





HIGHLY PATHOGENIC AVIAN INFLUENZA SITUATION IN FRANCE

SCoPAFF February, 10 2022



HPAI situation

Last update 08/02/2022

Poultry: 349 cases H5N1

✓ South-West region (5 departments): 337 outbreaks

✓ Nord department : 8 outbreaks

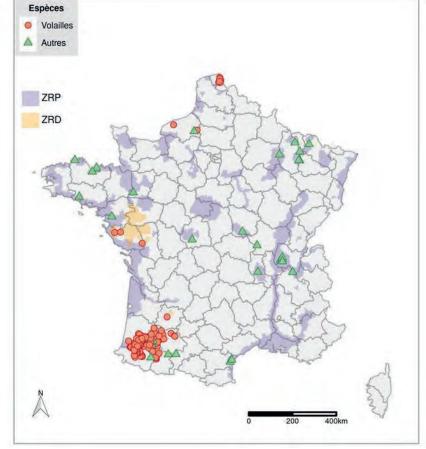
✓ Seine-Maritime department : 1 outbreak

✓ Vendée department : 3 outbreaks

Backyards:

3 cases H5N8 11 cases H5N1

Wildlife: 30 cases H5N1



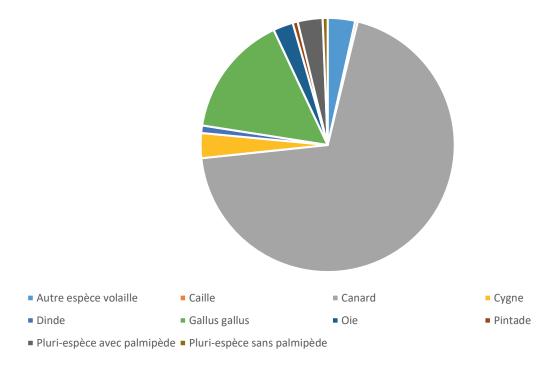
ZRP: Zone à risque particulier (= wetland areas)

ZRD: Zone à risque de diffusion (= areas at high risk of spread)



HPAI situation

Distribution of outbreaks by species





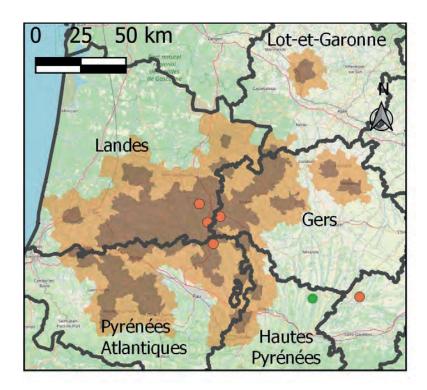
HPAI situation in South-West

Zones règlementées

- zone de protection
 - zone de surveillance

Foyers

- Cas Faune sauvage
- cas oiseaux captifs





Preventive depopulation in South-West region: Regional fallow approach

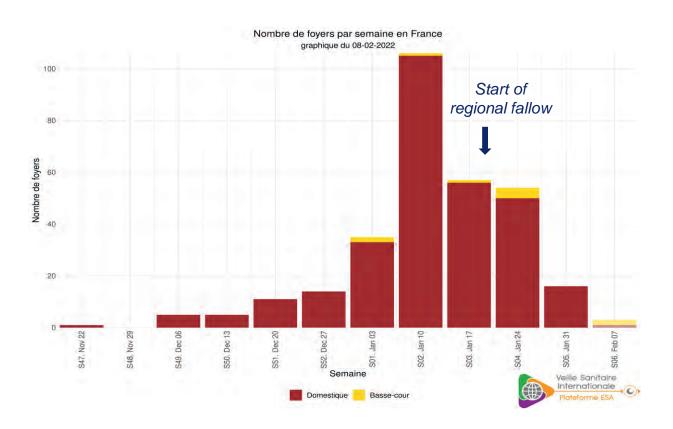
- Situation in South-West region, early January 2022 ➤ Despite a reinforced level of biosecurity and sheltering of poultry, high number of outbreaks, limited effect of the peri-focal preventive depopulation approach
 - Many farms preventively depopulated found infected leading to extension of protection zones
 - Explanation:
 - ✓ High level of virus excretion before symptoms with H5N1 strain,
 - √ Failures in biosecurity measures
 - ✓ Airborne transmission of the virus may also have played an important role.

Strategy

- Regional fallow i.e. depopulation of all poultry farms in order to quickly reduce animal density and stop the spread
- To be done in parallel of outbreaks depopulation: to reduce infection load in the area and for animal welfare reasons
- Area: the coalescent surveillance and protection zone
- Centripetal approach



HPAI outbreaks in Poultry: evolution by week



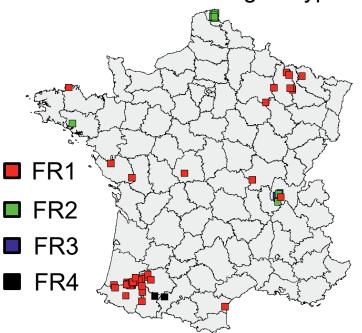


Phylogenetic analysis



82 full genomes currently sequenced in France at French AI NRL and compared to GISAID database

French HP H5N1 genotypes > Only HP H5N1 AIV was detected in France since Nov 2021



4 genotypes identified

FR1

- Found in wildlife and poultry all over France
- Genotype also found in Italy, Czech rep., Poland, Russia, Estonia and England

FR2

- Found in poultry outbreaks in Nord département, backyard in Morbihan and wildlife in Ain departements
- Genotype found in Russia, Netherlands, Belgium and Croatia

FR3

- Only in wildlife in Ain département
- Genotype found also in Italy

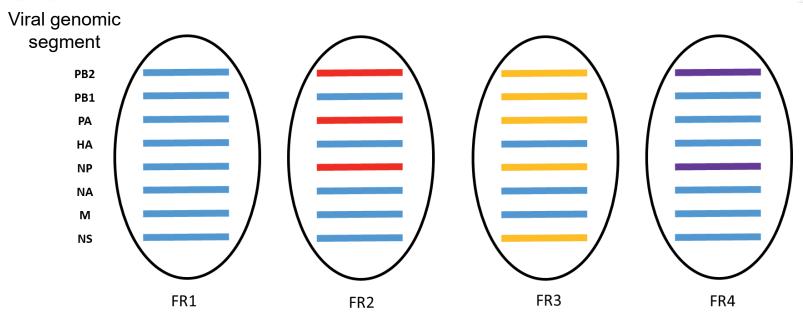
FR4

- Only in Hautes-Pyrénées and Haute-Garonne departments
- No other related sequences available in international database



Schematic representation of each genotype



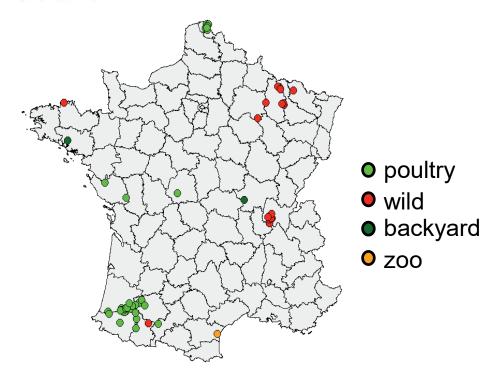


Genotypes of French IAHP A(H5N1) detected in France since November 2021. Each color of viral genomic segments corresponds to a different phylogenetic origin.



Origin of sequenced viral genomes







Thank you for your attention Merci pour votre attention



