Highly Pathogenic Avian Influenza H5 in Italy

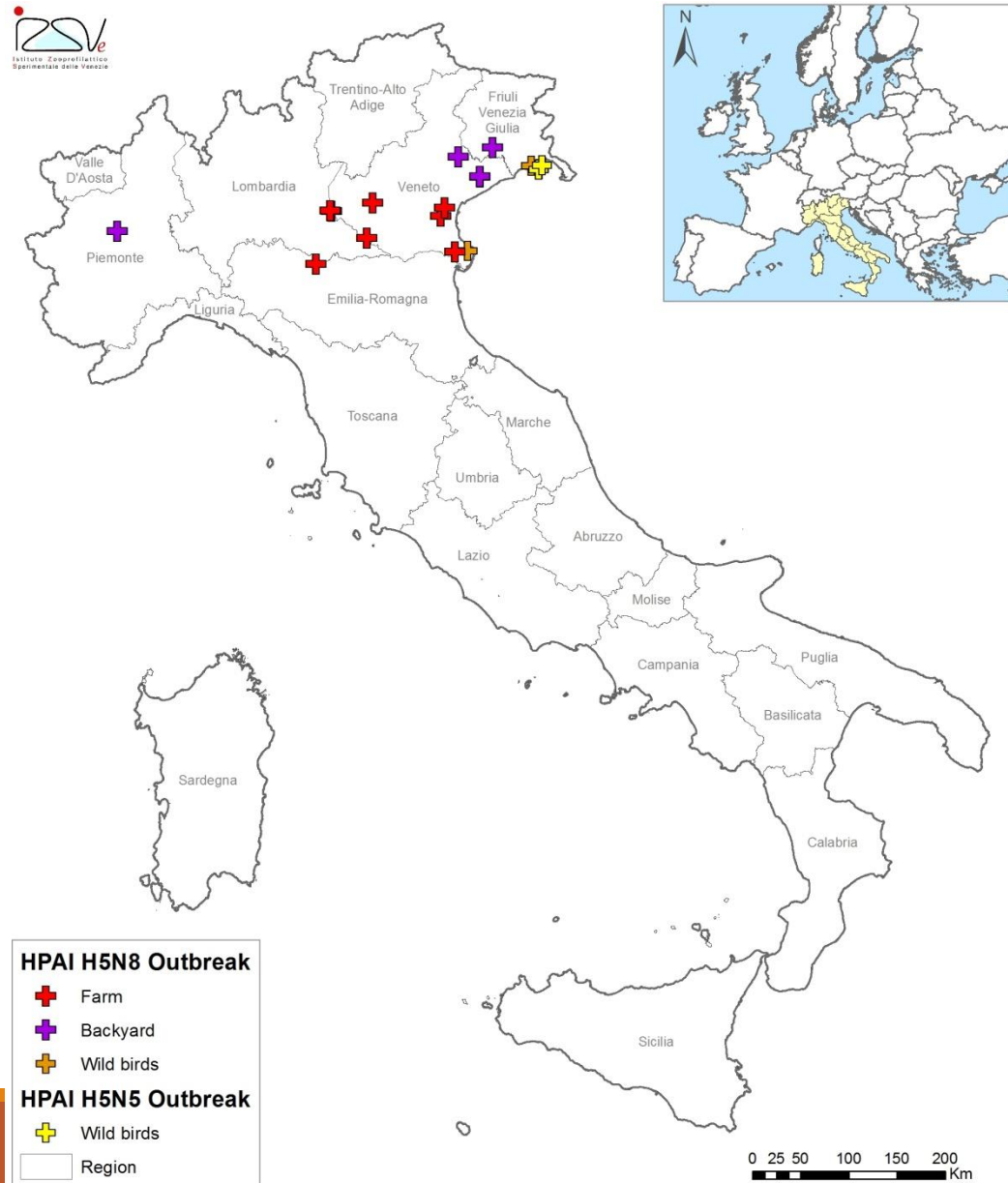STANDING COMMITEE ON PLANTS, ANIMALS, FOOD AND FEED

SECTION ANIMAL HEALTH AND WELFARE

6-7 APRIL 2017

HPAI H5 outbreaks in Italy

Between December 2016 and March 2017

- Cases in wild birds:
  - 4 in Friuli Venezia Giulia
  - 1 in Veneto

- Outbreaks in domestic poultry:
  - 8 in Veneto
  - 2 in Lombardy
  - 1 in Emilia Romagna
  - 1 in Friuli Venezia Giulia
  - 1 in Piedmont

HPAI H5N8 Outbreak
- Farm
- Backyard
- Wild birds

HPAI H5N5 Outbreak
- Wild birds
- Region

10th Outbreak of HPAI H5N8 in domestic birds

- On 16 March, the NRL confirmed a positivity to **High Pathogenicity Avian Influenza Subtype H5N8** in a backyard farm in Treviso province (Veneto region)
- Five broiler chickens showed clinical symptoms and died
- The holding is located near an important waterbody

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
16/03/2017	Veneto	17/03/2017	Treviso	• Quails (40) • Laying hens (15) • Guinea fowl (10) • Pheasants (100) • Ducks (10) • Broilers (5)	180	H5N8

11ᵗʰ Outbreak of HPAI H5N8 in domestic birds

- On 28 March, the NRL confirmed a positivity to **High Pathogenicity Avian Influenza Subtype H5N8** in a backyard farm in Pordenone province (Friuli-Venezia Giulia region)
- At the moment of the epidemiological investigation all animals present were asymptomatic

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
28/03/2017	Friuli-Venezia Giulia	29/03/2017	Pordenone	Pigeons (18), Quails (19), Laying hens (4), Fattening ducks (3)	47	H5N8

12ᵗʰ Outbreak of HPAI H5N8 in domestic birds

- On 29 March, the NRL confirmed a positivity to **High Pathogenicity Avian Influenza Subtype H5N8** in a fattening turkeys farm in Verona province (Veneto region)

- An increase in mortality was observed in the previous days

- There were sightings of waterfowl flying over the farm, and there is a river and other water reservoir in close proximity to the farm.

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
29/03/2017	Veneto	30/03/2017	Verona	Fattening turkeys	15.430	H5N8

13th Outbreak of HPAI H5N8 in domestic birds

- On 30 March, the NRL confirmed a positivity to **High Pathogenicity Avian Influenza Subtype H5N8** in Backyard farm in Turin province (Piedmont region)

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
30/03/2017	Piedmont	(*)	Turin	Backyard farm	Goose (1) Gallus gallus (12)	H5N8

(*) All of the birds present in the farm died before HPAI was confirmed

Phylogenetic analysis

The H5N8 case of Trevisoprovince (10th case) showed 99.9% similarity of HA and NA genes with virus detected in the 2nd (Padua province) and 6th (Verona province) cases. Moreover, it show high similarity with a virus identified in a wild bird in Russia.

The H5N8 case of Pordenone province showed 100% similarity of HA and NA genes with the virus detected in Treviso (10th case).

No potential risk contacts among the abovementioned farms were evidenced through the epidemiological investigations

Phylogenetic analyses on the last two outbreaks detected in Veneto, and Piedmont regions, are still ongoing

H5N8 HPAI outbreaks in domestic birds

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
21/01/2017	Veneto	26/01/2017	Venice	Fattening turkey	20,500	H5N8
23/01/2017	Veneto	29/01/2017	Padua	Fattening turkey	22,300	H5N8
25/01/2017	Veneto	04/02/2017	Rovigo	Laying hen	36,737	H5N8
02/02/2017	Emilia Romagna	08/02/2017	Parma	Fattening turkey	22,800	H5N8
15/02/2017	Lombardy	18/02/2017	Mantova	Fattening turkey	14,327	H5N8
17/02/2017	Veneto	21/02/2017	Verona	Fattening turkey	41,373	H5N8
22/02/2017	Lombardy	25/02/017	Mantova	Fattening turkey	21,820	H5N8

H5N8 HPAI outbreaks in domestic birds

Conf. Date	Region	Depopulation date	Province	Species	No animals	Strain
28/02/2017	Veneto	28/02/2017	Venice	Backyard	11	H5N8
28/02/2017	Veneto	28/02/2017	Venice	Backyard	18	H5N8
16/03/2017	Veneto	17/03/2017	Treviso	Backyard	180	H5N8
28/03/2017	Friuli Venezia Giulia	29/03/2017	Pordenone	Backyard	44	H5N8
29/03/2017	Veneto	30/03/2017	Verona	Fattening turkey	15,640	H5N8
30/03/2017	Piedmont	(*)	Turin	Backyard	13(*)	H5N8

(*) All of the birds present in the farm died before HPAI was confirmed

Thanks for your attention