

Updated Outbreak Assessment #26

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

15 September 2021

Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

Since our last report on 12 August, four outbreaks of highly pathogenic avian influenza (HPAI) H5N8 have been detected in captive birds in north-western Europe. These include single outbreaks in backyard premises of captive birds (including wild and domestic non-poultry species) in north-eastern France, and in Luxembourg in early September. In addition to two outbreaks involving backyard birds and captive birds in Belgium at the end of August. Luxembourg identified the introduction of new birds as the source of their infection; the other three outbreaks (France and Belgium) involved premises which were outdoors and contact with wild birds/contaminated environment has again been implicated as the source of infection.

There have been no new cases of HPAI in domestic poultry or in captive birds in the **UK** since the end of March 2021. The last detection of HPAI in UK wild birds was H5N1 virus in Great skua (*Stercorarius skua*) carcasses submitted from the Scottish islands in July 2021.

HPAI H5 has continued to circulate endemically in wild birds particularly in the low countries of north-west Europe and the Baltic Sea coast (namely the Netherlands, Finland and Sweden). In the next few weeks, many wild ducks, geese and swans will be moving across these countries to migrate back and overwinter in the UK. Some of these birds will originate from breeding grounds in central Siberia where HPAI is currently present in the wild bird population and there are interfaces with infected poultry populations.

These cases are considered to most probably relate to residual infection from the 2020/21 winter season (and therefore not new introduction of virus), and as such an increase to the national risk level is not considered appropriate at this stage. However, the appearance of these wild bird and captive bird findings at this time of year, in north-west continental Europe, is unusual and does require close monitoring of the situation.

Situation Assessment

The epizootic of HPAI H5 infection in Europe over the autumn/winter season of 2020/2021 has been unprecedented both in the number of virus genotypes including multiple neuraminidase (N) subtypes and the numbers and species of wild birds affected. There were numerous positive HPAI H5 incidents reported in domestic poultry and wild birds with the main focus in Northern Europe creating presumably large infection pressure including through contaminated environments near to poultry production premises. The UK reported 24 outbreaks in poultry and captive birds during autumn/winter 2020/2021, as described fully in previous reports ([Avian influenza \(bird flu\) in Europe, Russia and in the UK - GOV.UK \(www.gov.uk\)](#)).

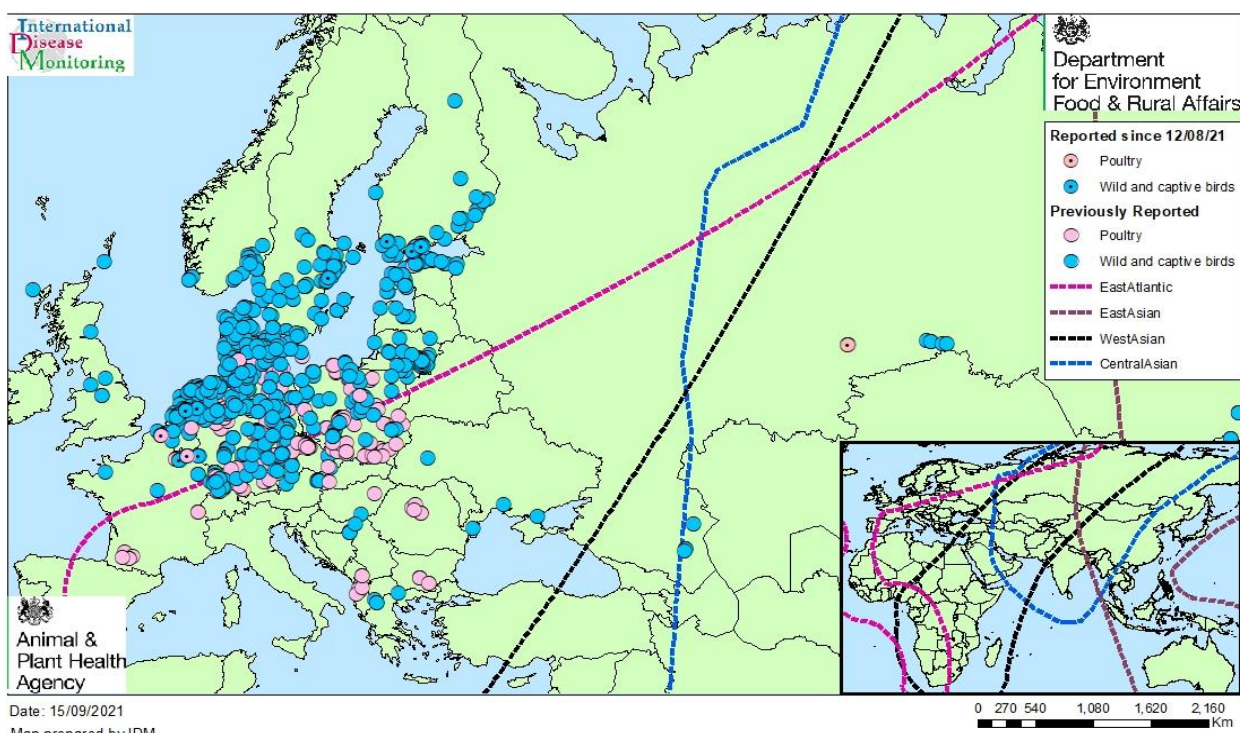
As of 15 September 2021, there have been no new reports of HPAI H5 in domestic poultry or in captive birds in Great Britain (GB) since 31 March 2021. The last reported case in Northern Ireland was on 12 January 2021. There have been no new reports of HPAIV H5 cases in wild birds since the two events involving Great Skua (*Stercorarius skua*) carcasses found on the Fair Isle (Shetland, Scotland) on 20 July 2021 and on the Flannan Isles (Outer Hebrides, Scotland) on 27 July 2021. These relate to discrete localised infections within a single colonial species in summer and not therefore representative necessarily of the whole UK level situation at the present time.

HPAI in Europe since 12 August 2021

The map below shows the distribution of HPAI H5 outbreaks in poultry, captive birds and wild birds in Europe since March. The number of HPAI H5 findings in wild birds peaked in March 2021 at around 200 per week and has since steadily decreased over the summer to less than five cases per week (IZSve 2021).

The four poultry/captive bird reports in Europe since our last update on 12 August 2021, are presented in Table 1.

Map 1: HPAI outbreaks (from OIE) in poultry, captive and wild birds across Europe, 1 March 2021 to 14 September 2021.



Highly pathogenic avian influenza in Poultry, Captive and Wild birds
 March- September 2021. OIE data only
 Overlay: migratory bird flyways

Table 1: Total number of HPAI H5 outbreaks in domestic poultry and captive birds in Europe, 12 August to 14 September 2021 (OIE data only)

Country	Strain						Grand Total
	H5	H5N1	H5N3	H5N4	H5N5	H5N8	
Belgium						2	2
France						1	1
Luxembourg						1	1
Grand Total						4	4

Belgium reported an outbreak of HPAI H5N8 in Menen starting 30 August 2021, affecting 348 captive birds including chickens, turkeys and guinea fowl. The following day (31 August) another finding was reported in a backyard flock of chickens in Chiny with five of the nine birds dying. Luxembourg reported H5N8 on 07 September 2021 (with a start date of 03 September) in a flock of 60 captive birds. On 04 September 2021 there was an outbreak of H5N8 in the Ardennes in north-east France involving a backyard collection of 592 birds including chickens, ducks, pigeons, collared doves, quails, turkeys, and Egyptian geese. All the birds were kept in the open air and thus were at risk of infection from wild birds either directly or indirectly.

In wild birds, a total of 13 cases of HPAI H5 have been reported in Europe since the previous report on 12 August 2021 (Table 2). Of these, eight were in Finland, with H5N1 affecting one Eagle owl (*Bubo bubo*), two Whooper swans (*Cygnus cygnus*) one Mute swan (*Cygnus olor*), a Common gull (*Larus canus*) and a Goosander (*Mergus merganser*) and H5N8 affecting one Herring gull (*Larus argentatus*) and a Common gull. Four wild bird H5N8 events started in the Netherlands, namely one Mute swan, one unidentified goose species and two Mallard ducks (*Anas platyrhynchos*) all in wetland areas. In Sweden, HPAI H5N8 was reported in a Mallard.

Table 2: Total number of outbreaks in wild birds in Europe 12 August 2021-14 September (OIE data only)

Country	Strain						Grand Total
	H5	H5N1	H5N3	H5N4	H5N5	H5N8	
Finland		6				2	8
Netherlands						4	4
Sweden						1	1
Grand Total		6				7	13

Implications for the UK

HPAI is still being detected in wild birds around the Baltic Sea coast and in north-western Europe. The East Atlantic flyway is in proximity through which many migrating wild water birds (ducks, geese and swans) will pass on their way to their UK wintering grounds over the next few weeks. It is uncertain whether the virus is circulating in the wild bird populations in these areas, or whether the wild bird deaths are due to residual infectivity in the environment. Considering the high number of cases reported in Europe earlier in the year and the resulting heavy infection pressure over the winter period and into the spring, it is likely that the recent outbreaks reported in north-western Europe are a result of low level persistence of the HPAI H5 virus in the environment, rather than a new incursion of disease. This residual tail off is not unexpected towards the end of summer. Although more information is needed, this is further supported by the lack of outbreaks in Germany and eastern Europe, through which migrating birds would fly before during their journey to western Europe.

The four outbreaks in poultry/captive birds documented here (Table 1) in France, Belgium and Luxembourg were in open air premises and hence act as good sentinels of the ongoing presence of HPAI H5N8 in wild birds in north-western Europe. The report of ongoing cases in wild birds in Scandinavia and the Netherlands (Table 2) are relatively unusual for this time of year.

At the current stage of the epizootic cycle (i.e. early autumn), the risk of incursion of HPAI H5 from wild birds into the UK may soon start to increase as some of the ducks, geese and swans begin to arrive from mid-September onwards. Certain wader bird species have already arrived, but there have been no positive findings to report as yet.

Conclusion

The risk of HPAI H5 incursion in wild birds remains at **LOW (event is rare but does occur)**. Given all the factors, with ongoing detections in wild bird populations not only in central Asia and southern Russia, but also nearer to the UK in north-east France, Belgium, Luxembourg and the Netherlands, the risk level may well increase through the autumn. We are in a period of uncertainty and 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.

While the wild bird risk is still low, it should be noted that the UK is entering a new fast-moving phase as many wild waterfowl will soon start to arrive for over-wintering. This dynamic situation can change rapidly, as observed during winter 2020/21.

It is particularly important that stringent adherence to biosecurity measures is maintained and where appropriate improved, together with reviewing contingency plans and workforce practices, to prevent disease being introduced to poultry and captive birds, through contaminated fomites and environmental exposure. Attention to maintenance and the secure nature of buildings is recommended.

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.

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

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/>



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