

HPAI outbreaks in Italy

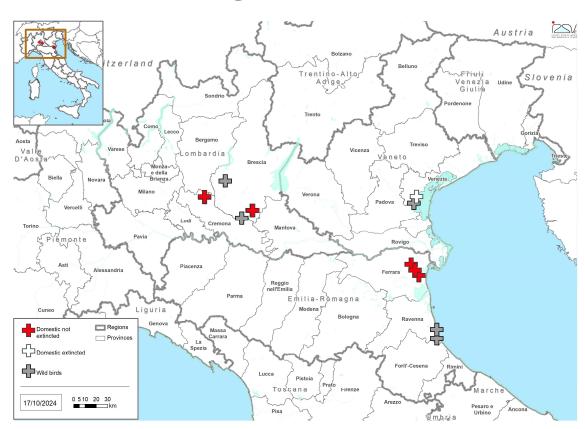
PAFF Committee – Animal health and welfare 24-25 October 2024



HPAI H5N1 in Italy

Ministero della Salute

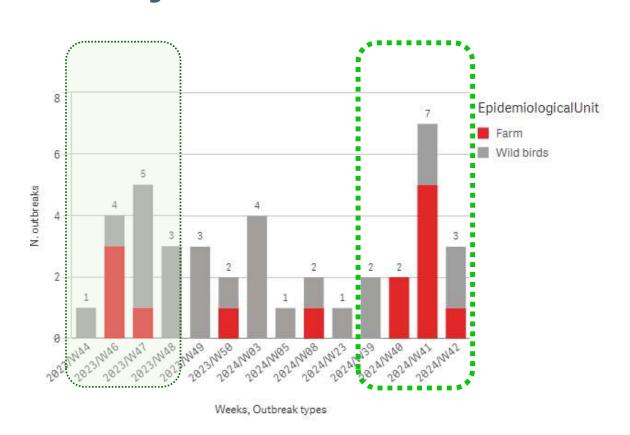
- ✓ 8 HPAI outbreaks in poultry (17/10/2023)
 - 1 Veneto
 - 3 Emilia-Romagna
 - 4 Lombardia
- ✓ 6 HPAI outbreaks in wild birds (17/10/2023)
 - 2 Veneto
 - 2 Emilia Romagna
 - 2 Lombardia



Regular update on: https://www.izsvenezie.com/reference-laboratories/avian-influenza-newcastle-disease/italy-update/
https://eurlaidata.izsvenezie.it/

Number of weekly HPAI H5N1 cases

The current epidemic season, compared to the one of 2023/24, started earlier in autumn (in week 39 vs week 44), with the first positive wild bird found positive at the end of September





HPAI H5N1 in domestic poultry and wild birds

n	ID ADIS	Region	Province	Species	Subtype	C	onfirmation date
1	IT-HPAI(P)-2024-00002	VENETO	VENEZIA	MEAT TURKEY	H5N1		2024-10-01
2	IT-HPAI(P)-2024-00003	EMILIA-ROMAGNA	FERRARA	LAYING HEN	H5N1		2024-10-04
3	IT-HPAI(P)-2024-00004	LOMBARDIA	BRESCIA	MEAT TURKEY	H5N1		2024-10-10
4	IT-HPAI(P)-2024-00005	LOMBARDIA	CREMONA	MEAT TURKEY	H5N1		2024-10-10
5	IT-HPAI(P)-2024-00006	LOMBARDIA	CREMONA	MEAT TURKEY	H5N1		2024-10-10
6	IT-HPAI(P)-2024-00007	FMILIA-ROMAGNA	FFRRARA	MFAT TURKFY	H5N1		2024-10-11
n	ID ADIS	Region	Province	No. animals	Species	Subtype	Confirmation date
1	IT-HPAI(NON-P)-2024-00007	VENETO	VENEZIA	5	Common Teal (Anas crecca)	H5N1	2024-09-26
2	IT-HPAI(NON-P)-2024-00008	VENETO	VENEZIA	6	Common Teal (Anas crecca)	Н5	2024-09-27
3	IT-HPAI(NON-P)-2024-00009	LOMBARDIA	BRESCIA	1	Mallard duck (Anas platyrhynchos)	H5N1	2024-10-12
4	IT-HPAI(NON-P)-2024-00010	LOMBARDIA	BRESCIA	1	Mallard duck (Anas platyrhynchos)	H5N1	2024-10-12
5	IT-HPAI(NON-P)-2024-00011	EMILIA-ROMAGNA	RAVENNA	1	Mallard duck (Anas platyrhynchos)	H5N1	2024-10-16
6	IT-HPAI(NON-P)-2024-00012	EMILIA-ROMAGNA	RAVENNA	1	Eurasian wigeon (Mareca penelope)	H5N1	2024-10-16

Outbreaks in poultry

- No at-risk contacts in the 21 days prior onset of symptoms
- Infected premises are commercial poultry holdings belongs to major poultry companies
- Only symptoms observed are increased mortality rates
- Infected premises: close to hunting areas or wetlands where wild birds infected with HPAI
- Sub-optimal biosecurity practices (managerial and structural)
- Located within the restricted zones of primary outbreaks

Disease control measures as provided by Commission Delegated Regulation (EU) 2020/687

- Epidemiological investigation
- Culling, disposal of carcasses, cleaning and disinfection procedures
- Establishment of protection and surveillance zones (3 and 10 km)
- Restrictions on movements of poultry and poultry products (with derogations)



GENETIC CHARACTERISATION OF THE VIRUSES IDENTIFIED IN THE HPAI OUTBREAKS

The H5N1 HPAI viruses identified so far in Italy belong to clade 2.3.4.4b, genotype DI. Within the DI genotype, the Italian samples are grouped with the viruses identified in September in France (backyard chickens), Austria (Muscovy ducks) and Croatia (mute swan).

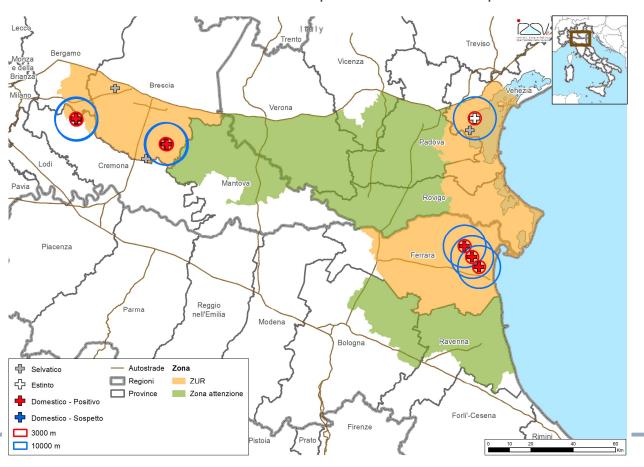
The high similarity of the viruses found in poultry (in red) to those identified in wild birds (in blue) suggests multiple primary introductions at the origin of the poultry outbreaks in Italy.

Noteworthy, viruses identified in Lombardy in poultry and in one wild mallard have the mutation in the PB2 gene segment D701N, which is a marker of adaptation to mammals.



Further Restricted Zone

A FRZ has been established by the Competent Authority of Veneto, Lombardy and Emilia-Romagna Regions to prevent the further spread of the infection



Two different areas have been defined within the Italian territory at higher risk for HPAI (based on the evolving epidemiological situation) and will be in place until 31/01/2025

Measures applied within the two zones

- Differences are mainly related to re-stocking restrictions
 - For meat turkeys and laying hen poultry establishment with >250 birds:
 - verification of compliance with biosecurity standards
 - cycle length: max 140 days for turkeys male and 90 days for turkeys female
 - recommended time for the vacancy period of 5 week
 - Restocking of fattening turkeys is **prohibited** within the FRZ, with possible derogations:
 - according to territorial areas, defined as "homogeneous areas" (restocking within a limited time frame of 20 days), in order to ensure the complete depopulation of the area at the time of slaughter and, in case of re-emergence of AI, the enforcement of an all in/all out system for the entire area
 - verification of compliance with biosecurity standards



Other preventive and risk mitigation measures in FRZ

- Reinforcement of high biosecurity measures
- Housing order
- Gathering of domestic birds for fairs, exhibitions and live-bird markets are banned
- Release of game for hunting is prohibited
- Pre-movement clinical inspection and virological testing according to specific protocols
- A strict monitoring plan in high risk areas of Veneto, Lombardy and Emilia-Romagna, on a weekly basis in broiler of age between 37 and 44 days, and fortnightly in fattening turkey older than 50 days and in pullets and laying hen older than 28 days (prevalence 3% - 95% CI)
- The use of live decoy birds belonging to the orders Anseriformes and Charadriformes for hunting is prohibited



Thank you

