

Updated Outbreak Assessment #6

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

18 December 2024

Disease report

Since our [previous outbreak assessment on 6 November 2024](#), there have been ten reports of high pathogenicity avian influenza (HPAI) H5 clade 2.3.4.4b in domestic poultry. All reports have been confirmed as HPAI H5N1, the first confirmation of the subtype in commercial poultry since February 2024.

There has also been a further 18 HPAI H5 clade 2.3.4.4b events involving 30 “found-dead” wild birds in Great Britain. Of these, 15 have been confirmed as HPAI H5N1, 13 as HPAI H5N5 and 2 as HPAI H5Nx (see Map 1 for wild bird cases collected since 1 October 2024). The wild bird risk level across Great Britain has been raised to very high.

The risk level for HPAI H5 incursion in poultry:

- With stringent biosecurity is increased to medium with medium uncertainty; and
- With non-stringent or suboptimal biosecurity is increased to high with medium uncertainty.

HPAI H5 reports continue across Europe, with continued incidences of poultry outbreaks of H5N1 in Germany and France and the first HPAI outbreak in commercial poultry in the Netherlands. Wild bird reports have also increased, with 240 reports between 06 November and 18 December.

There have been no further reports of HPAI H5 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

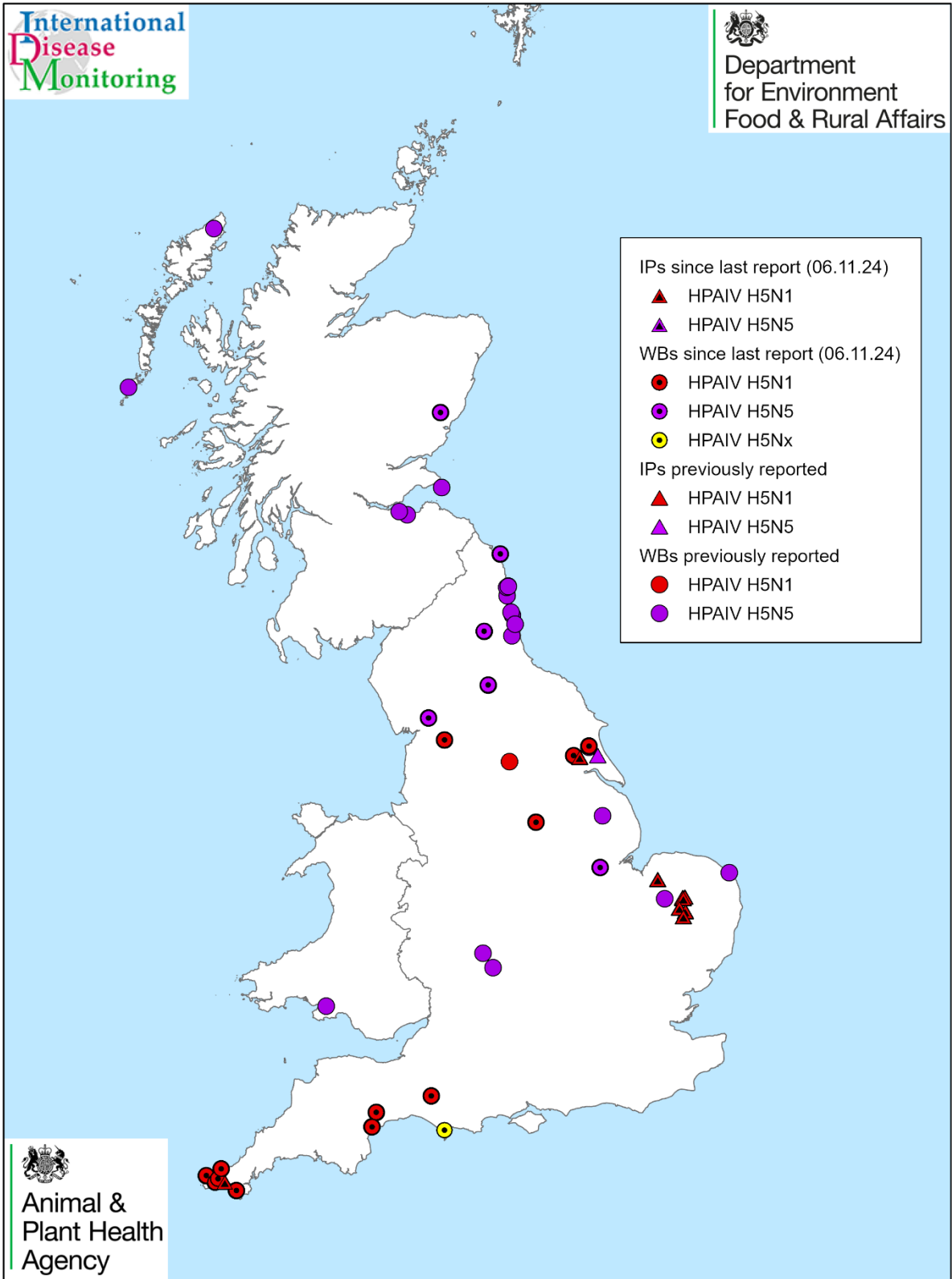
Since our last outbreak assessment on 6 November 2024, at time of writing, there have been 10 IPs confirmed with HPAI H5N1 in poultry. These are the first HPAI H5N1 confirmations since mid-February 2024. These IPs comprise of 9 commercial premises and 1 non-commercial premises. Of the commercial IPs, 7 were located in Norfolk (5 IPs with turkeys, 1 with ducks and 1 with broilers), 1 IP was located in East Riding of Yorkshire housing ducks, and 1 IP was a small holding in Cornwall with 50 chickens. The non-commercial premises was reported in Norfolk with mixed species including emus and aviary birds.

All poultry on the infected premises are humanely culled and a 3 km protection zone and 10 km surveillance zone have been put in place surrounding the premises. For updates on the latest situation in England please see [Gov.uk](https://www.gov.uk).

Wild birds

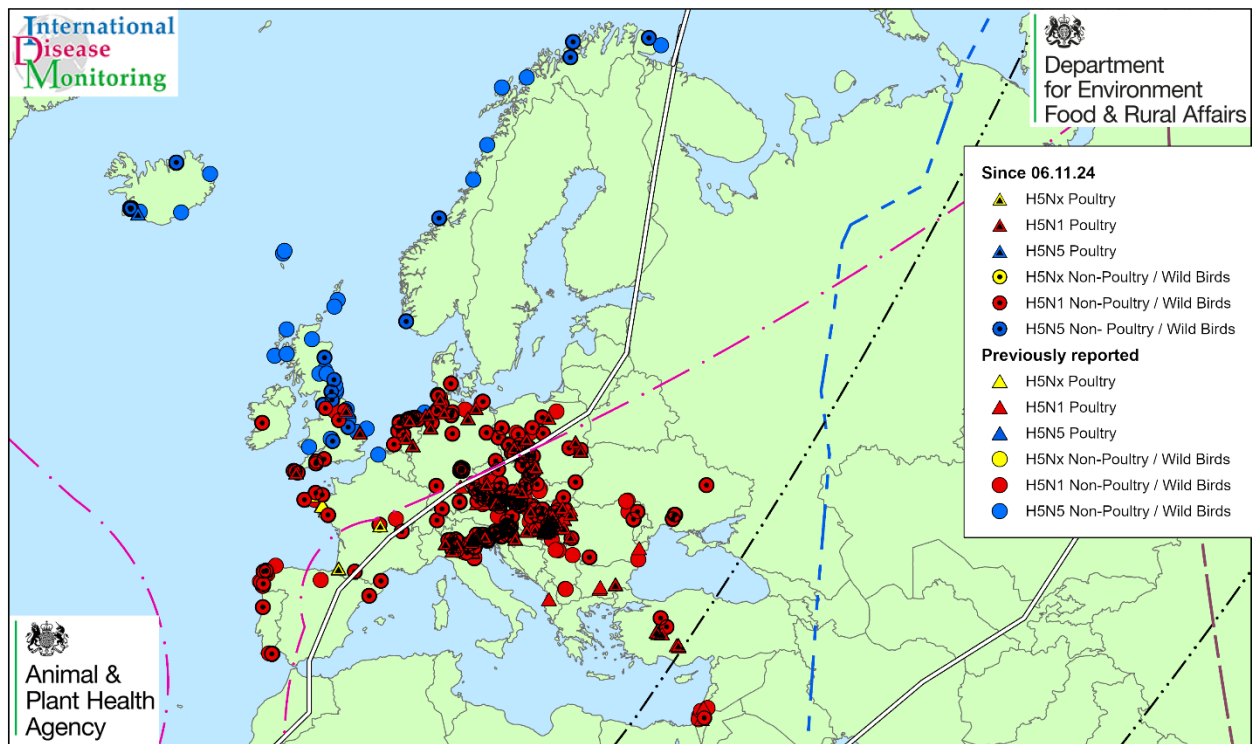
It should be noted that there is a variable lag period between the collection of found-dead wild birds to sampling, testing, and the reporting of results.

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 visitors accessing 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](#).



Map 1. Wild bird positive cases and IP for HPAI H5Nx across Great Britain from 1 October 2024 to 18 December 2024. Discussed in body of report.

Europe



Map Prepared by IDM Highly Pathogenic Avian Influenza in Poultry, Captive and Wild Birds October to December 2024

Date: 19/12/2024

Absolute Scale: 1:48,000,000

Overlay: Migratory Bird Flyways
(* WOAHA Data Only ** WOAHA Defined)

0 900 1,800 2,700 Km

Map 2. Map showing HPAI events in domestic poultry and wild birds in Europe reported by WOAHA between 1 October and 18 December 2024 (WOAHA, 2024) cases and outbreaks are observed across Europe, as described in the main body of this report.

Between 6 November and 18 December 2024, there were a total of 432 HPAI H5 events reported by WOAHA in domestic poultry, captive birds and non-poultry including wild birds across Europe. In total, there were 240 reports on WOAHA in wild birds. These were seen mainly in gulls, geese and swans, however, there has been an increase in detections in bird of prey species. Please note, there are differences in the level of detail between reports from WOAHA and the EU's Animal Disease Notification System (ADIS), which we are not able to access. This report brings together multiple sources of information, including WOAHA, ADIS summaries and media reports and publications.

France

Since our last report, there have been three cases of HPAI H5N1 affecting wild birds in Brittany. These were reported in gulls and terns. Elsewhere, in France, there has been three outbreaks of HPAI H5Nx in commercial poultry, affecting between 250 and 6,400 (unlisted) birds. There have been four other reports of HPAI H5N1 in wild birds affecting gulls, mute swans and common cranes. France has also reported one outbreak of HPAI

H5N1 in non-commercial, non-poultry premises¹. This was on a backyard flock on a farm housing 18 (unlisted) birds in Auvergne-Rhône-Alpes, southeast-central France. On 3 December, France raised their risk level for avian influenza to high from moderate. A [housing order has been implemented](#) across the country to help prevent the spread of HPAI since 9 November 2024. The last IP in France was reported to WOAHA on 14 November 2024 in Nouvelle-Aquitaine.

Belgium

Belgium has not reported any outbreaks or cases of HPAI in poultry or wild birds. However, due to outbreaks in surrounding countries, on the 23 November, the Federal Agency for the Safety of the Food Chain [announced a housing order](#) for all commercial and kept birds.

Netherlands

Since 6 November, the Netherlands have reported their first outbreak of HPAI H5Nx in commercial poultry. The outbreak was confirmed on 18 November in an organic laying hen farm in Putten, located in the coastal area of the old Zuiderzee. The farm housed 22,793 birds. A 3km protection zone and 10km surveillance zone have been established and all susceptible animals on the infected premises have been culled. According to epidemiological comments, there are 13 commercial poultry farms within the 3km protection zone, which have been examined, sampled and tested, with results to follow. On 8 December, a second farm was confirmed with HPAI H5N1 around 90km away from the initial outbreak. This outbreak was reported on a farm housing 62,925 broiler birds in Friesland. Protection and surveillance zones have been put in place and all susceptible animals have been culled. The Netherlands have also reported 15 cases of HPAI H5N1 in wild birds. These were reported across the country in species such as geese, gulls, swans, and birds of prey. According to epidemiological comments, all of the birds were found at wetland sites.

On 20 November, the Expert Group on Animal Diseases estimated the risk of avian influenza outbreaks to be moderate to high. They also implemented a housing order, which applies to all commercially kept birds and a screening obligation which applies to non-commercially kept birds of risk (such as chickens kept as a hobby). Pheasants and ratites (such as ostriches, rheas, emus and kiwis) are also considered to be birds of risk in the order, but housing is not required, just screening. The ministry stated that these measures are to prevent new infections by reducing the likelihood of contact between commercial poultry and infected wild birds.

¹ 1 According to the 2021 WOAHA definition of poultry. Terrestrial Code Online Access - WOAHA - World Organisation for Animal Health

Germany

Since our last assessment, Germany has reported 10 outbreaks of HPAI H5N1 in commercial poultry across the country. Germany has reported 32 cases of HPAI H5N1 in wild birds ranging from gulls, geese, swans, ducks and gamebirds. There has also been one report of HPAI H5N1 in non-commercial, non-poultry¹ on a backyard farm in Bayern. The risk of entry and further spread of HPAI H5 viruses in water bird populations within Germany continues to be assessed as high. The risk of HPAI H5 entry into German poultry farms and bird populations in zoological institutions through direct and indirect contact with wild birds is also assessed as high (FLI).

Denmark

Denmark has reported their first detection of H5N1 in wild birds this season. The species affected was a Barnacle goose and was reported in the east of the country.

Poland

Since our last assessment, Poland has reported a total of 9 outbreaks in commercial poultry across the country. These include the first outbreaks reported in the west of Poland for the HPAI season. All outbreaks have been reported on commercial farms apart from one in a backyard farm. Restriction zones have been implemented. No further details are currently available. Cases in wild birds continue in Poland, with 21 cases affecting 52 birds. These were seen in geese and swans. Poland has also reported 7 outbreaks of HPAI H5N1 in non-commercial, non-poultry¹ The backyard farms were located across Poland and housed between 18 and 111 (unlisted) birds.

Austria

According to WOAHA, since our last report, Austria has reported 4 outbreaks of HPAI H5N1, 51 cases in wild birds and one outbreak on a non-commercial, non-poultry¹ premises. Austria has reported an increase of outbreaks in the district of Amstetten (northeastern Austria), where they have seen several outbreaks of HPAI H5N1 in large poultry farms. Due to these outbreaks, there have been protection and surveillance zones set up. Measures inside these zones include a general obligation to keep poultry indoors (including farms with less than 50 birds), a ban on poultry gatherings, disinfection measures for vehicles and humans, and poultry and poultry products may only be moved in and out of zones under specific conditions.

Bulgaria

Since our last assessment, Bulgaria has reported 1 further outbreak of HPAI H5N1 on a farm affecting 373,847 birds. This brings the total number of outbreaks for the 2024 to 2025 season to 3.

Croatia

Croatia has reported their first commercial outbreak of HPAI H5N1 in the 2024 to 2025 season on a farm in Zagreb, in the northwest of the country. The farm housed 26 (unlisted) birds. Croatia has also reported one case of HPAI H5N1 involving five Eurasian spoonbills in a zoo in Zagreb. These birds were reported as wild.

Czech Republic

The Czech Republic has reported 3 outbreaks of HPAI H5N1 in commercial poultry, affecting 12,764 fattening turkeys, 18,280 fattening ducks and game birds and 7,209 fattening and breeding geese, respectively. The Czech Republic has also reported 4 events of HPAI H5N1 in wild birds, 1 of which involved a mass mortality of 14 mute swans, and nine non-commercial, non-poultry¹ HPAI H5N1 outbreaks in hobby flocks. These have been reported across the country.

Hungary

Hungary have continued to see an increase in HPAI outbreaks through November, with 115 outbreaks in poultry and 1 outbreak on a non-commercial, non-poultry¹ premises. The majority of these are localised in the south (a dense area for poultry production https://empres-i.apps.fao.org/general_using_GLW2020 data) and the east of the country. However, outbreaks are being reported across the country. The majority (93) of these outbreaks affected the foie-gras sector with 69 in foie-gras ducks, 16 in foie-gras goose and 8 in foie-gras turkey premises. The remainder of outbreaks were in backyard poultry holdings (6), broiler holdings (5), breeding duck holdings (3), breeding goose holdings (2), breeding hen holdings (1), breeding turkey holdings (1), pheasant holdings (1) and laying hen holdings (1). Two outbreak reports did not contain any holding information. Detections in wild birds continue in Hungary, with 12 events reported across the country. Species affected include greylag geese, mute swans, gulls, doves and falcons.

Italy

Since our last assessment, Italy has reported 15 outbreaks of HPAI H5N1 in Emilia Romagna, Lombardy, Veneto and Friuli-Venezia Giulia, all in northern Italy. Italy has also confirmed 38 cases of HPAI H5N1 in wild birds. Species affected included greylag geese, mute swans, Northern shovelers, mallards, teals and wigeons (IZVE). Other notable species include little owl and European robin. As these are non-migratory birds, they are not typically the primary species that are affected by HPAI, which can indicate localised spread.

Moldova

In November, Moldova reported 1 outbreak of HPAI H5N1 in a non-commercial, non-poultry¹ premises. The outbreak affected 27 susceptible animals and was reported on a village premises. Moldova also reported 1 case of HPAI H5N1 in wild birds, affecting 3

mute swans. The National Agency for Food Safety (ANSA) urges people to avoid illicit street trade, the purchase of animals, and products of animal origin from unauthorised spaces to help prevent the spread of HPAI. They also recommend keepers to monitor birds with the application of rigorous precautionary measure such as housing birds, prohibition of watering domestic birds from water accessible to wild birds, prevention of contact with mammals, and personnel restrictions .

Romania

Since our last assessment, Romania reported 1 outbreak of HPAI H5N1 in commercial poultry. The premises was a backyard farm housing 21 (unlisted) birds. Romania also reported 2 cases of HPAI H5N1, affecting 4 mute swans and 24 whooper swans. The mute swans were reported in a botanical garden in Dolj, southwestern Romania and the whooper swans in a natural park in western Romania.

Ukraine

Ukraine has reported 4 outbreaks of HPAI H5N1 in non-commercial, non-poultry¹. Of these, 3 were reported in Mykolayiv, southern Ukraine and 1 in Kharkiv, northeastern Ukraine. The premises housed between 41 and 1,068 (unlisted) birds.

Slovenia

Slovenia has reported 34 cases of HPAI H5N1 over late October and throughout November. The majority of these reports were in mute swans.

Slovakia

Since our last assessment, Slovakia has reported 1 outbreak of HPAI H5N1 in non-commercial, non-poultry¹. The report was on a backyard farm where all 29 birds died suddenly.

Switzerland

Switzerland has reported 2 cases of HPAI H5N1 in wild birds. Affected species included mute swan and yellow-legged gull.

Ireland

Since our last assessment, Ireland has reported 1 case of HPAI H5N1 in wild birds in Galway. The affected species was a Eurasian buzzard.

Spain

Spain has reported 6 cases of HPAI H5N1 in wild birds. Of these, 5 were reported in Galicia, northwestern Spain and one in Cataluña, northeastern Spain. Primarily yellow-legged gulls were affected (five birds in total) however, there was also 1 northern gannet affected too.

Portugal

Portugal has reported 2 cases of HPAI H5N1 in wild birds. One report was in São Jacinto, northwestern Portugal. São Jacinto is located close to the Aveiro lagoon, which is used as a wintering ground for many migratory species. The other report was in Olhão, southern Portugal, also nearby Ria Formosa Natural Park, a critical wetland and migratory stopover for wild birds. The Directorate-General for Food and Veterinary Medicine (DGAV) have warned of the “high risk” of the spread of avian influenza.

Iceland

Iceland has reported 1 outbreak of HPAI H5N5 in commercial poultry, their first outbreak in commercial poultry according to WOA. Iceland has also reported 6 cases of HPAI H5N5, affecting 9 wild birds including gulls and crows. Of these reports, four were in Reykjavik, one in Garðabær, which is close to Reykjavik and one in Húsavík, northern Iceland. Iceland is on key migratory routes however, the bulk of migratory species would have already arrived in Great Britain by late November. HPAI H5N1 has not been detected in poultry in Iceland since April 2022.

Norway

Since our last assessment, Norway has reported 1 outbreak of HPAI H5N5 in non-commercial, non-poultry¹, on a backyard farm housing 91 (unlisted) birds. Norway has also reported 4 cases of HPAI H5N5 in gulls and hooded crows. One event reported 170 dead gulls (herring gulls and black backed gulls), which, [according to media reports](#), were found washed ashore in Kvænangen, northern Norway.

There have been no new cases of HPAI reported in mammals in Europe since our previous update on 6 November 2024.

Implications for Great Britain

New cases of HPAI H5 in wild birds and outbreaks in poultry continue to be reported in northern Europe and Great Britain since our last assessment with the first wild bird case reported in the Republic of Ireland.

Great Britain is now experiencing the impact of incursions of HPAI H5 from three areas. The first is HPAI H5N5 from the north-west. While HPAI H5N5 has continued to be reported in wild birds in Iceland and Norway, all migratory birds will have arrived in Great Britain some weeks ago from these northerly latitudes. Thus, while no further entry of HPAI H5N5 is expected this season it is still circulating in wild birds in Great Britain. It is interesting to note that poultry outbreaks of H5N5 have been reported recently in Norway and Iceland emphasising the fact that H5N5 does pose an ongoing threat to poultry. From a genetic perspective, all of the H5N5 detections have been of the same genotype I.

The detection of H5N1 in poultry was the first case in Great Britain since February 2024. The detection of H5N1 in gulls in Cornwall preceded a detection in a back yard flock, and both the wild birds and the poultry case were the BB genotype of H5N1 which has been circulating in Brittany and along the Channel coast over the summer. Remarkably no incursions were detected along the south coast of England over the summer with the first cases in gulls in south-west Cornwall this autumn followed by an outbreak there in poultry. This strain appeared to be spreading north-east from Cornwall although no further outbreaks have been reported to date.

Further cases of H5N1 have been detected in several poultry premises in Norfolk (AIV 2024 04-06) and East Ridings of Yorkshire (AIV 2024 07) and all of these viruses have been defined as being of the DI genotype (EA-2023-DI) and further as a DI.2 subcluster. The DI genotype has extensively circulated mainly in eastern Europe during the 2023 to 2024 epidemic wave. Currently, genotype DI is one of the most frequently detected genotypes in Anseriformes and domestic birds in Europe. Of note, the viruses belonging to this genotype form two separate clusters. A “northern cluster”, DI.1, which includes sequence collected in Poland, Czech Republic, Germany, and Austria and a “southern cluster”, DI.2, including sequences from Italy, Austria, and France. The recent report cases have belonged to the DI.2 ‘southern’ cluster. We have had one instance of the DI.1 in a greylag goose near Leeds back in October. The detection of both DI.1 and DI.2 demonstrates the ongoing westward spread of the DI genotype of HPAI H5N1 from continental Europe where the Netherlands and Germany have recently reported increases in wild bird cases and poultry outbreaks. As above, the genetics indicate that the DI genotype has entered England at least twice this autumn (the second and third routes of incursion), with ongoing outbreaks now in East Anglia. Most migratory ducks, geese and swans will now have arrived in Great Britain through this route with numbers of wintering birds peaking this month (December) although a few more birds may arrive in January, which may be affected by the weather. Furthermore, some may have only recently arrived and may yet develop infection along the lines of recent observations in the Netherlands and northern Germany. The ongoing detections of poultry outbreaks of H5N1 in East Anglia is also consistent with its presence in wild birds.

Taking into account the ongoing spread of HPAI H5 through these 3 routes across much of Great Britain together with the recent increase in wild bird cases in northern Europe, the wild bird risk has now been increased from high to very high. This naturally increases the risks to poultry as shown by the increase in poultry outbreaks. The risk to poultry with suboptimal biosecurity is now considered to be high (with medium uncertainty) and risk to poultry with stringent biosecurity is now considered to be medium (with medium uncertainty).

Conclusion

Following our [previous outbreak assessment on 6 November 2024](#), there have been nine commercial outbreaks and one non-commercial outbreak of H5N1. This brings the total

number of IPs in Great Britain to 11 and more importantly, it is the first confirmation of H5N1 in poultry in Great Britain this season. This, along with the detection of HPAI H5N1 in wild birds nearby and the continued detection of HPAI H5N5 in wild birds further north, suggests that several strains and genotypes of HPAI are circulating in Great Britain. There have been a further 30 reports of HPAI H5 in wild birds (15 HPAI H5N1, 13 HPAI H5N5 and 2 H5Nx) including pheasants, gulls and birds of prey. It is considered that the wild bird risk in Great Britain now very high, with further cases of HPAI H5 expected to be detected in the coming weeks.

Given the wild bird risk level increasing together with the ten additional HPAI H5 IPs in Great Britain, the risk to poultry with sub-optimal biosecurity has been increased to high (with medium uncertainty). The risk of infection of poultry in Great Britain with stringent biosecurity is now increased to medium (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](#).

[Additional biosecurity measures came into force on 16 December 2024 in four counties in England](#). Following a number of findings of highly pathogenic avian influenza in wild birds and detections in poultry in the East Riding of Yorkshire and Norfolk, a regional avian influenza prevention zone (AIPZ) has been declared in the East Riding of Yorkshire, City of Kingston upon Hull, Norfolk and Suffolk to mitigate the risk of further outbreaks of disease occurring. This means that it is a legal requirement for all bird keepers within the zone to follow strict biosecurity measures to help protect their flocks, of whatever type or size. This does not include a requirement to house birds, unless you are also in a 3km protection zone. However, this is being kept under constant review.

See the [interactive map](#) for details and check the [declarations](#) for details of the restrictions.

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 with migratory ducks, geese and swans now present at peak numbers in Great Britain and forming wintering aggregates with resident waterbirds.

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 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 WOA, 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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