

# Low Pathogenic Avian Influenza H5 (LPAI) in Italy

STANDING COMMITTEE ON PLANTS, ANIMALS,  
FOOD AND FEED

*Section Animal Health and Welfare*

6 March 2015

# Epidemiological Situation 2014

- Five LPAI outbreaks were detected in Italy in 2014
- Two H5 LPAI outbreaks involved commercial and rural flocks located in:
  - Piedmont
  - Friuli Venezia Giulia
- Three H7 LPAI outbreaks occurred in:
  - Lombardy
  - Emilia Romagna



# 2014 H5-H7 LPAI outbreaks – Summary

ADNS	Conf. Date	Depop. Date	Est. Date	Region	Province	Type	Strain
14/0001	28/01/2014	03/02/2014	04/02/2014	Friuli Venezia Giulia	Udine	Grower	H5N1
14/0002	25/03/2014	28/03/2014	28/03/2014	Lombardia	Mantova	Grower	H7N1
14/0003	24/06/2014	26/06/2014*	06/08/2014	Emilia Romagna	Ravenna	Grower	H7N1
14/0004	03/07/2014	05/07/2014	18/07/2014	Emilia Romagna	Ravenna	Grower	H7N1
14/0005	16/09/2014	22/09/2014	25/09/2014	Piedmont	Novara	Game Birds	H5N2

- \*17 Birds belonging to CITES species were also present in the premise:
  - Animals were not culled
  - Samples taken on 28 June 2014 tested negative

# 2015 H5 LPAI outbreak – Tuscany

ADNS Number 15/0001

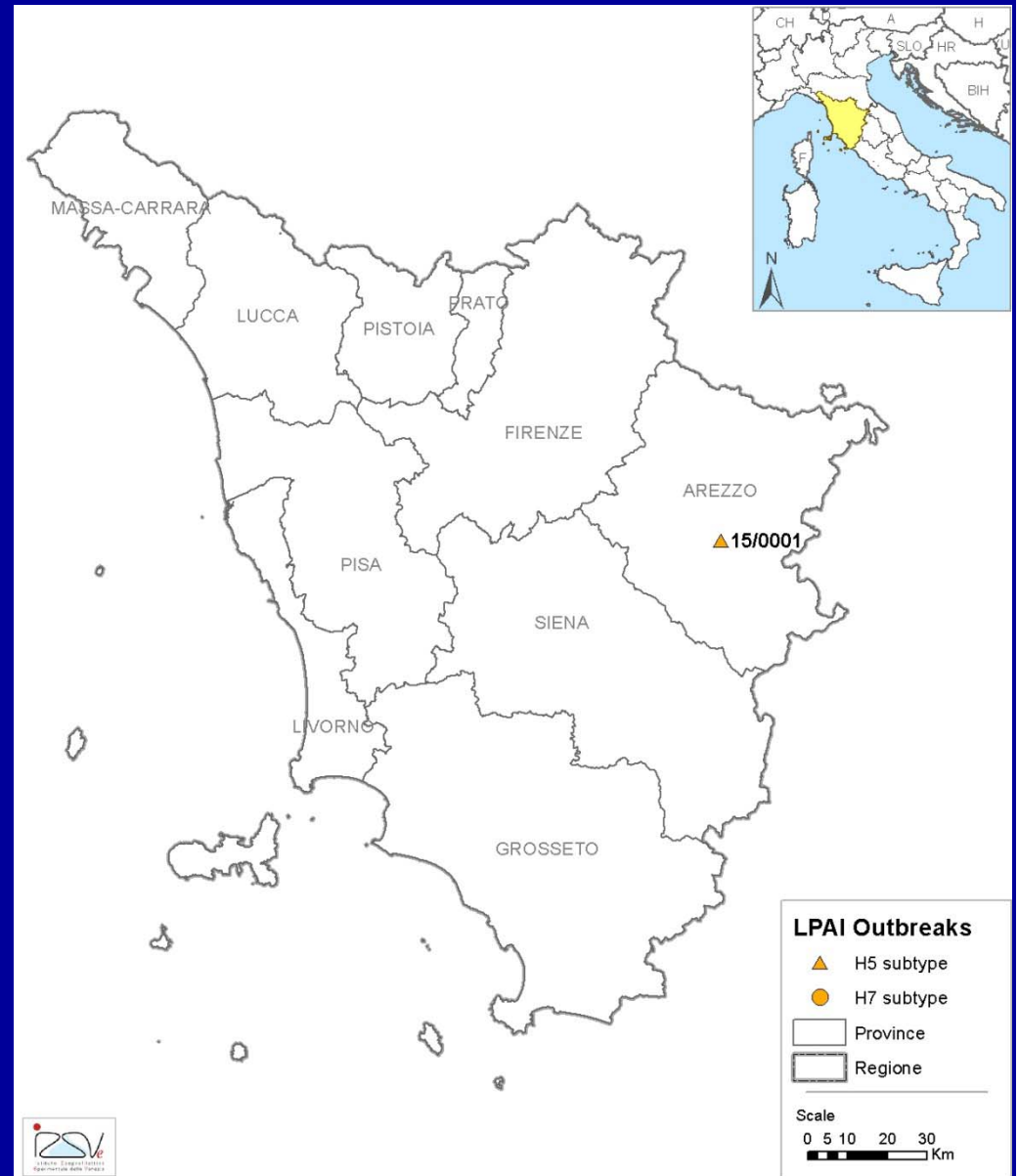
- On **24 Jan 2015** the National Reference Laboratory confirmed a virological positivity for AI virus for LPAI virus **H5N2** subtype in an ornamental birds farm in Arezzo province
- Control measures:
  - Ban of movement of animals from the infected farm
  - Depopulation
- On **27 Jan 2015** the depopulation procedures ended, and preliminary cleaning activities were performed

# H5 LPAI outbreak – Tuscany

ADNS Number 15/0001

- Ornamental Birds farm with **81 ducks** belonging to three different breeds
- All the birds present at requisition were culled

Species	Number
Muscovy ducks	53
Black East Indian ducks	16
Call ducks	12
<b>Total</b>	<b>81</b>



# H5 LPAI outbreak – Tuscany

ADNS Number 15/0001

- Birds were tested to participate to a fair in Emilia Romagna region, as requested in the Ministerial Provision of 22 Dec 2014 and further modifications of 15 Jan 2015
- Birds were kept free-range and only moved for Bird Fairs, upon testing negative for AI
- Birds were previously virologically tested on **Jan** and **Sept 2014**, with negative results
- Contact holding:
  - Farm belonging to the same owner
  - Cloacal swabs tested negative on **4 Feb 2015**

# H5 LPAI outbreak – Veneto

ADNS Number 15/0002

- On **6 Feb 2015** the National Reference Laboratory confirmed a virological positivity for AI virus for LPAI virus **H5** subtype in a premise with living decoy birds in Venice province
- Control measures:
  - Ban of movement of animals from the infected farm
  - Depopulation
- On **11 Feb 2015** the depopulation procedures ended, and preliminary cleaning activities were performed

# H5 LPAI outbreak – Veneto

ADNS Number 15/0002

- In the same site **39 living decoy mallards** were kept, belonging to 4 different owners
- All the birds present at requisition were culled





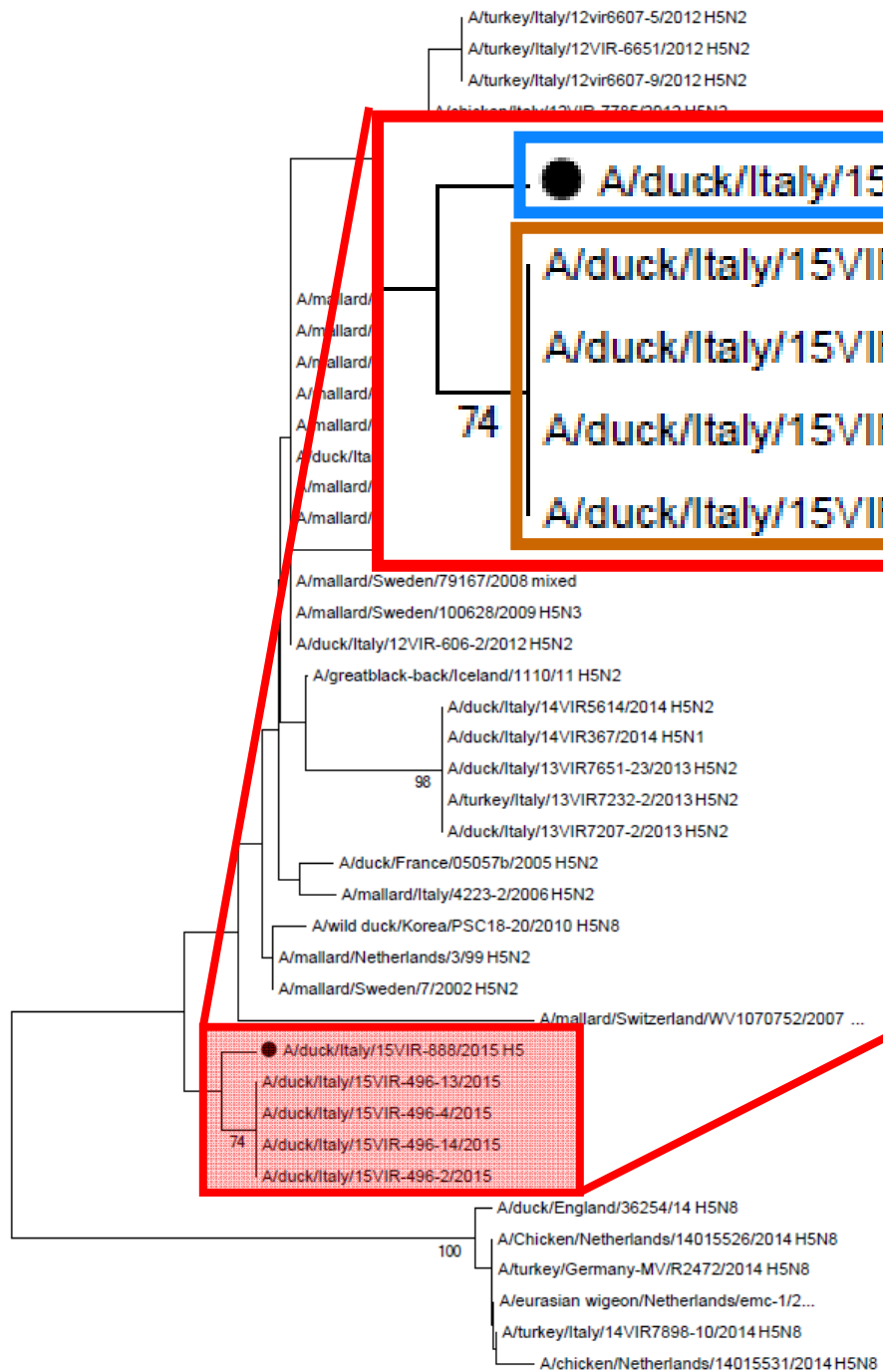
# H5 LPAI outbreak – Veneto

ADNS Number 15/0002

- Birds were tested in accordance to the Ministerial Provision of **8 Jan 2015** (DGSAF no. 323)
  - Living decoys premises with birds deployed in hunting sessions in areas considered at higher risk of AI introduction were targeted by focused surveillance activities on a sample basis
- Birds were kept free-range in a fenced area with nets to avoid contacts with wild waterfowl
- The infected birds were deployed on **7 Dec 2014**, while the other birds in the premise were moved for hunting sessions on **22 Dec 2014**
- Another premise with living decoy birds is located within 300 m from the outbreak
  - Birds tested negative for AI viruses on **2 Feb 2015**
- No poultry farms are located within 1 km from the affected premise

# H5N2 LPAI outbreaks – Laboratory analyses

- Phylogenetic analyses suggested the viruses detected in the two outbreaks have a common ancestor
- The viruses found in the two outbreaks resulted in having high similarity (97.5%)
- Levels of similarity with other AI viruses are slightly lower, suggesting the origin of the common ancestor is likely to be traced back to wild bird populations



● A/duck/Italy/15VIR-888/2015 H5 15/0002 - Venice  
 A/duck/Italy/15VIR-496-13/2015  
 A/duck/Italy/15VIR-496-4/2015 15/0001 - Arezzo  
 A/duck/Italy/15VIR-496-14/2015  
 A/duck/Italy/15VIR-496-2/2015

0.01

# 2015 LPAI outbreaks – Summary

ADNS	AI virus	Conf. Date	Depop. Date	Region	Province	Type
15/0001	H5N2	24.01.2015	27.01.2014	Tuscany	Arezzo	Ornamental birds
15/0002	H5N2	06.02.2015	11.02.2014	Veneto	Venice	Living decoy birds

Thanks for your attention