Department for Environment, Food and Rural Affairs

Preliminary Outbreak Assessment #1

High pathogenicity avian influenza (HPAI) in Great Britain and Europe

17July 2024

Disease report

Since our last outbreak assessment on 1 April 2024, there have been no reports of high pathogenicity avian influenza (HPAI) H5 clade 2.3.3.4b in domestic poultry in Great Britain (England, Scotland and Wales). There have, however, been 2 HPAI H5 clade 2.3.3.4b events involving “found-dead” wild birds in Great Britain, although one was retrospectively tested from a sample collected last year. The last bird found dead and testing positive was a sparrowhawk collected on 5 April 2024. Reassuringly, no wild bird cases of HPAI H5 have been detected in Great Britain since 5 April 2024, despite some 706 found-dead bird carcases having been tested over this period and the survey sensitivity has been at its highest for both target species (Anatides and Gulls) and other seabirds. This is in stark contrast to the previous 2 summer seasons in Great Britain when numerous mass die-off events in seabirds and gulls were reported. The risk of HPAI H5 incursion in wild birds is considered to be low (rare but does occur).

The risk of HPAI H5 incursion in poultry:

- With stringent biosecurity is assessed as very low (very rare but cannot be excluded) with medium uncertainty; and
- With non-stringent or suboptimal biosecurity is assessed as low with medium uncertainty**.**

Across Europe, HPAI H5 reports in wild birds and poultry decreased from a peak of 82 in week 7 to 3 in week 17 with between just one and 4 positive reports per week since week 17. Since 1 April 2024 (to 17July 2024), the World Organisation for Animal Health (WOAH) has reported 14 outbreaks of HPAI H5 in domestic poultry with another 4 outbreaks before April mainly in Eastern and Central Europe. These were all H5N1 and the tail end of the HPAI H5 epizootic that has spread through Europe over the last few years. However, in a new development, HPAI H7N5 has been detected on a poultry farm in north-west Germany on 3 July 2024.

For wild birds in Europe, since 1 April 2024, there have been 52 HPAI H5N1 events reported to WOAH, but no further cases of HPAI H5N5 or HPAI H5N8. There have also

been 2 reports of HPAI H5N1 in red foxes in Germany in April 2024 and one delayed report of HPAI H5Nx in a walrus in Norway in 2023.

Situation assessment

Here, an HPAI H5 event refers to a report of HPAI in poultry, or a location with at least one HPAI H5 positive wild bird. Individual HPAI H5 positive wild birds are referred to as cases.

Great Britain

Since our last report, published on 1 April 2024 (to 17 July 2024), there have been no infected premises (IP) confirmed with HPAI H5 in poultry in Great Britain. The last IP was confirmed on 14 February 2024.

For further details, please see the reports on the latest situation:

- HPAI in domestic poultry and captive birds in England
- HPAI in domestic poultry and captive birds in Scotland
- HPAI in domestic poultry and captive birds in Wales
- HPAI in domestic poultry and captive birds in Northern Ireland

Wild birds

Between 1 April 2024 and 17 July 2024, HPAI H5 has been reported in 2 found-dead wild birds in Great Britain. The first was HPAI H5N5 in a golden eagle found on 7 October 2023 (reported on 1 May 2024) on the Isle of Lewis on the Western Isles in Scotland. The second was HPAI H5N1 in a sparrowhawk found on 5 April 2024 (reported on 19 April 2024) in Herefordshire. Since 1 May 2024 there have been no wild bird cases in Great Britain. The total number of birds tested during this period was 706. Please note, there is a lag period between found-dead wild bird reporting, collection, sampling, and testing.

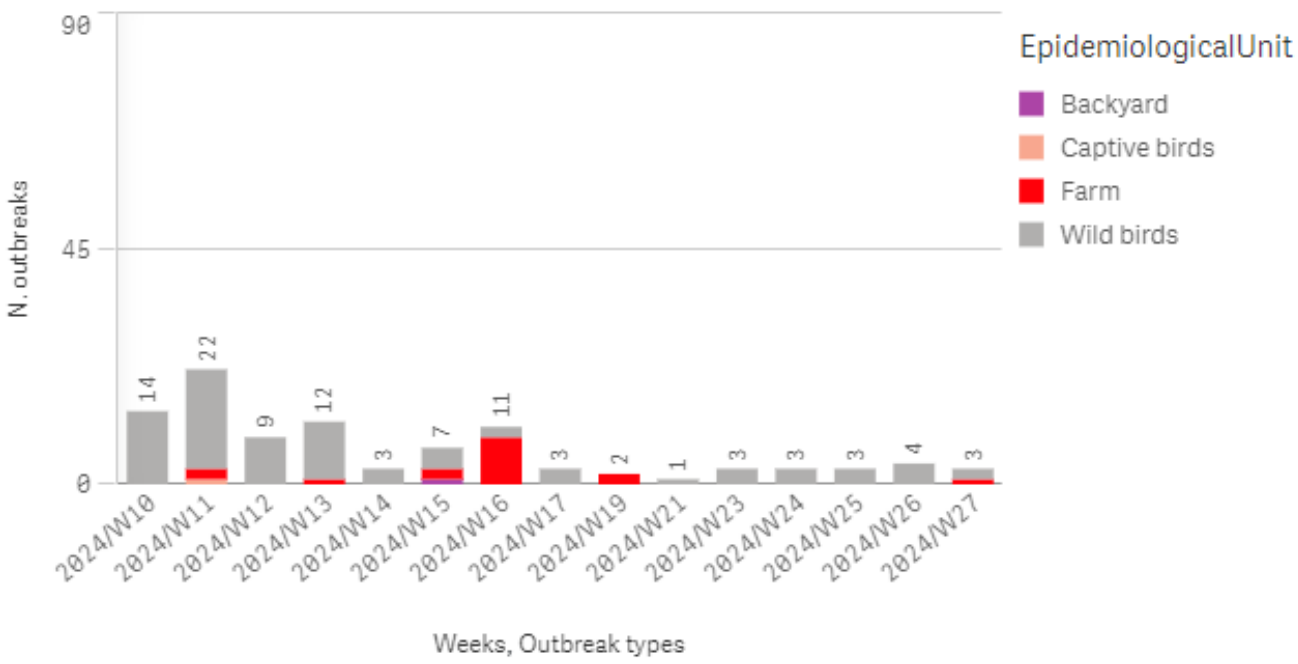
It is important to note that these surveillance figures are based on passive surveillance of found dead birds reported to Defra by the general public and as such, may be affected by several factors including frequency of visiting areas with bird populations, the potential for immunity in the wild bird population (which may result in fewer birds developing clinical disease and/or dying with HPAI), sensitivity as well as the size and location of carcasses, meaning that this wild bird surveillance does not necessarily capture all of the cases that occur. We will continue to monitor the situation closely. For further details, please see the report (updated weekly) on findings of HPAI in wild birds in Great Britain and HPAI in wild birds in Northern Ireland.

Europe

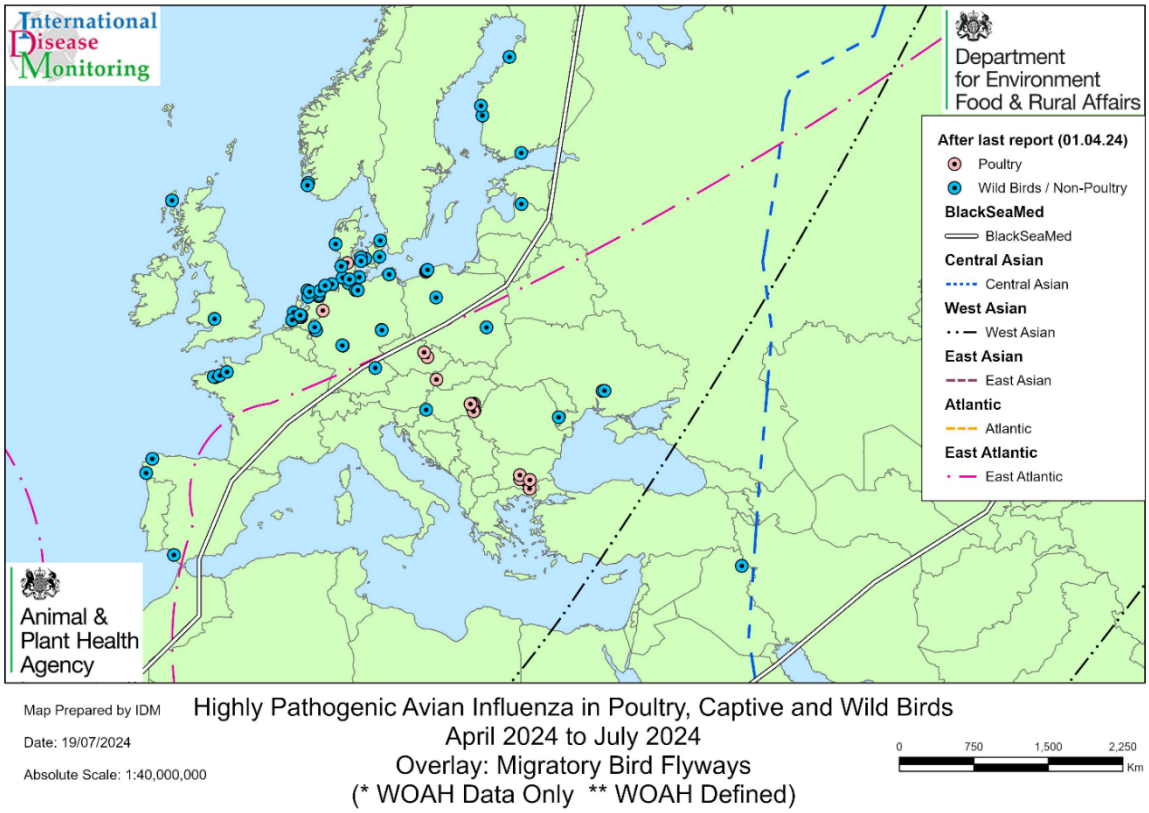
The number of HPAI positive reports in Europe peaked in mid-February 2024 at 82 reports per week (IZSVe 2024). Since that peak, reports have steadily decreased to just 3 to 4 per week in June and early July (Figure 1). The majority of these reports were in wild birds

although the recent HPAI H7N5 outbreak in poultry in Germany is apparent in week 27 (Figure 1). The level of positive reports this current season is much lower than for 2023 when positive reports from Europe were between 73 and 144 per week from week 18 to week 28. Similarly, during this period in 2022 positive reports were also much higher than this season, albeit decreasing from 168 in week 13 to 38 in week 23 but then increasing to 112 in week 26.

Figure 1. Weekly outbreaks of HPAI in poultry and captive birds and cases in wild birds reported across Europe between week 10 (early March 2024) and week 27 (early July 2024) (IZSVe, 2024).



Map 1. Map showing HPAI events in domestic poultry and wild birds in Europe reported by WOAH between 1 October 2023 and 17 July 2024 (WOAH, 2024).



Between 1 April 2024 and 17 July 2024, there were a total of 78 HPAI H5N1 events reported by WOAH in domestic poultry and non-poultry including wild birds (and mammals) across Europe. These occurred mainly in northern and Eastern Continental Europe and western Spain with central Spain, central France, Switzerland, Austria and Italy free from HPAI H5 (Map 1). Of the 78 reports, only 39 were actually detected since 1 April 2024 with the rest being late reports mainly of wild bird cases from the beginning of the year from Germany, the Netherlands and Denmark.

Since 1 April 2024, 14 outbreaks of HPAI H5N1 were detected in domestic poultry, namely 6 in Bulgaria and 8 in Hungary. There have also been reports of 1 poultry outbreak in Denmark, 2 in the Czech Republic and 1 in Slovakia, though these appear to be retrospective reports, with start dates from earlier in the year. There was also one report of HPAI H5N1 in non-commercial non-poultry in Ukraine and one in Germany.

There have been 52 wild bird cases of HPAI H5 reported by WOAH in Europe since 1 April 2024 (Table 1).

Table1: Wild bird cases of HPAI H5 in Europe reported on WOAH since 1 April 2024 (to 17 July 2024). Number of cases in parentheses.

Country	Detected since 1 April 2024	Detected prior to 1 April 2024 but reported since then
Denmark	Common buzzard (1) in April	Common buzzard (1), Mute swan (1), Lesser black-backed gull (1), Peregrine falcon (2)
Finland	0	Goshawk (1)
France	Herring gull (3) and Northern gannet (1) in June	0
Germany	Goose (5) in April and goose (1) in June	Goose (4)
Latvia	Graylag goose (1) in April	0
Moldova	0	Stork (1)
Netherlands	0	Wigeon (1), Mallard (1), Greater white-fronted goose (1), Graylag goose (2), Canada goose (3), Barnacle goose (3), Black-headed gull (1), Carrion crow (1)

Country	Detected since 1 April 2024	Detected prior to 1 April 2024 but reported since then
Norway	Common buzzard (1) in April	Gyrfalcon (1)
Poland	White stork (1) in April, and Mute Swan (5) in June/July	0
Slovenia	Mute swan (1) in April	0
Spain	Sandwich tern (1) in May and Yellow-legged gull (2) in May and June	0
Ukraine	0	Mute swan (1)

There were 2 cases of HPAI H5N1 in red foxes in Germany in April 2024 and a late report of HPAI H5 in a walrus in Svalbard from 2023.

On 29 June 2024, HPAI H7N5 was detected in poultry on a farm in Germany for the first time and reported on 3 July 2024. There were 6,047 clinically-affected birds in the flock of 90,879 laying hens. The outbreak in north-western Germany is right on the border with the Netherlands. H7N5 is not typically reported in poultry in Europe although H7 is endemic in wild birds in Europe (Abdelwhab and others 2014).

Implications for Great Britain

The number of positive reports of HPAI H5 both in wild birds and poultry has reduced considerably in 2024 in Great Britain compared to the previous 2 years with no wild bird reports in Great Britain since 5 April 2024. The last poultry IP in Great Britain was in February 2024. Similarly, the number of positive reports in both wild birds and poultry in Europe has greatly decreased since the peak in February with just 3 or 4 reports per week over the last few months (Figure 1) mostly in Eastern and Northern Europe (Map 1). While there has not been the huge number of seabird and gull cases seen in previous years, there are still a few reports of HPAI H5N1 in north-western Europe. Notably there are recent cases of HPAI H5N1 in gulls in north-west Spain and on the north coast of Brittany (south of Devon) with a case in a northern gannet in late June also on the north Brittany coast. There has also been a herring gull case in Normandy in late June (Map 1) and reports in early July of multiple mortality events at a gull rescue centre in Brittany and in herring gulls at a naval base in Cherbourg. Further east, there have been recent cases of

H5N1 in wild geese in north-west Germany and in mute swans on the north coast of Poland (Map 1). Should H5N1 continue to spread and circulate in these regions of northern Germany and Poland, then migrating ducks, geese and swans could bring the virus back into Great Britain in the autumn from mid-September. Some wader species will be flying into Great Britain from northern Europe (Iceland and Scandinavia) and the Baltic states in July and through August and could come through these areas. It should be stressed that at this time of year there is no mass migration of wild birds from northern France into southern England. However, seabirds along the coast of northern Brittany could bring infection into southern England in sporadic random movements of small numbers of birds, particularly if the virus were to spread further east towards Calais. The seabird colonies in Great Britain will be starting to disperse in the next month hence limiting any spread within the colonies. While the risk of HPAI H5 in wild birds in Great Britain is still low, the presence of HPAI H5 in wild birds in northern Europe presents a pathway to Great Britain with the risk potentially increasing over the coming months.

The implications for Great Britain of the HPAI H7N5 outbreak in poultry in west Germany are not clear at the moment, as the origin of the outbreak and the degree of future spread of the virus across poultry are not known. The origin is suspected to be a mutation from a low pathogenicity avian influenza (LPAI) H7 variant in wild birds to the HPAI variant to which the poultry were subsequently exposed through contamination. Geographically, the most prevalent subtype of avian influenza H7 is (LPAI) H7N7 which is endemic in wild birds in Europe (Abdelwhab and others 2014). Generally, depopulation of infected poultry was the main control tool for HPAI H7 outbreaks (Abdelwhab and others 2014). H7N5 was the least reported H7 subtype being restricted to North America with detections in wild birds (Abdelwhab and others 2014). There is likely to be some immunity to HPAI H7 in wild birds in Germany. To note, that our survey testing algorithm currently used both for wild birds and poultry would detect any Avian Influenza strains including H7 LPAI and H7 HPAI, allowing us an early warning mechanism if this subtype were to enter Great Britain.

Conclusion

Since our last assessment on 1 April 2024, there have been only two cases of HPAI H5 reported in wild birds in Great Britain with none reported since 1 May 2024. In fact, the last wild bird case in Great Britain was detected on 5 April 2024. The risk of HPAI H5 in wild birds in Great Britain is still assessed to be low. The number of wild bird cases in Europe has also continued to steadily fall since the peak in February 2024. However, there are still a few cases each week in Europe and of more concern to Great Britain is the detection of cases of H5N1 in herring gulls and gannets on the north coast of Brittany and Normandy in late June to early July and also in wild geese in northern Germany on the border with the Netherlands in June. The risk of entry of HPAI H5 into Great Britain may increase in the coming weeks as wild birds begin to fly into Great Britain, depending on the degree to which HPAI H5N1 circulates in the Netherlands and Germany. Spread of HPAI H5N1 in herring gulls in northern France is also a concern particularly if the virus were to spread further east to Calais.

HPAI H7N5 has been detected in a poultry outbreak in Germany for the first time in late June. Since H7 is endemic in wild birds in Europe there may be some immunity serving to reduce transmission through migratory wild birds to some degree.

There have been no outbreaks of HPAI H5 in domestic poultry in Great Britain since February 2024. The main route of exposure to poultry would be through wild birds for which the risk is low. Taking into account the reduction in exposure to wild birds through stringent biosecurity, the risk of infection of poultry in Great Britain with stringent biosecurity is now considered to be very low with medium uncertainty**.** The risk to poultry where biosecurity is non-stringent and there are biosecurity breaches is maintained at low with medium uncertainty. Here we consider stringent biosecurity to be the highest standards of biosecurity, which are applied by premises in the poultry compartments scheme including air and door locks, shower in – shower out facilities and pristine areas in the poultry sheds as defined previously in the scientific opinion on the incursion of HPAI H5N1 into housed or not housed poultry flocks and captive birds. The medium uncertainties in the poultry risk levels reflect our uncertainty in the low risk to wild birds currently with H5N1 in wild birds in northern France and north-west Germany.

We are continuing to closely monitor the situation in Europe and to review the risk.

It is particularly important that stringent adherence to good biosecurity practices is maintained, particularly in the coming weeks as wader bird species and then migratory ducks, geese and swans begin to arrive in Great Britain for the autumn and winter.

Advice for working with birds

Reinforcement of good biosecurity awareness behaviours and practices should be frequently communicated to all personnel working with birds.

Any lapse of these measures could still result in disease being introduced to poultry and captive birds.

This could be by direct or indirect contact with wild birds.

Direct contact includes wild birds getting into housing or onto the range.

Indirect contact with wild birds includes faecal contamination of:

- feed
- water
- bedding
- equipment
- vermin
- clothing (including footwear of people in contact with infected birds or contaminated environment including flood water)

Special consideration should be made when bringing in equipment and materials, especially bedding and outer packages which may have become contaminated following environmental exposure whilst stored outside.

If you keep poultry (including game birds or as pets), you should follow our biosecurity best practice advice on GOV.UK.

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. Contact

- 03000 200 301 in England
- 0300 303 8268 in Wales
- your local field services office in Scotland

Further guidance about avian influenza, including updated biosecurity advice for poultry keepers in:

- England is available on GOV.UK
- Wales is available on the Welsh Government's website
- Scotland is available on the Scottish Government's website
- Northern Ireland is available on DAERA's website

The WOAH, FAO International Reference Laboratory and the UK National Reference Laboratory at Weybridge have the necessary diagnostic capability for strains of avian influenza virus, whether of low or high pathogenicity, and continually monitor changes in the virus on a wide scale, whilst utilising global networks to gain early insights into epidemiological trends and potential emergence of new genotypes which might change the risk profile.

We will continue to report on any updates to the situation in Europe and, in particular, any changes in disease distribution or wild bird movements which may increase the risk to the UK.

In England, Scotland and Wales, any findings of the following dead wild birds found at the same location at the same time should be reported online (https://www.gov.uk/guidance/report-dead-wild-birds) or to the Defra wild bird helpline on 03459 33 55 77:

- 1 or more dead birds of prey (such as an owl, hawk or buzzard)
- 1 or more dead swans, goose or duck
- 1 or more dead gulls

- 5 or more dead wild birds of any species (not including gulls)

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 (WOAH). 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 (WOAH).

- Abdelwhab and others (2014) Prevalence and control of H7 avian influenza viruses in birds and humans | Epidemiology & Infection | Cambridge Core
- DAERA (2024) Department of Agriculture, Environment and Rural Affairs Avian influenza information page
- IZSVe (2024) EURL Avian Flu Data Portal (izsvenezie.it)
- WOAH (2024) WAHIS (woah.org)

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

Any enquiries regarding this publication should be sent to us at iadm@apha.gov.uk.