Department for Environment, Food and Rural Affairs
Animal & Plant Health Agency
Advice Services Team - International Disease Monitoring

Updated Outbreak Assessment #25

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

12 August 2021 Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

Following the unprecedented epizootic of highly pathogenic avian influenza (HPAI) H5 during autumn/winter 2020/2021, there have now been two reports of HPAI H5 in wild birds in the **United Kingdom** (UK). Three Great Skua *(Stercorarius skua)* carcasses found on Fair Isle (Shetland, Scotland) have tested positive for HPAIV H5, with one testing positive for HPAIV H5N1. Another Great Skua carcass was found on the Flannan Isles and also tested positive for HPAI H5N1. There have been no new cases of HPAI in poultry, or in captive birds, in the **UK** since March 2021. In **Europe**, including France, Poland, Czech Republic and Denmark, cases of HPAI H5N8 have continued to be reported sporadically in poultry. HPAI H5 findings in wild birds in Europe have greatly decreased since the peak in March, although the virus is still present in wild water birds along the Baltic coasts. The Netherlands have reported six cases of H5N8 in young Greater White-Fronted Geese *(Anser albifrons)*, found dead in a wetlands area in the Eemdijk region on 3 August 2021. Germany has reported a further four cases of HPAIV in wild birds since the end of July, although these have not yet been reported by OIE. All of the German wild bird cases were in the Niedersachsen area in the north-west with three H5N8 and one H5N1. Further north in Europe, H5 HPAIV has been reported in wild birds in Finland and Norway. Finland have reported five wild bird cases this week, two H5N8 from mid-July and three H5N1 including a Herring gull (*Larus argentatus*) from late July. Also, Norway has reported one H5N8 case in a Northern eider duck (*Somateria mollissima*) found on 29 July 2021.

Situation Assessment

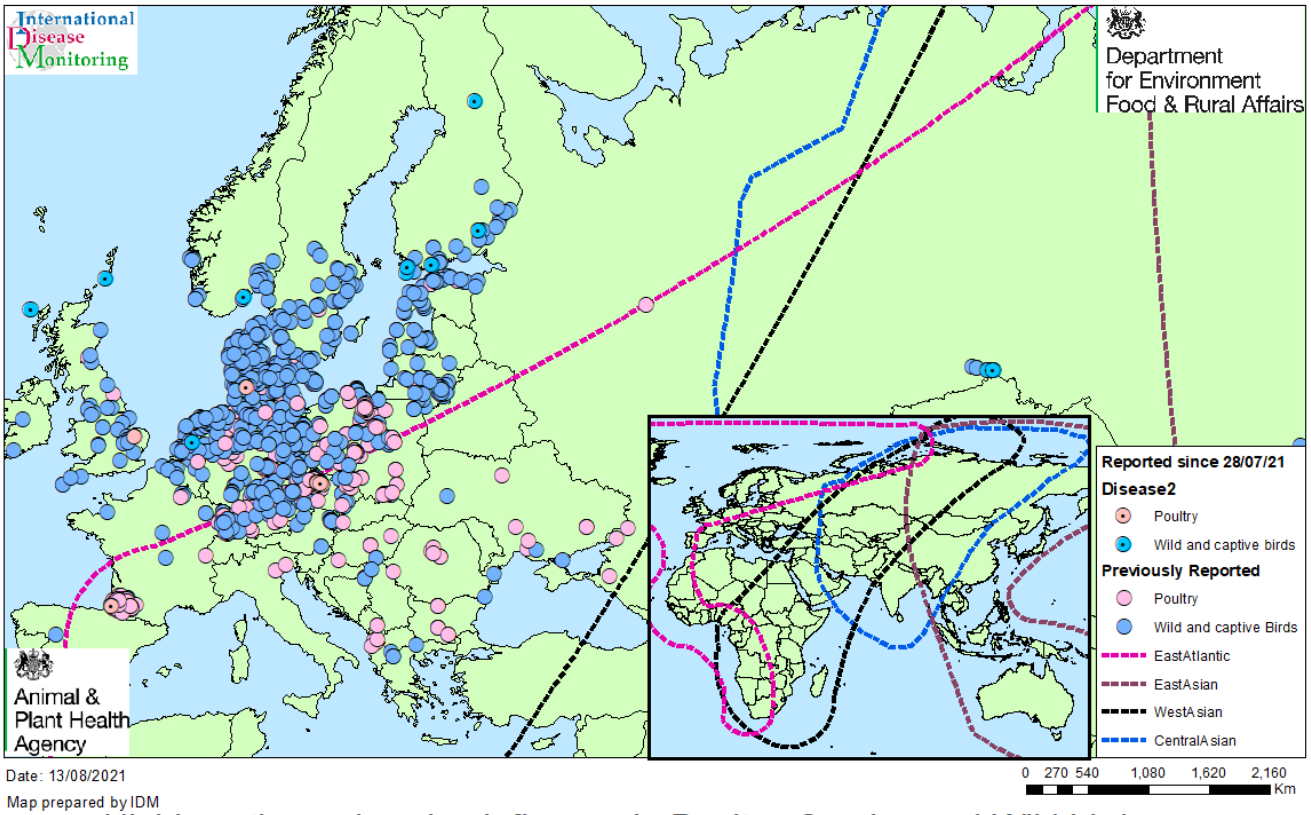
The epizootic of HPAI H5 in Europe in autumn/winter 2020/2021 was unprecedented both in the number of neuraminidase (N) subtypes and the number of wild birds affected. While many poultry outbreaks and wild bird cases were reported in European countries, the UK reported 24 outbreaks in poultry and captive birds. Of these most were HPAI H5N8 in England, with Scotland, Wales and Northern Ireland reporting two, one and two HPAI H5 outbreaks respectively as described fully in our previous report (Avian influenza (bird flu) in Europe, Russia and in the UK - GOV.UK (www.gov.uk)). In total, 320 HPAI H5 cases have been reported in wild birds in the UK over the autumn/winter/spring 2020/2021 epizootic, with most of those in England, and only a few in Scotland, Wales or Northern Ireland.

There have been no new cases of HPAI H5 in poultry or in captive birds (to 13 August 2021) in Great Britain (GB) since 31 March 2021, and no new cases in poultry in Northern Ireland since 12 January 2021. There have been two new reports of HPAIV H5 cases found in wild birds in the UK in July 2021; the first involving three Great Skua (*Stercorarius skua*) carcases found on the Fair Isle (Shetland, Scotland) on 20 July 2021 and the other one Great Skua carcass found on the Flannan Isles on 27 July 2021. This is the first time HPAI has been reported in Great Skua in the UK during the current (2020/2021) HPAI H5 epizootic, and these Scottish islands represent new locations of infection.

HPAI in Europe since 28 July 2021

The map below shows the distribution of HPAI outbreaks in poultry, captive birds and wild birds across Europe since February. Cases of HPAI in wild birds in Europe peaked in March at around 200 per week and have greatly decreased over the summer to <5 cases per week (IZSVe 2021). The reduction in cases is apparent in the map below as shown by the symbols with dots representing those outbreaks reported to OIE since the last report on 28 July 2021.

Map 1: HPAI outbreaks (from OIE) in poultry, captive and wild birds across Europe, 1 February 2021 to 12 August 2021.



Highly pathogenic avian influenza in Poultry, Captive and Wild birds
February - August 2021
Overlay: migratory bird flyways

Outbreaks of HPAI H5 are continuing sporadically in poultry in Europe, with 22 H5N8 reports by OIE since 28 July 2021 (Table 1). Both Poland and Denmark have reported one outbreak each. The H5N8 outbreak on a poultry farm in Denmark started with clinical suspicion on 04 July 2021. The holding contained approximately 38,000 animals producing eggs for broiler production. All animals had been culled as of 7 July 2021. The outbreak in central Poland was reported in the latest ADIS weekly summary (ADIS, 2021), although there are no further details available at this time and it is yet to be reported by OIE.

Since our last report, multiple outbreaks of HPAI in poultry have been reported by OIE for Poland (H5N8, 13), the Czech Republic (H5N8, seven), and France (H5N8, one) (Table 1). These reports refer to outbreaks that were confirmed through March and April 2021.

Table 1: Total number of outbreaks in poultry across Europe 28 July – 12 August 2021 (OIE data only)

Country	Strain						Grand Total
	H5	H5N1	H5N3	H5N4	H5N5	H5N8	
Czech Republic						7	7
Denmark						1	1
France						1	1
Poland						13	13
Grand Total						**22**	**22**

In wild birds, a total of 8 cases of HPAI H5 have been reported across Europe since the previous report on 28 July 2021 (Table 2). Of these, five were in Finland, affecting two Herring gulls, a Barnacle Goose, a Golden Eagle, and a White-tailed Eagle. The Netherlands reported one outbreak affecting six Greater White-fronted Geese found dead in a wetlands area. The UK has reported its first cases of HPAIV in wild birds since April 2021, in Great Skuas found off the coast of Scotland on Fair Isle and the Flannan Isles.

Table 2: Total number of outbreaks in wild birds in Europe 28 July – 12 August 2021 (OIE data only)

Country	Strain						Grand Total
	H5	H5N1	H5N3	H5N4	H5N5	H5N8	
Finland		**3**				**2**	5
Netherlands						**1**	1
United Kingdom		**2**					2
Grand Total		**5**				**3**	**8**

Implications for the UK

The main concentration of wild bird HPAI H5 cases continues to be in northern Europe, with relatively few in southern or central Europe and the virus is still sporadically detected in wild birds particularly in southern Scandinavia and countries surrounding the Baltic Sea. It is not known whether the virus is being maintained in these birds or whether they are exposed to residual infectivity in the environment. With such heavy infection pressure over the winter and into the spring a small number of cases would be expected in a residual tail through the summer.

The main change in this update is the detection of HPAIV H5N8 in Greater white-fronted geese in the Netherlands. These are reported by OIE as six young birds, i.e. juveniles. It is not clear from the information available whether they hatched in the Netherlands or have migrated in from breeding grounds in northern Russia, where most of the northern Europe wintering population breeds. It should be noted that many geese (including some Greater white-fronted geese), ducks and wild swans will fly through this area to the UK in the coming months.

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We have recently published a rapid risk assessment for the derogation of avian influenza control measures for H5N1 in wild birds in Fair Isle (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1010875/rapid-risk-assessment-H5N1-110821.pdf).

At this current stage of the epizootic cycle (i.e. late-summer), the risk of incursion of HPAI H5 in wild birds in the UK as a whole will be slightly increased now with HPAI H5N1 already present in wild birds in some remote northern Scottish Isles and HPAI H5N8 in wild geese in the Netherlands. The high temperatures this summer will have inactivated much of any residual environmental infectivity from the spring. However, the risk to the UK will likely increase as the main body of ducks, geese and swans begin to arrive from mid-September with certain wader bird species already arriving.

Conclusion

The risk of HPAI H5 incursion in wild birds remains at **LOW (event is very rare but cannot be excluded)**. Given all factors with ongoing detections in wild bird populations not only in central Asia and southern Russia, but also nearer to the UK mainland in the remote northern Scottish Isles and the Netherlands, the risk level may well increase through the autumn. We will continue to closely monitor the situation. The risk of poultry and captive bird exposure to HPAI H5 across the whole GB is still **LOW** (with **MEDIUM** uncertainty) **where biosecurity is sub-optimal,** and **LOW** (with **LOW** uncertainty) **where stringent biosecurity measures** are applied.

It is particularly important that stringent adherence to biosecurity measures are maintained as summer progresses into autumn, so as to prevent disease being introduced to poultry and captive birds, through contaminated fomites and 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 .

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 five or more dead wild birds of any species, found at the same location and at the same time 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).*

IZSVe (2021) https://www.izsvenezie.com/reference-laboratories/avian-influenza-newcastle-disease/europe-update/

This publication is available at https://www.gov.uk/government/collections/animal-diseases-international-monitoring

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