

Highly pathogenic Avian Influenza in Italy: epidemiological update

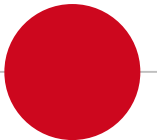
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SCoPAFF AHW

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HPAI H5N1 in Italy



Ministero della Salute

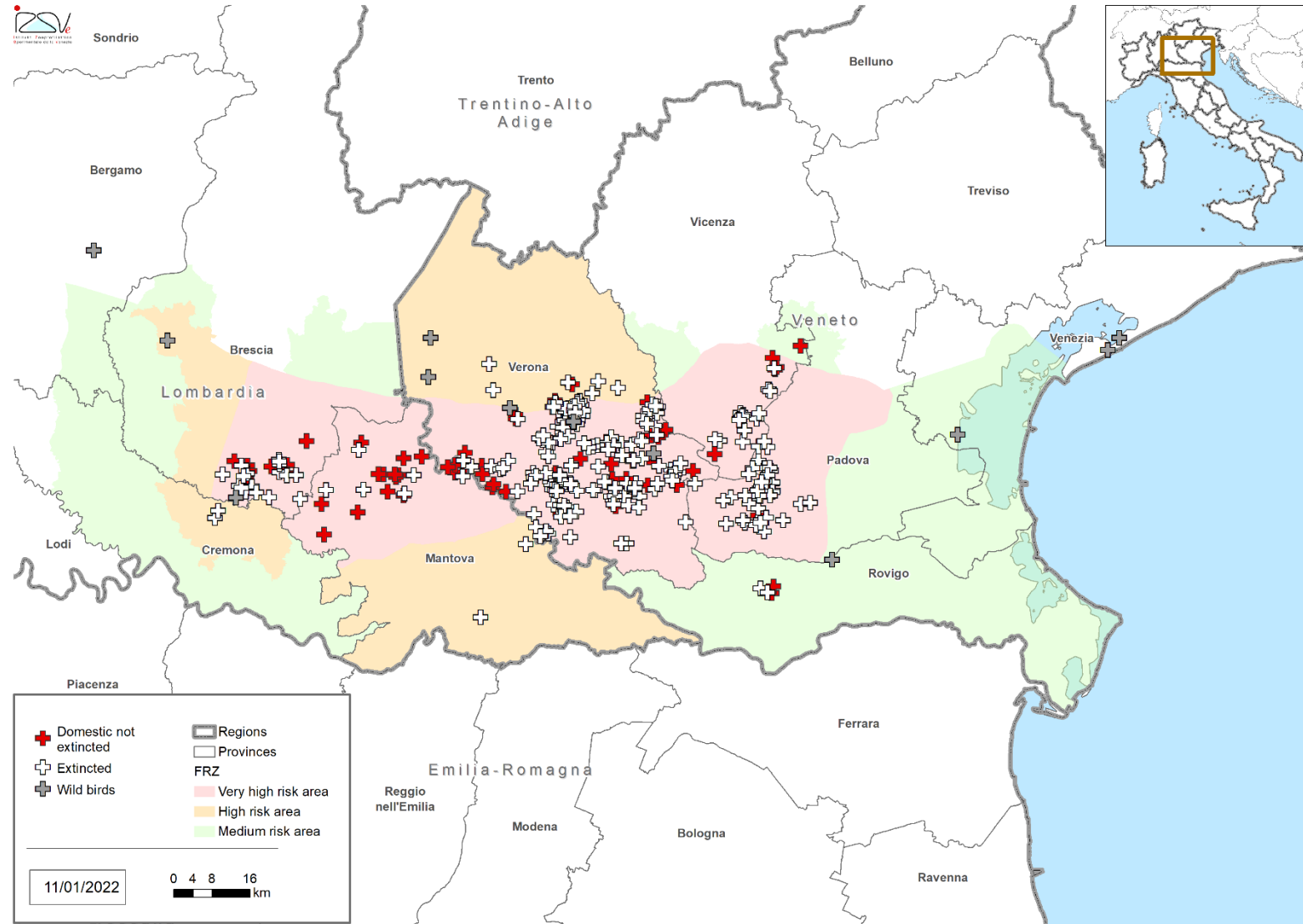
last update 11/01/2022

■ Wild birds outbreaks

- **9** in Veneto
- **3** in Lombardia
- **1** in Friuli-Venezia Giulia
- **1** in Lazio
- **1** in Apulia
- **1** in Emilia-Romagna

■ Domestic poultry/captive outbreaks

- **248** in Veneto
- **55** in Lombardia
- **1** in Lazio
- **1** in Friuli-Venezia Giulia
- **1** in Emilia-Romagna
- **1** in Campania

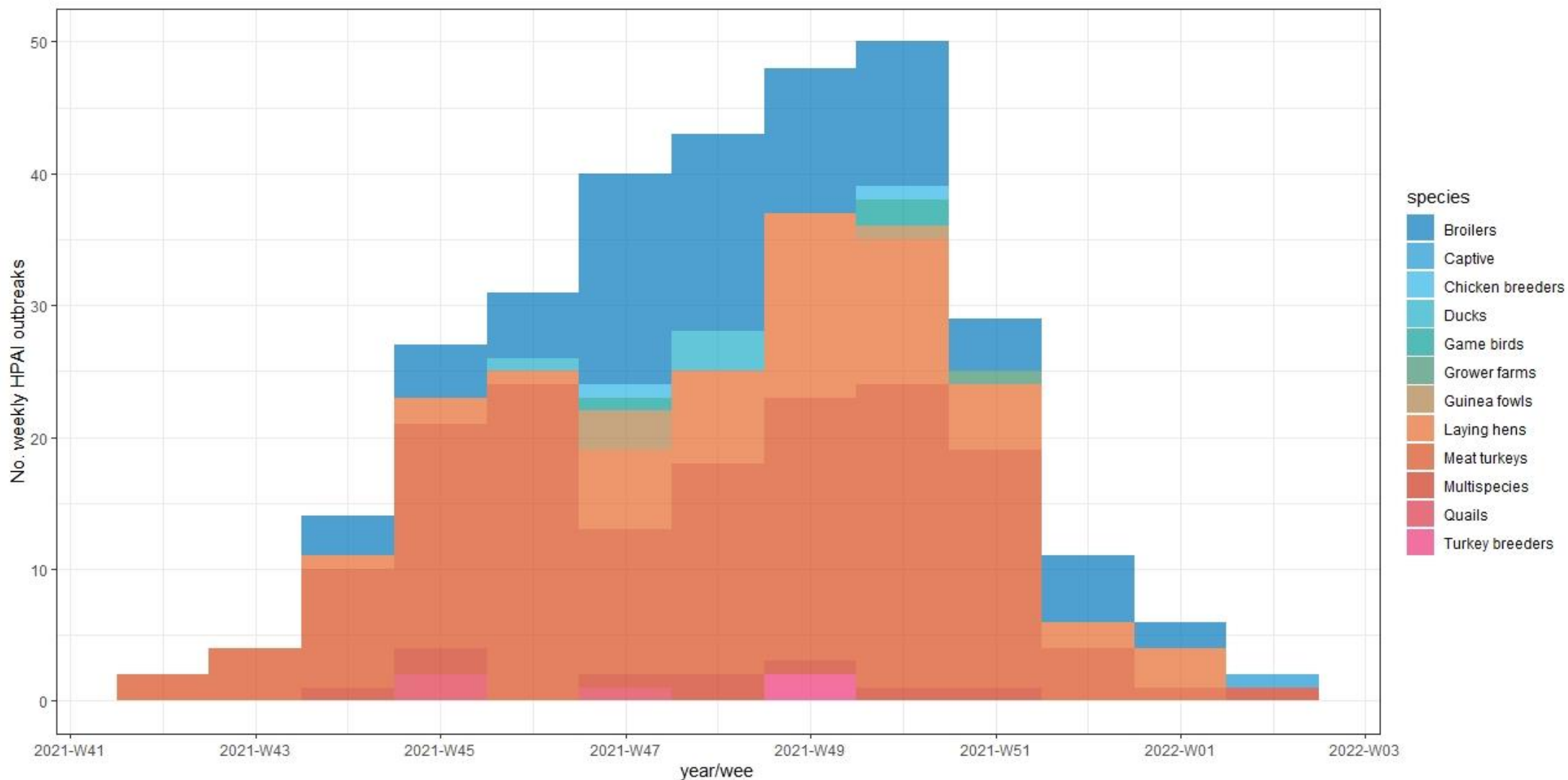


HPAI H5N1 in domestic poultry/captive birds: distribution and type of affected farms

REGION	PROVINCE	Meat turkeys	Broilers	Laying hens	Multi-species*	Guinea fowls	Ducks	Quails	Game birds	Chicken breeders	Turkey breeders	Grower farms	Captive	TOTAL
Emilia-Romagna	Rimini				1									1
Friuli-Venezia Giulia	Udine		1											1
Lazio	Roma				1									1
Lombardia	Brescia	4	5	11	1		3					1		25
	Cremona	1	1											2
	Mantova	15	3	9	1									28
Veneto	Padova	15	13	8	2		1			1				40
	Rovigo	3		1										4
	Verona	99	42	23	3	4		3	3	1	1			179
	Vicenza	12	11		1						1			25
Campania	Salerno												1	1
TOTAL		149	76	52	10	4	4	3	3	2	2	1	1	307

*8 rural/backyard, 1 agrotourism, 1 free-range

Weekly incidence of HPAI H5N1 cases, by poultry species



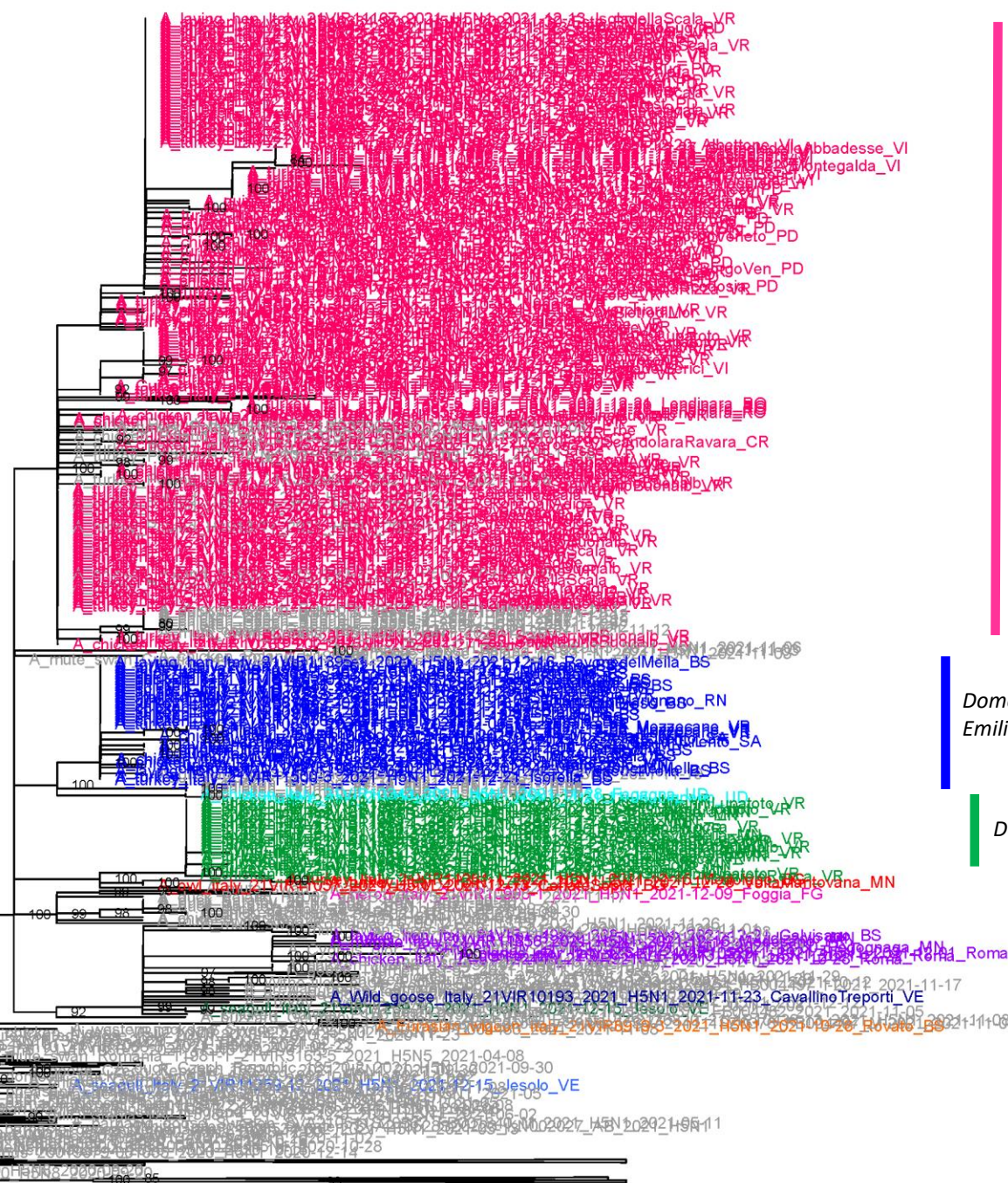
HA gene

European H5N1 viruses are marked in grey.

Italian H5N1 viruses are marked with different colors representing different introductions in the country.

We identified at least 11 viral introductions in Italy, of which 6 in domestic birds.

Within the biggest group (in pink), several subgroups can be distinguished, most likely representing new additional introductions.



Domestic/Wild birds, Veneto (VR, PD, VI, RO) and Lombardy (MN, CR) regions

Domestic/Wild birds, Veneto (VR), Lombardy (BS, MN), Emilia Romagna (RN) and Campania (SA) regions

Domestic/Wild birds, Friuli Venezia Giulia (UD)

Domestic/Wild birds, Veneto (VR) and Lombardy (MN)

Domestic/Wild birds, Lombardy (BG, MN)

Domestic/Wild birds, Lombardy (BS, MN), Lazio (Rome), Emilia Romagna (PR)

Wild bird, Puglia (FG)

Wild bird, Veneto (VE)
 Wild bird, Veneto (VE)
 Wild bird, Lombardy (BS)
 Wild bird, Veneto (VE)

● Risk mitigation measures and disease control measures applied

Measures to mitigate the risk of AI virus introduction and spread are in place since summer 2021:

- Increasing awareness of the stakeholders and the general public
- Housing order
- Strengthening biosecurity measures (other than housing order) in high-risk areas
- Enhanced surveillance during fairs, bird exhibitions ect...
- Release of poultry intended for restocking wild game was suspended (with derogations)
- Use of live decoy birds belonging to the orders *Anseriformes* and *Charadriiformes* for hunting was suspended

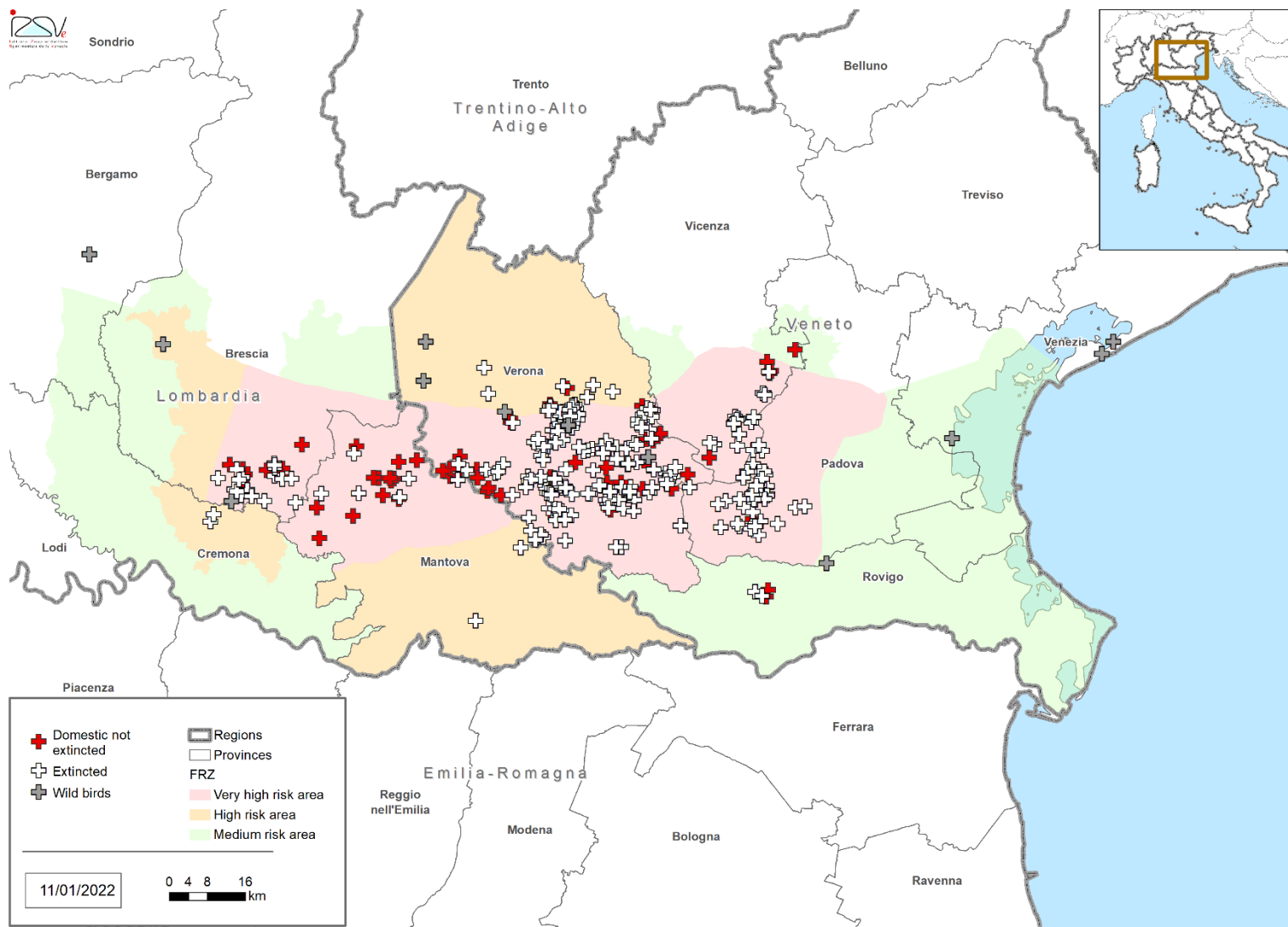
Disease control measures as provided by Commission Delegated Regulation (EU) 2020/687 since 19/10/2021:

- 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)
- Epidemiological investigation
- Preventive culling in at-risk contact farms/Pre-emptive culling in meat turkey farms in protection zone



Control measures – Establishment of a Further Restricted Zone (FRZ)

A FRZ has been established (Ministerial provision n°25660 of **5/11/2021**) and ***further amended*** according to the evolving epidemiological situation (Ministerial Provision n°27237 of **22/11/2021** and n°29811 of **18/12/2021**)



● Measures applied within the Further Restricted Zone - 1

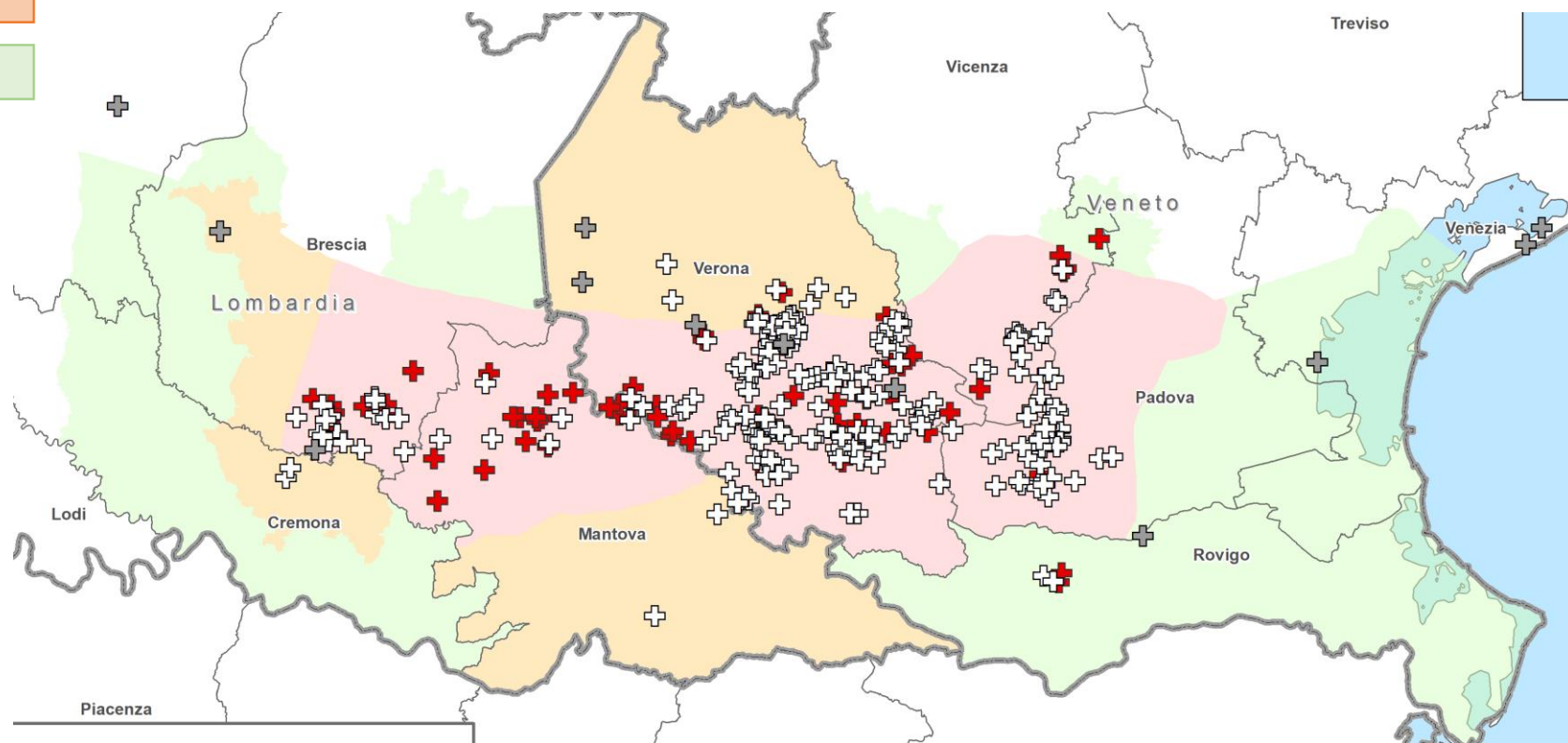
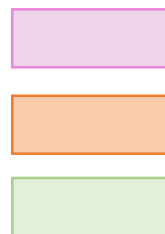
- Census of industrial poultry holdings
- Enforcement of increased biosecurity measures (vehicles, personnel, etc.)
- Birds shall be kept inside closed buildings and measures should be taken to reduce the risk of direct/indirect contacts with wild birds (also non commercial and backyard holdings)
- Any significant productive or sanitary changes observed must be reported immediately to the Veterinary Services (clinical symptoms, increased mortality rate, decrease in feed and/or water consumption, decreased production of eggs)
- Fairs, bird exhibitions and any other gatherings of poultry or other captive birds are prohibited

● Measures applied within the Further Restricted Zone - 2

- Poultry companies must ensure that there is a functional separation of activities, personnel and facilities between at-risk regions
- Movement to the slaughterhouse subjected to clinical inspection and virological testing
- Derogation from measures in restricted zones: based on a scoring system considering risk factors (poultry species susceptibility, distance from nearest infected premises, no. infected premises within 3km....)
- Gathering of domestic birds for fairs, exhibitions and live-bird markets are banned
- Release of game for hunting is prohibited
- The use of live decoy birds belonging to the orders *Anseriformes* and *Charadriiformes* for hunting is suspended

● Measures applied within the Further Restricted Zone - 3

- Within the FRZ, three different areas have been defined based on the poultry farms density and occurrence and characteristics of HPAI cases in previous epidemics:
- very high risk area
- high risk area
- medium risk area



● Measures applied within the Further Restricted Zone - 4

- **Differences** are mainly related to re-stocking restrictions:
 - in the **very high** and **high risk** areas, re-stocking of domestic poultry is prohibited
 - in the **medium risk** area derogations to this measure can be gradually authorized only after an official veterinarian has verified the compliance with biosecurity standards, a favourable evaluation of the geographical risk of the holding according to a) the poultry density in the area and b) a minimum distance to other poultry premises (1,100 m between broiler and meat turkey farms; 1,500 m between broiler/meat turkey and laying hens farms)
- **Differences** in the monitoring measures:
 - in the **very high risk** area, the pre-movement within-farm sample size protocols are larger than in high and medium risk areas and areas not included in the FRZ
 - in the **very high risk** area laying hens farms should be tested virologically at least once a week (5 dead birds)
 - in high risk areas on the Italian territory not included in the FRZ meat turkey and laying hen older than 30 days should be tested virologically once every 21 days (5 dead birds)

Thanks for your attention