

## Updated Outbreak Assessment #2

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

10 November 2021

Ref: VITT/1200 HPAI in the UK and Europe

### **Disease Report**

Since our last report on 2 November 2021, there continues to be reports of highly pathogenic avian influenza (HPAI) H5 both in Europe and in Great Britain (GB) itself.

In GB, thirteen HPAI H5N1 events in wild birds have been reported including the east coast of Scotland, the west coast, east coast and north-east of England, the Midlands, and north Wales. To date there have been three confirmed cases of HPAI H5N1 in captive birds, and one in poultry in GB. In northern Europe, Germany and Poland have reported HPAI H5N1 in domestic poultry, while in southern Europe, further outbreaks of HPAI H5/H5N1 have been reported on fattening turkey farms in northern Italy. Wild bird H5N1 cases continue to be reported in north-west Germany/Denmark, in the coastal regions of the Netherlands, and birds in south-west Sweden, near Malmö. The Republic of Ireland have reported their first case of HPAI H5N1 this season, in wild birds in Galway.

### **Situation Assessment**

#### **United Kingdom**

HPAIV H5N1 was detected in rescued swans and captive poultry at a swan sanctuary in Worcester (England) on 15 October. Following this, there have been three further confirmed cases of HPAIV H5N1, affecting captive birds in Wrexham (Wales), captive birds in Angus (Scotland) and a commercial turkey premises in Warwickshire (England) (Table 1).

**Table 1: Described in this, and previous reports, poultry and captive birds at the following sites have tested positive for high pathogenicity avian influenza (HPAI) H5N1:**

Date HPAI H5N1 confirmed	Location, County	Description
27 October	Near Wychavon, Worcester	Rescued wild swans (adults and young), rescued and captive geese, ducks and chickens.
2 November	near Chirk, Cheshire	Backyard chickens
4 November	Near Arbroath, Angus	Mixed backyard flock of 16 chickens, 20 guinea fowl and 12 ducks.
8 November	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken

Since our last outbreak assessment on 2 November, HPAI H5N1 has been detected in a further eight wild bird locations, bringing the total to 13, separate wild bird positive events in GB, affecting over 50 birds. 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*) a Whooper Swan (*Cygnus cygnus*) and Greylag goose (*Anser anser*) all in north west England. Since our last updated assessment on 2 November, HPAI H5N1 has been reported in Mute swans (*Cygnus olor*) in the midlands, eastern, and north-east England, a Herring gull (*Larus argentatus*) in south-west Wales, pheasants and a common buzzard (*Buteo buteo*) in North Yorkshire, a Great-crested Grebe in the north west and Canada Geese (*Branta canadensis*) in Wales (Table 2).

**Table 1 Wild birds in GB that have tested positive for H5N1 as at 11 November 2021**

County and species	Total number of birds testing positive
<b>England</b>	<b>43</b>
<b>Greater Manchester</b>	<b>1</b>
Great-crested Grebe	1
<b>Lancashire</b>	<b>11</b>
Greylag goose	4
Whooper Swan	5

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Curlew	1
Pink-footed goose	1
<b>Norfolk</b>	<b>1</b>
Mute Swan	1
<b>North Yorkshire</b>	<b>7</b>
Mute Swan	1
Common Buzzard	1
Pheasant	5
<b>Warwickshire</b>	<b>21</b>
Canada Goose	1
Mute Swan	20
<b>Worcestershire</b>	<b>2</b>
Mute Swan	2
<b>Wales</b>	<b>8</b>
<b>Carmarthenshire</b>	<b>1</b>
Herring Gull	1
<b>Ceredigion</b>	<b>2</b>
Canada Goose	2
<b>Wrexham</b>	<b>5</b>
Pheasant	5
<b>Scotland</b>	<b>2</b>
<b>Fife</b>	<b>1</b>
Gull	1
<b>Leith</b>	<b>1</b>
Mute Swan	1
<b>Grand Total</b>	<b>53</b>

**Northern Europe**

Since our last assessment, HPAI has been recorded in the following countries:

In the Republic of Ireland, a peregrine falcon (*Falco peregrinus*) was found alive in a coastal area on the West coast, near Galway, but later died. Testing showed that the bird was positive for HPAIV H5N1.

The Netherlands have reported a H5N1 outbreak in a broiler unit in Grootchermer, detected on 29 October where the Dutch Food and Consumer Product Safety Authority culled 107,000 animals on site. A second poultry outbreak was detected in 321 backyard birds on 31 October and a third in 10,455 fattening ducks in Zeewolde on 3 November. Five mute swans (*Cygnus olor*) with some other unspecified wild birds were found dead in Parrega Friesland on 1 November and five pheasants were found dead in a wetland area on 25 October and tested positive for HPAI H5N1.

On 29 October, Germany detected H5N1 on two farms, the first with 75 geese, 122 ducks and 27 chickens and the second with 60 laying hens and 23 ducks in Burg, Spreewald in the east of the country near the border with Poland. In early November, H5N1 was detected in a backyard premises in Wismar and a farm at Hohenkirchen. The total number of wild bird events reported in Germany this season is 68 to 10 November (IZSVe 2021a), many of these are yet to be reported by OIE and there are no further details available at this time.

In Denmark (Sønderupsønder), a turkey holding with approximately 27,600 birds was confirmed positive for HPAIV (subtype H5) on 1 November. On 2 November a further case of HPAIV H5 was confirmed in backyard captive birds in Boeslunde. Denmark has reported HPAI H5N1 in four wild bird events since our last report, detected in late-October, affecting a Eurasian wigeon (*Mareca penelope*), a greylag goose (*Anser anser*), a barnacle goose (*Branta leucopsis*) and a common buzzard (*Buteo buteo*). The total number of wild bird events this season in Denmark is eight to 4 November (IZSVe 2021a).

Poland has detected its first HPAIV H5N1 outbreaks of the season in domestic poultry, affecting six commercial farms (five rearing fattening turkeys with between 7,000 and 29,000 birds, one commercial chicken broiler unit) since our last report. One non-commercial premises has also reported HPAI H5N1 on 8 November, affecting hens, ducks, quail, guinea fowl and parrots.

The Czech Republic has reported two wild bird cases of HPAI H5N1, both in mute swans (*Cygnus olor*) found dead on the Lužnice river in the south of the country.

Sweden has reported H5N1 in a Barnacle goose detected on 26 October.

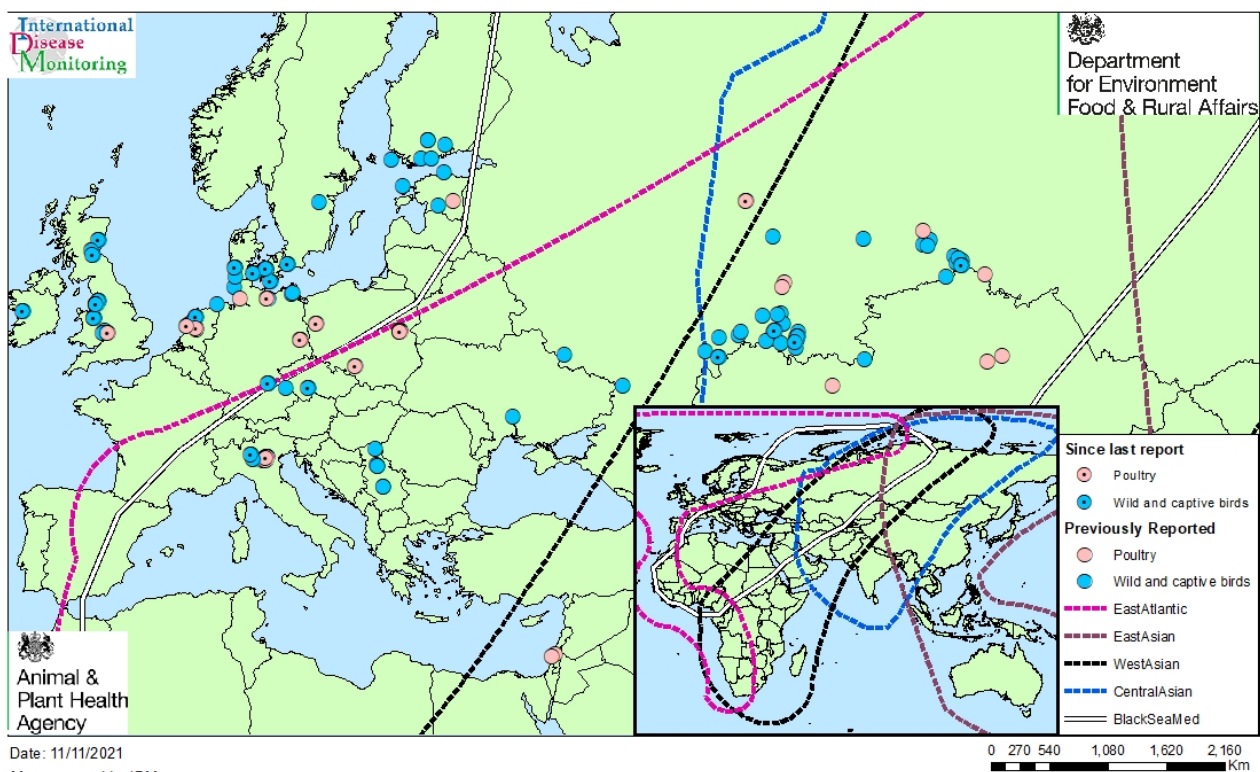
## **Southern Europe**

Since our last report on 2 November, Italy has notably reported the most cases with seven further HPAIV H5N1 outbreak in fattening turkeys. There have also been two reports of

HPAIV H5N1 in a commercial layer unit and HPAIV H5 in a broiler unit in Italy. This takes the total to nine outbreaks, all in the north-east (Verona region) of Italy.

The map below shows the distribution of HPAI H5 events in poultry, captive birds and wild birds in Europe reported from October to November to OIE. Those events reported since our last report on 2 November are distinguished with dots and show the recent westward spread into domestic poultry in north-west Europe. In addition H5N1 has been detected in wild Eurasian wigeon and mallard ducks (*Anas platyrhynchos*) in late October.

**Map 1: HPAI outbreaks (from OIE) in poultry, captive and wild birds across Europe, 1 October 2021 to 10 November 2021.**



**Highly pathogenic avian influenza in Poultry, Captive and Wild birds**

October - 10 November 2021  
 Overlay: migratory bird flyways

OIE Data Only

**Implications for the UK**

The westward spread of HPAI H5N1 being detected in wild birds in north-west Europe and across Great Britain is apparent from Map 1 together with the first wild bird case reported in the Republic of Ireland (RoI), in a peregrine falcon. The infection pressure on domestic poultry and captive birds will inevitably increase, particularly where biosecurity is sub-optimal. Even where biosecurity is stringent, it may highlight any weaknesses. Mixed poultry outbreaks are following the wild bird cases in Poland, Germany and the

Netherlands. The first outbreaks in captive birds and a commercial turkey premises in the UK have now been detected.

Although further investigation is needed, early analyses indicate that the HPAI H5N1 viruses so far observed in the winter 2021 season appear to show high genetic similarity but are distinguishable from H5 HPAI viruses from last winter, but with antigenic similarity to the HPAI H5Nx (including N1/N8) reported during the 2020/21 season. The antigenic similarity of the contemporary H5N1 HPAI viruses to previously circulating strains in wild birds, may result in attenuation of infection outcomes in some wild bird species due to some protective effect from prior immunity in previously exposed and recovered birds. At population level this could result in less extreme mass mortality events, but birds with prior H5 immunity can still be infected and shed virus into the environment with onward risk for transfer to domestic poultry.

## Conclusion

HPAI is continuing to spread west across northern Europe and into GB and RoI. The number of wild bird cases confirmed as positive for HPAI H5N1 in England, Wales and Scotland has increased since our last outbreak assessment when the risk of incursion of HPAI H5 in wild birds in GB was elevated to **HIGH** (event occurs often).

The risk of exposure of poultry to HPAI H5 in GB where biosecurity is sub-optimal remains at **MEDIUM** after being elevated in our last outbreak assessment, though the level of uncertainty has increased from medium to high uncertainty, reflecting the particular increase in infection pressure where there is sub-optimal biosecurity.

The risk of exposure of poultry to HPAI H5 in GB where biosecurity is stringent remains at **LOW** (medium uncertainty) and emphasises the importance of maintaining good biosecurity.

We are continuing to closely monitor the situation as more wild birds from northern Europe are arriving.

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: <https://www.gov.uk/guidance/avian-influenza-bird-flu#biosecurity-advice> .

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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](#). Further information is available here: <https://www.gov.uk/guidance/avian-influenza-bird-flu> including updated biosecurity advice for poultry keepers for England; <https://gov.wales/avian-influenza> for Wales and; <http://gov.scot/avianinfluenza> for Scotland.

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 [https://tsis.fli.de/Reports/Info\\_SO.aspx?ts=015&guid=16b724ca-a4ae-462a-8d67-269348391e04](https://tsis.fli.de/Reports/Info_SO.aspx?ts=015&guid=16b724ca-a4ae-462a-8d67-269348391e04)

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IZSVe (2021a) <https://www.izsvenezie.com/documents/reference-laboratories/avian-influenza/europe-updates/HPAI/2021-1/total-events.pdf>

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