



STANDING COMMITTEE ON PLANTS, ANIMALS, FOOD AND FEED

Section Animal Health and Welfare

Highly Pathogenic Avian Influenza H5 in Italy

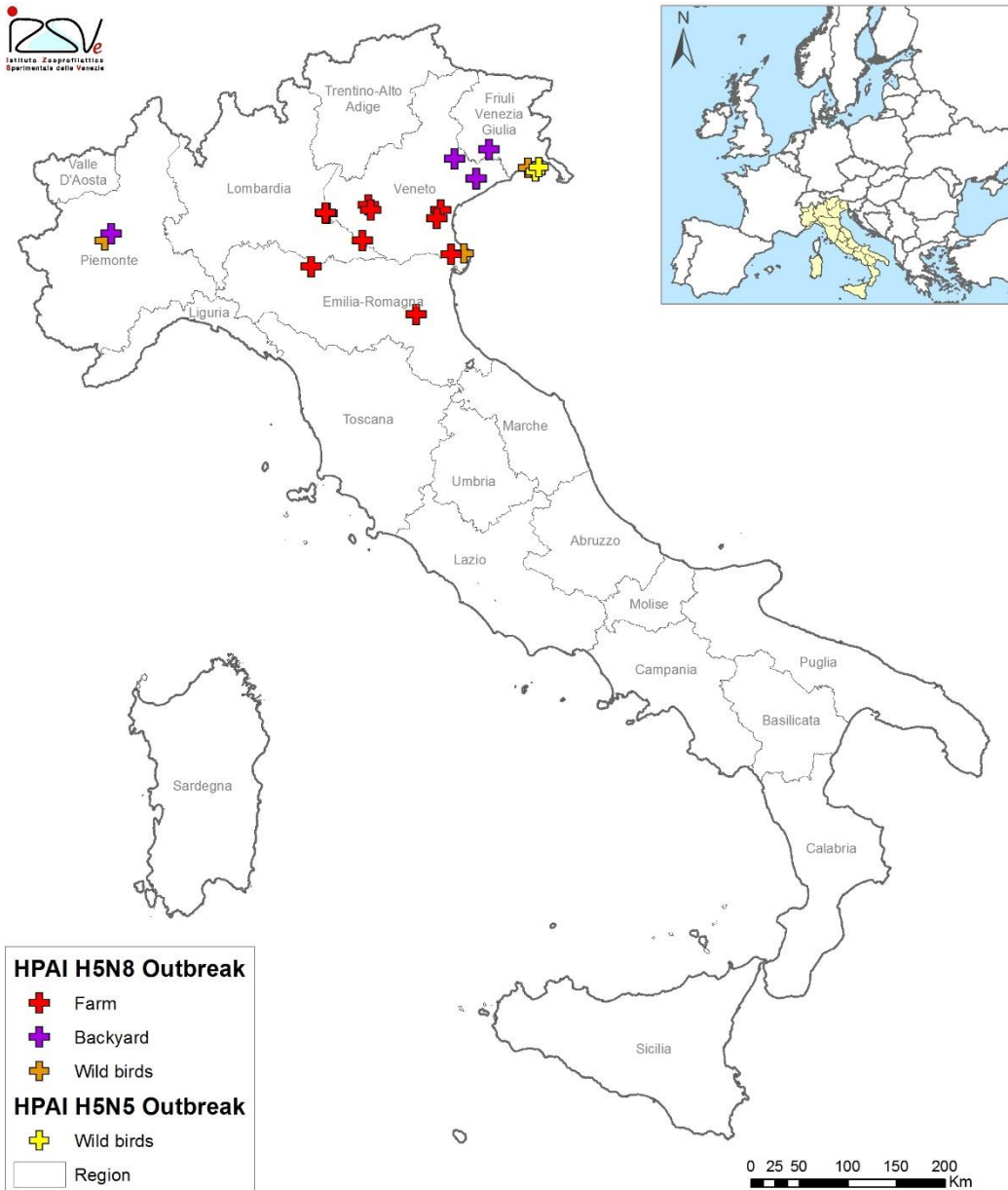
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Ministry of Health

Bruxelles, 16 May 2017

HPAI H5 outbreaks in Italy

Between December 2016 and May 2017

- Outbreaks in wild birds:
 - 4 in Friuli Venezia Giulia
 - 1 in Veneto
 - 1 in Piedmont
- Outbreak in domestic poultry:
 - 9 in Veneto
 - 2 in Lombardy
 - 2 in Emilia Romagna
 - 1 in Friuli Venezia Giulia
 - 1 in Piedmont



14th Outbreak of HPAI H5N8 in domestic birds

- 8 April 2017, **HPAI subtype H5N8** confirmed by the NRL in a industrial laying hen farm in **Bologna** province (Emilia-Romagna region)
 - Mortality increase was observed in the previous days
 - Ponds used for sport fishing next to the holding
 - Mallards were observed near the sheds
 - The hens were in the beginning of the laying phase, eggs were still in the packaging center and none of them were moved

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
08/04/2017	Emilia-Romagna	17/04/2017	Bologna	Laying hens	130,773	H5N8

15th Outbreak of HPAI H5N8 in domestic birds

- 9 April 2017, fattening turkey reared in a industrial farm in **Verona** province (Veneto region) started showing depression and other nervous symptoms, drop in water consumption and mortality increase
- 12 April 2017, the NRL confirmed the positivity for **HPAI subtype H5N8**
 - In the vicinity of the farm there are water canals and ponds used for sport fishing

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
12/04/2017	Veneto	12/04/2017	Verona	Fattening turkeys	13,015	H5N8

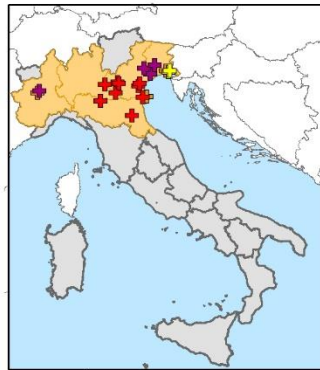
- Culling procedures were concluded on 12 April for the outbreak in Verona province and on 17 April for the outbreak in Bologna province
- Protection and surveillance zones (3 and 10 km) around the infected holding were defined, and control measures were implemented as provided by the Council Directive 2005/94/EC

6th Outbreak of HPAI H5 in wild birds

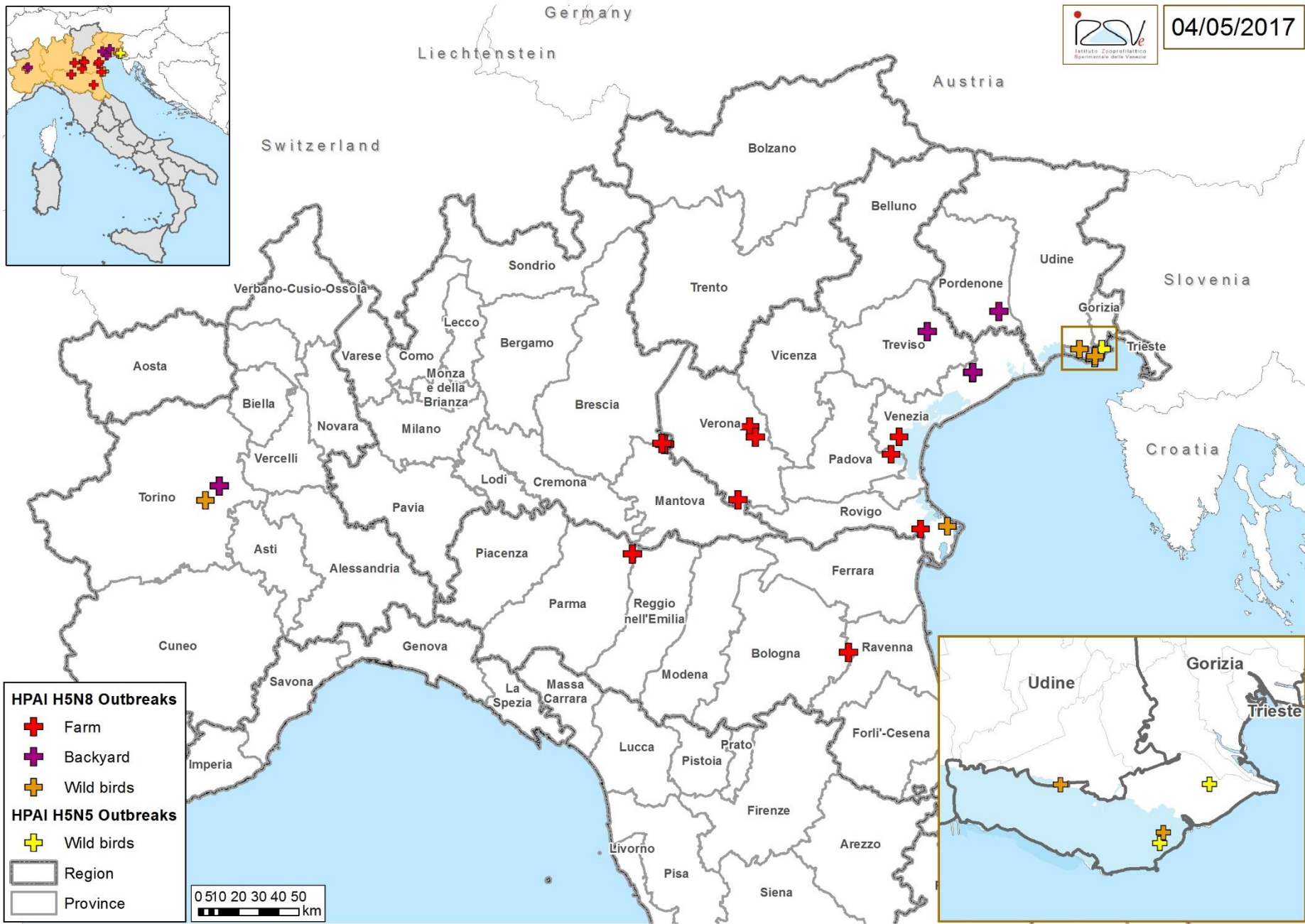
- 29 April 2017, a new positivity to **HPAI subtype H5N8** in wild population was confirmed by NRL
 - Species involved: wild swan (*Cygnus sp.*)
 - The bird was found dead in a pond of a public park in **Turin** province (Piedmont region)

Conf. Date	Region	Province	Species	No animals	Strain
29/04/2017	Piedmont	Turin	Swan (<i>Cygnus sp.</i>)	1	H5N8

Location of HPAI outbreaks in domestic poultry farms



04/05/2017



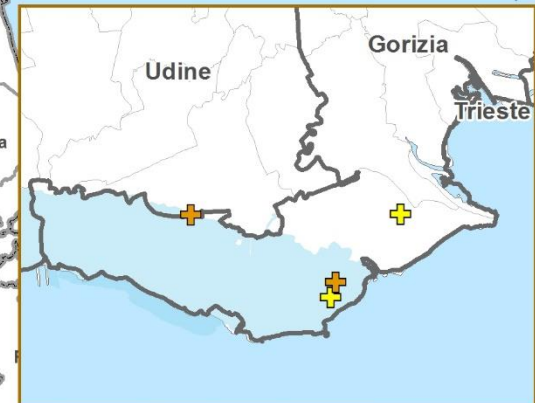
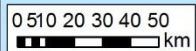
HPAI H5N8 Outbreaks

- + Farm
- + Backyard
- + Wild birds

HPAI H5N5 Outbreaks

- + Wild birds

Region
 Province

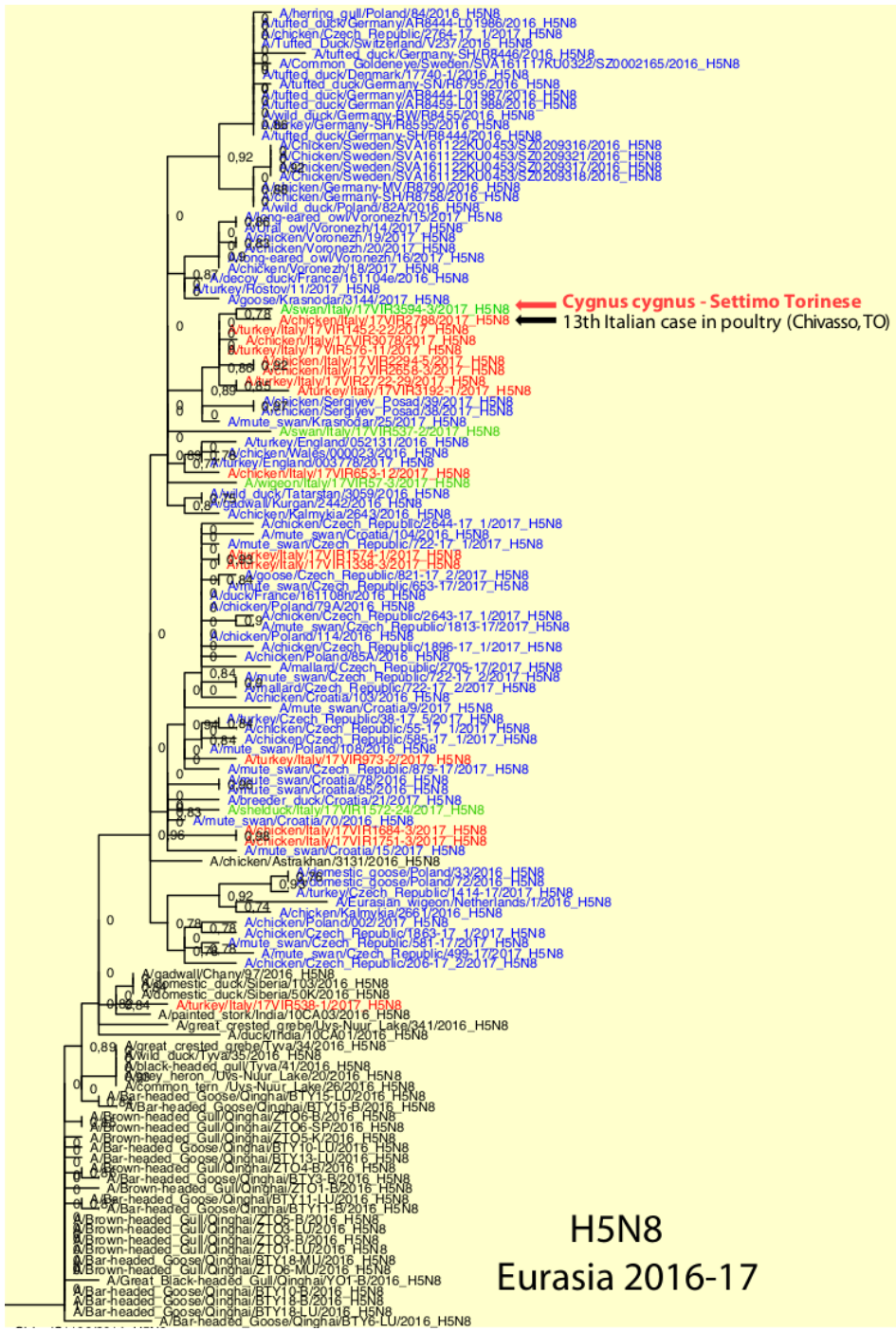


Phylogenetic analysis

- The last H5N8 case in Bologna province (8 April 2017) showed 99.8% and 99.9% similarity of HA and NA genes with viruses detected in the previous cases in Padua province (2nd case) and in Verona province (6th case)
- The last H5N8 case in Verona province (12 April 2017) clusters with the H5N8 viruses found in the Italian domestic population in 2017
- The H5N8 virus found in the wild swan showed 99.7% similarity of NA genes with virus detected in the previous case in Turin province (13th case)
- **All the three H5N8 viruses identified in the last cases cluster with the H5N8 viruses circulating in the Italian domestic population this year**

NA

- 2016-2017 European HPAI H5N8
- 2016-2017 Italian HPAI H5N8 from poultry
- 2016-2017 Italian HPAI H5N8 from wild birds



H5N8
Eurasia 2016-17

Grazie per l'attenzione