



H5N1 LPAI in broiler breeder hens in the United Kingdom

SCOPAFF 3 February 2016



Outbreak History



- 7th Jan 2016: PVS submitted samples under 'testing to exclude' from a hen broiler breeder farm of 40,000 birds in Dunfermline (East Central Scotland). Egg drop noted in one of ten houses; similar in a second (joining) house.
- 8th Jan: Unofficial samples tested positive for M gene for Avian Influenza; Restrictions placed on the farm.
- 9th Jan: official samples submitted; mild clinical signs.
- 10th Jan: Preliminary results indicated H5 AI virus. CVO (Scotland) authorised a TCZ 1 km restrictions as if for confirmed LPAI.
- 13th Jan: Disease **confirmed as H5N1 LPAI**; RZ replaced TCZ
- 15th Jan: culling completed.
- 19th Jan: preliminary C&D completed



The Infected Premises

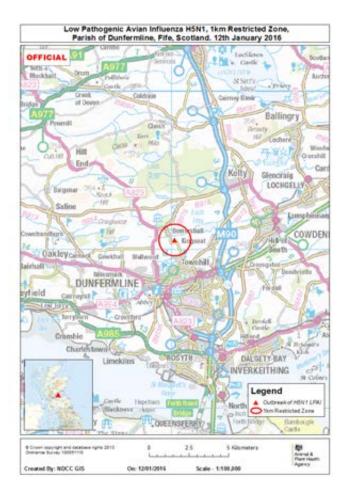


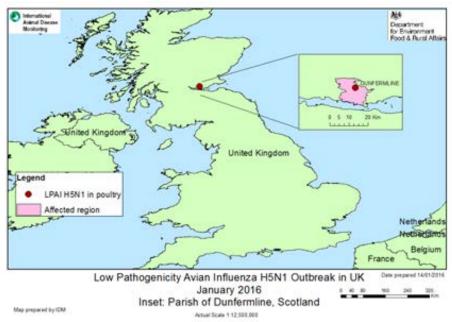
- A commercial hen broiler breeder holding located in Dunfermline (Fife), 8km north of the Firth of Forth estuary, East Scotland.
- Intensive (indoor) barn style production, eggs for hatching collected 3 to 4 times per week and sent to company hatchery
- The site has 10 sheds, of around 4,000 birds each.
- The business was "all in all out" and the birds were 57 weeks old and therefore near end of lay.
- Within 3 km there are two large bodies of water and a land fill site.
- No other commercial premises in the 1km zone.



Disease Control Measures







- Restrictions on IP in place since 8th Jan
- A temporary control zone corresponding to 1km restriction zone in line with Directive 2005/94/EC in place since 10th Jan
- Disease confirmed on 13th Jan
- Census confirmed no commercial poultry premises in the 1km zone.



Epidemiological Investigations



Source/Trace Backward:

- There is strong evidence that this was a European strain H5N1 LPAI virus which has recently been introduced from wild birds.
- Potential hypotheses for source of infection being investigated:
 - Contact with infected wild birds
 - Indirect contact with contaminated people, fomites etc
- Ornithologists reported few migratory waterfowl directly around the property. Large groups of gulls fly over regularly.
- Phylogenetic analysis suggests this is not the same strain as those reported in France (H5N1 HPAI) but is related to previous H5N1 LPAI outbreaks in Italy and Germany in 2014.



Epidemiological Investigations



Spread/Trace Forward:

- No movement of live birds, hatching eggs, day-old chicks, table eggs, meat or other poultry products to other Member States or Third Countries from the affected premises during the high risk period.
- Tracings of hatching eggs, people, vehicles and contact premises have been completed and ruled out for risk of spread.

Conclusions

- The most likely source of LPAI is wild birds, as confirmed by genetic sequence analysis and the epidemiological investigations.
- We have high level of confidence there is not increased risk in the area for infected wild birds, above what is generally expected.
- The outbreak was rapidly detected and controlled.