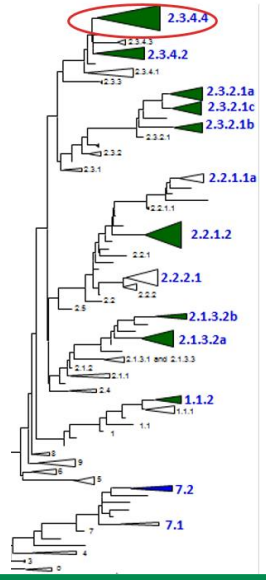
OFFLU network contribution to WHO Vaccine Composition Meetings





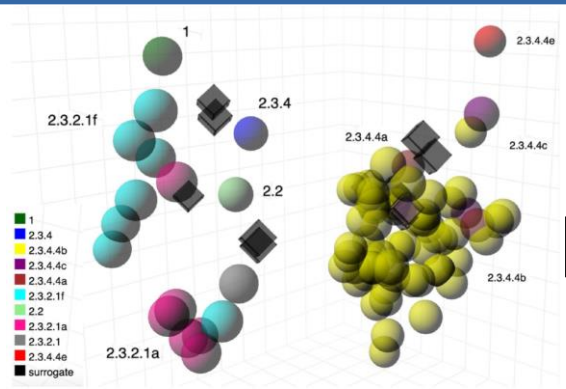
Step 1:

Epidemiological and genetic analysis



Step 2:

Evaluate antigenic changes of significance to candidate vaccine viruses (CVV)



Step 3:

- OFFLU data package presented
- Discussed in the context of zoonotic human influenza cases
- WHO VCM zoonotic report
- Updates to CVVs

World Organisation for Animal Health
Founded as OIE

World Health Organization

Avian Influenza Matching (AIM) for poultry vaccines

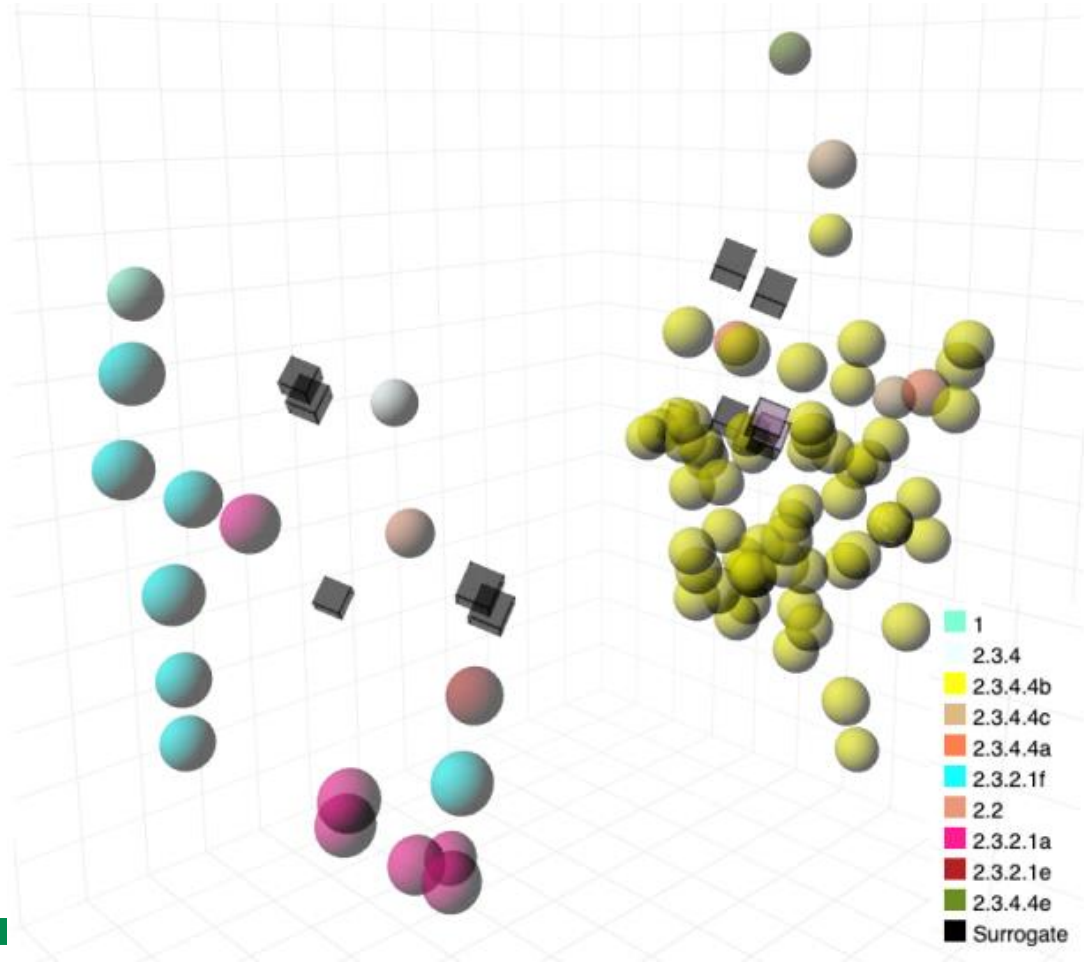
Sera
- Isolates *similar* to vaccine seed strains and contemporary viruses

HI
- Selection of globally representative contemporary viruses

Cartography
- Antigenic characterisation mapped using cartography

Report
- Summary report → OFFLU website

- Information on the antigenic characteristics of currently circulating avian influenza viruses
- Facilitate the selection of appropriate vaccines for poultry
- Requires **sharing** of viral isolates from countries
- Potential for early warning and regularly updated



HPAI Global Strategy 2024 - 2033

- **Prevent** HPAI epidemics, panzootics and negative impacts on biodiversity through multisectoral early detection and control
- **Protect** poultry value chains, livelihoods, trade, and the health of humans, ecosystems, and other animals from avian influenza impacts
- **Transform** poultry value chains to improve resilience to avian influenza and other disease threats.

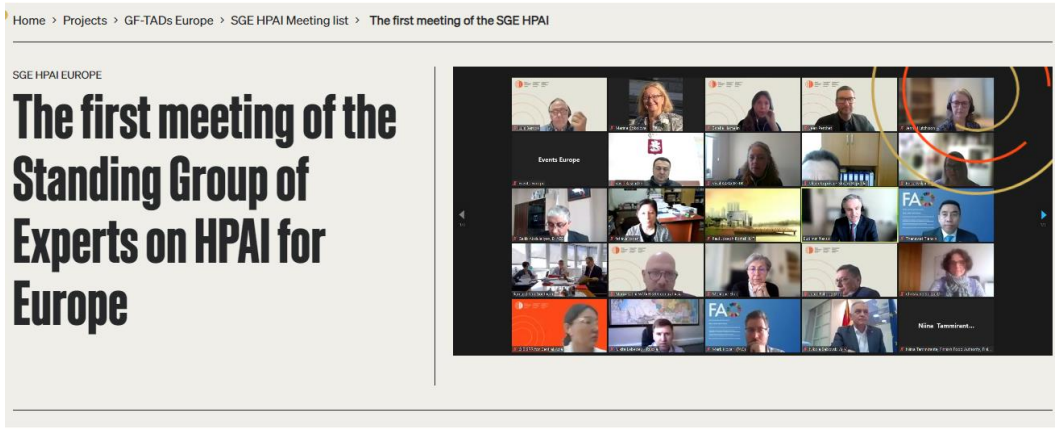
https://openknowledge.fao.org/server/api/core/bitstreams/6fff62da-80e1-43ab-94ee-3a5b69940b7c/content

Regional groups on Avian Influenza

Supporting coordination and exchange of information between neighbouring countries, experts and international/regional organisations

Information, presentations and material available on regional WOAH website

Second meeting of the SGE HPAI - Americas



The first meeting of the SGE HPAI - WOAH – Europe

Avian Disease Workshop for Asia Pacific 2024 - WOAH - Asia

Thank you

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