Department for Environment, Food and Rural Affairs

Updated Outbreak Assessment #3

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

7 October 2024

Disease report

Since our last outbreak assessment on 15 August, there have been no new 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 9 more HPAI H5 clade 2.3.3.4b events involving 52 'found-dead' wild birds in Great Britain. The majority of these were found at coastal locations in Scotland. However, some are now being reported further south in locations such as Northumberland and Worcestershire. Twenty of the 52 cases detected were from a single mortality event involving pheasants that was classified as a wild bird case following epidemiological investigations. Given the increase in the number of wild bird cases in Great Britain and ongoing passage of west-bound Eurasian migrants (namely waterfowl) through continental areas where HPAI has also been reported, the risk of HPAI H5Nx incursion in wild birds is now considered to be medium (occurs regularly).

The risk of HPAI H5 incursion in poultry:

- with stringent biosecurity is assessed as very low (very rare, but cannot be excluded) with high uncertainty (increased from medium)
- with non-stringent or suboptimal biosecurity is assessed as low (rare, but does occur) with high uncertainty (increased from medium)

Across Europe, HPAI H5 reports in wild birds have fluctuated, from the 13 wild bird cases in week 32 (early August) to 0 cases in week 37 (early to mid-September) and 32 cases in week 39 (end of September), notably, with cases in Anatidae in Germany and Denmark. There have also been cases reported in captive birds in Europe, in Czechia, Poland, Moldova and Germany. In addition to wild bird cases and reports in captive birds, there have been outbreaks of HPAI H5 in poultry in Europe, in coastal areas of Denmark and France, with outbreaks in poultry also reported in Germany, Czechia, Poland, Hungary and Italy.

There have been no further reports in mammals in Europe.

Situation assessment

Here, an HPAI H5Nx event refers to a report of HPAI in poultry, or a location with at least one HPAI H5Nx positive wild bird. Individual HPAI H5Nx positive wild birds are referred to as cases.

Great Britain

Since our last report, published on 15 August 2024 (to 07 October 2024), there have been no infected premises (IP) confirmed with HPAI H5Nx in poultry in Great Britain. The last IP was confirmed on 14 February 2024.

Wild birds

Between 15 August 2024 and 07 October 2024, HPAI H5N5 has been reported in 52 found-dead wild birds in Great Britain across 9 locations in 6 counties. Whilst the majority of these were single wild birds, some were single birds sent in from mortality events including up to 50 birds. See table 1 for summary of counties, locations and species of wild bird cases.

Table 1 – summary of counties, locations and species of wild bird cases from 15 August 2024 to 07 October 2024

County, location	Common Gull	Fulmar	Great Black-Backed Gull	Great Skua	Herring Gull	Kestrel	Pheasant
Highland, Dunnet Bay	0	1	0	0	0	0	0
Inner Hebrides, Kilmory Bay	0	0	1	0	0	0	0
Northumberland, Coquet Island	0	5	1	0	1	0	0
Northumberland, Eve Black Coast	3	3	0	0	5	0	0
Shetland Islands, Isle of Noss	0	0	2	0	0	0	0
Shetland Islands, Stonybreck	0	0	3	1	0	0	0
Shetland Islands, Sumburgh Head	0	0	1	0	0	1	0
Western Isles, Gleann Mòr	0	0	0	4	0	0	0
Worcestershire, Franklin	0	0	0	0	0	0	20*

*The pheasants had been released for some time and were considered wild birds following epidemiological investigations, though many samples were taken and tested as part of those investigations.

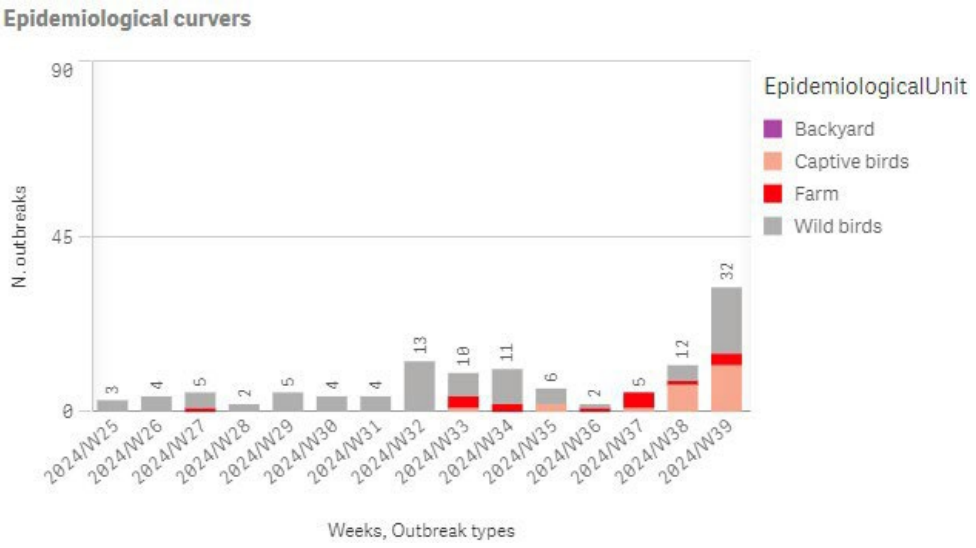
Note, there is a variable lag period between found-dead wild bird reporting, collection, sampling, and testing.

It is important to note that these surveillance figures for Great Britain 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), variable surveillance system sensitivity, as well as the size, location and accessibility 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.

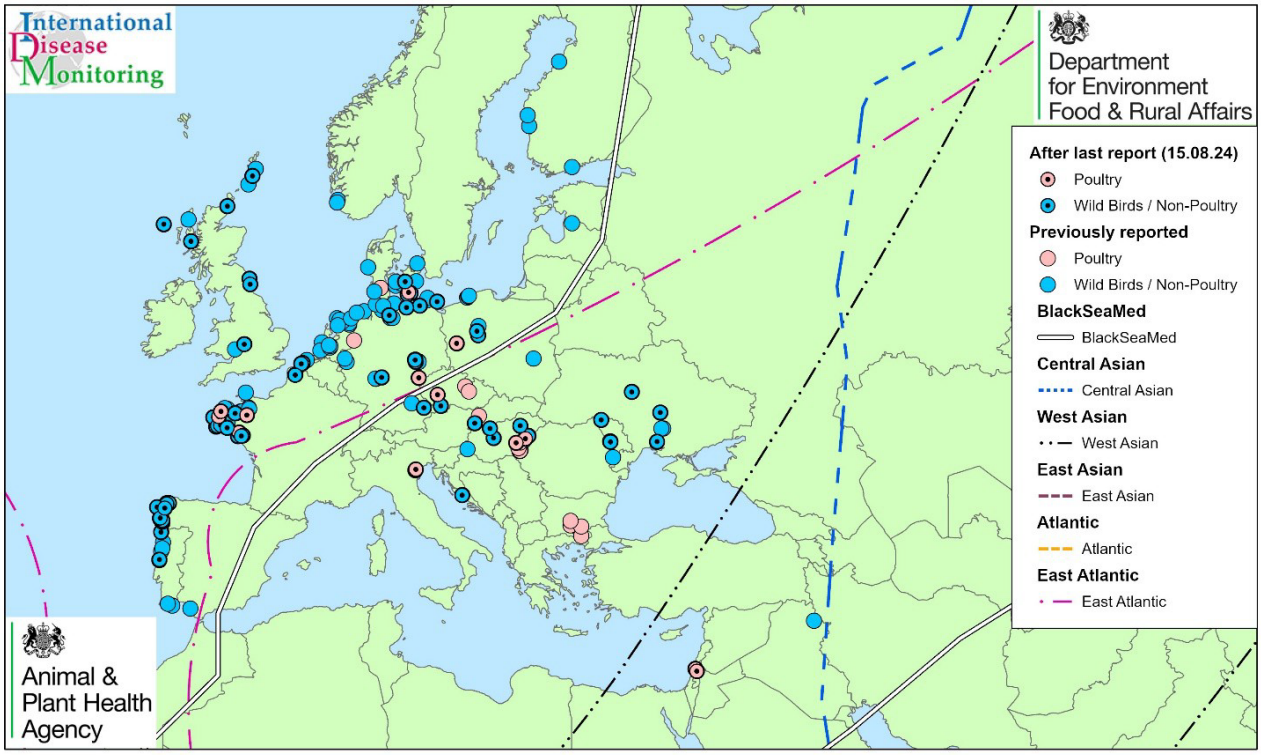
Europe

The number of HPAI positive reports in Europe peaked in mid-February 2024 at 82 reports per week (IZSVe 2024). Since that peak, the number of reports steadily decreased to just 3 to 5 per week through June and early July. This level of reporting continued through July, although numbers started to increase from 13 reports in week 32 (beginning of August) to 32 reports in week 39 (end of September) (Figure 1).

Figure 1. Weekly outbreaks of HPAI in poultry and captive birds and cases in wild birds reported across Europe between week 25 (late June 2024) and week 39 (late September 2024) (IZSVe, 2024).



Map 1. Map showing HPAI events in domestic poultry and wild birds in Europe reported by WOAH between 01 April 2024 and 07 October 2024 (WOAH, 2024).



Between 15 August 2024 and 07 October 2024, there were a total of 86 HPAI H5 events reported by WOAH in domestic poultry and non-poultry including wild birds across Europe. The majority of these occurred along or near coastal locations in Portugal, Spain, France and up to Germany. However, there are also reports at inland locations across Austria, Hungary and Ukraine (Map 1). In total, there were 58 reports on WOAH in wild birds. These were seen mainly in gulls, geese and swans. All species are set out in Table 1. Combining data sources from WOAH, Platforme, Plants Animals Food and Feed committee (PAFF) and TierSuchenInformationsSystem (TSIS), there have been at least 115 wild bird cases involving 33 species from 15 August to 07 October 2024.

Table 2: Wild bird cases of HPAI H5 in Europe reported on WOAH since 15 August 2024 (to 07 October 2024). Number of cases in parentheses.

Country	Wild bird species (WOAH data only)
Austria	Anserinae (unidentified) (1).
Belgium	European herring gull (3).
Croatia	Mute swan (1).
Denmark	Mallard (1), mute swan (2).
France	Gull (unidentified) (3), European herring gull (6).
Germany	Unidentified wildlife species (1), Anatidae (unidentified) (2), stork (unidentified) (1), swan (unidentified) (4).
Hungary	Greylag goose (3), mute swan (1).
Italy	Eurasian teal (1).
Moldova	Greylag goose (7).
Poland	Bean goose (1), mute swan (2).
Portugal	Common gull (1).
Spain	Yellow-legged gull (9).
Ukraine	Egyptian goose (1), mute swan (1), Fulvous whistling duck (1), common shelduck (1).

Since 15 August 2024, there have been 16 reports of HPAI H5 in domestic poultry farms in Europe on WOAH. HPAI H5N1 has been reported in the Czech Republic (1), Denmark (1), Germany (6), Hungary (2), Italy (1) and Poland (1). HPAI H5Nx has been reported in poultry in France (4).

Outbreaks of HPAI H5N1 in non-commercial, non-poultry* have been reported in France (1), Moldova (15), and Portugal (1). HPAI H5Nx outbreaks in non-commercial, non-poultry* have been reported in Czech Republic (1) and Ukraine (1). Those non-commercial outbreaks in France and Portugal were reported near coastal locations, while other

outbreaks occurred at inland locations. France announced a 'littoral zone' on 4 September following their third outbreak in poultry in Brittany on 2 September, with 650 chickens, ducks, capons, guinea fowl, geese and pigeons. The littoral zone consists of a 20km buffer zone from the coast with increased biosecurity including sheltering poultry, a ban on gatherings and limited authorizations for the transport and introduction into the natural environment of game birds, and the use of decoys (https://www.prefectures-regions.gouv.fr/bretagne/Actualites/Influenza-aviaire-Perimetre-de-surveillance-active-zone-Atlantique-Manche). Though they are officially still at a 'negligible' risk, the latest Anses report acknowledges that "The risk of introduction of HPAI viruses into France from migratory wild birds is already significant. Following the detection in France of a new genotype of HPAI virus H5N1 clade 2.3.4.4b, in a poultry yard in Pas-de-Calais on 18/09/2024".

This genotype was found to have no direct link with the viruses recently detected in France in Laridae and in outbreaks in Brittany and is considered an indicator of the arrival in France of birds infected by this strain of HP H5N1 virus. On 2 October, Brittany announced its fourth outbreak of HPAI H5N1 in the 2024 to 2025 season, in an open-air farm with 30,000 laying hens. Depopulation of the farm took place on 1 October, with additional disease control measures of housing poultry and kept birds within the 3km and 10km Restriction Zones implemented.

There have been no new cases of HPAI reported in mammals in Europe since our previous update on 15 August 2024.

Implications for Great Britain

HPAI H5N5 continues to be detected in wild bird populations in Great Britain, though the majority of these cases have been associated with marine ecosystems (seabirds or gull species) washed ashore on the coast, or on islands around northern Scotland and Northumberland. A recent spate of cases in recovered dead gulls and seabirds raised concerns that a new more virulent H5N5 might be circulating and producing a disease process associated with marine species and manifesting as a previously unseen pattern of wild bird cases. Sequence analysis suggest that the virus is closely related to a strain associated with sporadic but consistent cases in recent years, across northern marine ecosystems, and whilst the threat posed to poultry by this previously peripheral virus is unknown, it seems unlikely to represent a significant new threat and has not previously resulted in large outbreaks in poultry in Great Britain. However, the pattern and distribution of cases across Scotland and England warrants some caution, allied to the seasonal behaviour of some gull species which at this time of year transition between coastal breeding landscapes (summer) and relatively densely aggregated overwintering colonies (some inland), which increase their potential to spread and disseminate virus to poultry. As gulls are prolific scavengers of bird carcasses at sea, as well as being susceptible to HPAI viruses, this seasonal movement may produce risks to inland poultry premises. Whether the simultaneous case in wild birds in Worcestershire represents an example of gull

mediated movement of H5N5 inland, or some other pathway, is unknown, but may illustrate the potential risk to Galliformes inland. If the current pattern of H5N5 cases is produced by a distinct disease process associated with marine species, we suggest that this is likely to decline in the next weeks as many seabird breeding colonies have either recently dispersed or will complete their dispersal soon, with seabirds of varied species adopting a seasonally solitary life at sea, limiting the bird-to-bird contact necessary to maintain HPAI virus. Further, it is possible that the recent H5N1 epizootic has produced sufficient residual resistance to disease (immunity) that whilst infection pressure from a marine based disease process remains low, many terrestrial wild bird populations may show no evidence of disease effects (i.e. in wildfowl sharing waterbodies with gulls). To date (7 October 2024), there have been no outbreaks of HPAI H5N5 reported in poultry in Great Britain or in Europe.

Of greater concern to Great Britain is the ongoing proliferation and spread of HPAI H5N1 in poultry in Europe (Germany and France) and reports in wild birds from across the Baltic and North Sea states (e.g. Anatidae in Germany). The ongoing presence of HPAI virus in wild birds in northern Europe is now (early autumn) of interest to Great Britain as a potential source of HPAI for west-bound migratory wildfowl which will pass through this region, and staging (stopping and interacting with local birds) enroute to Great Britain.

As the flow of west-bound migrants increases through the following month or so, the density of aggregations on the continental staging sites, as well as the enormous number of birds that will move from the coastal Baltic states and northern Europe to Great Britain (and the United Kingdom), will increase substantially the potential for HPAI virus proliferation and incursion. It is anticipated that over the next month, wild bird cases may increase at short notice, with the ongoing arrival of migratory waterbirds to Great Britain.

Conclusion

Since our last assessment on 15 August 2024, there have been 52 cases of HPAI H5N5 reported in wild birds in Great Britain, predominantly on islands to the north and north-west of mainland Scotland and Northumbria, with a single case in pheasants in Worcestershire. With the increase in reports in wild birds and the start of autumn migration, the risk of HPAI H5 in wild birds in Great Britain has been raised to medium. Fluctuating numbers of wild bird cases, including reports in Anatidae, continue to be reported each week in Europe, with an increase in the last week of September. This is in addition to an increase in the number of outbreaks in poultry in Germany (including geese), France and Denmark. The continuing presence of HPAI H5N1 in northern Germany and possibly still in northern Poland may present a risk to Great Britain in the coming weeks as migratory ducks, geese and swans begin to arrive in Great Britain, depending on the degree to which HPAI H5N1 circulates in the Netherlands and Germany.

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 bird incursion,

for which the risk is medium. The risk of infection of poultry in Great Britain with stringent biosecurity is still considered to be very low though now with high uncertainty. The risk to poultry where biosecurity is non-stringent and there are biosecurity breaches is still low, though now with high 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 high uncertainties in the poultry risks reflect our uncertainty in the HPAI H5N1 process in wild birds (and if we are observing a change or an anomaly), and uncertainty in the trajectory of the H5N1 level in wild birds in Europe, notably France, Denmark and 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 haven started 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, Food and Agriculture Organisation (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).

- Anon (2024) Confirmation of avian influenza in a Breton farm | Successful poultry (reussir.fr)
- 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)

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