



Update of the Global and regional situation of avian influenza outbreaks and Animal Health Forum

Dr Gounalan PAVADE

*29th Annual Meeting of the National Reference
Laboratories for Avian influenza and Newcastle Disease of
European Union Member States*

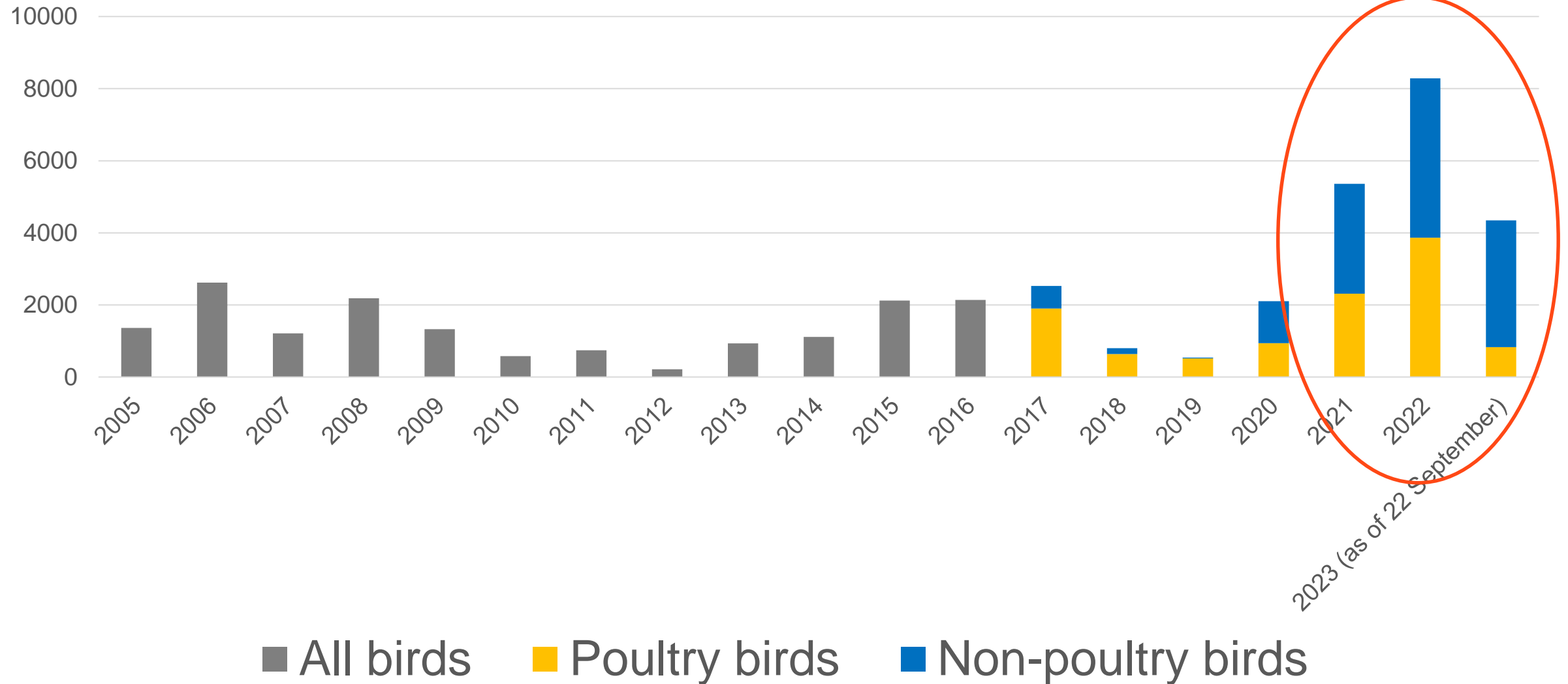
Parma, Italy , 2 – 3 October 2023



**World Organisation
for Animal Health**
Founded as OIE

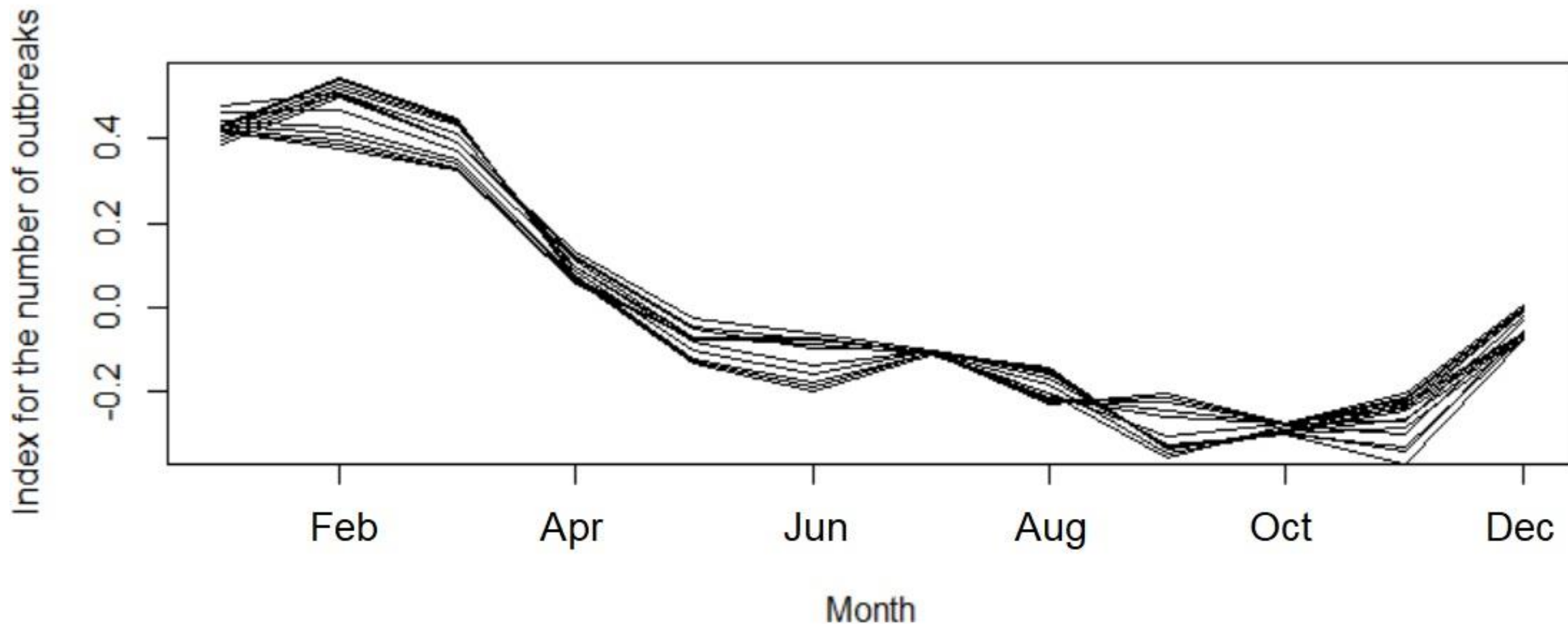
GLOBAL HPAI SITUATION (2005-2023)

No. outbreaks





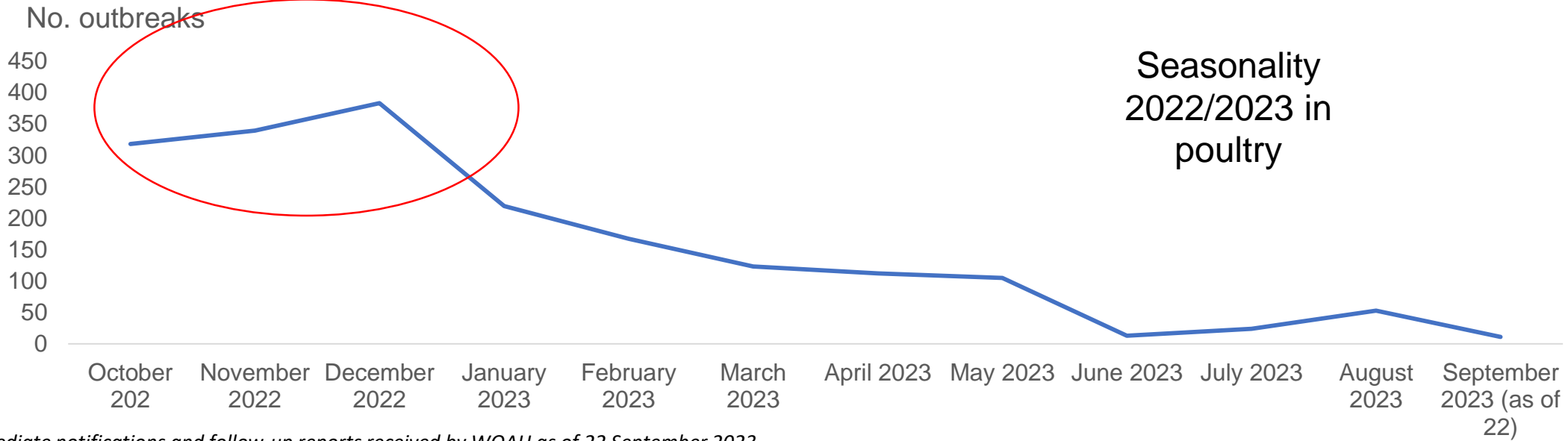
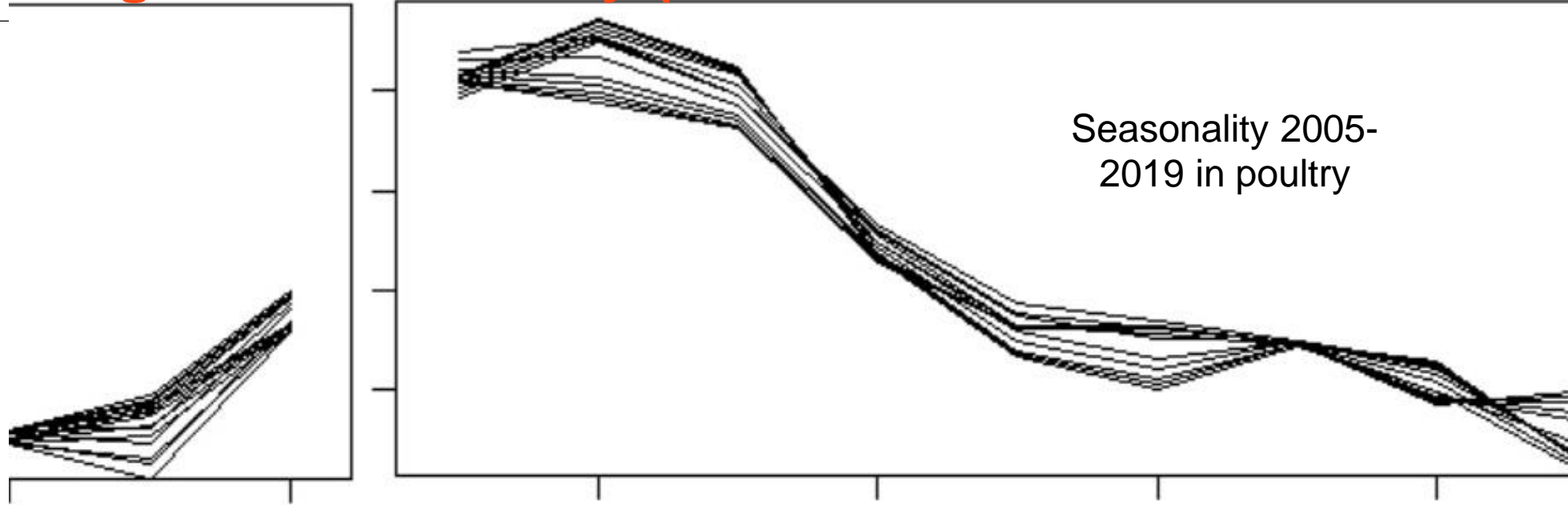
HPAI global seasonality in poultry (2005-2019)



**Based on Seasonal and Trend decomposition using Loess (STL) analysis performed on data reported between 2005 and 2019 by 76 affected countries and territories for 18,620 outbreaks in poultry (detailed methodology presented in Awada et al., 2018).*



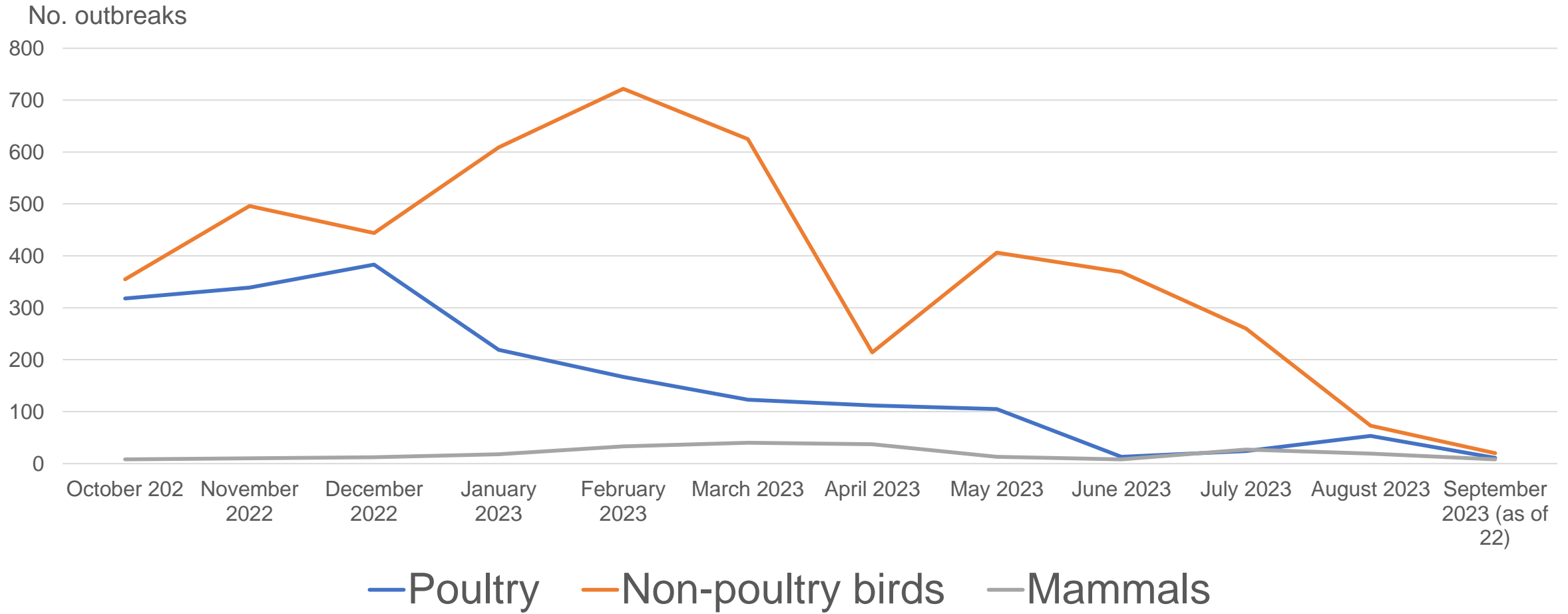
HPAI global seasonality (current seasonal wave 2022/2023)



**Based immediate notifications and follow-up reports received by WOA as of 22 September 2023.
This does not include outbreaks reported through other means (stable situations in Egypt & Indonesia and some outbreaks in mammals)*



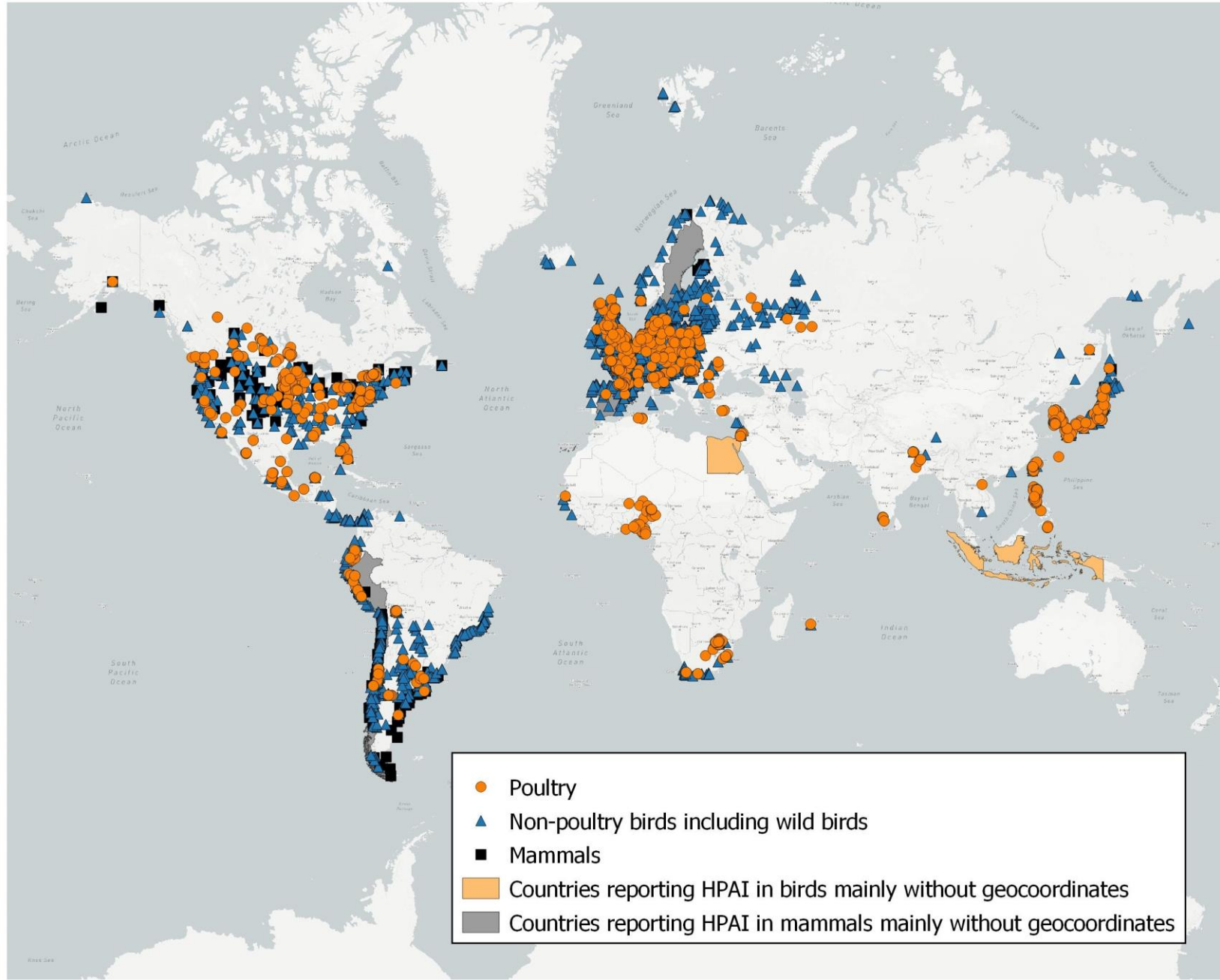
HPAI global seasonality (current seasonal wave 2022/2023)



**Based on immediate notifications and follow-up reports received by WOA as of 22 September 2023.
This does not include outbreaks reported through other means (stable situations in Egypt & Indonesia and some outbreaks in mammals)*

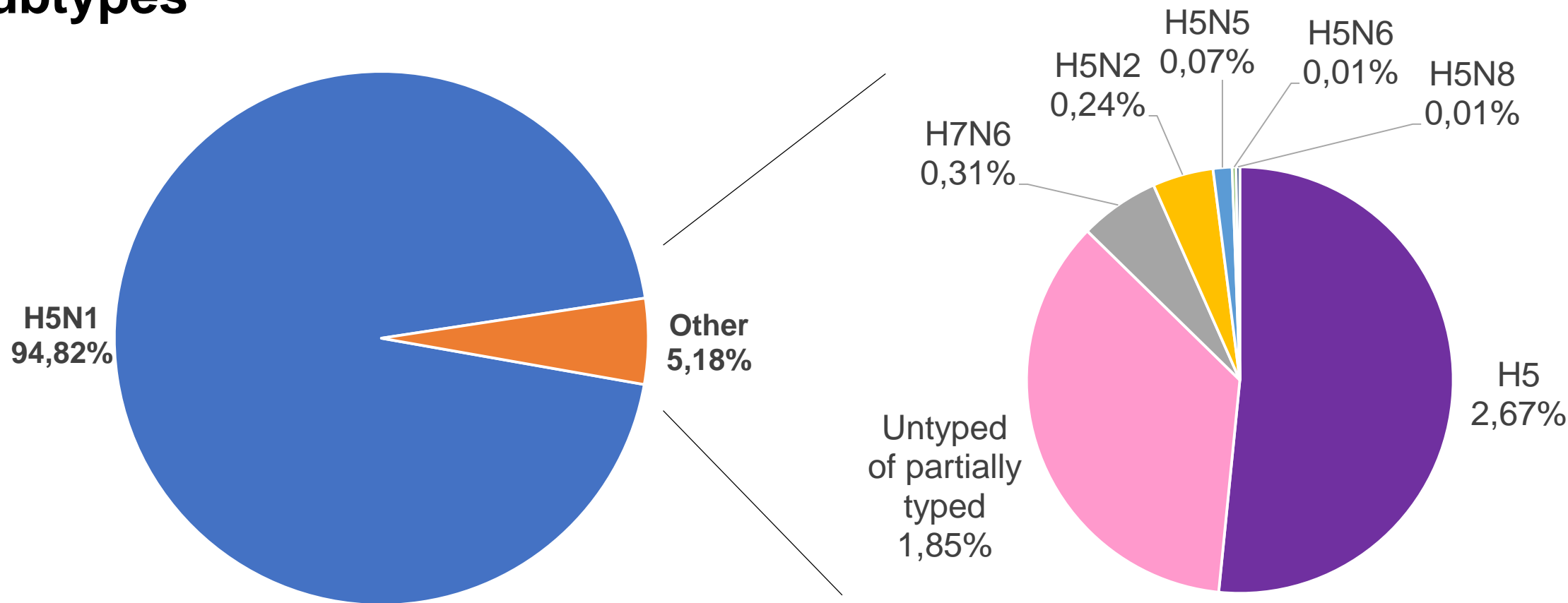


GLOBAL HPAI SITUATION (1 Oct 2022 – 22 Sept 2023)





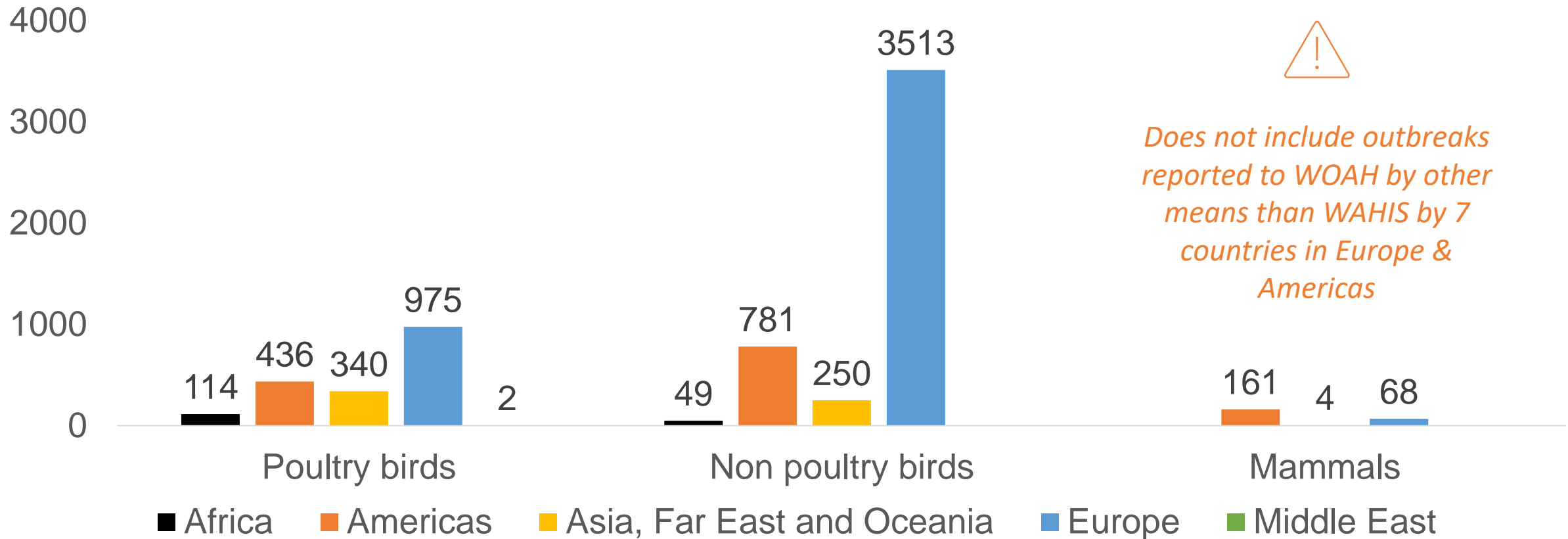
Subtypes



**Based immediate notifications and follow-up reports received by WOAHA as of 22 September 2023. This does not include outbreaks reported through other means (stable situations in Egypt & Indonesia and some outbreaks in mammals)*



No. outbreaks by host category & world region

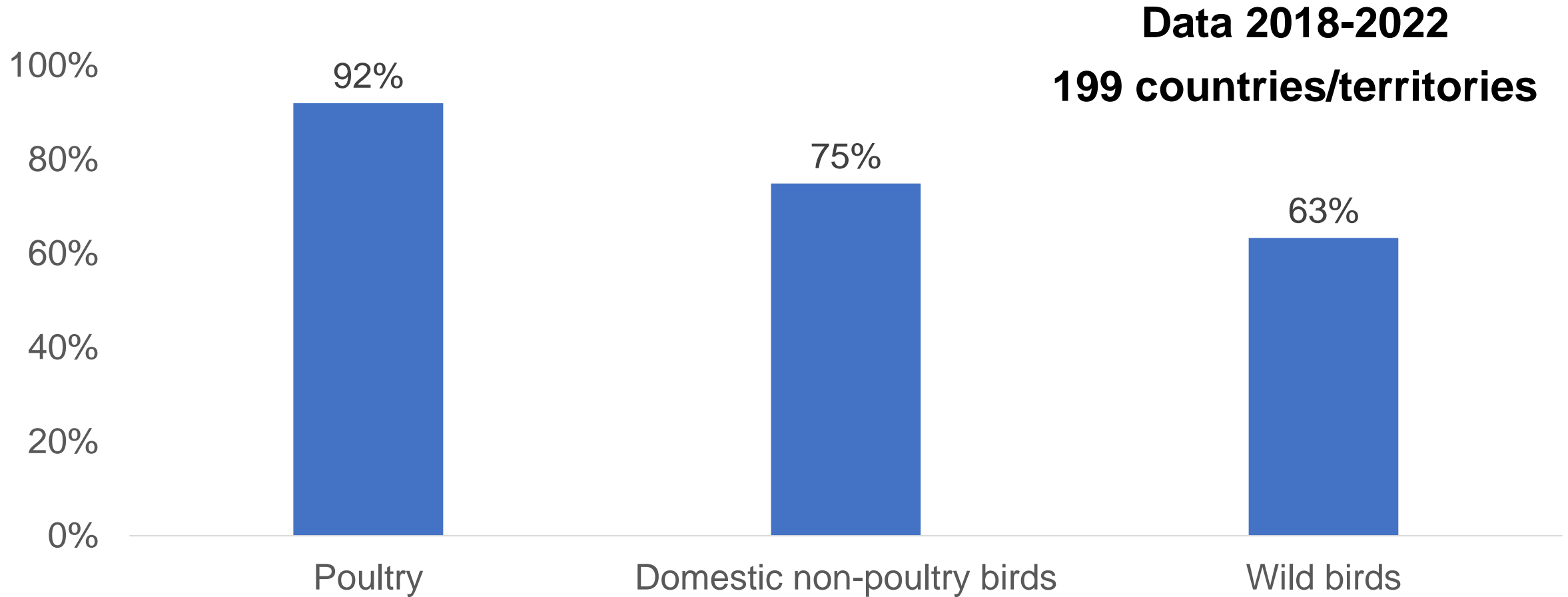


**Based immediate notifications and follow-up reports received by WOAHA as of 22 September 2023.*

This does not include outbreaks reported through other means (stable situations in Egypt & Indonesia and some outbreaks in mammals)



% of countries and territories reporting surveillance activities ⁹



**Based on six-monthly reports received and validated by WOAHA as of 13 April 2023.*



HPAI in mammals (1 Oct 2022 – 22 Sept 2023)



Cases in mammals reported by 22 countries



Mammal cases reported in more than 30 species

Farmed mammals



Cats & dogs



Terrestrial wild mammals



Marine mammals

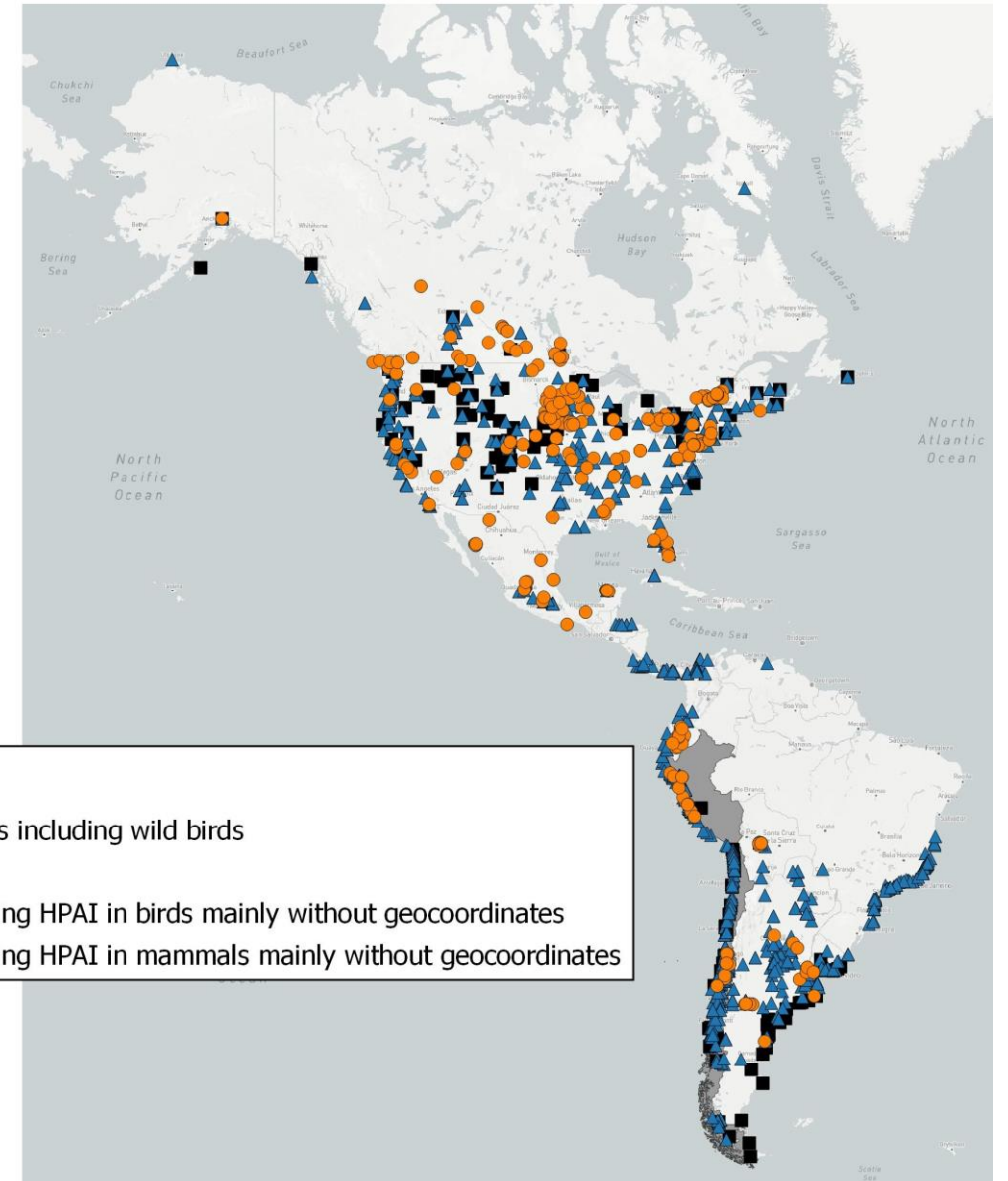


Zoo mammals



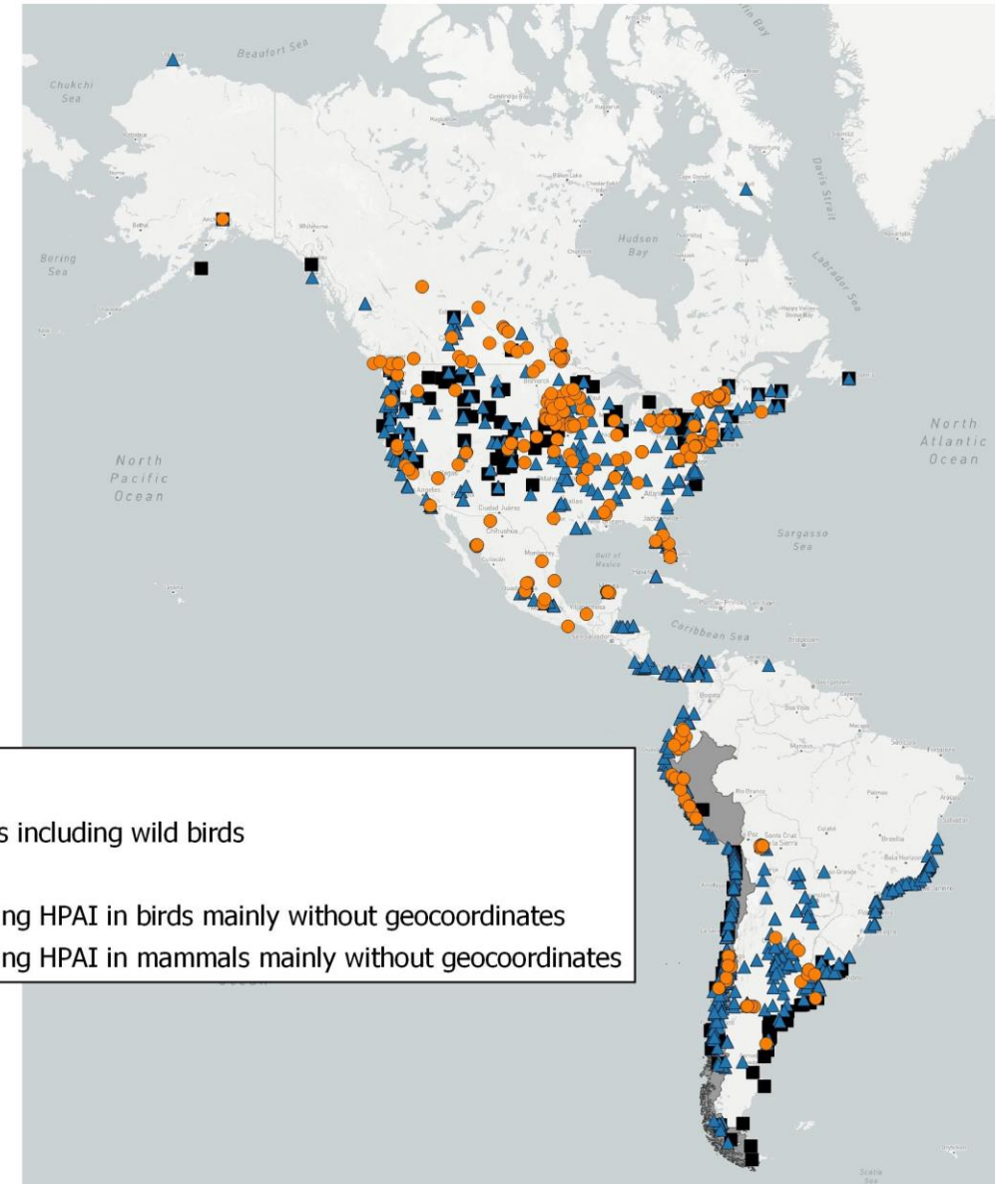


1. 18 countries reported HPAI events
2. **Worrying spread to countries further south than Mexico since October 2022**, 1st occurrence in Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Honduras, Panama, Paraguay, Peru, Uruguay, Venezuela and recurrence in Chile after 20 years of absence.
3. In 2022, North America was impacted by the **worst** avian influenza epidemic wave ever registered **since 2005**
4. Viruses currently circulating in Americas closely related to Eurasian lineage, suggesting the viruses have been introduced by wild bird migration into the American continent.





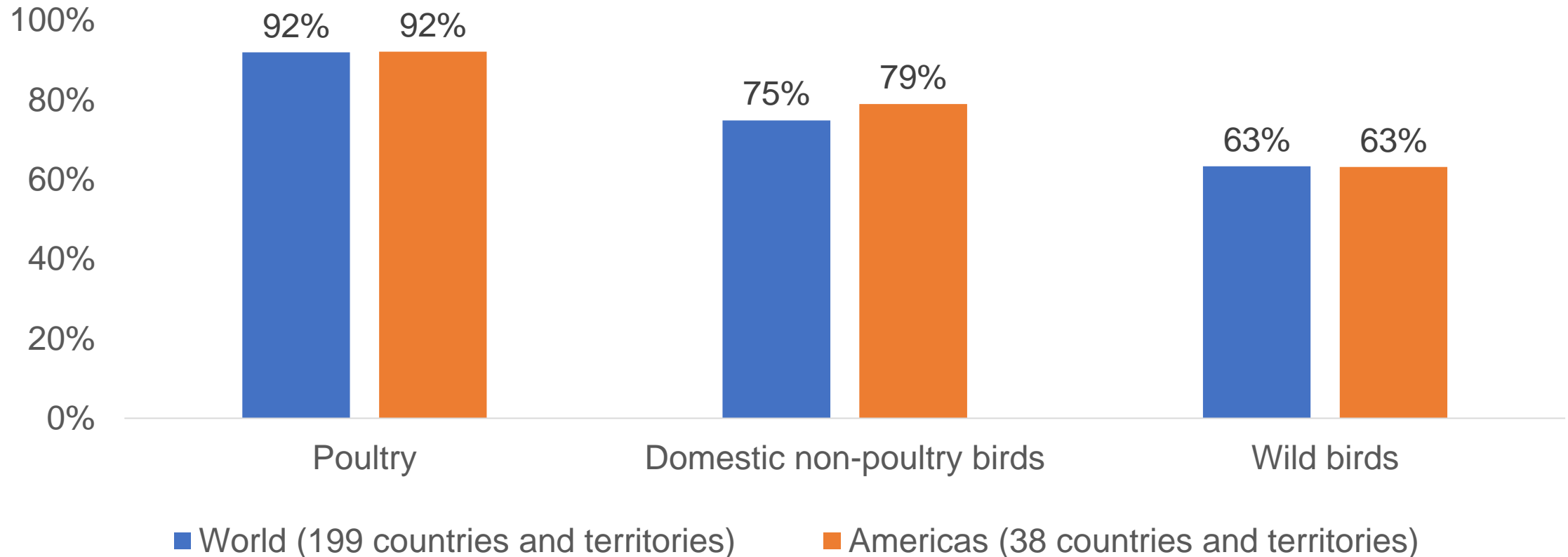
1. 1378 outbreaks were reported through WAHIS: 436 in poultry birds, 781 in non-poultry birds and 161 in mammals (some other outbreaks in mammals were reported through other communication means). H5N1 was the subtype reported in the vast majority of the outbreaks, and only 2 outbreaks were reported for H5N5 (in Canada).
2. Outbreaks in poultry were reported by 8 countries. Most detections in non-poultry birds were reported by USA (224), Chile (166) and Brazil. Outbreaks in mammals were reported by 8 countries.
3. 29 million poultry dead or killed and disposed of
4. Concerns of spread to Antarctica



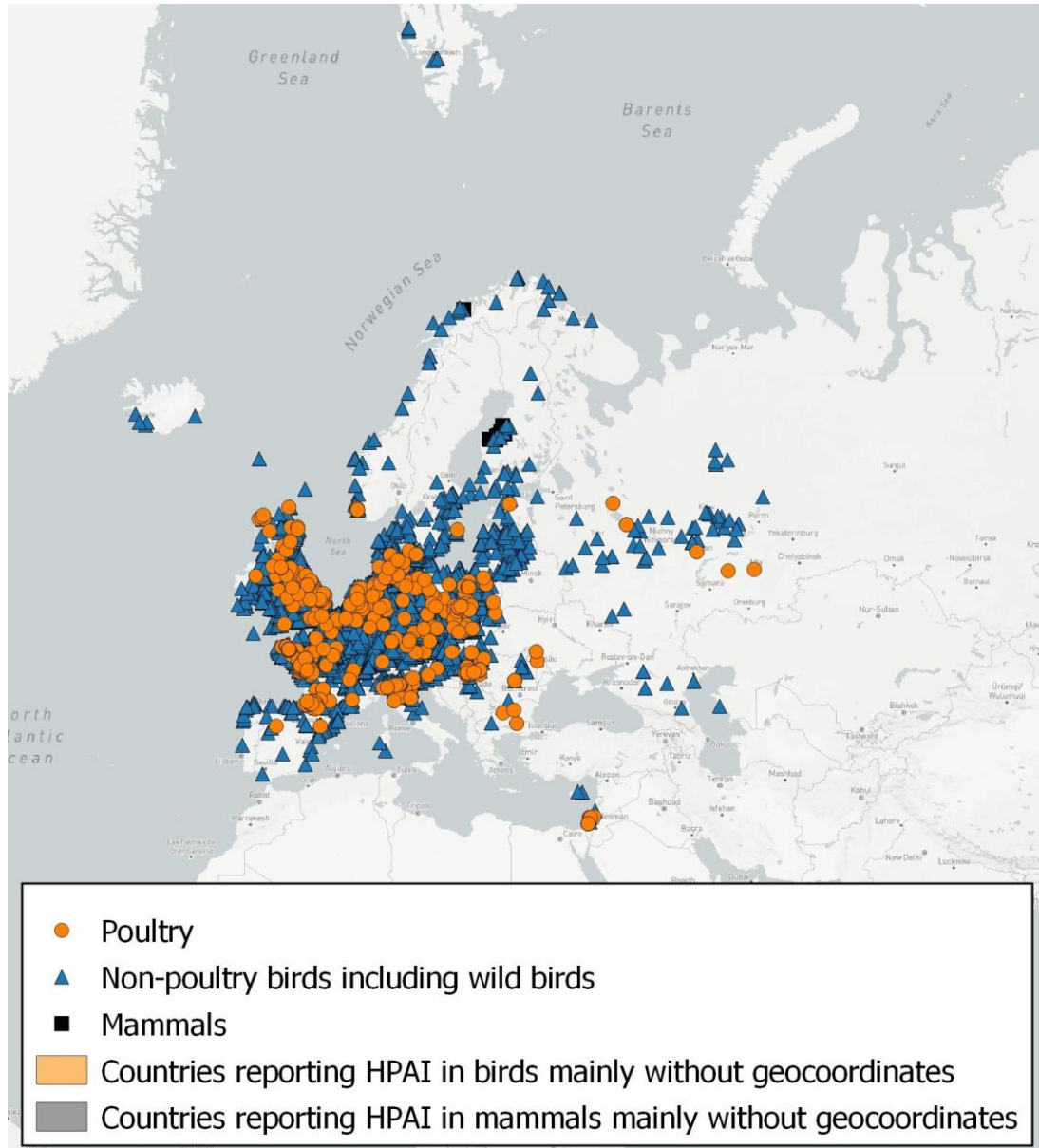


% of countries and territories reporting surveillance activities ¹⁴

Data 2018-2022



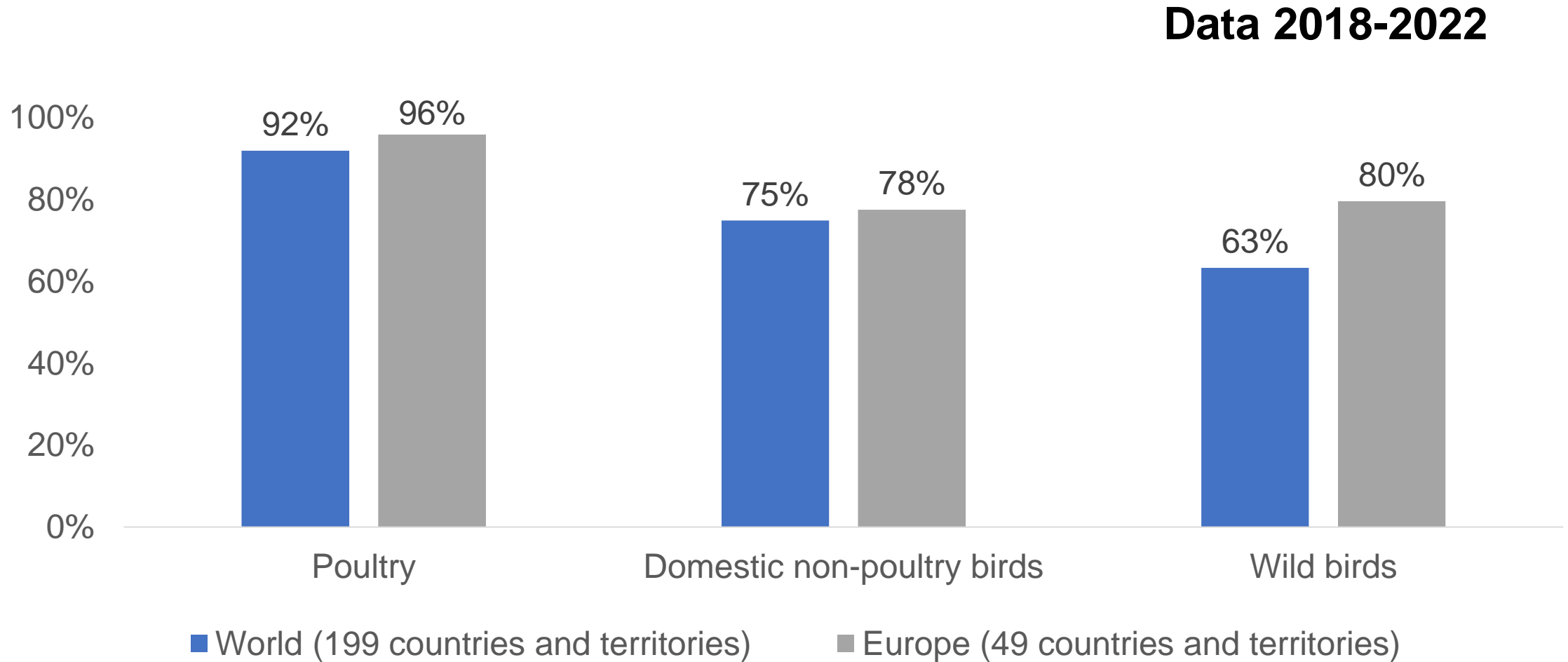
**Based on six-monthly reports received and validated by WOAH as of 13 April 2023.*



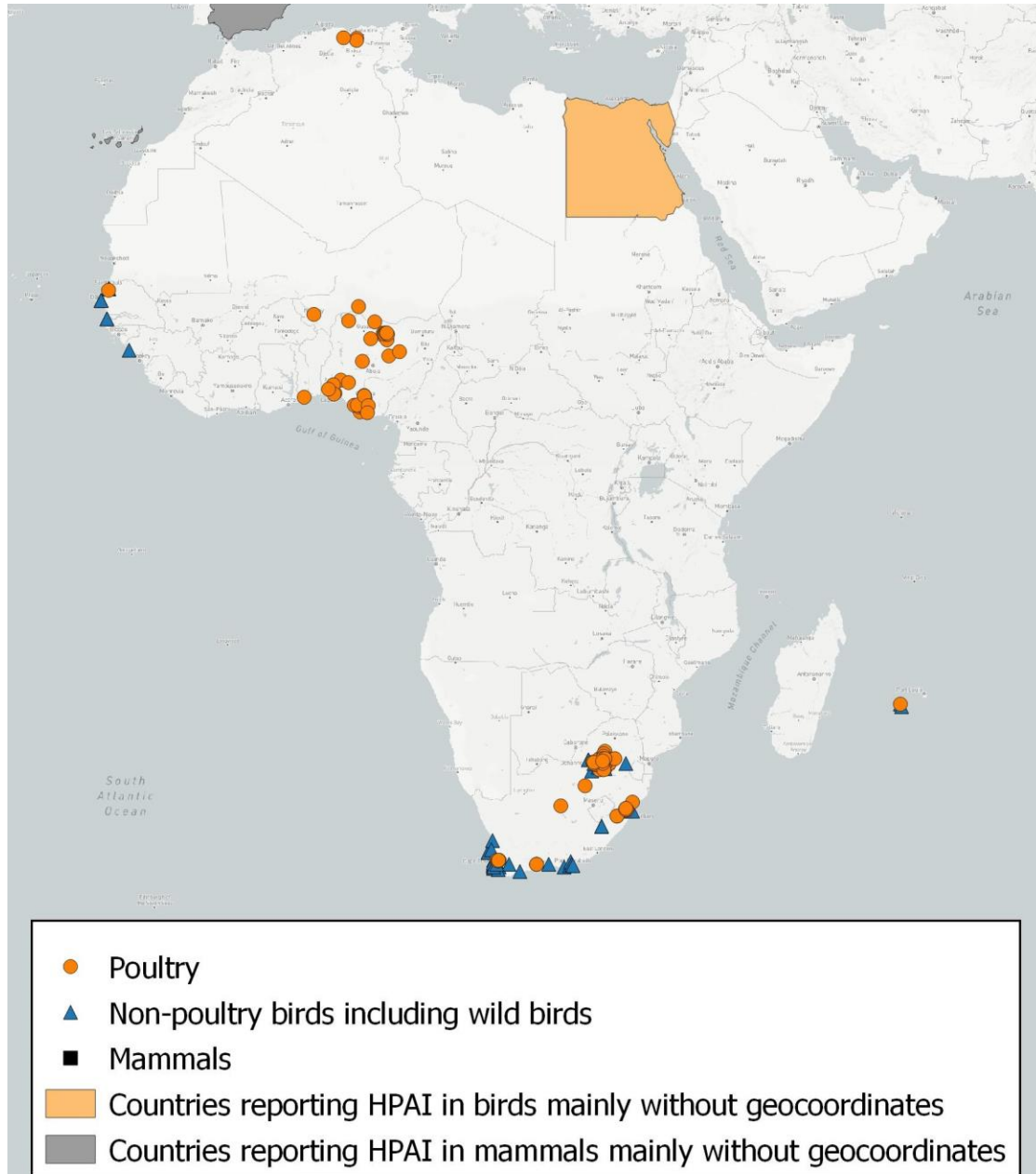
1. 34 countries and territories reported HPAI events.
2. **Unusual persistence of HPAI viruses over summer**
3. 4555 outbreaks were reported through WAHIS: 975 in poultry birds, 3512 in non-poultry birds and 68 in mammals (some other outbreaks in mammals were reported through other communication means).
4. Most outbreaks in poultry were reported by France (380), Hungary (168) and United Kingdom (149). Most detections in non-poultry birds were reported by Germany (626), France (517) and United Kingdom (478)
5. The predominant subtype A(H5N8) in the 2020–2021 epidemic season was replaced by subtype A(H5N1) in the 2021–2022 and 2022-2023 epidemics.
6. 24 million poultry birds dead or killed and disposed of



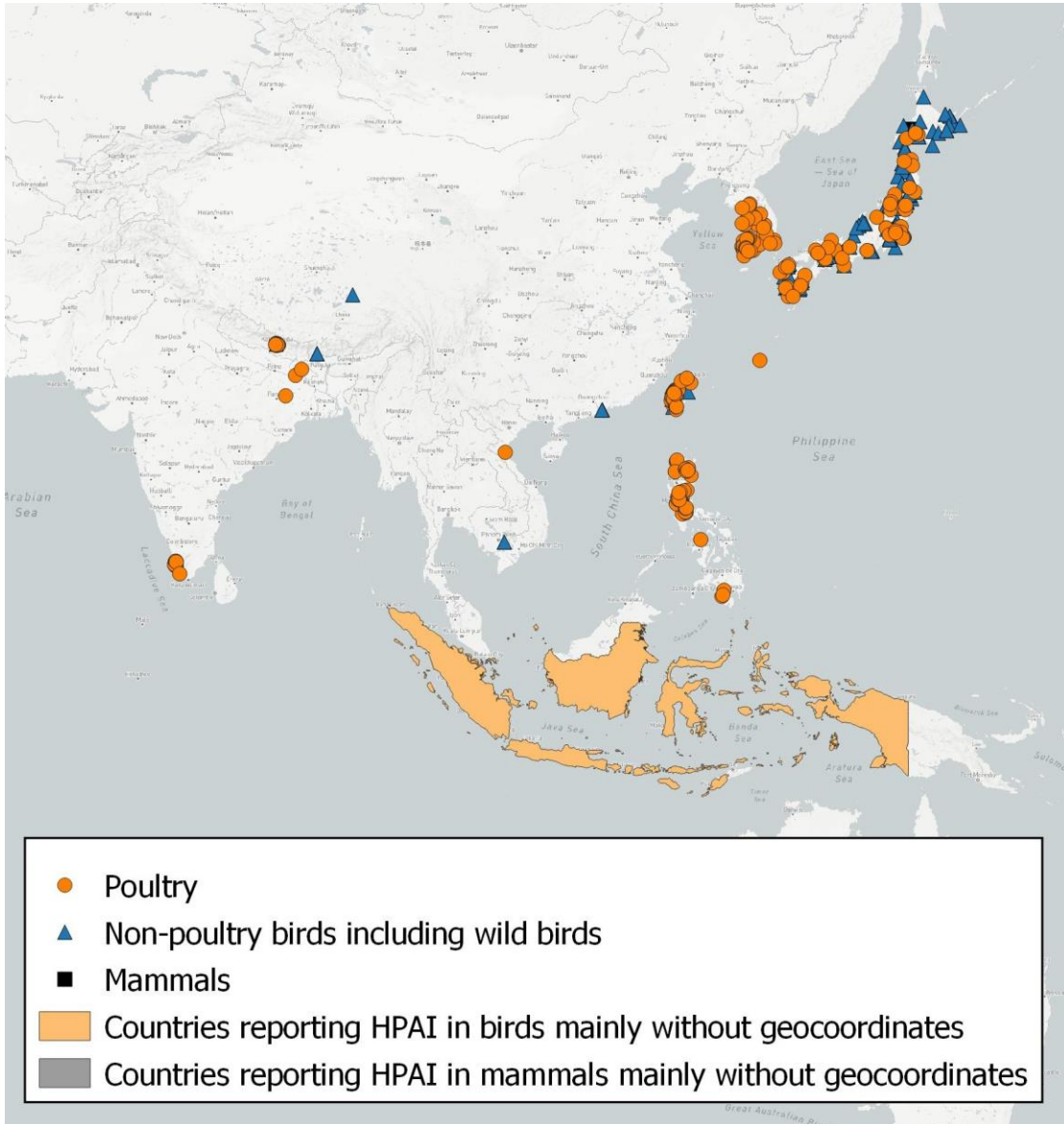
% of countries and territories reporting surveillance activities ¹⁶



**Based on six-monthly reports received and validated by WOAHA as of 13 April 2023.*



1. 9 countries and territories reported HPAI events, in addition to Egypt reporting a stable situation
2. Subtypes – H5N1 was the subtype reported in the majority of the outbreaks, H5N2 and H7N6 were reported in South Africa
3. 163 outbreaks were reported through WAHIS early warning (Egypt not included): 114 in poultry and 49 in non-poultry.
4. Most outbreaks in poultry were reported by South Africa (67) and Nigeria (39). And most detections in non-poultry birds were reported by South Africa (43).
5. There is persistent circulation of the virus in West Africa and Southern Africa
6. Nearly 3 million poultry birds died or were killed and disposed of (**of which 94% in South Africa**)



1. 11 countries and territories reported HPAI events, in addition to Indonesia
2. Subtypes – H5N1 was the subtype reported in the vast majority of the outbreaks, H5N2, H5N5, H5N6, H5N8 were also reported
3. 594 outbreaks were reported through WAHIS early warning (Indonesia not included): 340 in poultry birds, 250 in non-poultry birds and 4 in mammals.
4. Most outbreaks in poultry were reported by Japan (84), Korea (Rep.of) (75) and Philippines (70). Most detections in non-poultry birds were reported by Japan (238). Detections in mammals were reported by Japan and Korea (Rep. of)
5. 23 million poultry dead of killed and disposed of



1. Türkiye reported HPAI events (in addition to Egypt)
2. Subtype – H5N1
3. 2 outbreaks reported in poultry
4. 4 million poultry dead of killed and disposed of



1. **Reduced viral diversity**, dominant circulating virus subtype H5N1 clade 2.3.4.4b
2. In some areas, **persistence** of virus for periods not previously detected
3. **Spread to new areas** where HPAI had not previously been detected in Central and South America
4. The **impact on poultry** remains very high (more than 176 million poultry dead or killed and disposed of since 2022)
5. Impact on **wildlife and biodiversity**: several cases of mortality in endangered wild bird species (*e.g. Cape Cormorant in Namibia and South Africa end of 2021 early 2022 – endangered species*)
6. The increase in the number of **cases detected in mammals** is of concern, pandemic potential
7. Substantial risk for HPAI to continue southwards and in the near future reaching Antarctica and its offshore islands, with dramatic consequences
8. Sporadic human cases (*Dec 2021 UK, Apr 2022 USA, China PR, Sep 22 Spain, Jan 23 Ecuador, Feb 23 Cambodia, Mar 23 Chile and China PR, May 23 UK*)



ANIMAL HEALTH FORUM



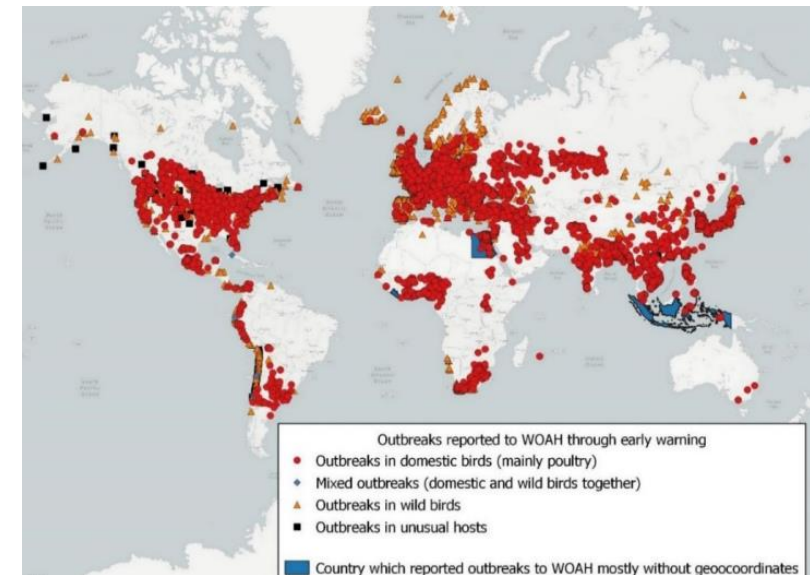
HPAI has resulted in the death and mass slaughter of more than

500 million

poultry worldwide between 2005 and 2022.

Mass culling of poultry incurs huge costs for government and industry, heavy economic losses for farmers generating a long-lasting impact on their livelihoods and raises societal and environmental concerns.

Despite the efforts of WOAHA Members to implement strict preventive and control measures such as movement control, enhanced biosecurity, and stamping out, avian influenza continues to spread.



Cumulative reported presence of H5 and H7 HPAI (2005–March 2023)

Based on the scientific article prepared by avian influenza experts...

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

**ANIMAL
HEALTH
FORUM**

- Selected panelists and speakers: Delegates, subject-matter experts, and representatives from the private sector
- Formal presentations, round table discussion, and interviews
- The format enabled debate and discussion among the facilitator, rapporteur, panelists and Delegates.

ANIMAL HEALTH FORUM

explore the challenges laid out in the technical item in depth

Session 1 – Avian influenza intelligence – Surveillance and monitoring for early detection and prevention

Session 2 – Response: Disease control strategies for early response and business continuity, including vaccination

Session 3 – Collection, analysing and disseminating veterinary scientific information worldwide

Session 4 – Global coordinated strategy for progressive control of avian influenza



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





RESOLUTION No. 28 Strategic challenges in the global control of high pathogenicity avian influenza

Through scientific assessment and the key stakeholders in avian influenza, Resolution 28 was developed, **integrating the current disease landscape with diverse needs across regions, realities, and sectors.**



19 recommendations

- Enhance epidemiological information
- Reinforce international collaboration
- Intensify exchange with relevant stakeholders
- Consider the implementation of vaccination as a complementary tool
- Enhance biosecurity, early identification and reporting
- Support research alliances and coordination
- ...



- Maintain **transparency through timely and comprehensive reporting** of avian influenza events to WOAHA as described in the *Terrestrial Animal Health Code*.
- Promptly **share samples and virus isolates, virus sequence data**, and associated epidemiological information with WOAHA Reference Laboratories, OFFLU and deposit sequences in publicly available databases to inform risk managers, thus enabling early detection, rapid response and pandemic preparedness through monitoring the evolution of LPAI and HPAI viruses
- Conduct appropriate, risk-based, **comprehensive and systematic monitoring and surveillance in domestic birds, wild birds (e.g., along flyways) and in other susceptible animal species** to support early warning and risk management at the human–animal–environment interface.

<https://www.woah.org/app/uploads/2023/06/a-resos-2023-all.pdf>

- Intensify the **exchange of relevant information and coordination with public health authorities** and other relevant authorities.
- **Support poultry keepers, in particular smallholders**, in implementing correct usage of disease preventive and control tools, such as enhanced biosecurity, early identification of clinical signs and reporting, to prevent the introduction and spread of HPAI.
- Respect and implement the adopted WOAH standards and **recognise compliant zones and compartments of their trade partners**.
- **May consider the implementation of vaccination as a complementary disease control tool** that is based on sound surveillance and takes into account local factors such as circulating virus strains, risk assessment and vaccination implementation conditions.
- Adopt vaccine best practices (stewardship) and reassess on an ongoing basis the **use of appropriately field matched vaccine strains** and the continuing need for update of vaccines

<https://www.woah.org/app/uploads/2023/06/a-resos-2023-all.pdf>

- **Develop and implement national disease control and operational plans** in cooperation and coordination with wildlife health authorities, public health authorities and the private sector to ensure a multi-stakeholder effort to combat HPAI.
- **Support research alliances and global research coordination mechanisms** (e.g. STAR-IDA, WHO Public Health Research Agenda, OFFLU) to generate scientific knowledge using interdisciplinary approaches and tools, including the development, testing, production and approval of effective vaccines to contribute to the successful control of HPAI.
- Advocate for increased investment in low- and middle-income countries from funding institutions, the private sector, resource partners and development agencies in support of **strengthening the human resource capacity and sustainable infrastructure of Veterinary Services, including diagnostic capability and early warning systems.**

<https://www.woah.org/app/uploads/2023/06/a-resos-2023-all.pdf>



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



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



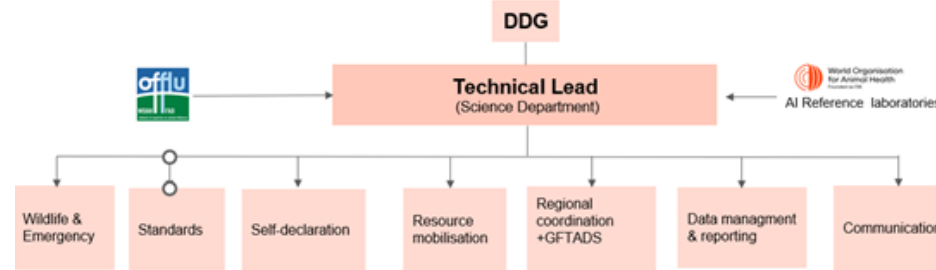
Resolution 28:
Strategic Challenges in the Global Control of High Pathogenicity Avian Influenza



Implementation framework



WOAH Animal Influenza Coordination Group



1. Improved global intelligence on HPAI in domestic and wild animals;

2. Use of current tools to prevent and control HPAI;

Aligned with the strategic direction of the **Global Strategy**



PLAN

EXPECTED RESULTS

Inputs

Activities

Outputs

Outcomes

Impact

-Increase of HPAI outbreaks,
-Challenges to control HPAI in diverse poultry industries,
-Ecological and epidemiological changes,
-Possibility of vaccination,
-Surveillance and monitoring,
-Facilitate safe trade,
-...

Internal Activities
(HQ + Regional)
following the recommendations of the Assembly
(*Resolution N28*)

Activities completed, in progress, future activities (planned) and desire activities.

Indicators

Targets

Outcome 1: Global and regional surveillance and monitoring systems for early detection and prevention in domestic and wild animals are **enhanced**.

Outcome 2: Tools for the prevention and control of HPAI, including vaccination, are **optimised** and disseminated, and the development of new tools is accelerated.

Outcome 3: Safe international trade is being **facilitated** by the correct implementation of up to date and science-based standards and guidance.

Outcome 4: Global and regional coordination on avian influenza is **achieved**.

3. Facilitation of safe trade using up-to-date and science-based standards and guidance;

4. Effective global and regional coordination in the control of HPAI

Thank you

*Acknowledgment : Lina Awada WOAHA Data
Integration Department*

12, rue de Prony, 75017 Paris, France
T. +33 (0)1 44 15 19 49
F. +33 (0)1 42 67 09 87

woah@woah.int
www.woah.org

[Facebook](#)
[Twitter](#)
[Instagram](#)
[LinkedIn](#)
[YouTube](#)
[Flickr](#)



World
Organisation
for Animal
Health
Founded as OIE

Organisation
mondiale
de la santé
animale
Fondée en tant qu'OIE

Organización
Mundial
de Sanidad
Animal
Fundada como OIE

