World Organisation for Animal Health
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UPDATE ON GLOBAL AVIAN INFLUENZA AND NEWCASTLE DISEASE SITUATION

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WOAH Regional Expert Group Meeting for diseases of poultry in Asia and the Pacific Region, Geelong, Australia
31 October - 2 November 2022

AVIAN INFLUENZA NOTIFICATIONS TO WOAH

- Refer *Terrestrial Code* Chapter 1.3 - Diseases, infections and infestations listed by the WOAH, Article 1.3.6 (avian diseases)

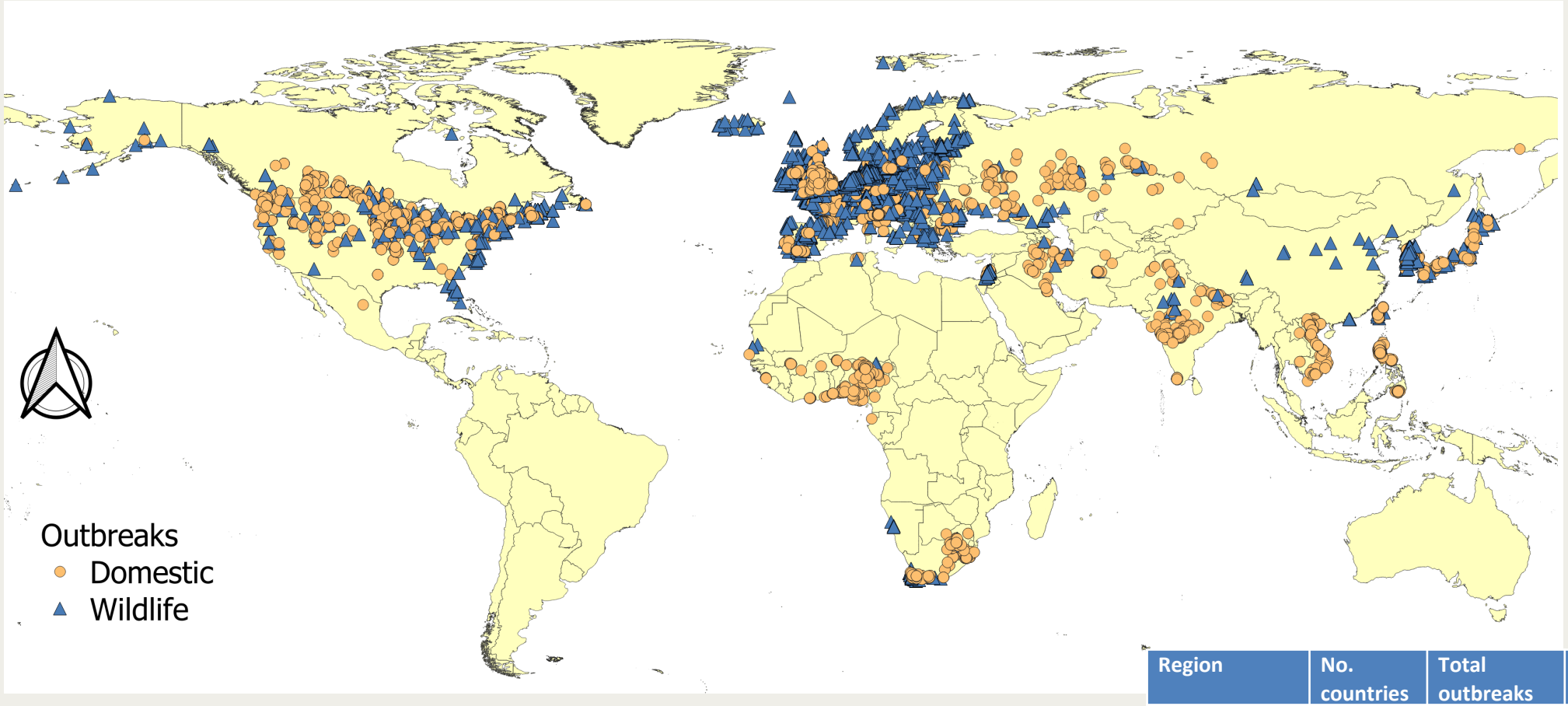
❑ Infection with high pathogenicity avian influenza viruses

❑ Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity

❑ Infection of domestic and captive wild birds with low pathogenicity avian influenza viruses having proven natural transmission to humans associated with severe consequences

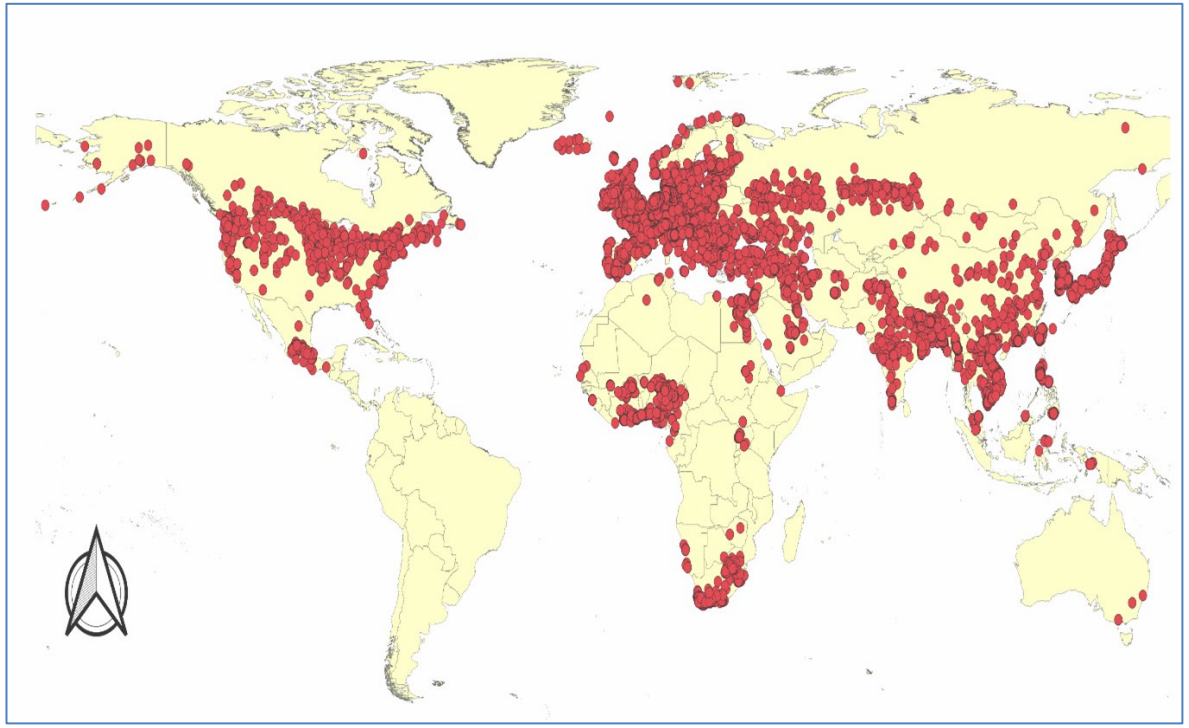
- Refer *Terrestrial Code* Chapter 10.4: Infection with high pathogenicity avian influenza viruses (Revised Standards adopted at 88th General Session - May 2021)

HPAI SITUATION (October 2020 – Sept 2022)

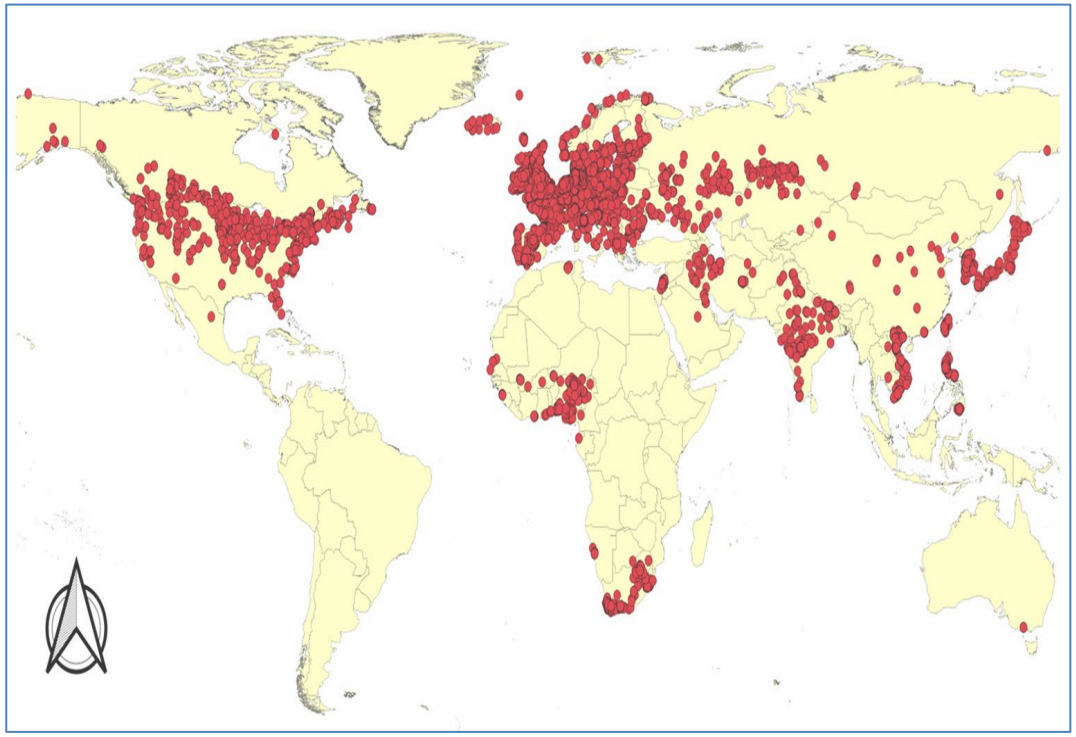


Region	No. countries	Total outbreaks	Domestic	Wild birds
Asia Pacific	18	1472	962	510
Africa	18	620	553	67
Americas	3	801	552	249
Europe	38	8575	4035	4540
Global	77	11468	6102	5366

HPAI SITUATION

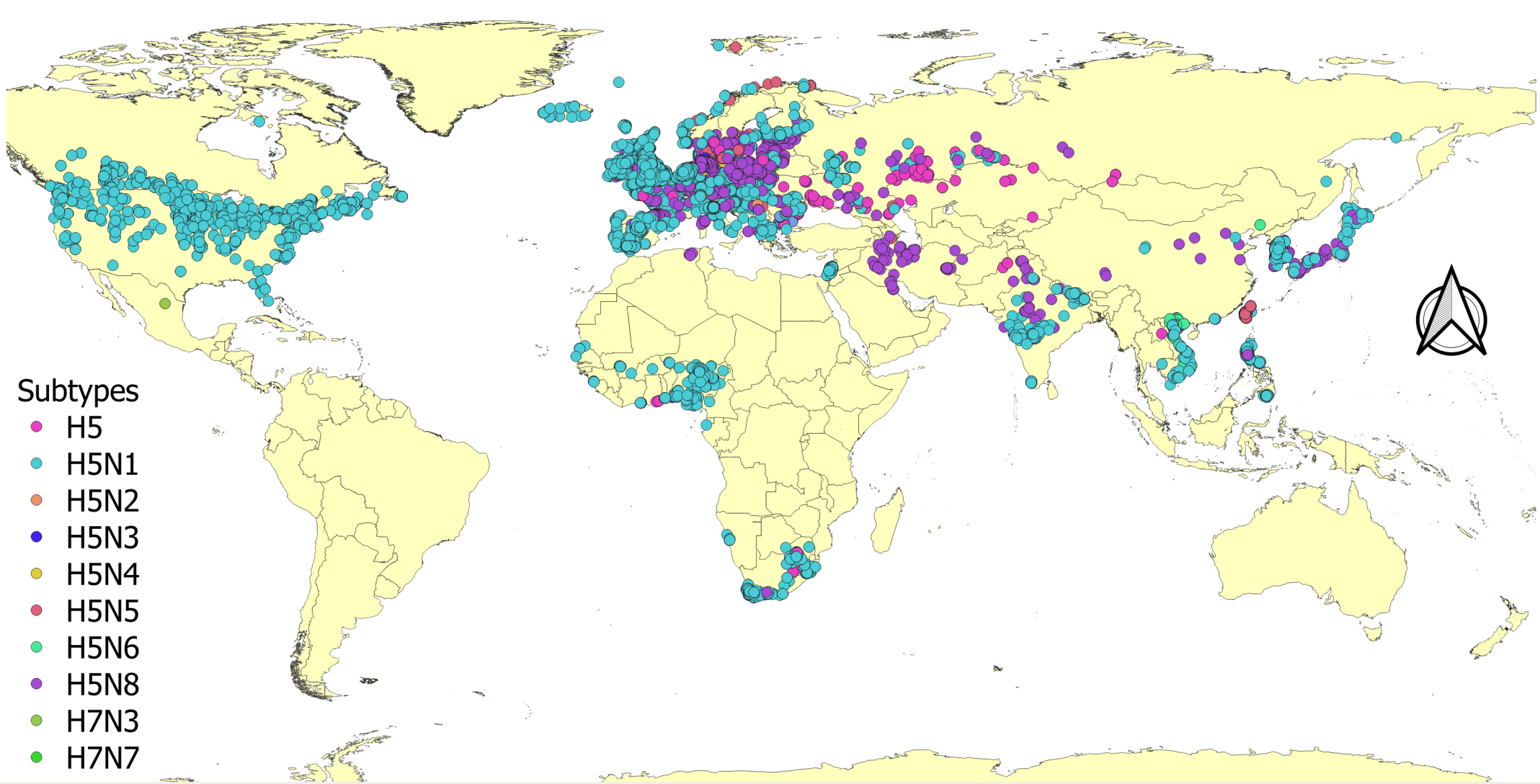


23,500 avian influenza outbreaks reported since 2005

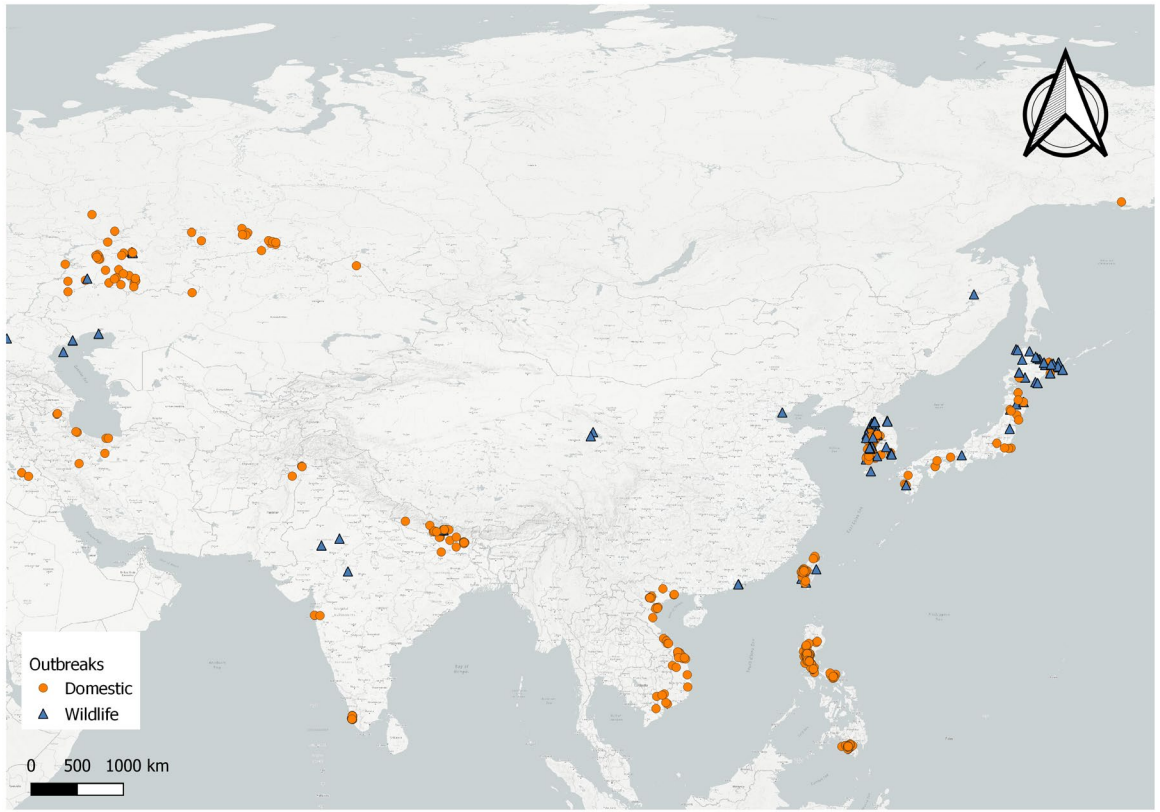


12,000 avian influenza outbreaks reported since 2020

Reported HPAI subtypes (October 2020 – Sept 2022)



HPAI – Asia and Oceania
Oct 2021 – 2 Sept 2022

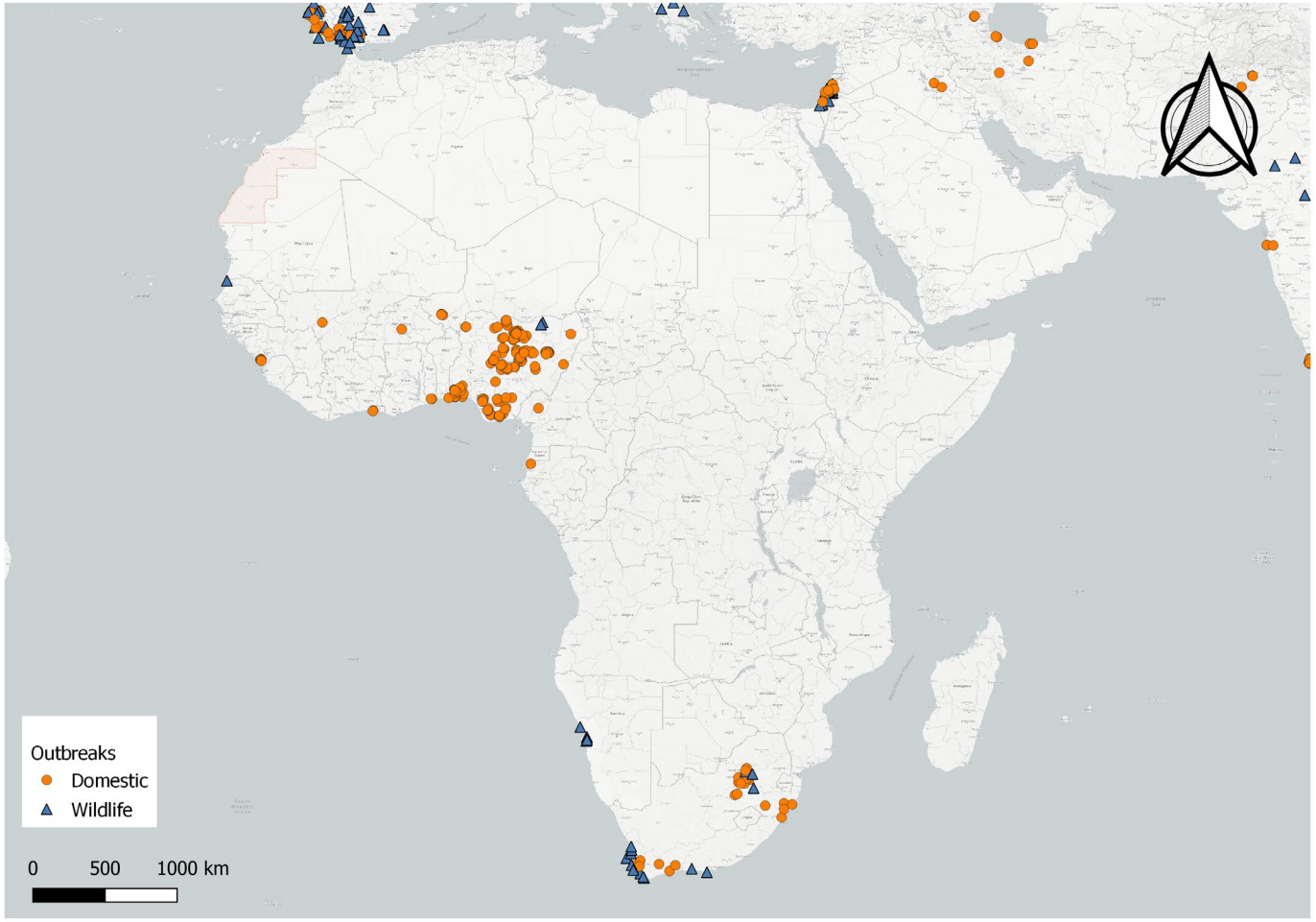


1. 18 Members reported HPAI events
2. Subtypes – H5N1, H5N2, H5N5, H5N6, H5N8
3. 677 outbreaks were reported: 476 in domestic birds and 201 in wildlife.

Asia	476	201	677
China (People's Rep. of)		3	3
Chinese Taipei	38	3	41
Hong Kong		2	2
India	25	3	28
Iran	8		8
Iraq	2		2
Israel	77	20	97
Japan	25	100	125
Kazakhstan	1	1	2
Korea (Rep. of)	47	68	115
Nepal	34	1	35
Pakistan	4		4
Philippines	176		176
Vietnam	39		39

HPAI – Africa

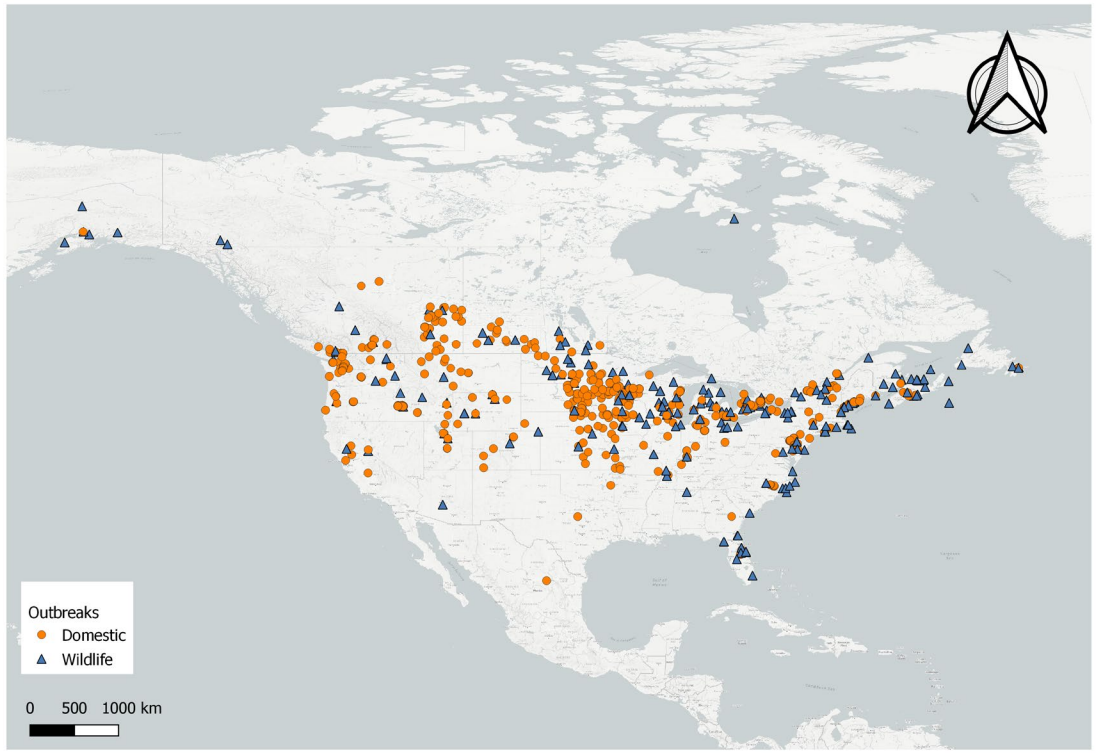
Oct 2021 – 2 Sept 2022



1. 13 Members reported HPAI events
2. Subtype – H5N1
3. 269 outbreaks were reported: 241 in domestic birds and 28 in wildlife.

Africa	241	28	269
Benin	1		1
Burkina Faso	1		1
Cameroon	1		1
Cote D'Ivoire	2		2
Gabon	1		1
Guinea	6		6
Mali	1		1
Namibia		7	7
Niger	3		3
Nigeria	188	2	190
Senegal		1	1
South Africa	35	18	53
Togo	2		2

HPAI - Americas
Oct 2021 – 2 Sept 2022

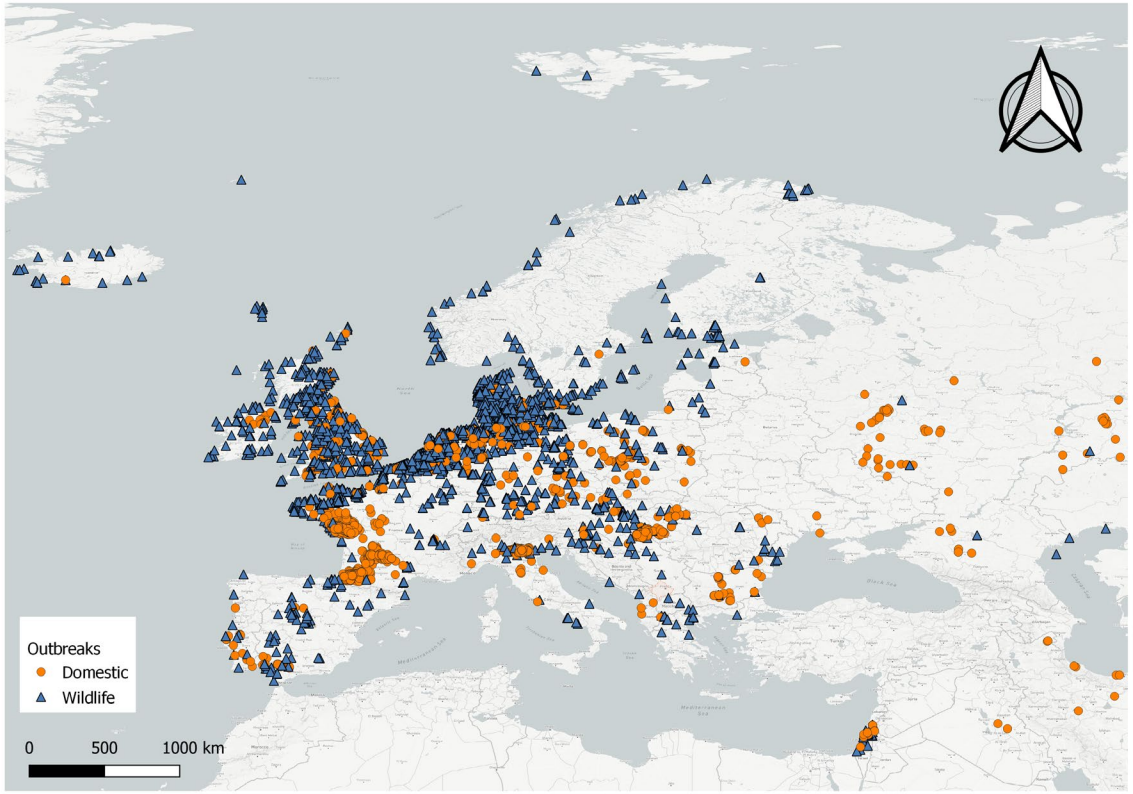


1. 3 Members reported HPAI events (Canada, USA, Mexico) H5N1 and H7N3 in Mexico
2. The region was impacted by the worst avian influenza epidemic wave ever registered since 2005

Americas	**516**	**243**	**759**
Canada	110	58	168
Mexico	1		1
United States of America	405	185	590

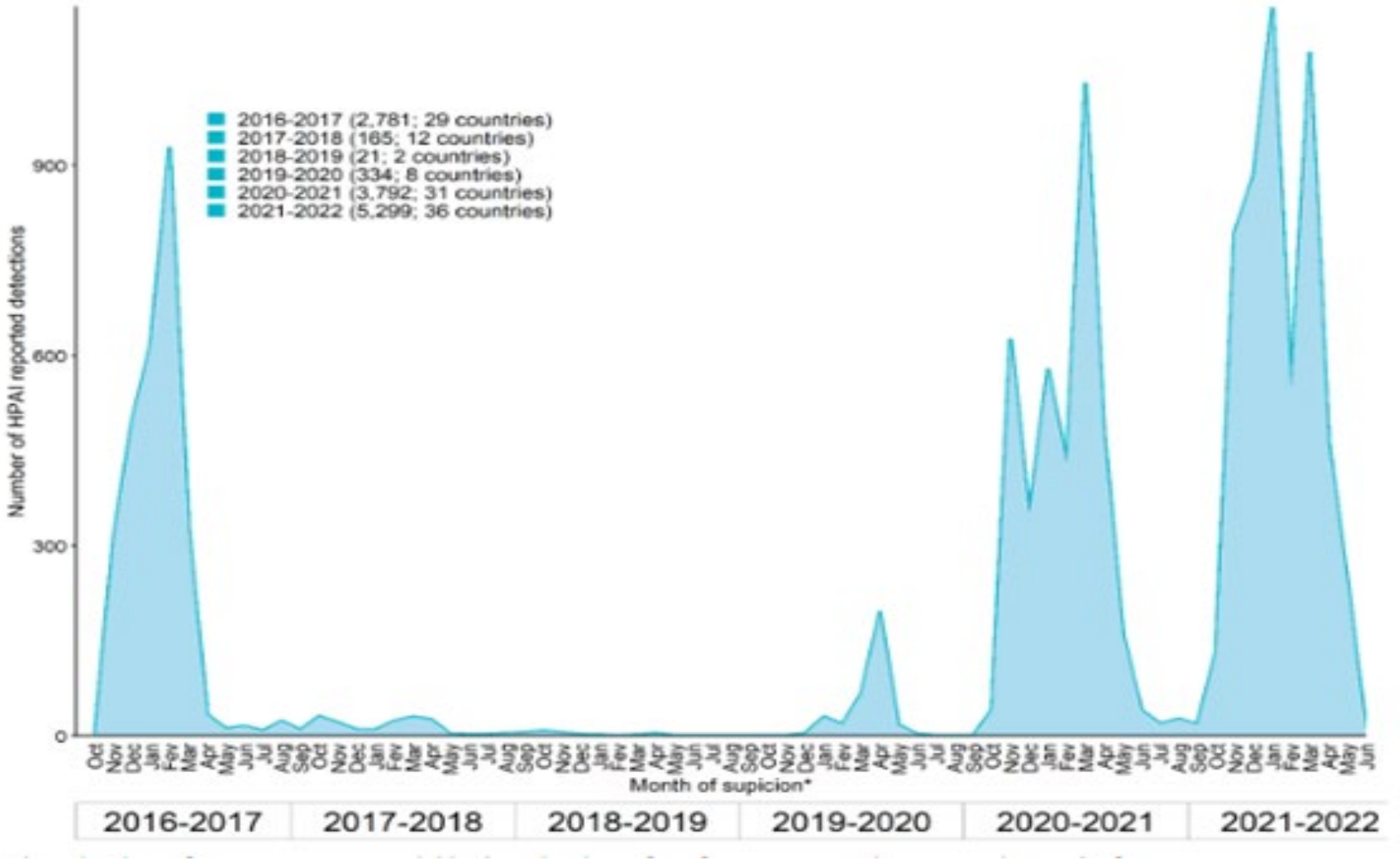
3. Genetic analysis of H5N1 viruses currently circulating in Americas belong to clade 2.3.4.4b. and closely related to Eurasian lineage. Suggesting the viruses have been introduced by wild bird migration into the American continent.

HPAI – Europe
Oct 2021 – 2 Sept 2022



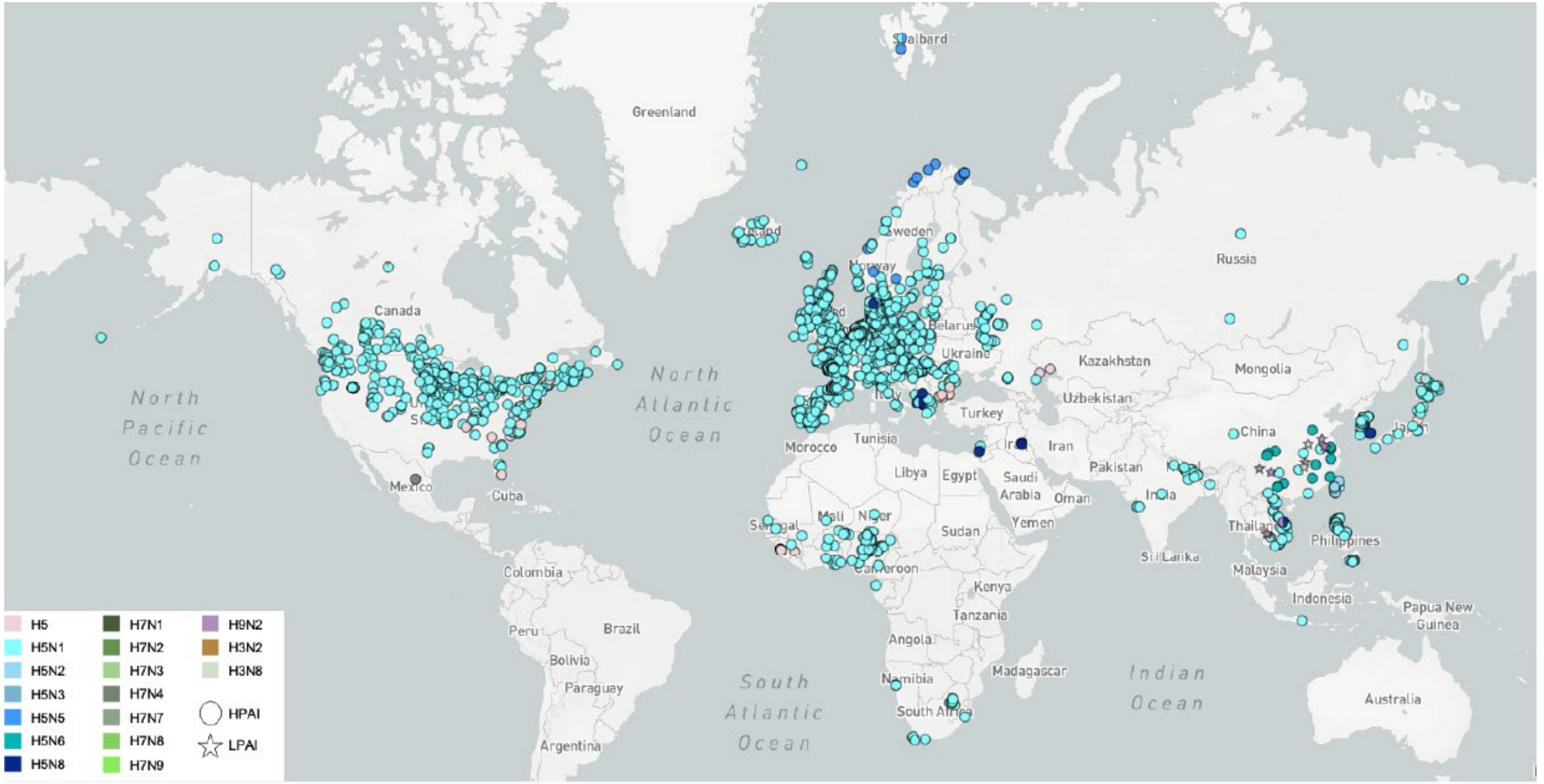
1. 38 Members reported HPAI events.
2. During this period, 5439 outbreaks were reported: 2635 in domestic birds and 2804 in wildlife. 46 million birds culled in the affected establishments.
3. Most detections in poultry were reported by France (1416), Italy (316), Hungary (291), UK (134). And most detections in wild birds were reported by Germany (891), Netherlands (506), UK (376).
4. The 2021–2022 epidemic is larger than the 2020–2021 epidemic and appears to be the largest so far in Europe.
5. The predominant subtype A(H5N8) in the 2020–2021 epidemic season was replaced by subtype A(H5N1) in the current 2021–2022 epidemic.
6. Genetic analysis of H5N1 viruses currently circulating in Europe belong to clade 2.3.4.4b.

European HPAI epidemic waves 2016 - 2022

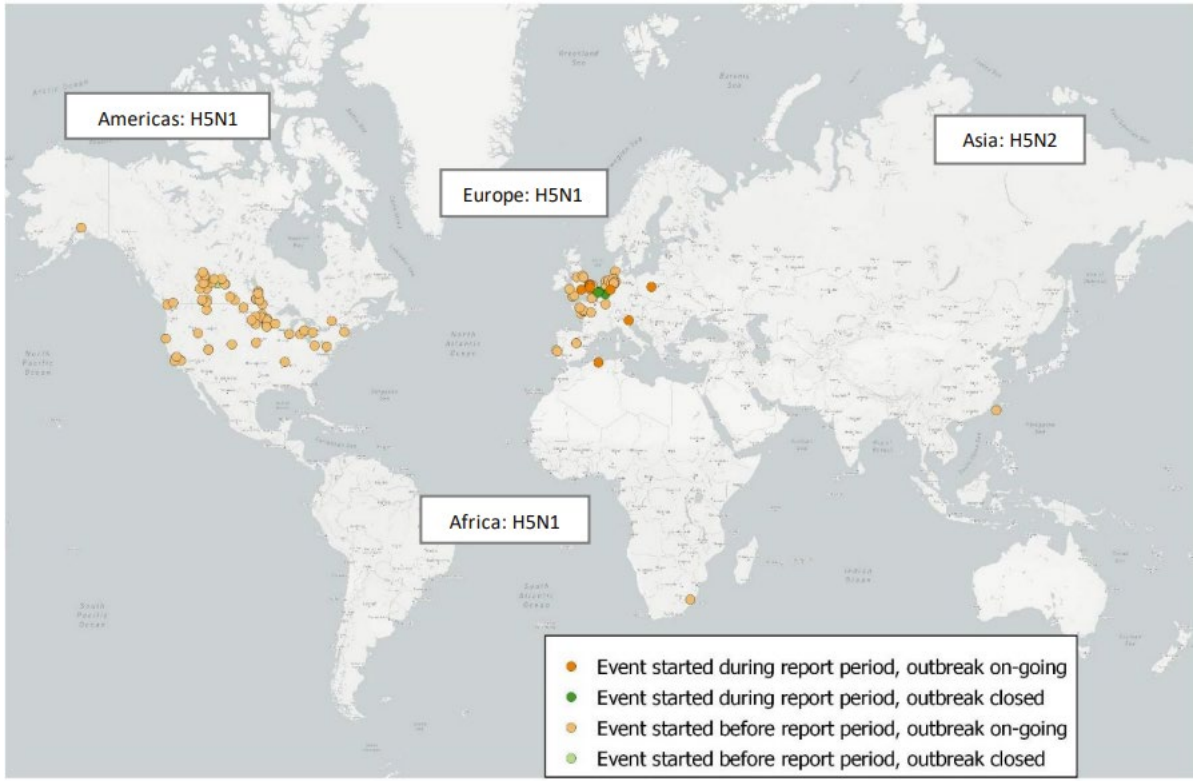


EFSA Avian Influenza overview march –June 2022; https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2022.7415

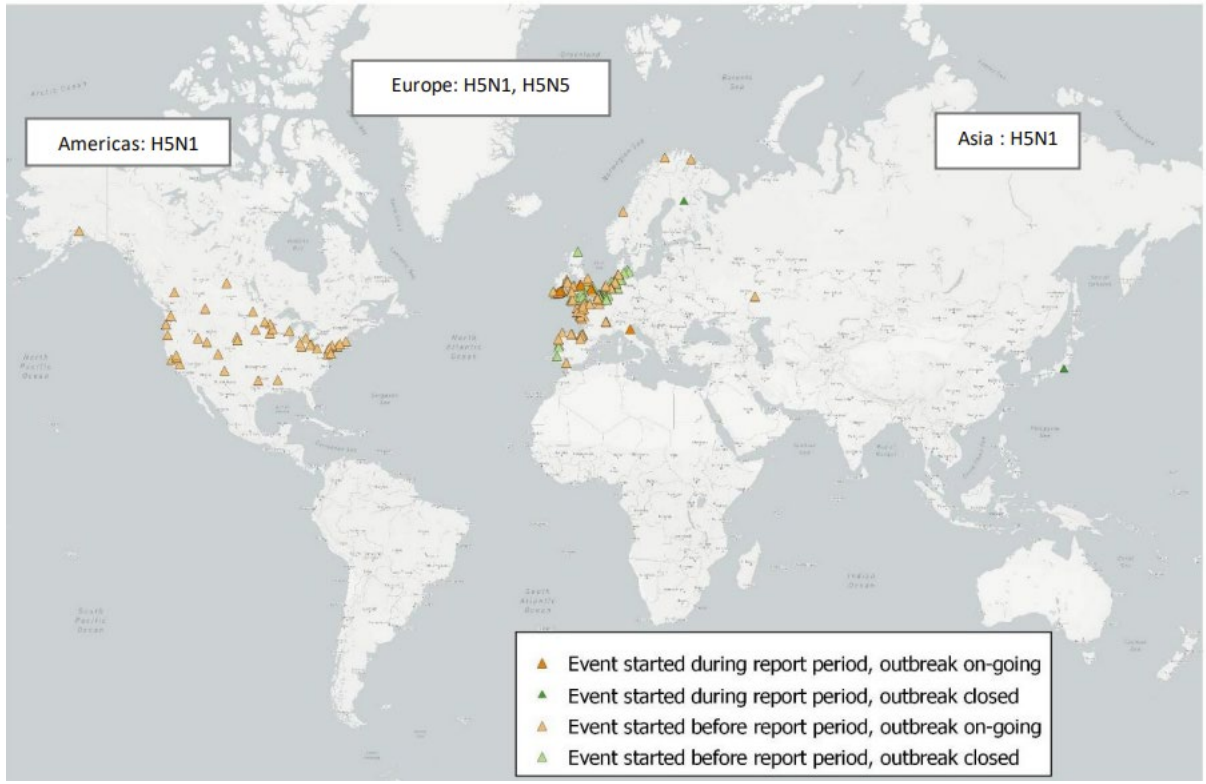
Global H5, H7 and H9 avian influenza events in animals (Feb – August 2022)



Recent situation 1 September – 11 October 2022

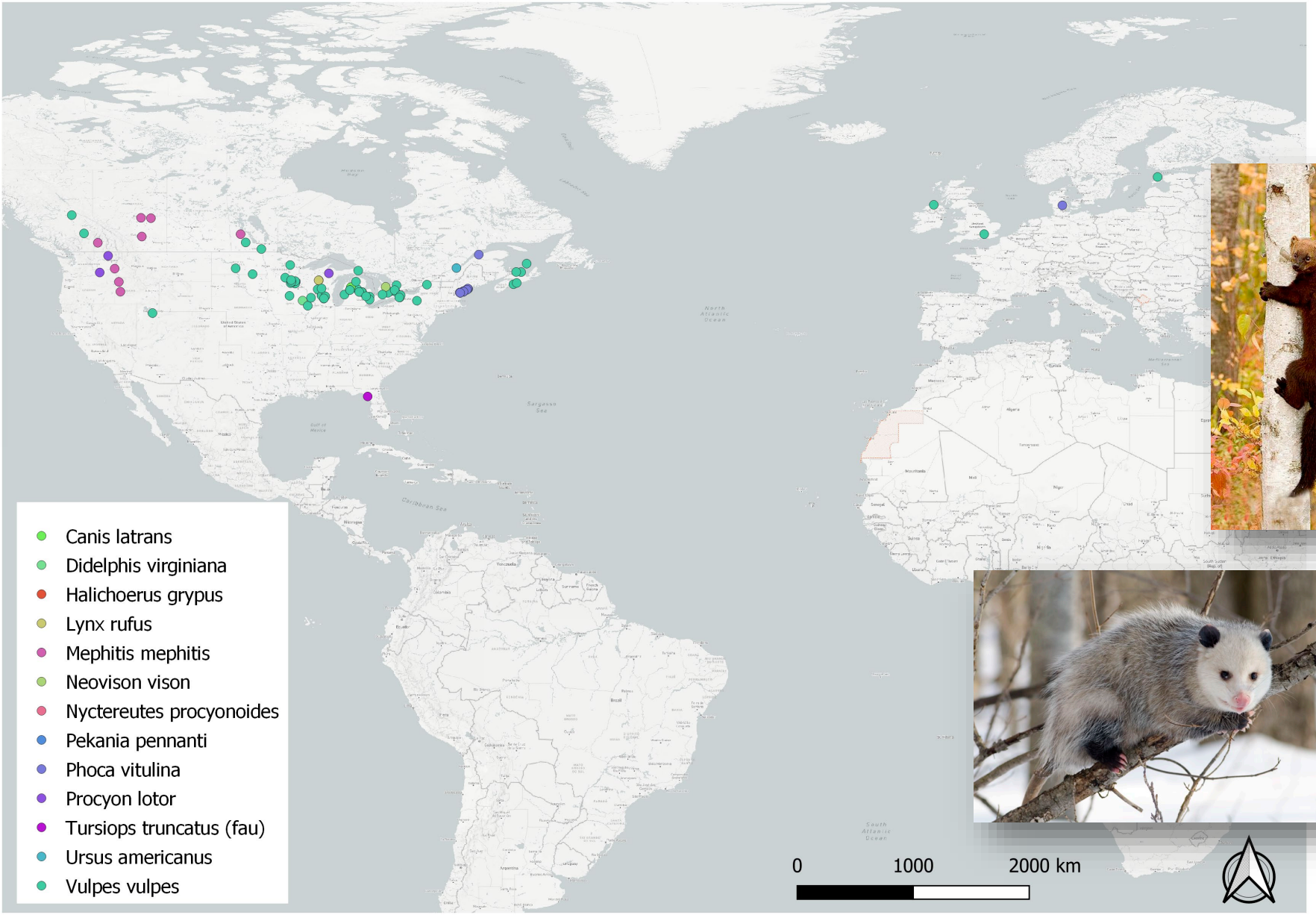


145 outbreaks in poultry, 14 countries and territories (Algeria, South Africa, Chinese Taipei, Belgium, France, Germany, Italy, Netherlands, Poland, Portugal, Spain, United Kingdom, Canada, USA



197 outbreaks in non-poultry, 16 countries (Japan, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Russia, Spain, United Kingdom, Canada, USA

Unusual host species avian influenza



Avian influenza and Wildlife

Risk management for people working with wild birds

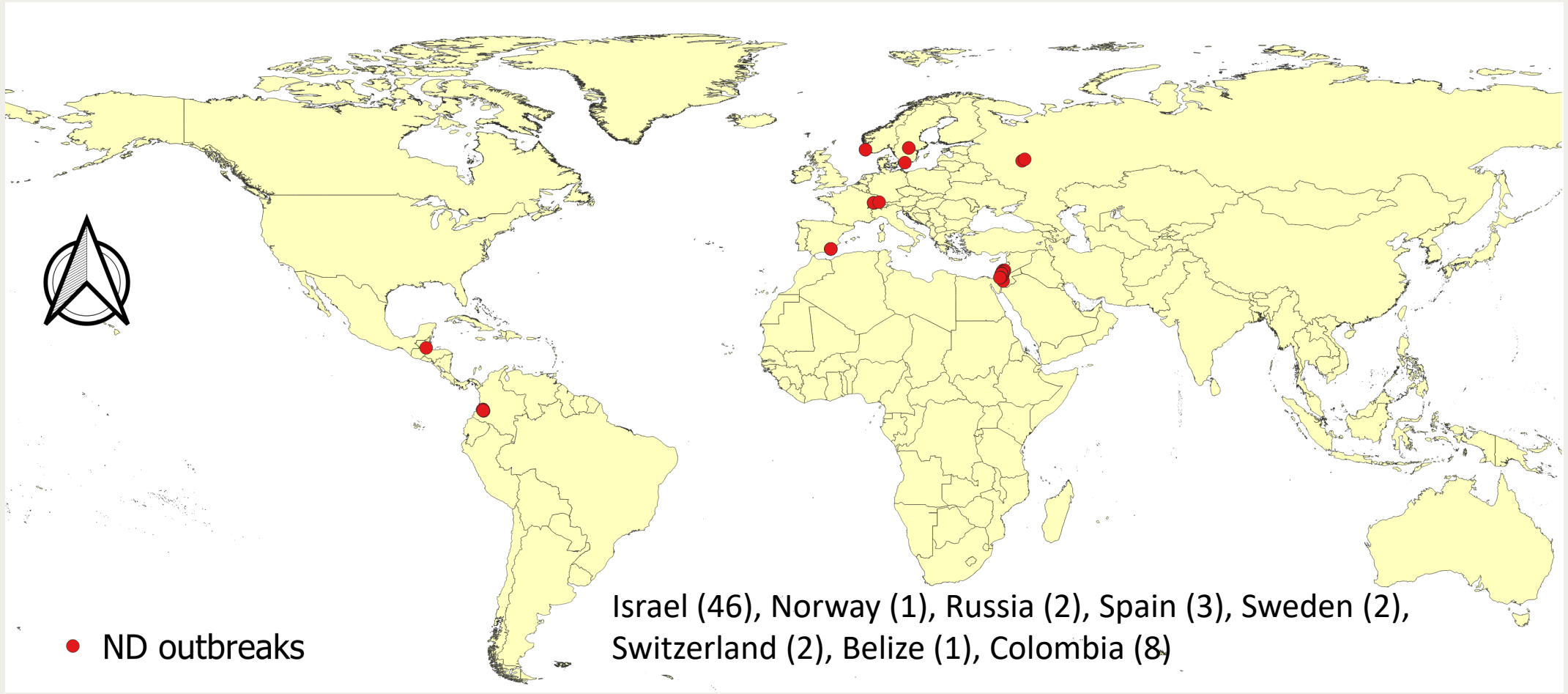
1. https://www.woah.org/app/uploads/2022/08/avian-influenza-and-wildlife-risk-management-for-people-working-with-wild-birds.pdf

2. Provide guidance to people who handle wild birds on measures to reduce disease risks associated with avian influenza virus strains. The guidance takes a One Health approach by considering the health of wildlife, poultry and people

Impact of HPAI

	Cases		Dead		Killed_disposed	
Year	Domestic	Wild	Domestic	Wild	Domestic	Wild
2005	197,847	907	180,851	1,017	895,371	560
2006	1,479,968	4,744	1,417,523	4,266	11,550,870	139
2007	368,027	364	322,122	366	9,017,511	101
2008	509,490	23	496,517	22	8,080,378	0
2009	48,089	245	44,471	518	548,158	1
2010	80,448	600	60,759	598	488,270	11
2011	256,020	1,237	164,549	1,227	4,022,228	10
2012	3,067,117	51	1,313,918	49	12,469,826	3
2013	1,233,537	3	818,371	3	10,547,500	0
2014	376,048	12	187,611	6	11,975,599	1
2015	4,324,225	2,595	2,173,170	3,301	27,776,759	65
2016	1,831,193	3,372	1,377,622	3,353	37,635,326	136
2017	3,560,975	5,416	1,984,972	4,445	23,831,855	943
2018	1,887,434	8,029	1,501,621	7,849	9,437,667	180
2019	300,743	857	165,577	843	2,156,672	204
2020	2,504,323	2,101	1,131,911	1,863	23,353,243	788
2021	15,004,692	42,216	6,876,602	40,013	60,824,135	5,115
2022	17,982,360	14,051	3,024,580	15,389	76,612,371	3,721
Total	55,012,536	86,823	23,242,747	85,128	331,223,739	11,978

Newcastle disease situation (October 2020 – Sept 2022)



In summary:

1. Avian influenza continues to heavily impact all regions of the world, leading to the significant economic losses incurred due to mass culling of birds.
2. Since 2005, more than 26 million poultry died and over 380 million poultry were culled for disease control reasons, according to the information reported by countries.
3. Wild birds have also been severely impacted by the disease including the endangered species. Over the past year, more than 49,000 wild birds have died due to avian influenza.
4. Over the last years, there has been substantive increase in number of outbreaks from annual waves of HPAI leading to large epidemics. There is continued persistence of outbreaks noticed year-round in the past seasons in both poultry and wild birds.
5. GF-TADs spearheaded by FAO and WOAH is coordinating efforts in the revision of global strategy of avian influenza considering the evolution of disease and Member needs.

JOINT WOAH-FAO SCIENTIFIC NETWORK ON ANIMAL INFLUENZA

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OFFLU Activities 2021 – 2022 (www.offlu.org)

- Contribution of zoonotic avian influenza and swine influenza data to WHO VCM
- 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, harmonization of nomenclature)
    - 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
  - OFFLU AIM (Avian Influenza Monitoring) project initiated

Food and Agriculture Organization of the United Nations

World Health Organization

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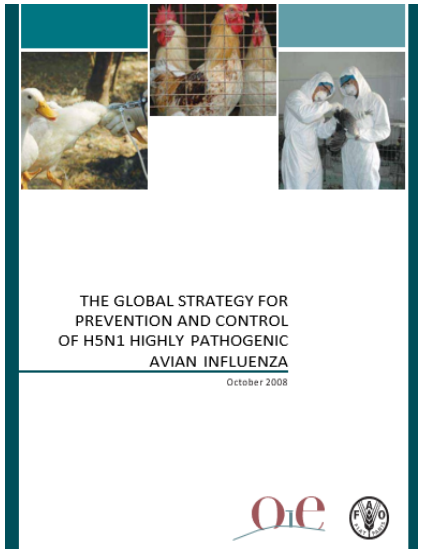
offlu
WOAH FAO
network of expertise on animal influenza

GF-TAD AI task force

- Established in June 2022, with main task to update/redraft of the Global FAO/WOAH AI Strategy.
- The work plan (June-Dec 2022) includes:
  1. Discuss and decide way forward to review, assess and update the old strategy; agree on target audience and scope. (ongoing)
  2. Ask countries and experts what components such strategy should entail. (ongoing)
  3. Conduct needs assessment with target audience for the updating of the global strategy.
  4. Write detailed concept note on the proposed plan and methodology to update the GF-TADs Global AI Strategy, including resources needed and M&E .



GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

Food and Agriculture Organization of the United Nations

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THANK YOU