Międzynarodowa
Konferencja Drobiarska
2026

AKTUALNE WYZWANIA BRANŻY DROBIARSKIEJ

Ministerstwo Rolnictwa i Rozwoju Wsi
Patronat honorowy Ministra Rolnictwa i Rozwoju Wsi Stefana Krajewskiego

Międzynarodowa Konferencja Drobiarska 2026

KRD IG | KRAJOWA RADA DROBIARSTWA IZBA GOSPODARCZA

Międzynarodowa Konferencja Drobiarska 2026

The French experience in implementing vaccination against HPAI

MINISTÈRE DE L'AGRICULTURE ET DE LA SOUVERAINETÉ ALIMENTAIRE
Liberté Égalité Fraternité

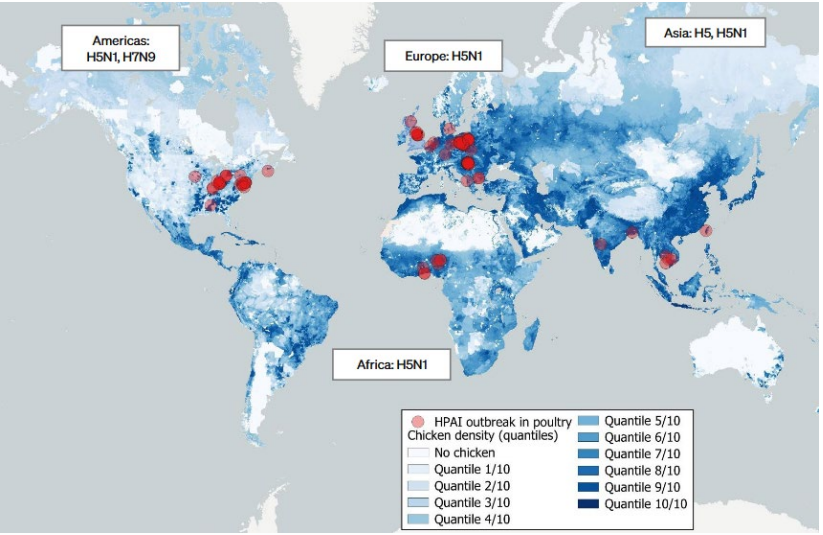
Jean-Luc GUERIN

National Veterinary College of Toulouse - ENVT

UMR IHAP – *Chair for Poultry Biosecurity & Health*

Warsaw – May 22, 2026

H5 avian influenza: a global risk for animal & human health



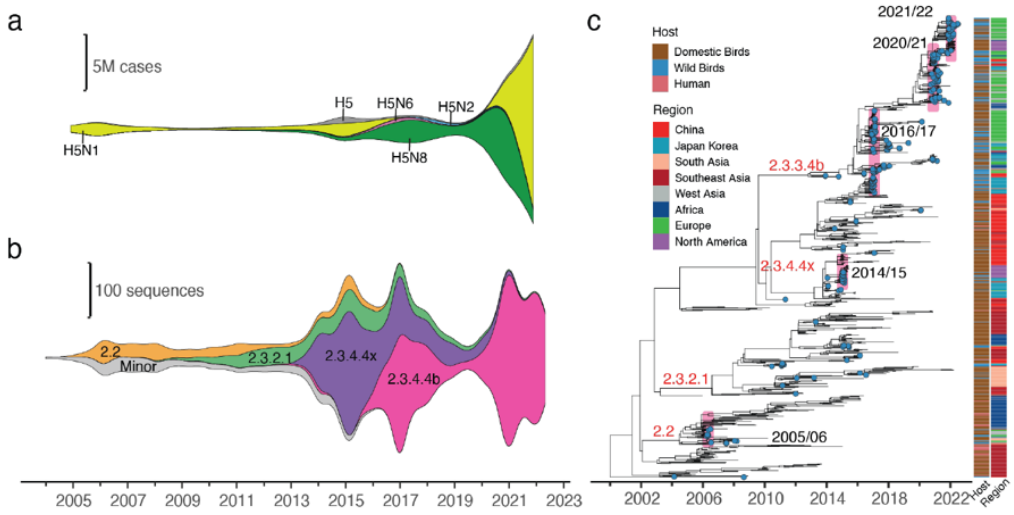
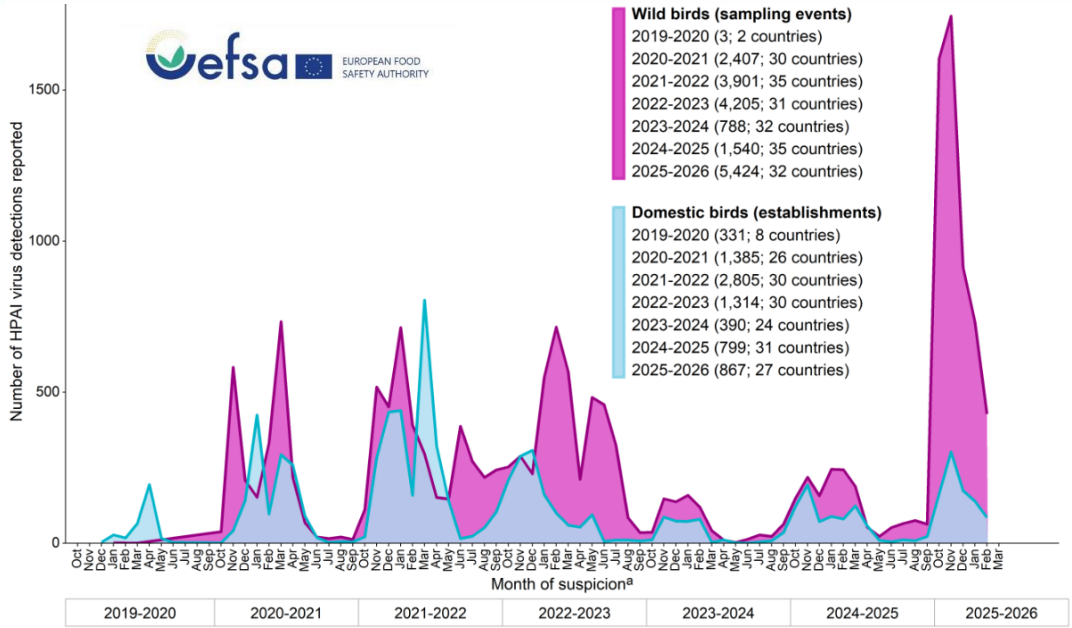


Figure 1. Dynamic changes in HPAI H5 subtyp

Xie et al, Nature, 2023

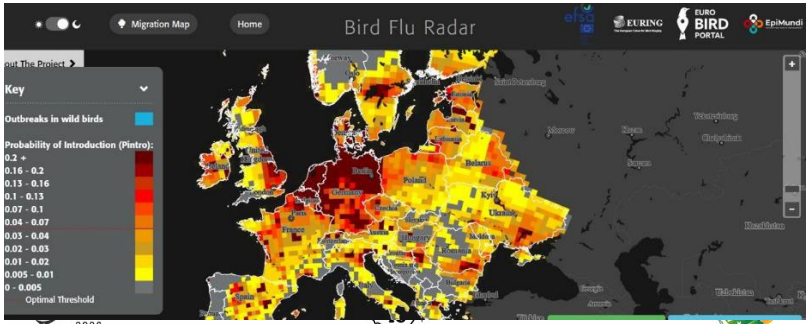
A huge impact in EU, for years and still TODAY



Avian influenza in Europe: enhanced surveillance and strict biosecurity needed as detections surge

Published: 24 November 2025 | 3 minutes read
Last reviewed date: 25 November 2025

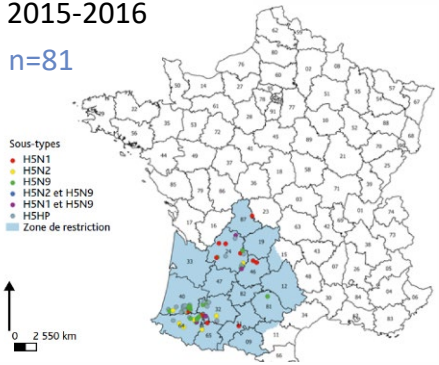
Share:



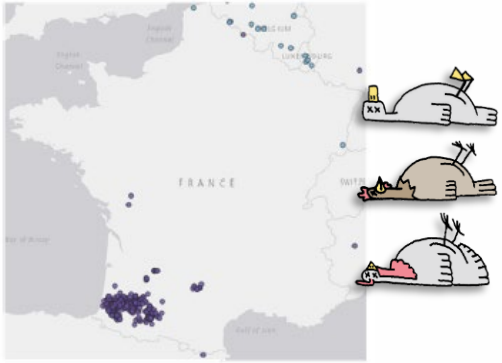
HPAI *versus* France, 2015-2023

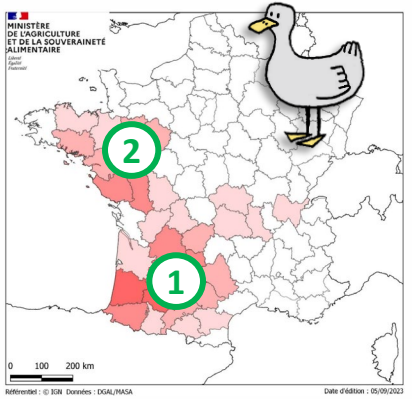
2015-2016

n=81

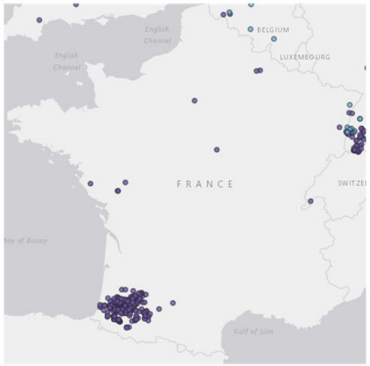


2016–2017 n=488

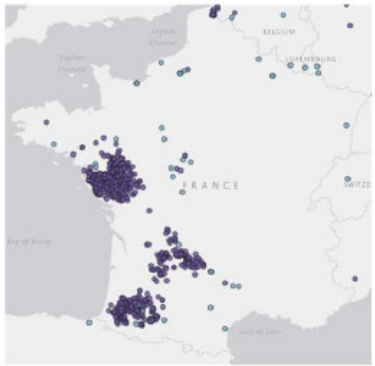




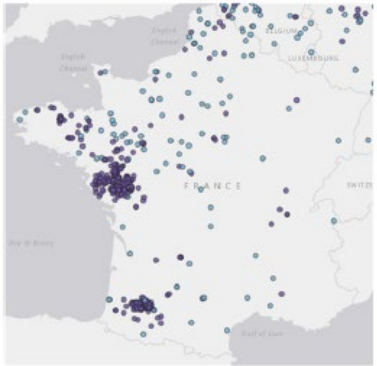
2020–2021 n=492



2021–2022 n=1,377



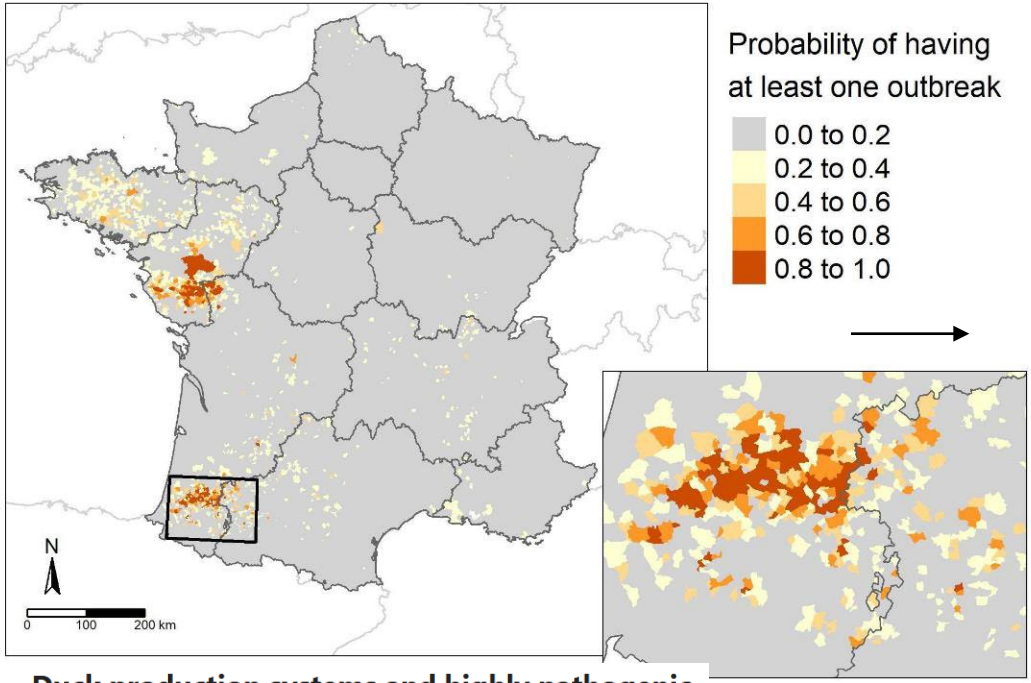
2022–2023 n=402



- 5 major epidemics
- Breeder stock affected
- **Role of duck farms**
- Farm density
- **« Classical » culling strategy is not efficient**

Bauzile et al, 2023
Guinat et al, 2020
Le Bouquin et al, 2016
Scoizec et al, 2024

The risk map of HPAI in France is shaped by duck farms density

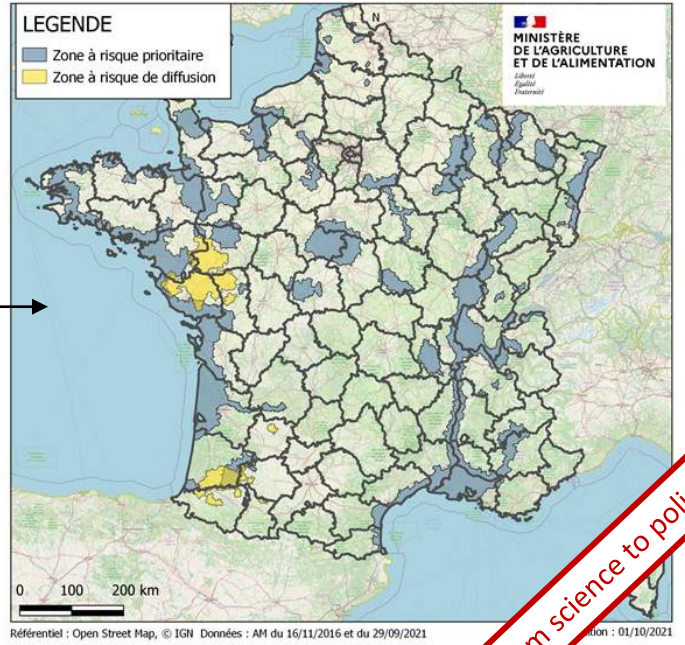


Duck production systems and highly pathogenic avian influenza H5N8 in France, 2016–2017

C. Guinat ✉, J. Artois, A. Bronner, J. L. Guérin, M. Gilbert & M. C. Paul

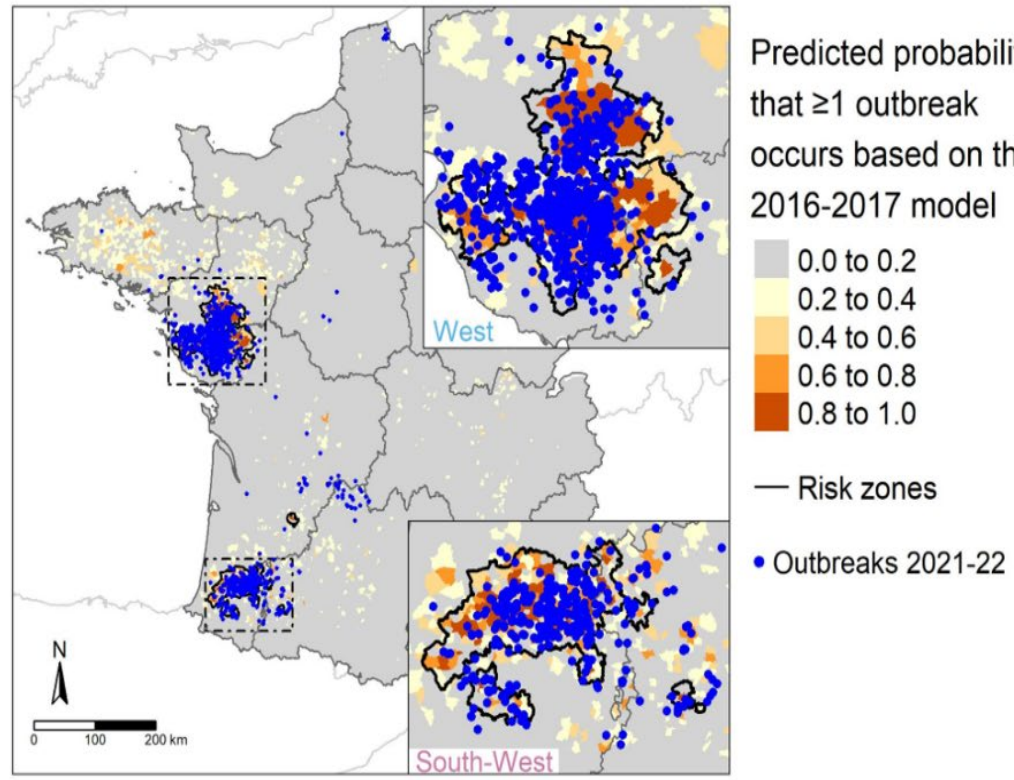
Scientific Reports **9**, Article number: 6177 (2019) | Cite this article

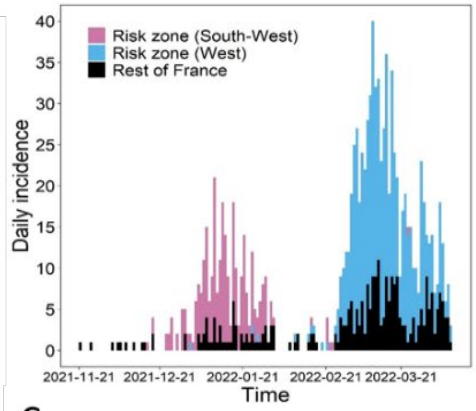
IAHP : zones à risque particulier (ZRP) et à risque de diffusion (ZRD) en France

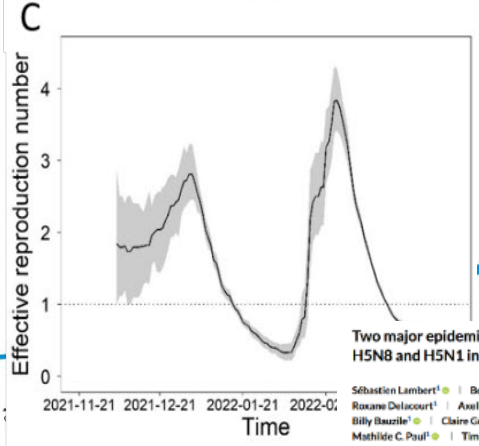


From science to policy

The risk map of HPAI in France is shaped by duck farms density







Two major epidemics of highly pathogenic avian influenza virus H5N8 and H5N1 in domestic poultry in France, 2020–2022

Sébastien Lambert | Benoît Durand | Mathieu Andraud | Roxane Delacourt | Axelle Scoizec | Sophie Le Bouquin | Séverine Rautureau | Billy Bauzile | Claire Guinat | Lisa Fourtune | Jean-Luc Guérin | Mathilde C. Paul | Timothée Vergne

Responses to outbreaks show limitations

- **Biosecurity**
  - Is and will remain a basics and a MUST in all sanitary strategy
  - But showed limited efficacy against avian influenza
- **Surveillance**
  - Objective: early detection of outbreaks
  - Molecular tools: detection ☞ genomic surveillance
  - Surveillance of vaccinated flocks more challenging (?)
- **Depopulation + restriction zones in case of oubreaks**
  - Outbreaks: « culling as fast as possible » + « Preventive culling »
  - Stop movements + testing
  - Issues : animal + farmer welfare, societal acceptability, capacities for culling and disposal of carcasses in case of large epizootics, …

SO…why not include vaccination in our toolbox?

PROS

- PROTECT birds from disease & mortality
- REDUCE viral excretion and sensitivity of birds to infection
- REDUCE culling and placement restriction
- REDUCE exposure of mammals (humans) to HPAIV

CONS

- RISK of silent viral circulation in vaccinated flocks
- RESTRICTION of international trade
- COST of vaccination and SURVEILLANCE
- REDUCE compliance with biosecurity measures by farmers

2022: toward vaccination in the EU

Agreement from EU and G7: vaccination is a complementary tool to control HPAI and should **not** result in commercial restrictions if properly applied

Trials in 3 EU members: France, Italy and The Netherland started trials

Ducks

Turkey (high farm densities + wetlands in the North)

Layers (specific risks + wetlands)

.....

The strategy should be adapted to the specificities of each poultry sector (species, densities ...)

Restrictions on international trade?

Policy brief

December 2023

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

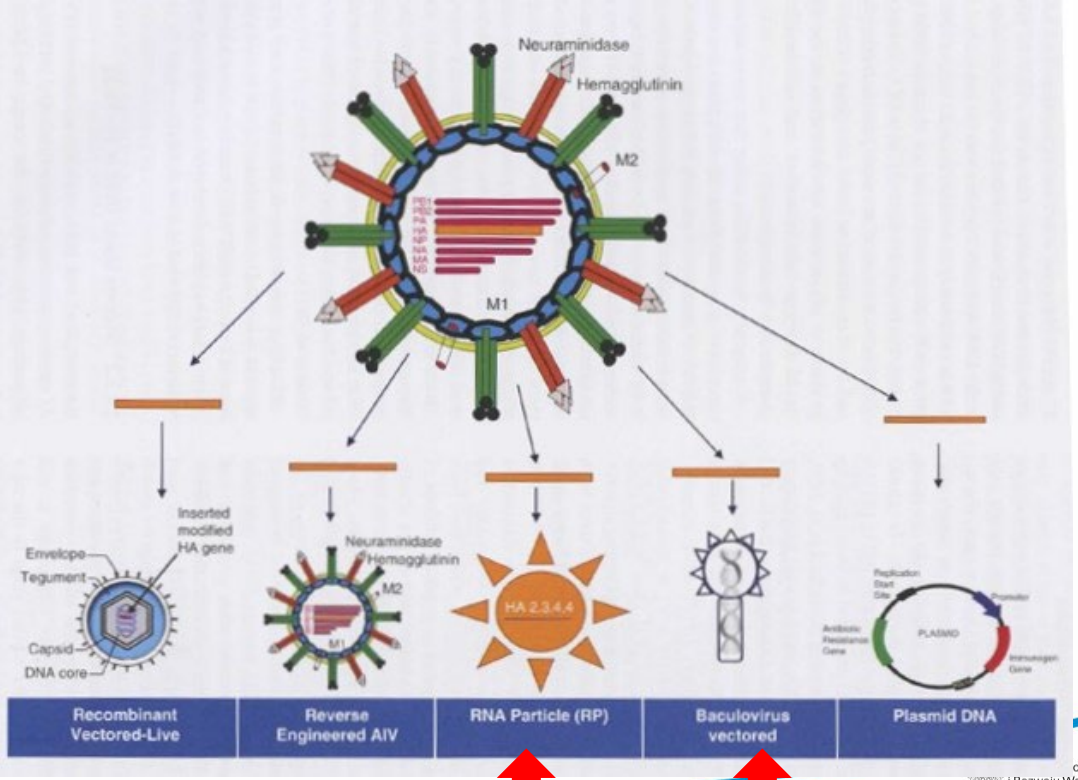
Executive summary

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.

© wikoski

WOAH updated policy brief; December 2023

A wide range of vaccines are available today



Swayne et Sims
In: Metwally et al., 2021

HPAI Vaccination in France since 1st October, 2023

Vaccine & company	Species	Vaccination at 1 day of age	DIVA ELISA NP serology
Volvac BEST AI+ND BOERHINGER INGELHEIM	Pekin ducks, Mule ducks,	Yes	Possible
	Muscovy ducks	Yes	
Vaccin CEVA Respons H5 Ceva Animal health	Mule ducks, Pekin ducks, Muscovy ducks	Yes	Possible

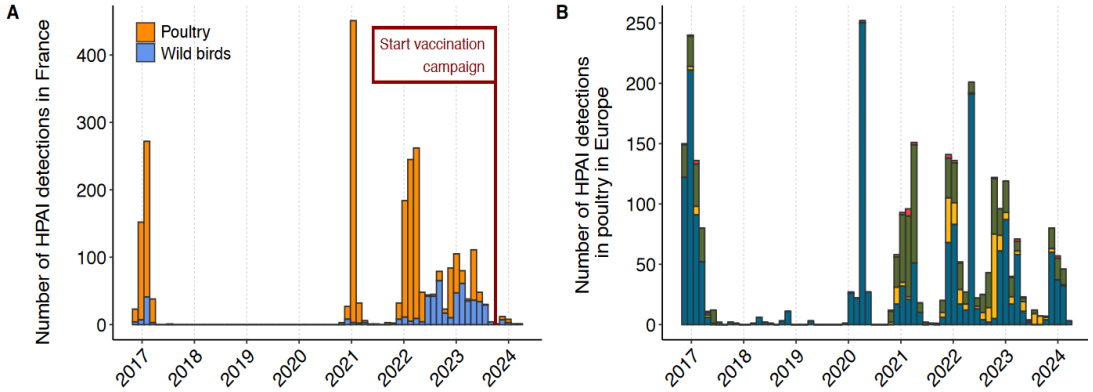
Vaccination ☞

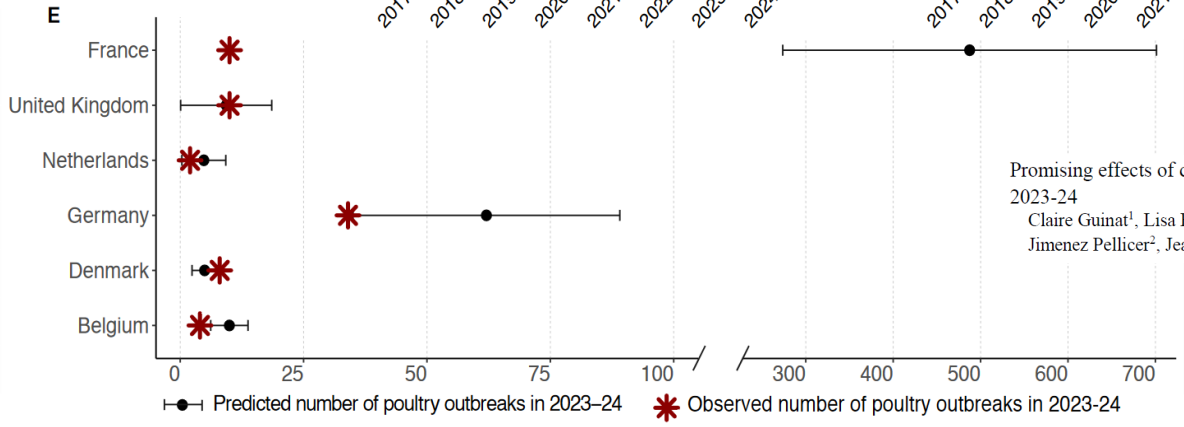
- Mandatory for all ducks at the production level
- Optional for breeder ducks
- Prohibited for all other poultry

EU Delegate act – HPAI vaccination surveillance

Conditions	Enhanced passive surveillance	Active surveillance	Serological survey to evaluate the effectiveness of the campaign
Where?	Epidemiological Unit	Epidemiological Unit	Batch
By who?	Breeder or Technician	Official veterinarian	Official veterinarian
Frequency?	Weekly	Every 30 days: clinical visit + virological analysis	At the end of the batch: serological analysis
How?	Swabs (tracheal or oropharyngeal swabs) on 5 cadavers	Swabs on 60 vaccinated ducks (tracheal or oropharyngeal swabs)	Blood collection from 20 animals
Analysis?	RT-PCR gene M virology If the result was positive ➔ screening H5/H7	RT-PCR gene M virology (If the result was positive ➔ screening H5/H7)	ELISA NP serology
Laboratory type?	Recognised laboratory	Approved laboratory	Approved laboratory

The FR Vaccination plan showed very positive effects in the 1st year of vaccination, this evaluation must be carefully updated

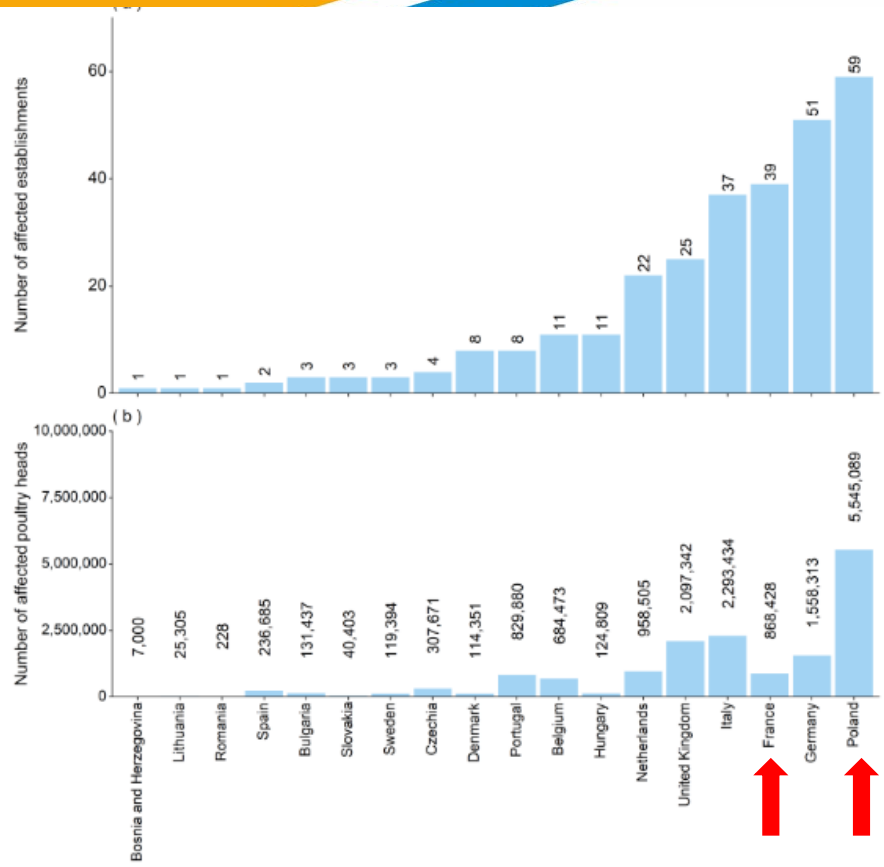




Promising effects of duck vaccination against highly pathogenic avian influenza, France 2023-24

Claire Guinat[1], Lisa Fourtune[1], Sébastien Lambert[1], Eva Martin[1], Guillaume Gerbier[2], Andrea Jimenez Pellicer[2], Jean-Luc Guérin[1], Timothée Vergne[1]

2025-26: the EU / FR poultry industry faced a massive HPAI challenge



efsa EUROPEAN FOOD SAFETY AUTHORITY

France

During the current reporting period from 29 November 2025 to 27 February 2026, 39 HPAI A(H5N1) outbreaks in poultry were reported in France via ADIS. Additional data were collected and provided by the reporting country for all outbreaks (Annex B). Among these, 97% (38/39) were classified as primary and 3% (1/39) as secondary, affecting a total of 868,428 birds. Most (87%, 34/39) of the outbreaks occurred in commercial single-species establishments, including vaccinated ducks (36%, 14/39), turkeys for fattening (15%, 6/39), laying hens (10%, 4/39),

- Multiple primary introductions at the EU scale
- Investigations pending on duck cases
- 100% protection does not exist !

Take-home messages

- No taboo ! vaccination may be part of the solution *(**along with biosecurity and surveillance**)*
- Implementation of HPAI vaccination – if properly executed - does NOT increase the risk of viral circulation
- Major improvements in both vaccine and diagnostics technologies offer now smart solutions for efficient vaccination AND monitoring of vaccinated flocks
- **A vaccination strategy (which species? Which areas? Which programme?) must be designed for each national/ regional specific situation**
- **Logistical / practical aspects** of a vaccination programme are very important and must be addressed with all stackeholders (vets, farmers, services, …)
- Surveillance is and will remain THE key and the most expensive part of a vaccination program
- Modeling the infection and the impact of vaccination, including the economic impact, at the farm and regional scales, may be helpful to define a strategy
- There’s need for research to improve vaccines, vaccination strategy and surveillance tools
- **This is a never-ending story ! Adaptation of our response to viral changes will remain our daily challenge**

Międzynarodowa
Konferencja Drobiarska
2026

Thank you for your attention !

MINISTÈRE
DE L'AGRICULTURE
ET DE LA SOUVERAINETÉ
ALIMENTAIRE
Liberté
Égalité
Fraternité

envt école nationale vétérinaire toulouse

INRAE

Ministerstwo Rolnictwa i Rozwoju Wsi
Patronat honorowy Ministra Rolnictwa i Rozwoju Wsi Stefana Krajewskiego

Międzynarodowa
Konferencja Drobiarska
2026

KRD IG KRAJOWA RADA DROBIARSTWA IZBA GOSPODARCZA

Ducks are insidious and heavy disseminators of HPAIVs