

Highly Pathogenic Avian Influenza H5 in Italy

STANDING COMMITTEE ON PLANTS, ANIMALS,
FOOD AND FEED

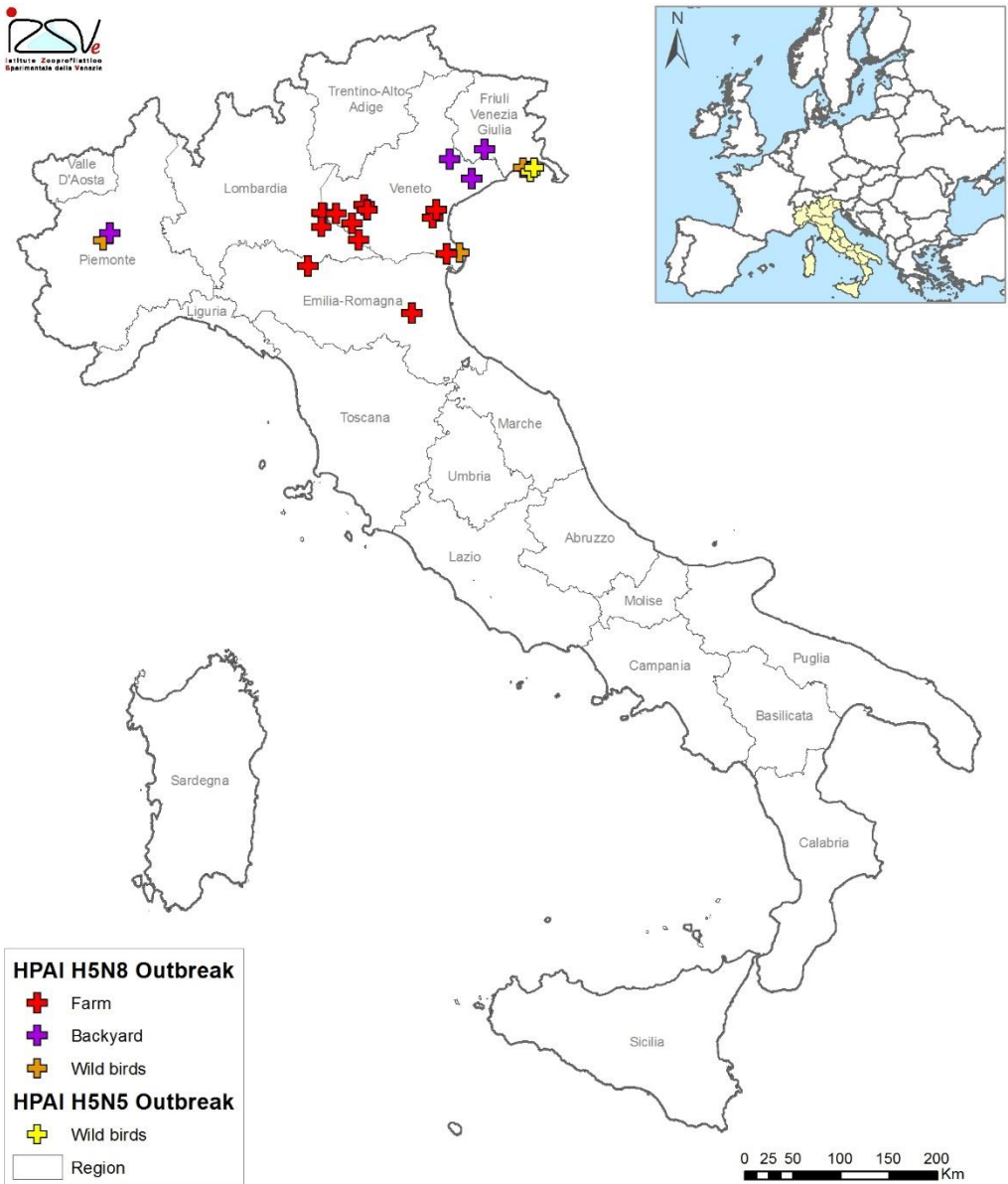
Section Animal Health and Welfare

June 2017

HPAI H5 outbreaks in Italy

**From 30 December 2016
to 30 May 2017**

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



16th Outbreak of HPAI H5N8 in domestic birds

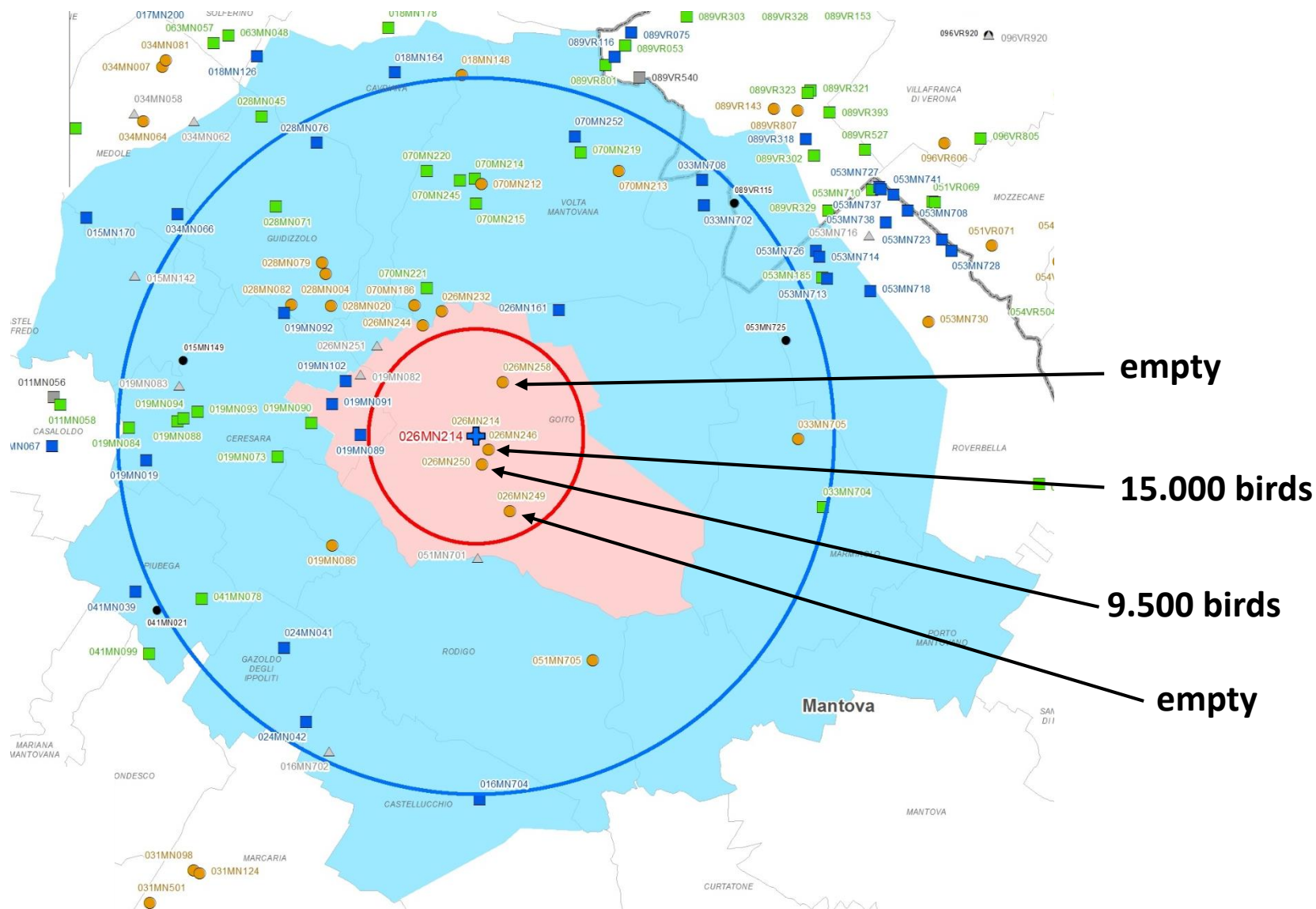
- 26-27 May 2017, mortality increase is noticed in 1 (of 4) shed of a fattening turkey farm in **Mantua** province (Lombardy region)
- 30 May 2017, during epidemiological investigation depression and mild respiratory symptoms are observed in two sheds
- 30 May 2017, the NRL confirmed the positivity for **Avian Influenza virus A subtype H5N8**
- 31 May 2017, the NRL characterized the virus as **HPAI**

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
30/05/2017	Lombardy	04/06/2017	Mantua	Fattening turkeys	19,041	H5N8

- 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
- Culling procedures in the outbreak were concluded on **4 June 2017**
- No potential risk contacts were evidenced through the epidemiological investigation

- A juvenile grey heron (*Ardea cinerea*) was found dead in close proximity to the sheds, and it tested **positive to AI virus subtype H5N8**

The depopulation of two fattening turkey farms located within the protection zone of the outbreak started on 5 June 2017

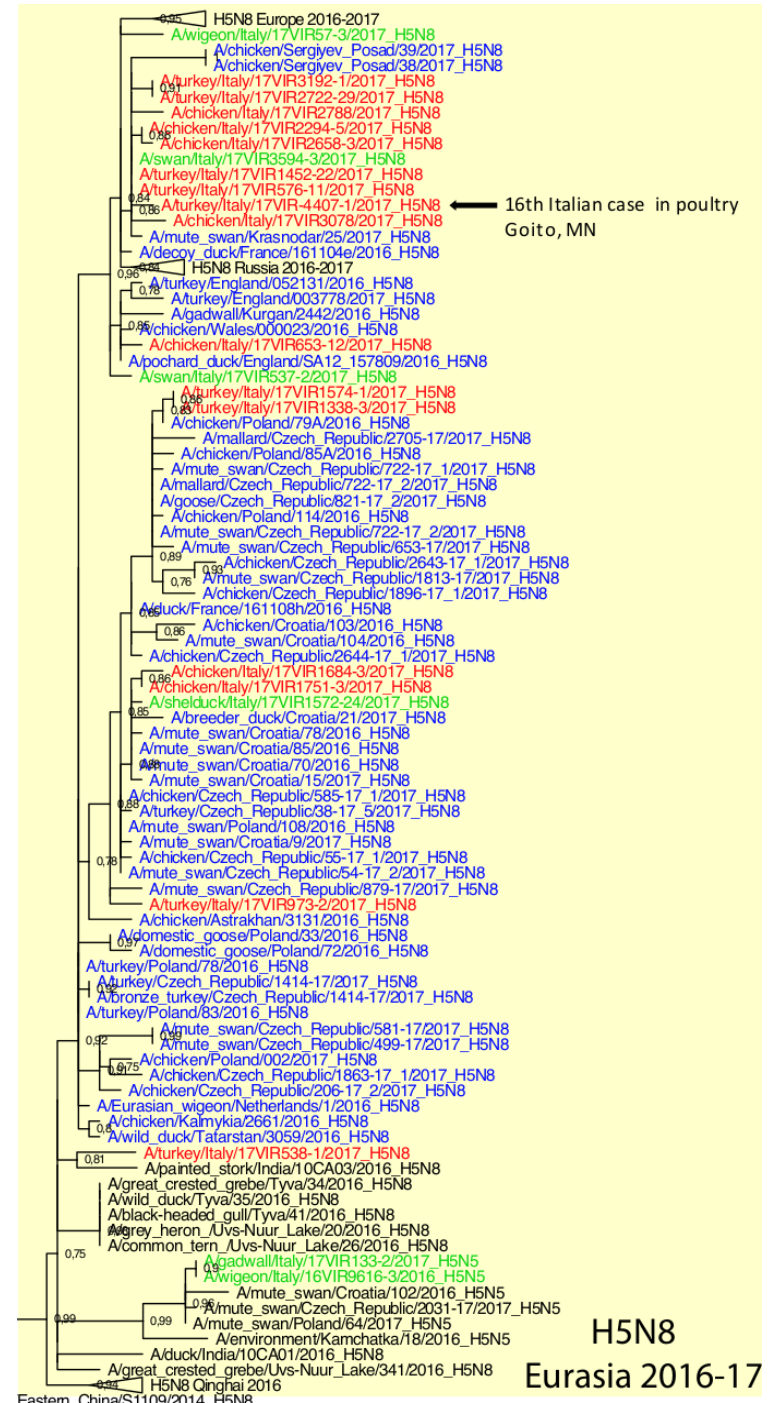


Phylogenetic analysis

- The last H5N8 virus isolated in this last case clusters with the other H5N8 viruses detected in the previous cases of Bologna (14th outbreak) and Verona (15th outbreak).
- The virus showed the higher similarity (99.9%) of HA gene with the virus isolated in the 6th outbreak, Verona province.
- The characterization of NA gene showed the higher similarity (99.9%) with the virus detected in the 15th outbreak, Verona province.

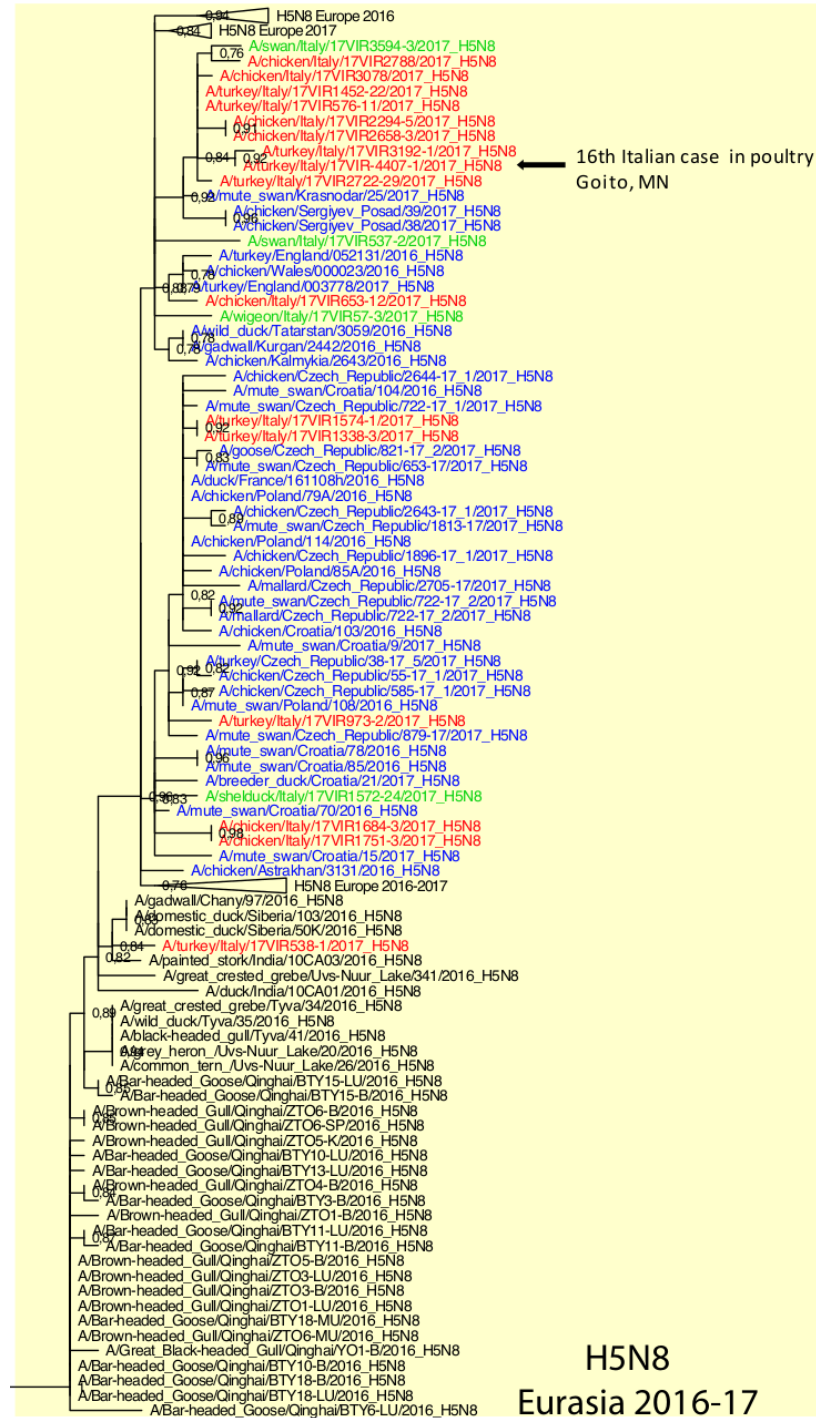
HA

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



NA

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



Thanks for your attention