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Questions

Are fewer poultry products being traded between countries?

Are we seeing movement towards more recognition of compartments?

Are countries that are vaccinating for HPAI able to export?

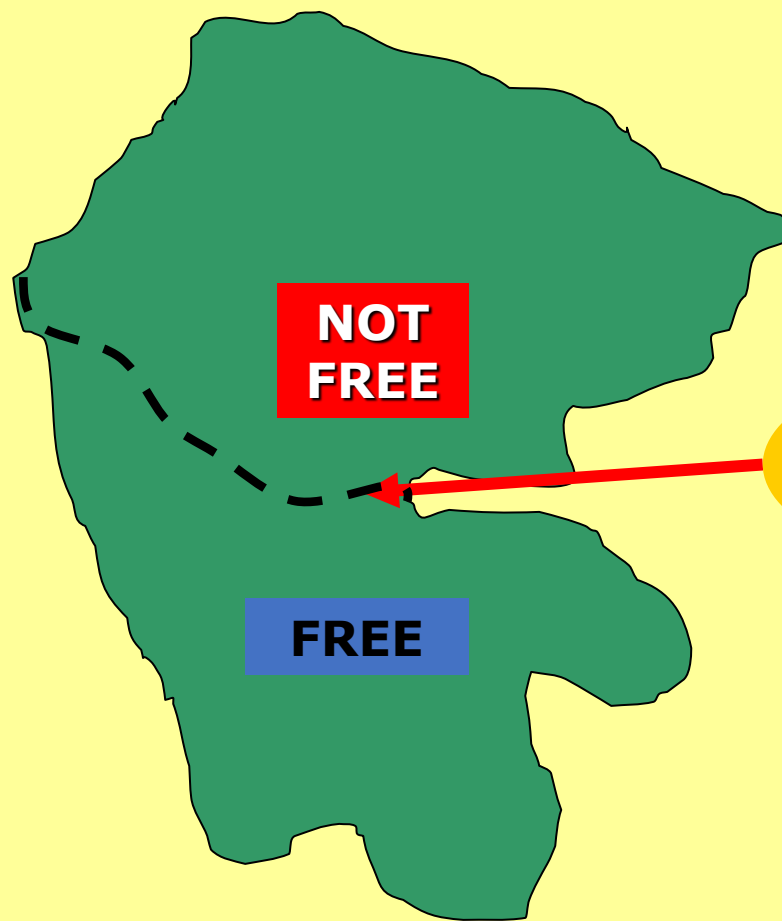
How is HPAI impacting the trade of poultry genetics today?

If we don't eradicate HPAI from North America, what will this mean for future US chicken exports?

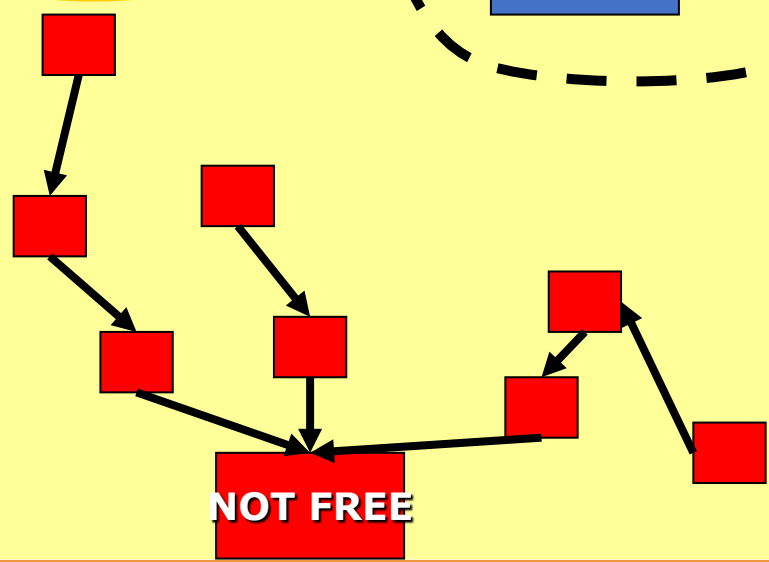
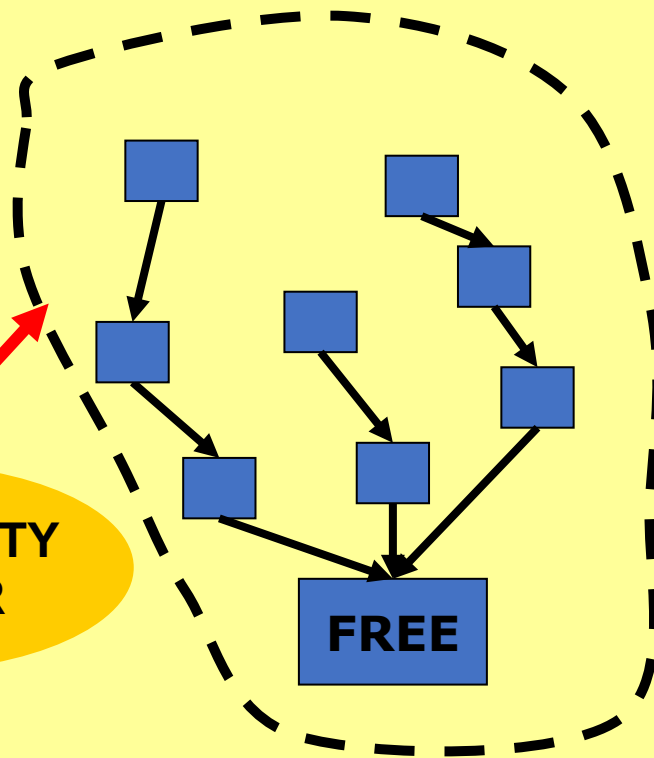
World Organization Animal Health

Establish International Standards for Animal Health

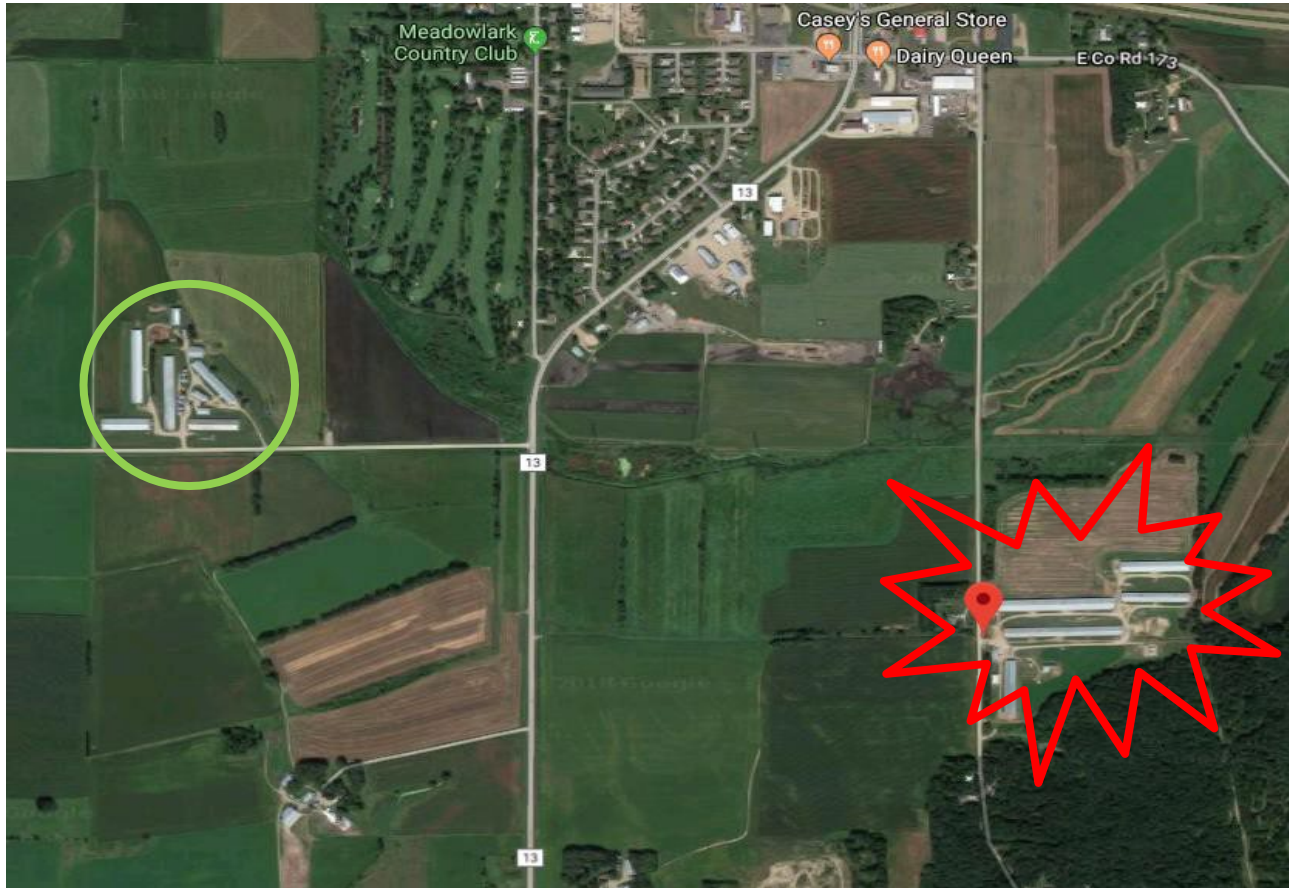
**Establish chapter that allows for zones, regions and
Compartments**



**BIOSECURITY
BORDER**



U.S. Compartmentalized

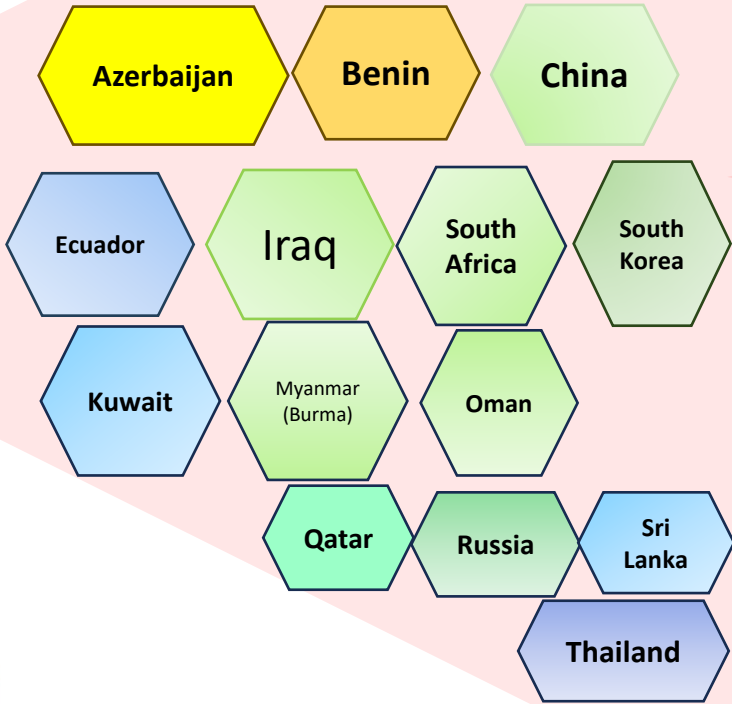


- With compartmentalization, a SAFE zone is defined. Regardless of proximity to a case of HPAI, countries that accept the AI Clean Compartment will accept product from the AI Clean Compartment facilities.
- This is because the AI Clean Compartment has strong structural and procedural biosecurity measures in place (in addition to rigorous routine flock health monitoring) to confidently ensure that HPAI does not enter their facilities or contaminate their product.

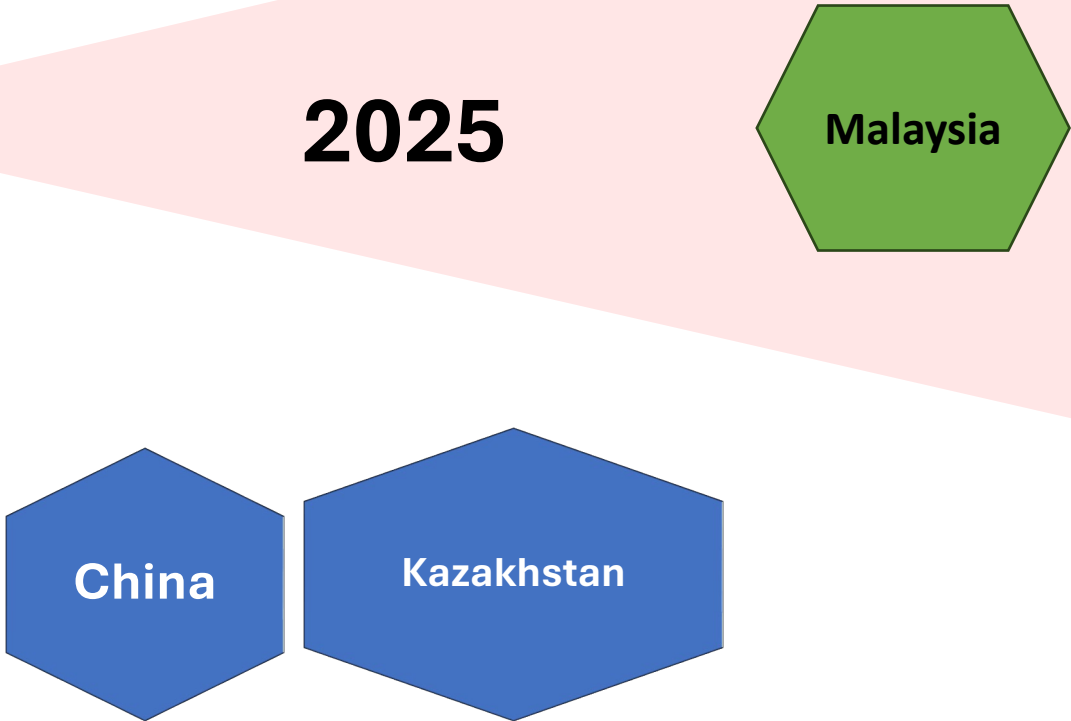
Improved Regionalization Standards

Country Bans 2015 vs 2025

2015



2025



U.S. Poultry Industry Loss Due To HPAI Ban

(February 2022 Through April 2026)

In Million US\$		Broiler	Turkey	Eggs	Total
	Export loss	2,045	565	698	3,308
	U.S. domestic drop in value	5,358	943	3,567	9,868
	Total	7,403	1,508	4,265	13,176

Note: does not include expenses to fight the HPAI (indemnification cost, etc.)

US live poultry and hatching egg exports since 2021

Table – US live poultry and hatching egg exports

	2021	2022	2023	2024	2025	Jan - May 2025	Jan - May 2026
live poultry (million birds)	63.1	67.9	73.3	85.0	89.3	37.0	37.9
live poultry (million \$)	277.6	282.3	319.6	365.8	357.8	145.3	162.8
hatching eggs (million dozen)	77.2	75.0	79.3	69.6	71.8	28.9	33.5
hatching eggs (million \$)	379.8	415.4	432.1	404.1	485.8	193.8	218.1
live poultry and hatching egg total export value (million US\$)	657.4	697.7	751.7	769.9	843.6	339.0	380.9

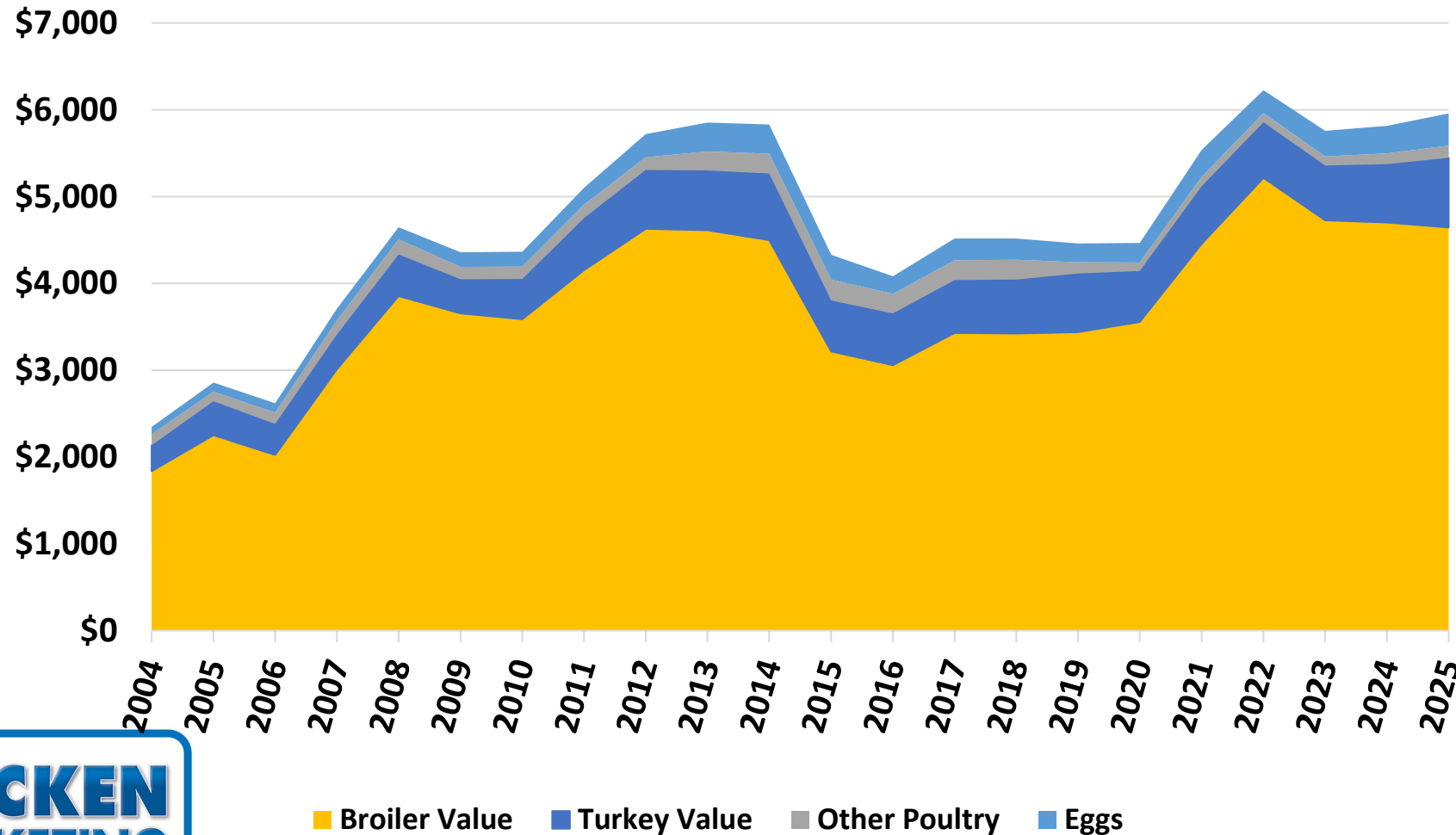
Exports of live poultry have increased constantly over the past five years. But US exports of hatching eggs in 2025 were 71.8 million dozen, down 7.1% from 2021 (the year prior to HPAI outbreaks).

But this doesn't mean that HPAI have no negative impact on US exports of live poultry. It's impossible to quantify the impact without live poultry production and price information.

- **Countries that accept US HPAI Primary Breeder Compartments**

Africa	Middle East	Asia/Americas
Egypt	Saudi Arabia	Colombia
Mozambique		Hong Kong (Transits)
Namibia		Indonesia
Nigeria		Uruguay
Tanzania		
Senegal		

U.S. Poultry & Egg Export Value

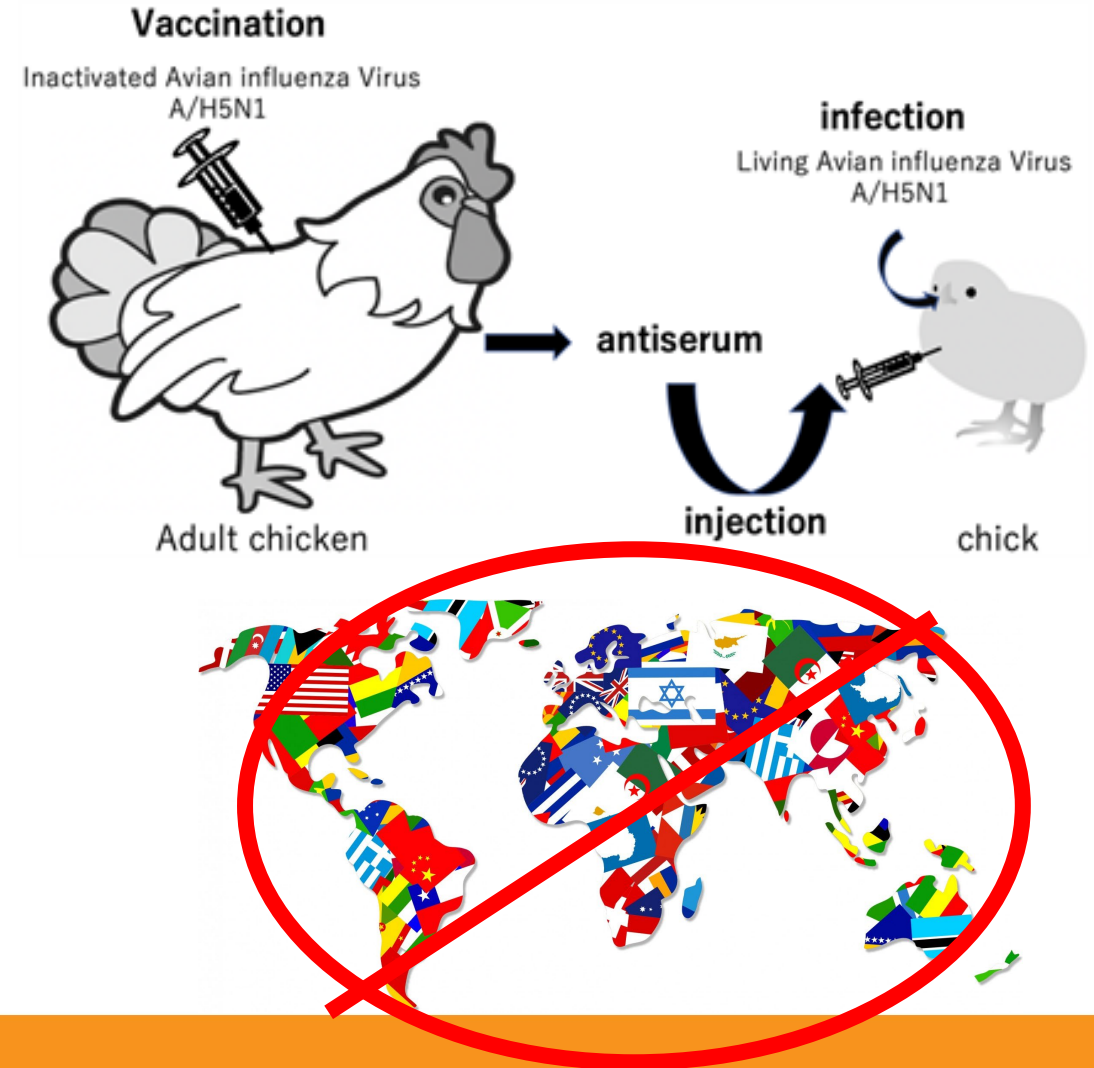


In 2024, total poultry and egg export value was \$5.814 billion, up 1.0% from 2023.

In 2025, total poultry and egg export value was \$5.957 billion, up 2.5% from 2024.

Poultry Vaccination = Trade Risks

- Most countries do not recognize others that vaccinate as being free of HPAI and do not accept exports from countries that do vaccinate.
- As part of USDA strategy to curb highly pathogenic avian influenza (HPAI) that was announced in February the USDA Animal and Plant Health Inspection Service (APHIS) is putting US\$100 million towards research focused on HPAI prevention, therapeutics and vaccine development.



Poultry Vaccination = Trade Risks Continues:

- Instant and Permanent Bans: Thailand, South Africa, Brazil, Taiwan **valued at \$471 million (including \$404 million of product and \$67 million of breeding stocks).**
- Instant Conditional Bans: Canada, The European Union, United Kingdom, Japan, United Arab Emirates, Cuba, Angola, Indonesia, Vietnam, Saudi Arabia, Philippines, Honduras, Nicaragua, Paraguay, Costa Rica, Argentina, Chile, Uruguay and China. **US export value: \$2.419 billion (including \$2.314 billion of product and \$105 million of breeding stocks).**
- Temporary bans: Guatemala, Peru, Ecuador, El Salvador, and Hong Kong. **US export value: \$567 million (including \$544 million of product and \$23 million of breeding stocks).**

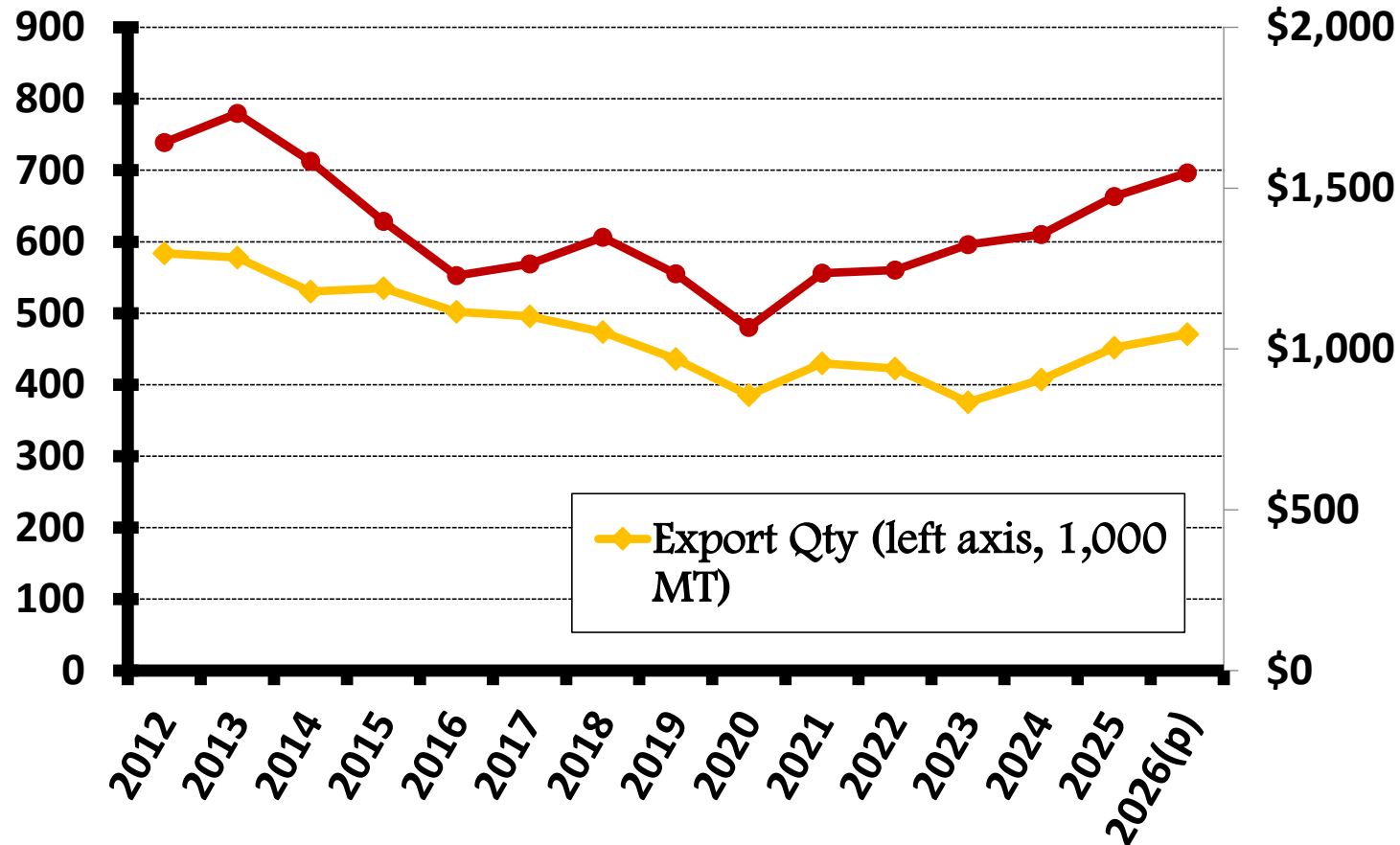
French Poultry Industry Loss Due To HPAI Vaccination in Ducks

(Oct 2023 Through Dec 2025)

In Million US\$		Broiler	Turkey	Duck	Total
	Export loss	317	65	19	402
	Domestic drop in value	1,930	104	34	2,069
	Total	2,248	169	54	2,471

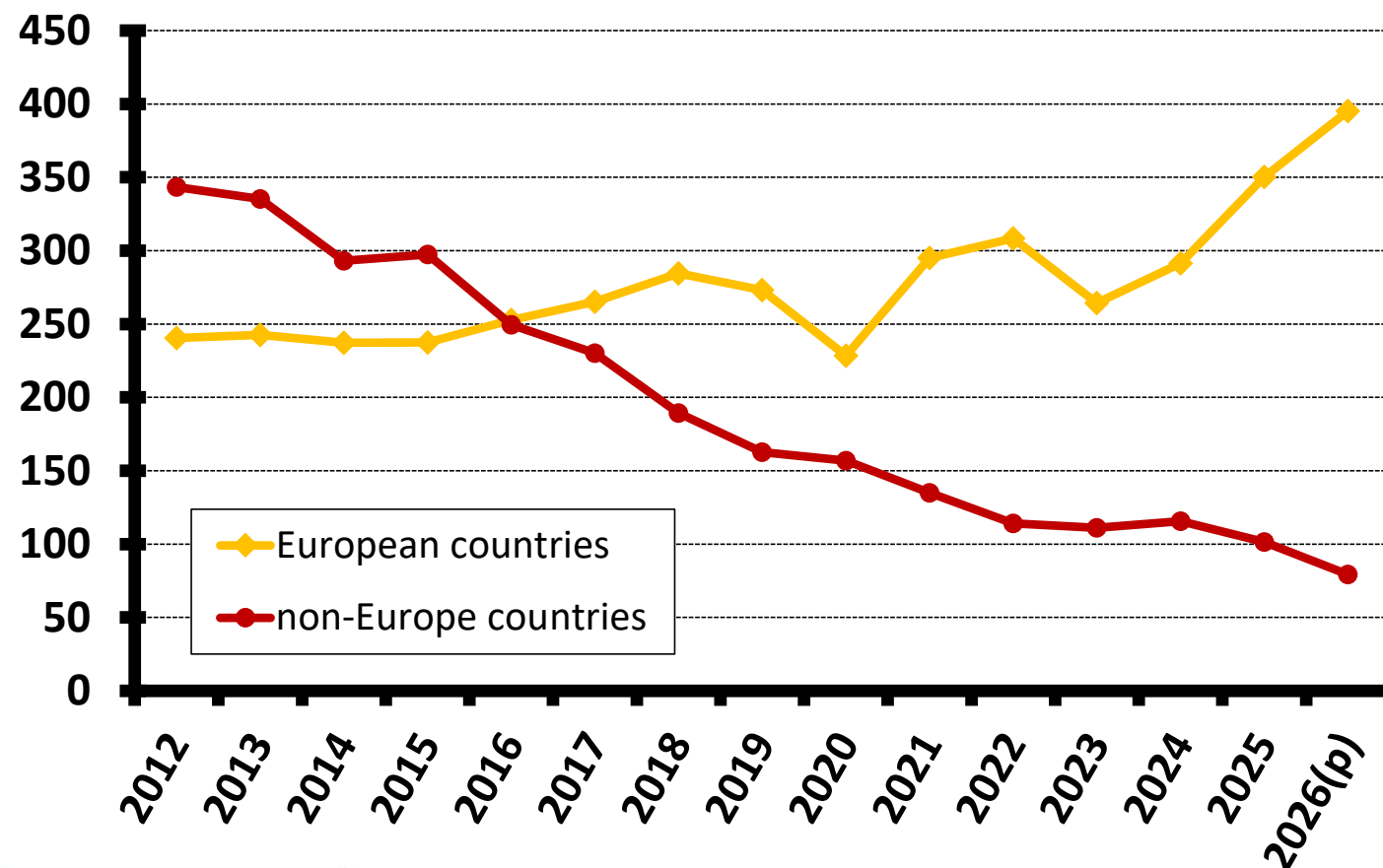
Note: does not include expenses to vaccinate ducks

French Poultry Exports since 2012



- French poultry exports in 2025 were 451,747 MT, up% 6.9% from 2022 (France officially launched its nationwide vaccination campaign for ducks on October 1, 2023.).
- Of the total exports, 77.6% or 350,374 MT were exported to European countries, and 22.4% or 101,373 MT were exports to non-Europe countries.

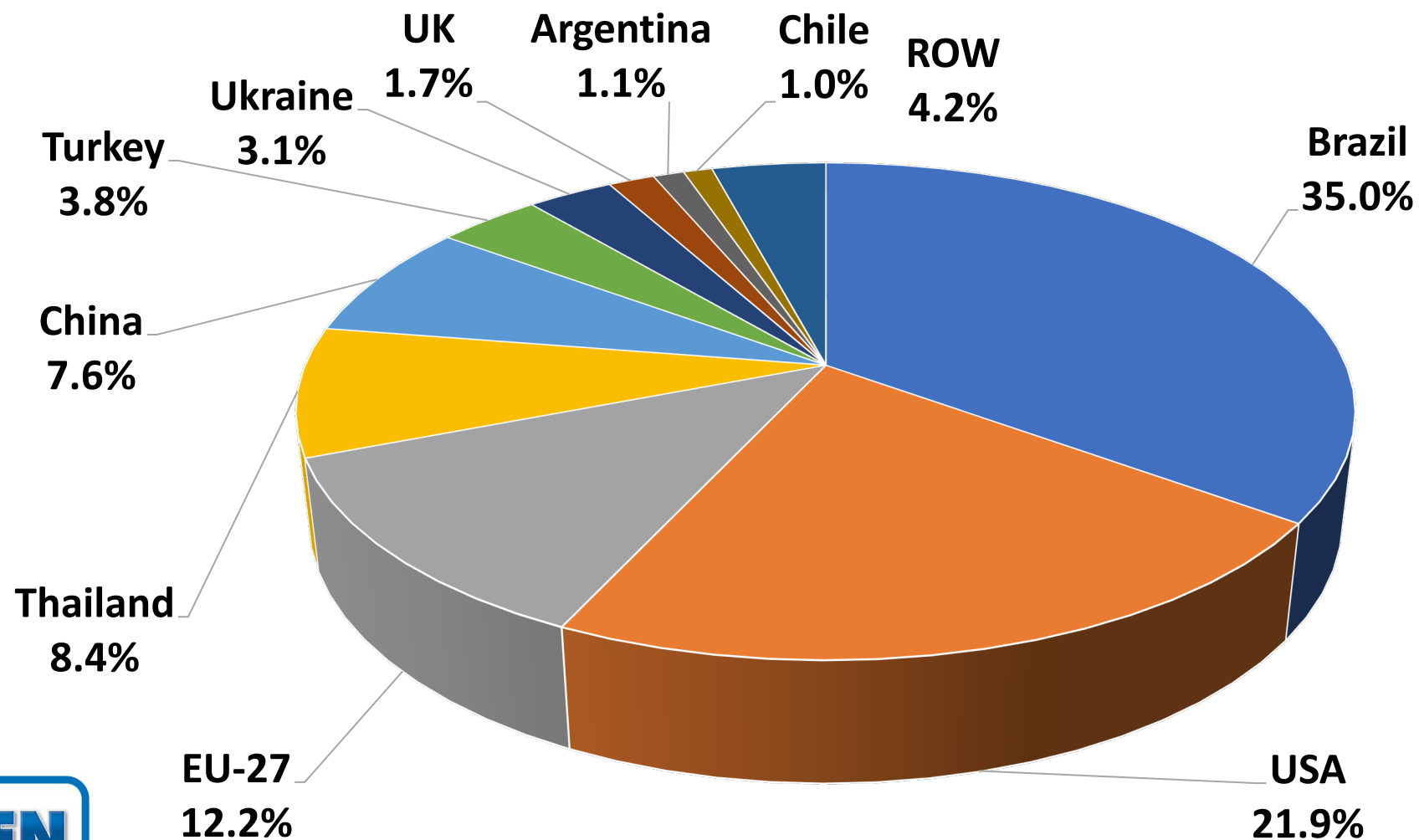
French Poultry Exports: Europe vs non-Europe Countries



- In 2025, French poultry exports to European countries were 350,374 metric tons, up 13.6% from 2022.
- French poultry exports to non-Europe countries in 2025 totaled 101,373 metric tons, down 11.2% from 2022. Of which, more than half were exported to Saudia Arabia.

Top Chicken Exporters

(2025)



Top 10 US Markets

Country
Mexico
Canada
Taiwan
Cuba
China
Philippines
Guatemala
Dominican republic
Vietnam
Angola



Brazil's First HPAI detection in Commercial Poultry



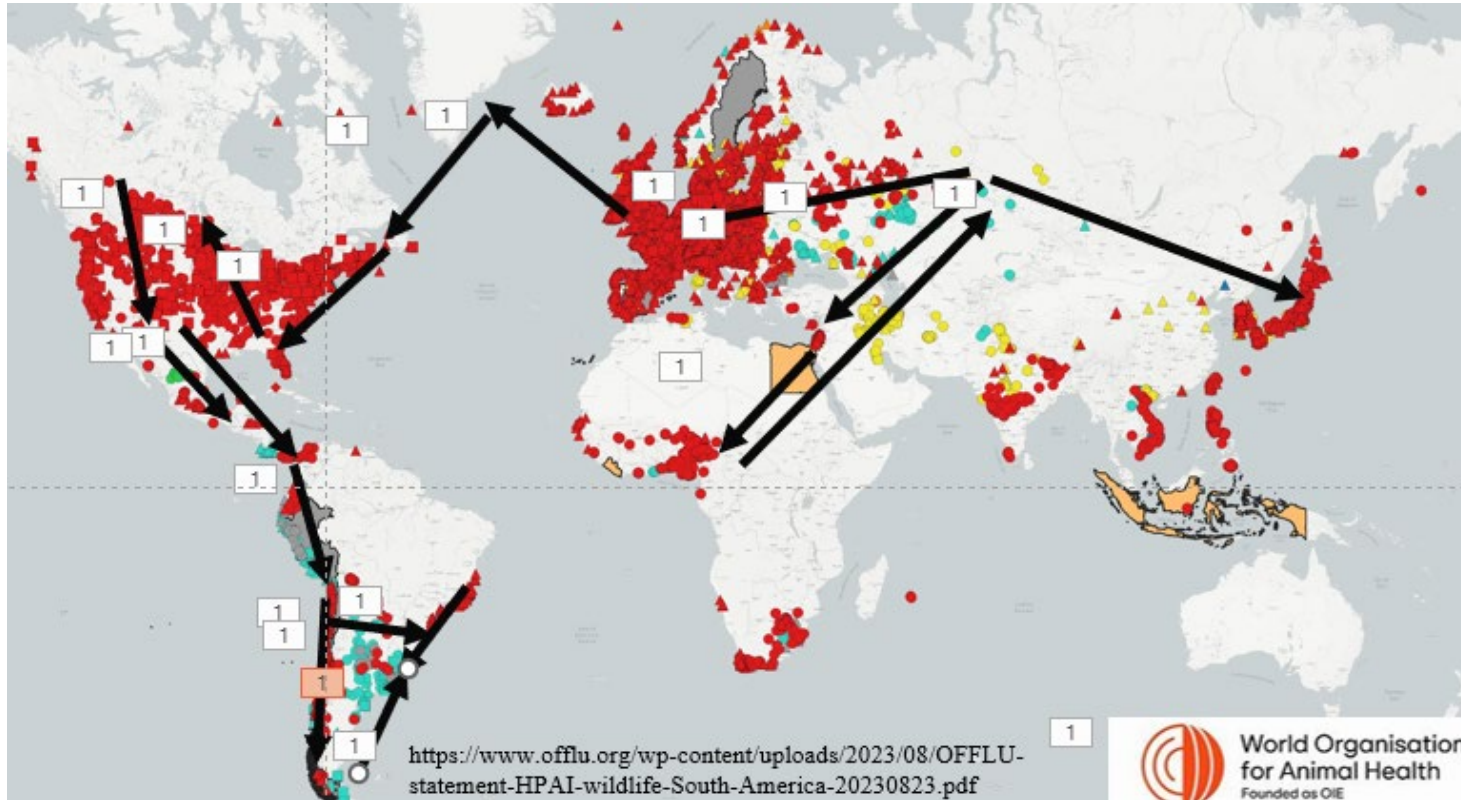
- Brazil reported its first HPAI H5N1 case in wild birds in May 2023. There have been dozens of wild bird and backyard cases since then.
- On May 16, 2025, Brazil confirmed its first commercial outbreak of avian influenza on a poultry breeding farm in the state of Rio Grande do Sul, a significant production state for the Brazilian industry

Brazil Top Chicken Export Markets

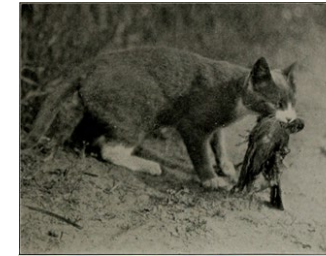
Rank	Country	2020	2021	2022	2023	2024	Jan-Apr 2024	Jan-Apr 2025	Ban for Brazil
1	China	672,662	639,151	539,904	682,337	561,261	177,037	192,383	Suspended imports at country level
2	United Arab Emirates	302,998	389,559	443,533	440,449	454,889	159,975	150,435	Suspended imports from the affected state
3	Saudi Arabia	467,522	353,584	340,127	376,771	370,726	139,884	137,932	Suspended imports from the affected state
4	Japan	409,966	448,356	420,127	433,167	443,101	150,531	123,179	Suspended imports from the affected municipality
5	South Africa	261,920	296,984	283,980	340,336	324,216	105,683	105,848	Initially a country level ban but lowered to affected state
6	Philippines	59,799	168,001	245,993	219,257	234,811	84,388	95,701	Suspended imports at country level
7	Mexico	15,888	104,203	140,033	172,106	211,993	39,378	70,148	Initially a country level ban but lowered to affected state
8	South Korea	127,332	113,757	185,381	201,748	155,801	58,689	64,969	Initially a country level ban but is to be lowered to regional level.
9	Iraq	75,724	44,563	56,608	152,724	180,040	64,021	60,168	Suspended imports at country level
10	EU-27	79,160	81,406	111,798	97,781	121,319	34,779	55,638	Suspended imports at country level.
	World Total	3,991,407	4,307,483	4,483,187	4,849,537	5,007,395	1,607,595	1,754,809	

2.3 H5N1 Gs/GD HPAI (since 1996)

- Current 2.3.4.4b HPAIV spread from Central Asia to Europe and Africa (2020), North America (2021-2022), South America (2022-2023) & Antarctica (2024)



[File:Flying mallard duck - female.jpg - Wikipedia](#)



AVIAN DISEASES 68:72-79, 2024

Case Report—

Caught Right on the Spot: Isolation and Characterization of Clade 2.3.4.4b H5N8 High Pathogenicity Avian Influenza Virus from a Common Pochard (*Aythya ferina*) Being Attacked by a Peregrine Falcon (*Falco peregrinus*)

Sun-Hak Lee,^A Sol Jeong,^B Andrew Y. Cho,^A Tae-Hyeon Kim,^A Yun-Jeong Choi,^A Hesu Lee,^A Chang-Seon Song,^{AC} Sang-Seop Nahm,^D David E. Swayne,^E and Dong-Hun Lee,^{CHG}



Tools used in the eradication of HPAI

1. **Biosecurity:** Building and farm structure
2. **Surveillance:** Early detection is critical
3. **Stamping-out:** Necessary to help prevent virus production and spread.
BUT – globally we are seeing reintroduction of HPAI
4. **Vaccination** – Low-income countries rely heavily on vaccination to increase resistance of poultry to HPAI virus infection, but now high-income countries are individually assessing adding vaccination and maintaining robust biosecurity, surveillance and stamping-out programs

5.1 Why Vaccinate Against HPAI?

Increase resistance to AIV infection

Uncommon infections with reduced virus growth and lower shedding

Prevent disease and death in poultry



Reduced environmental contamination

Reduced transmission and spread

Maintained livelihood of growers and food security of consumers

Improves animal welfare

Prevent human infections



5.3.2 Global HPAI Vaccination: **Emergency Program** since 2023

- Prevention in the Americas for H5N1 Gs/GD HPAI in 2023-2026: six Latin American countries
 - **Mexico, Guatemala, Ecuador** and **Bolivia**: vaccination of long-lived chickens (layers and breeders)
 - **Peru**: broader poultry vaccination including meat turkeys & breeders
 - **Uruguay** – smaller population of chickens
- **France**: vaccinated ~120M ducks (~280M doses) in 2 years (2023-25), continuing a third year with appropriate surveillance to support continuing trade
- **USA and New Zealand**: Vaccinating endangered native birds, but not poultry.
- Recent approvals for poultry vaccination but pending implementation: **Philippines** and **South Africa**



7. Vaccination Plans in Development and Review

- **The Netherlands:** completed a pilot project in layers → proposed vaccination
- **United Kingdom:** turkeys – pilot project underway for 24 weeks
- **Canada:** pilot in turkeys for Fall 2026
- **Italy:** Vaccination plan with near implementation
 - Turkeys and layers in Northern Italy (mandatory), but voluntary in other areas
 - Proposed to start June 2026, but delayed as assess trade issues and logistics
- **USA:**
 - United Egg Producers – proposed plan for layers to USDA with NTF supporting vaccination
 - USDA – proposed plan underdevelopment with industry input and review. Could a pilot study be possible?
- **Additional countries are studying pilot vaccination plans:** Hungary (ducks and geese), Poland, Denmark (turkeys) & Germany (turkeys)
- **Discussions:** layer industries in Brazil, Canada, Colombia and Japan

