Updated Outbreak Assessment

Avian Influenza of high pathogenicity (H5N1, H5N2, and H5N9) and low pathogenicity (H5N2, H5N3) in poultry in France

18 February 2016 Ref: VITT/1200 LPAI & HPAI in France

Disease Report

Since the last update on the 23rd December, several new outbreaks in poultry have been reported as a result of increased surveillance in South West France (Ministère de l’Agriculture, France, 2016; see map – not all outbreaks visible at this scale). To date there are 72 outbreaks of HPAI H5 (N1, N2 and N9) and seven outbreaks of LPAI H5 (N2 and N3) which have been reported to the EU Animal Disease Notification System. The recent outbreaks have been detected as part of clinical surveillance and the majority in fattening ducks. As a result of the epidemiological investigations, the French Authorities have put in place a wide restriction zone (under an amendment to Implementing Decision 2015/2460/EU) and an eradication plan for the next few months. Further cases may be detected within this zone in the coming weeks. The exports and trade of live poultry, hatching eggs and day old chicks are carefully controlled from restriction zone.

Situation Assessment

The eradication programme put in place by the French Authorities is designed to allow current populated farms to continue production until expected point of slaughter and then for strict cleansing and disinfection to take place, followed by a period of several weeks during which the premises must remain empty. Restocking will take place, accompanied by a programme of confirmatory negative testing which will lead to lifting the restriction zone later in the year.
The situation has been compounded by the difficulties in dealing with a complex production system (for fattened ducks) and the presence of strains of avian influenza which do not show overt clinical signs in the majority of poultry. Occasional outbreaks have been detected in galliforme poultry (chickens) through reports of clinical signs, which may signify contact with infected farms or a wider environmental contamination. The epidemiological studies and restocking/retesting programme will shed more light on which is the likely scenario. Interestingly, the recent epidemiological information from the French Authorities suggests that clinical signs of as much as 15% mortality may occasionally be observed in anseriforme poultry which is important for the success of passive surveillance programmes (Huneau-Salaün et al., 2016). In addition, of 38 outbreaks where epidemiological studies have been completed, 227 links to 157 farms were identified, showing the complexity of the production system. Also, 69% of the links were located in just two departments, Dordogne and Landes, with others in the wider restriction zone (Huneau-Salaün et al., 2016).

A wider surveillance programme for the other non-restricted regions in France will also take place in the coming months, focussing on the duck production industry, but not exclusively so; galliforme poultry will also be included.

**Conclusion**

The outbreaks have, for the large part, been restricted to the fattening duck production system with occasional spill-over into other farms in close proximity and likely fomite transfer. The eradication programme is a positive move by the French Authorities to give confidence to the consumer and trade partners.

There remain some uncertainties around the evolution of low pathogenic European strain viruses into these highly pathogenic strains, including the viral sequences and tissue tropism which will inform the transmission dynamics and potential to spill over into wild birds. Furthermore, the evolution of the HPAI virus as it spread remains to be defined including the precise pathways that resulted in the emergence of three HPAI virus subtypes in an apparently similar timeframe.

The risk to the UK has not increased as a result of the new outbreaks reported. However the situation in France simply reinforces what we already knew, that these LPAI viruses circulate in wild birds and cause occasional spill-over outbreaks in poultry which may be difficult to detect in domestic waterfowl species and which may then mutate into HPAI viruses following infection of galliforme hosts.

We will continue to monitor the situation closely. We would like to remind all poultry keepers to maintain high standards of biosecurity, remain vigilant and report any suspect clinical signs promptly and in addition using the testing to exclude scheme for avian notifiable disease where appropriate for early safeguard. For more information, please see www.defra.gov.uk/ahvla-en/disease-control/nad
The risk level for the UK remains at low, but heightened.

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References


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