Updated Outbreak Assessment #1

Highly pathogenic avian influenza (HPAI) in the UK, and Europe

2 November 2021    Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

Since our last report on 26 October 2021, there is evidence that there have been significant changes in the epidemiology of highly pathogenic avian influenza (HPAI) H5 both in Europe and in Great Britain (GB) itself. In northern Europe, Germany and the Netherlands have reported HPAI H5N1 in domestic poultry, while in southern Europe, at least six outbreaks of HPAI H5/H5N1 have been reported on fattening turkey farms in northern Italy. In Serbia and Montenegro, captive bird cases of HPAI H5N1 in a zoo and HPAI H5N2 in a wild duck have been reported. More wild bird H5N1 cases have been detected in the Wadden Sea around north-west Germany/Denmark and there is also a case of HPAI H5N1 in wild birds in south-east Germany on the border with the Czech Republic. In GB, five HPAI H5N1 events in wild birds have been reported including the east coast of Scotland, the west coast of England and north Wales. Two reports of notifiable avian disease in GB captive birds in late October have also now been confirmed as HPAI H5N1.

Situation Assessment

Great Britain

HPAIV H5N1 was detected in rescued swans and captive poultry at a swan sanctuary in Worcester on 15 October. Since our last report on 26 October, HPAI H5N1 has been detected in five separate wild bird submissions in GB. These include released pheasants at a site near Wrexham in north Wales, a gull species in Scotland, a Mute swan (Cygnus olor) at Leith in Scotland, a Eurasian curlew (Numenius arquata) in North western England and a Whooper Swan (Cygnus cygnus) and Greylag goose (Anser anser) also in North West England. HPAI H5N1 has been confirmed in a captive bird premises in north Wales.

Northern Europe

The Netherlands have reported a poultry outbreak at Zeewolde detected on 25 October involving 2,350 cases in 35,301 organic layers.
On 22 October, Germany detected H5N1 on a farm with 663 fattening geese in Brunsbuttel on the north coast near the Jutland peninsula (Wadden Sea) near where several wild duck cases had previously been detected.

Germany has reported on OIE a further four H5N1 detections in wild birds, namely two unidentified species on the north-east coast near the border with Poland, a gull species on the north-west coast, and an unidentified wild goose on the 20 October in the south-east near the border with the Czech Republic. Since 1 October 2021, Germany has reported ten events in Eurasian wigeon (*Mareca penelope*), six events in mallard duck (*Anas platyrhynchos*), one hawk, three Barnacle geese (*Branta leucopsis*), one curlew and a black-headed gull (*Chroicocephalus ridibundus*).

Denmark has reported HPAI H5N1 in two wild bird events, namely Eurasian wigeon and Eurasian teal (*Anas creca*) both on the east coast of Jutland and detected in mid October,

Finland has detected further HPAIV H5N1 cases in wild birds on the south coast with another Barnacle goose detected on the 24 September and a white-tailed eagle (*Haliaeetus albicilla*) detected on 12 October.

**Southern Europe**

Since our last report on 26 October, Italy has reported a further five HPAIV H5N1 outbreaks in larger farms for fattening turkeys (IZSVe 2021). This takes the total to six outbreaks, all in the north-east (Verona region) of Italy.

Further east, Serbia and Montenegro have reported HPAI H5N1 in captive swans at a zoo in Vrnjci detected in mid-October and also HPAI H5N2 in a wild mallard duck detected in late September.

The map below shows the distribution of HPAI H5 events in poultry, captive birds and wild birds in Europe reported in September and October to OIE. Those events reported since our last report on 26 October are distinguished with dots and show the recent westward spread into domestic poultry into north-west Europe.
Implications for the UK

It is unprecedented to have detections of HPAI H5N1 in wild birds so early in the season (end of October) and all being reported on the same day in Scotland, England and Wales. This suggests the virus has been here some time with multiple incursions including the east coast of Scotland, west coast of England, and north Wales. Ecologically most susceptible avian families are now affected in GB with cases in gulls, waders, pheasants and geese/swans. The occurrence of so many cases so quickly across the range of susceptible avian families with no epidemiological explanation, suggests a rampant process in wild birds. This will increase the infection pressure on poultry particularly where biosecurity is sub-optimal and even where biosecurity is stringent, it will highlight any weaknesses.

Conclusion

Given the detection of several cases of HPAIV H5N1 in wild birds in England, Wales and Scotland in the last week together with the increasing number of poultry outbreaks in the
Netherlands and in northern Germany, the risk of incursion of HPAI H5 in wild birds in GB has been raised from **MEDIUM** (event occurs regularly) to **HIGH** (event occurs often).

The risk of exposure of poultry to HPAI H5 in GB where biosecurity is sup-optimal has been raised from **LOW** (medium uncertainty) to **MEDIUM** (medium uncertainty).

The risk of exposure of poultry to HPAI H5 in GB where biosecurity is stringent remains at **LOW** but the uncertainty is to increase from low to medium uncertainty. This emphasises the importance of maintaining good biosecurity.

At **this stage last year (30 Oct 2020)** the wild bird risk was still medium and the poultry risk low. The wild bird risk was raised to **HIGH** and the poultry risk to **MEDIUM** on the **4 Nov 2020**, so events this year are about a week earlier than last year. The raise last year was a consequence of the first H5N8 HPAI poultry outbreak in the UK (3 Nov 2020), and poultry outbreaks in the Netherlands as well as the increasing HPAI H5N8 events in wild bird in the Netherlands and Germany that week in 2020, and the known migration routes on to the UK from these countries.

We are currently in a period of rapid seasonal change with respect to these risks and will continue to closely monitor the situation as more wild birds from northern Europe will be arriving over the few weeks.

It is particularly important that stringent adherence to good biosecurity practices is not only maintained but also reviewed for further improvement. Particular attention should by now have already been addressed to reviewing contingency plans, maintenance checks and repairs on roofs and fabric of buildings. Reinforcement of good biosecure behaviours and practices should now also be instilled into personnel to prevent disease being introduced to poultry and captive birds. Special consideration should be made when bringing in equipment and materials such as bedding and outer packages which may have become contaminated following environmental exposure.

If you keep poultry (including game birds or as pets), you should follow our biosecurity best practice advice, which can be found here: [Avian influenza (bird flu) biosecurity advice](https://www.gov.uk/guidance/avian-influenza-bird-flu).

Remain vigilant for any signs of disease in your flock and report any suspicious clinical signs of avian influenza to the Animal and Plant Health Agency. In England contact 03000 200 301. In Wales, contact 0300 303 8268. In Scotland, contact your local Field Services Office.


For Wales: [https://gov.wales/avian-influenza](https://gov.wales/avian-influenza)

For Scotland: [http://gov.scot/avianinfluenza](http://gov.scot/avianinfluenza)
The OIE/FAO International Reference Laboratory/UK National Reference Laboratory at Weybridge has the necessary ongoing proven diagnostic capability for these strains of virus, whether low or high pathogenicity AI, and continually monitors changes in the virus on a wide scale whilst utilising global networks to gain early insights to epidemiological trends and potential emergence of new genotypes which might change the risk profile. We will continue to report on any updates on the situation in Europe and, in particular, any changes in disease distribution or wild bird movements which may increase the risk to the UK.

Any findings of dead wild birds of any species should be reported to the Wild bird Helpline (Tel: 03459 33 55 77 – please select option 7). It is advisable that you do not touch these birds.

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**References**

All outbreaks and cases were taken from the World Organisation for Animal Health (OIE). Please note that changes in format and level of detail are due to the change of data source for this report, from EU’s Animal Disease Notification System (ADNS) to World Organisation for Animal Health (OIE).

**FLI (2021) Avian influenza**

**IZSVe (2021a)**

**IZSVe (2021b)**

**PAFF (2021) Highly pathogenic avian influenza update of the situation PAFF AHW 20 October 2021**