

Animal and Plant Health Agency

Updated Outbreak Assessment #5

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

06 December 2021

Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

Since our last outbreak assessment on 29 November 2021, there continue to be reports of highly pathogenic avian influenza (HPAI) H5 both in Europe and in Great Britain (GB).

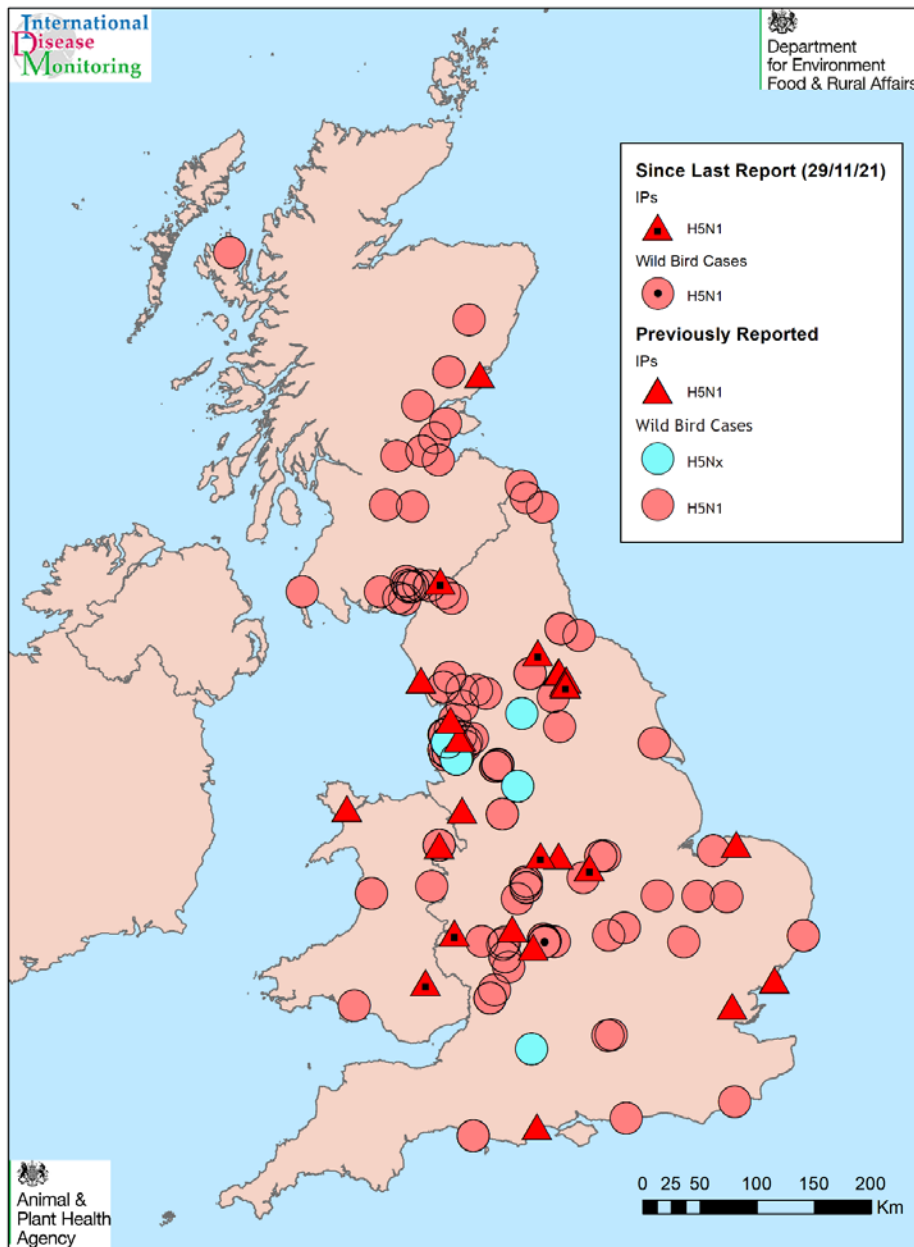
There have been a further nine confirmed report cases in the UK of HPAI H5N1 in domestic poultry or captive birds since our last assessment, with four in backyard (or captive bird) premises, and five in commercial premises.

According to the OIE, there continue to be high numbers of reports of HPAI H5 in Northern Europe over the past week. Since 29 November, Germany, Czech Republic, and Poland have reported further outbreaks of HPAI H5N1 in domestic poultry. To 06 December, the Republic of Ireland (RoI) has confirmed HPAI H5N1 at a third premises near to the border of Amargh and Monaghan. RoI has also reported 50 cases of HPAI H5N1 in wild birds to date, with a housing order brought into effect on 22 November (DAERA, 2021).

In southern Europe, further outbreaks of HPAI H5/H5N1 have been reported on finishing turkey and broiler units and layer farms in northern Italy. Bulgaria have also reported HPAI H5 in five farms, including two large domestic poultry premises.

Wild bird HPAI H5N1 cases continue to be reported in north-west Germany, the coastal regions of the Netherlands, Luxembourg, Denmark, and Sweden.

Map 1: HPAI H5 outbreaks (from OIE) in poultry¹, captive, and wild birds across Great Britain, October 2021 to 06 December 2021.



Date: 06/12/2021
Map prepared by IDM

GB HPAI IPs and Wild Bird Cases
October - December 2021

¹ According to the 2021 OIE definition of poultry: [Terrestrial Code Online Access - OIE - World Organisation for Animal Health](#)

Situation Assessment

United Kingdom

The first detection of HPAI H5N1 virus this season was in rescued swans and captive poultry at a swan sanctuary in Worcester (England) on 15 October. Since then, there have been 31 further confirmed cases of HPAIV H5N1 (Map 1), (Table 1).

Since our last assessment on 29 November, there has been four new outbreaks of HPAI H5N1 in non-commercial, non-poultry¹ premises in GB, including two backyard farms (Wales and England), a mixed captive bird premises (Wales) and a wildfowl park (England).

There have also been five new reports of HPAI H5N1 in poultry, two in North Yorkshire, one in Dumfries, one in Herefordshire, and one in Leicestershire.

Table 1: Poultry¹ and captive bird outbreaks for high pathogenicity avian influenza (HPAI) H5N1 so far in Great Britain since 1 October 2021, as of 06 December

Date HPAI H5N1 confirmed	Location, County	Description
27 October	Near Wychavon, Worcester	Rescued wild swans (adults and young), rescued and captive geese, ducks, and chickens.
2 November	Near Chirk, Cheshire	Backyard chickens
4 November	Near Arbroath, Angus	Mixed backyard flock of 16 chickens, 20 guinea fowl and 12 ducks.
8 November	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken
11 November	Near Kirby Cross, Essex	Small flock of mixed geese, chickens, guinea fowl
12 November	Near Preston, Lancashire	Commercial turkey premises

Date HPAI H5N1 confirmed	Location, County	Description
13 November	Near Northallerton, North Yorkshire	Commercial free range laying hens
16 November	Near Preston, Lancashire	Backyard chickens
17 November	Near Willington, Derbyshire	Commercial turkey premises
19 November	Near Pokesdown, Bournemouth	Backyard ducks
19 November	Near Silecroft, Cumbria	Commercial free range laying hens
21 November	Near Mouldsworth, Chester	Commercial turkey premises
21 November	Near North Fambridge, Essex	Small flock of mixed geese, chickens, ducks
21 November	Near Holkham, Norfolk	Small flock of mixed chickens and turkeys
21 November	Near Thirsk, Yorkshire	Commercial turkey premises
25 November	Near Thirsk, Yorkshire	Commercial free range laying hens
25 November	Near Thirsk, Yorkshire	Commercial turkey premises
26 November	Near Loughborough, Leicestershire	Commercial free range laying hens
26 November	Near Thirsk, Yorkshire	Commercial turkey premises
27 November	Near Blackpool, Lancashire	Mixed ornamental birds
26 November	Near Anglesey, Wales	Backyard hobby farm
26 November	Near Clitheroe, Lancashire	Mixed captive birds

Date HPAI H5N1 confirmed	Location, County	Description
28 November	Near Thirsk, Yorkshire	Backyard hobby farm
29 November	Near Thirsk, Yorkshire	Commercial turkey premises
01 December	Leicestershire	Commercial free range laying hens
02 December	Near Thirsk, Yorkshire	Commercial free range laying hens
02 December	Staffordshire	Backyard hobby farm
02 December	Herefordshire	Commercial broiler farm
04 December	Dumfries	Commercial laying hens
04 December	Powys	Mixed captive birds
04 December	Yorkshire	Backyard turkeys
04 December	Gloucestershire	Wildfowl Park
04 December	Yorkshire	Commercial laying hens

Since our last outbreak assessment on 29 November, and to 06 December, HPAI H5 has been detected in a further 8 wild bird locations in GB, bringing the total to 68 separate wild bird positive locations, involving 22 separate bird species in 45 separate counties (Table 2). There have been five cases for which the H5 genotype has been identified but the N type has not. These cases are currently undergoing further processing to identify the Neuraminidase genotype strain (H5Nx in Map 1).

For further details, please see the report (updated weekly) on findings of HPAI in wild birds in GB at: <https://www.gov.uk/government/publications/avian-influenza-in-wild-birds> and NI at: <https://www.daera-ni.gov.uk/articles/avian-influenza-ai#toc-11>

Table 2: Wild bird species in Great Britain that have tested positive for HPAI H5 as of 06 December 2021

Region and species	Total number of birds testing positive
England	195
Canada Goose	23
Greylag goose	8
Mute Swan	106
Peregrine Falcon	2
Pink Footed goose	10
Swan	8
Unspecified Goose	4
Whooper Swan	14
Common Buzzard	3
Pheasant	5
Curlew	2
Gull	1
Great-crested Grebe	1
Barnacle Goose	4
Mallard Duck	2
Widgeon	1
Black headed gull	1
Wales	9
Canada Goose	2
Herring Gull	1
Mute Swan	1

Region and species	Total number of birds testing positive
Pheasant	5
Scotland	31
Greylag goose	3
Kestrel	1
Mute Swan	4
Pink Footed goose	1
Swan	1
Unspecified Goose	4
Whooper Swan	4
Common Buzzard	1
Gull	1
Barnacle Goose	8
Unspecified Duck	1
Sea Eagle	1
Unidentified Swan	1
Grand Total	235

Europe

The total numbers of HPAI H5 outbreaks in poultry and wild bird cases in Europe are presented in Table 3. This is a rapidly changing picture, with new disease reports being made to the World Organisation for Animal Health (OIE) on a daily basis. Numbers reported are from OIE's WAHIS platform except for Germany where IZSVE totals are used due to more frequent reporting.

Table 3 Current outbreaks (to 06 December 2021) of HPAI H5 in domestic poultry and cases in wild birds since 1 October 2021 in Europe, excluding the UK, according to OIE reporting.

Country	H5 wild birds	H5 poultry	H5N1 wild birds	H5N1 poultry	H5N8 wild birds	H5N8 poultry	H5N2 wild birds	Total
Austria			1					1
Belgium	2		9					11
Bosnia and Herzegovina			2					2
Bulgaria		5						5
Croatia				1				1
Czech Republic			8	1				9
Denmark		1	22					23
Estonia			5		2	1		8
Finland			9		2			11
France			4					4
Germany			280	21				301
Hungary			2	20				22
Ireland			38	3				41

Country	H5 wild birds	H5 poultry	H5N1 wild birds	H5N1 poultry	H5N8 wild birds	H5N8 poultry	H5N2 wild birds	Total
Italy			7	119				126
Netherlands			54	8	2			64
Norway			2	2				4
Poland			2	21				23
Romania			2					2
Russia	30	7	10	1				48
Serbia and Montenegro			3		3		1	7
Slovakia			12		1			13
Sweden			10		1			11
Switzerland			1					1
Ukraine	1							1

Northern Europe (OIE data)

In the seven days since our last outbreak assessment on 29 November, HPAI H5 has been recorded in 13 European countries. The total number of EU countries affected this season according to IZSve (2021a) is now 23.

Belgium has reported four further wild bird events, a white-fronted goose (*Anser albifrons*), one common shelduck (*Tadorna tadorna*), an Egyptian goose (*Alopochen aegyptiaca*) and one unidentified goose, bringing the total to nine cases of H5N1 and two H5Nx in wild birds since 10 November.

The **Czech Republic** has reported one further poultry outbreak, in breeding geese, at a site with approximately 600 birds. Samples were taken as part of surveillance and the geese displayed no clinical signs. Two backyard holdings were also confirmed positive for HPAI H5N1 with approximately 100 birds per site. Eight wild herons were also found dead across two locations in the Hermanický rybník region.

Estonia has reported three further wild bird cases, spread across the country but all in coastal regions. The cases were in one mute swan (*Cygnus olor*), a great black-backed gull (*Larus marinus*) and a greater white-fronted goose (*Anser albifrons*).

France has reported two further outbreaks of HPAIV H5N1. The first was in a wild greylag goose (*Anser anser*) picked up by passive surveillance in a wetland area in the Birieux region, an area considered particularly high risk for avian influenza viruses. The second outbreak was in geese kept on a pond on private premises in the Languidic region.

Germany has reported HPAI H5N1 in poultry on three further farms since our last report, two commercial and one backyard premises. A further six wild bird events have been officially reported by OIE at this time (a total of 41 since 01 October), however significantly higher numbers of wild bird events have been reported by the IZSVe platform (IZSVe, 2021b), with 280 to date.

The **Republic of Ireland** has reported one further domestic outbreak close to the border between Monaghan and Amargh. The 10km zone extends into Northern Ireland. According to DAERA there have now been a total of 50 wild bird cases of HPAI H5N1 across eight locations in the Republic of Ireland. A housing order has been in place since 22 November.

Luxembourg has reported two further wild bird cases, one greylag goose (*Anser anser*) and one Canada goose (*Branta canadensis*).

The **Netherlands** has reported twenty further HPAI H5N1 cases. Nineteen of these affecting 32 wild birds across 19 locations since 29 November: one mallard (*Anas platyrhynchos*), ten greylag geese (*Anser anser*), one great blue heron (*Ardea herodias*), one Canada goose (*Branta canadensis*), one grey-headed gull (*Chroicocephalus cirrocephalus*), one unidentified covid (*Corvidae spp*), and 18 mute swans (*Cygnus olor*). One further report of HPAIV H5N1 in captive pheasants has also been reported, found dead in a wetland area.

Poland has reported three further cases of HPAI H5N1 since our report on 29 November, two large poultry farms with ducks (5,500 birds) and turkeys (24,000 birds) were affected.

Slovakia has reported HPAI H5N1 in a further 4 mute swans (*Cygnus olor*), found in two locations, in the Ružiná region.

Sweden has reported HPAI H5N1 in a hobby flock located in the Skivarp region. No further wild bird cases have been reported.

Southern Europe

Bulgaria has reported five outbreaks of HPAI H5 since 29 November. Two premises had under 100 birds, two approximately 700 birds and the largest housed approximately 32,000 birds. No further details are available on production type.

Since our last outbreak assessment on 29 November, **Italy** has reported 37 further outbreaks in domestic poultry, all clustered around the previous Verona reports in northern Italy. HPAI H5N1 was also detected in four wild birds across three locations including near to Rome (see Map 2) with three greylag geese (*Anser anser*) and a common kestrel (*Falco tinnunculus*).

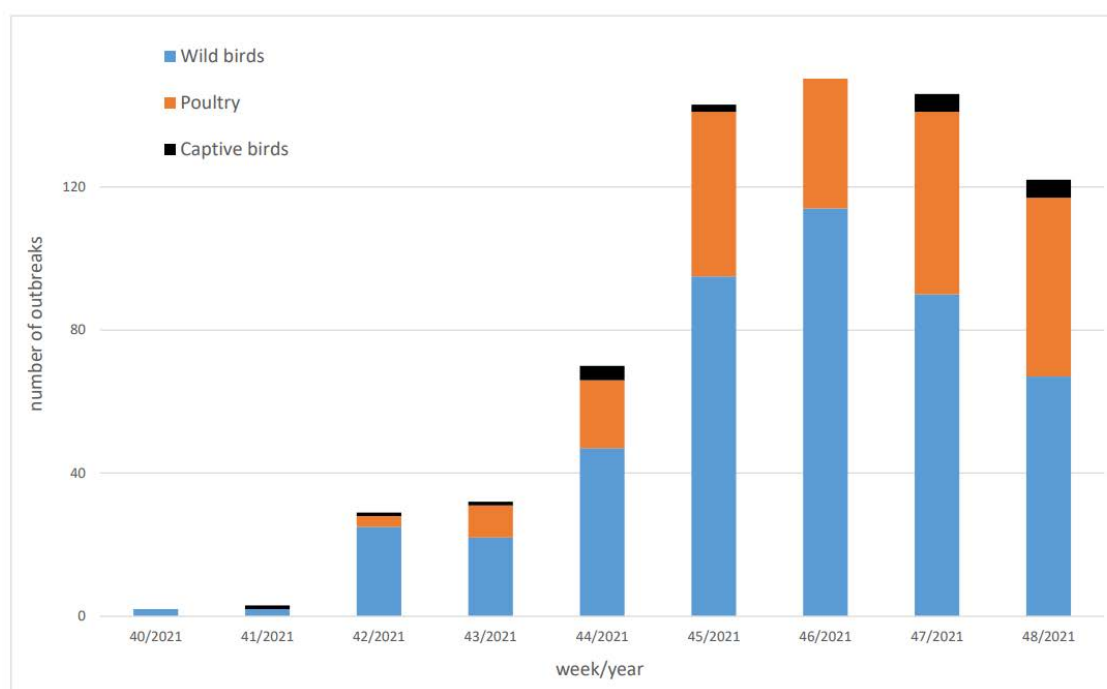


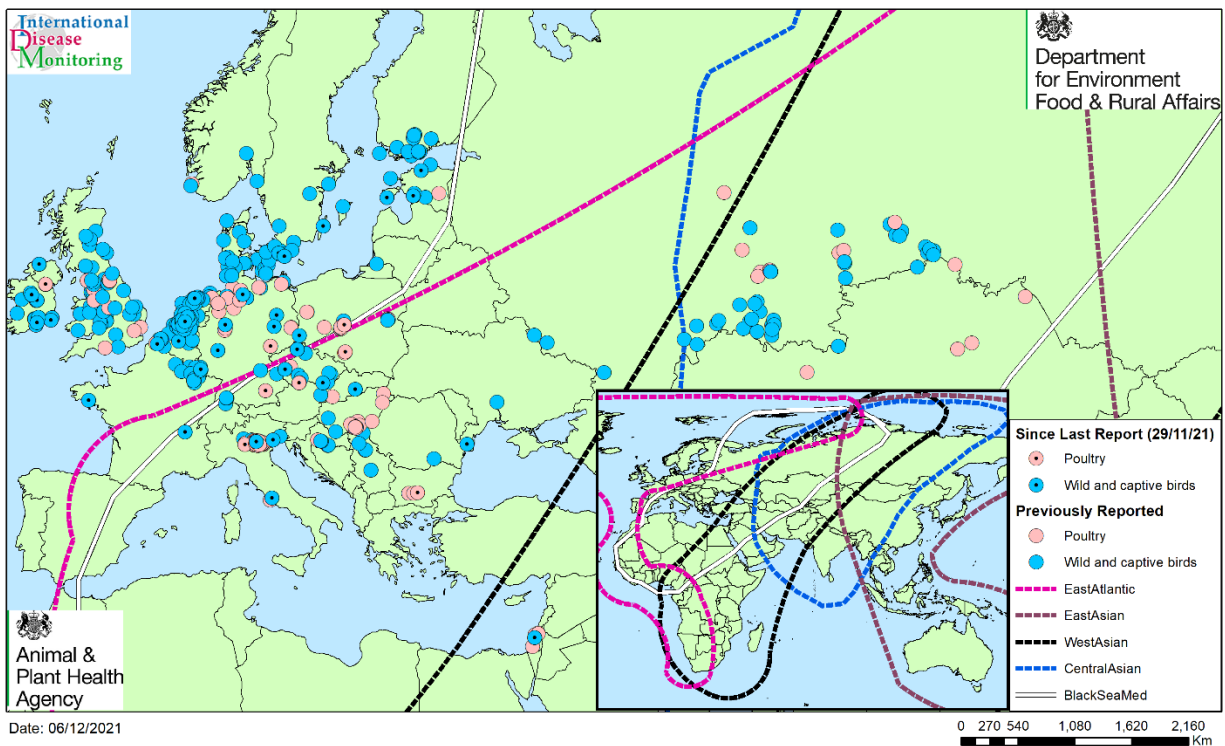
Figure 1- Number of HPAI events in Europe each week from October 2021 to 06 December 2021 (IZSVe, 2021a)

The number of poultry, wild bird, and captive bird reports for each week according to the EU Reference Laboratory (IZSVe 2021a) is shown in Figure 1. The number of wild bird

cases reported in Europe appears to have peaked. A similar trend was observed last season; with wild bird cases peaking in week 47 at 160 per week, before declining to roughly 50 cases per week by week 51. A second peak was then observed in week 9 (into the following calendar year) with about 200 cases (IZSVe 2021c). The number of poultry outbreaks in Europe continue to rise, typically lagging the wild bird cases.

The maps below (Map 2) show the distribution of HPAI H5 events in poultry, captive birds and wild birds in Europe reported from September to 06 December to OIE. Those events reported since our last outbreak assessment on 29 November are distinguished with dots.

Map 2: HPAI outbreaks (from OIE) in poultry, captive, and wild birds across Europe, September 2021 to 06 December 2021.



**Highly pathogenic avian influenza in Poultry, Captive and Wild birds
September - December 2021**

Overlay: migratory bird flyways

OIE Data Only

Implications for the UK

Given the frequency of wild bird cases of HPAI H5N1 across north-west Europe, including GB, the domestic poultry and captive bird populations remain under an

increased infection pressure particularly where biosecurity is sub-optimal. Even where biosecurity is stringent, the high wild bird infection pressure will highlight any weaknesses that exist. More poultry outbreaks are following the wild bird cases in Poland, Germany, and the Netherlands. While most of the wild water birds will now be in GB, there is generally a lag in poultry outbreaks before peaking.

Conclusion

New cases of HPAI H5 in wild birds and outbreaks in poultry continue to be reported in northern Europe including in the UK and the Republic of Ireland since our last assessment.

Total numbers of migrating wild water birds (ducks, geese, and some swan species) may now be peaking GB and the majority of wintering water birds have now arrived in the UK. Multiple confirmed cases of HPAI H5 in wild birds (235 to 06 December 2021) across a range of species, including resident sedentary species such as raptors and mute swan indicating that they had been exposed to infection in GB. Furthermore, potential bridging species such as gulls and raptors have tested positive. More wild bird HPAI H5 infections are expected including in sedentary GB species and potential bridging species. HPAI H5 will continue to circulate in both susceptible migrant water birds and sedentary bird species within the UK over the next few months, with a greater number of events likely to be observed around water bird wintering sites. The risk level of HPAI H5 in wild birds is therefore maintained at **VERY HIGH** across GB.

The risk of exposure of poultry across the whole GB is maintained at **MEDIUM** (with low uncertainty) where good biosecurity is applied, and at **HIGH** (with low uncertainty) where biosecurity is suboptimal. This assessment takes into consideration the Avian Influenza Protection Zone (AIPZ) and assumes that bird keepers are taking the additional biosecurity measures required.

On 24 November, the Chief Veterinary Officers for England, Scotland, Wales, and Northern Ireland announced housing measures, which came into force on the 29 November 2021. It is now a legal requirement for all bird keepers to keep their birds indoors, to exclude contact with wild birds, and to follow strict biosecurity measures in order to limit the spread of and eradicate the disease. These housing measures build on the strengthened biosecurity requirements that were introduced as part of the AIPZ in GB on 3 November 2021, and in Northern Ireland on 17 November 2021.

We are continuing to closely monitor the situation.

It is particularly important that stringent adherence to good biosecurity practices is now not only maintained but is constantly being reviewed for further improvement. Strict

attention should now be made to ensure compliance with reviewed contingency plans, with regular maintenance checks and repairs being carried out promptly on roofs and fabric of buildings – especially following damage caused by the recent Storms. Reinforcement of good bio awareness behaviours and practices should be constantly instilled into personnel to prevent disease being introduced to poultry and captive birds. 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, 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; <http://gov.scot/avianinfluenza> for Scotland and; <https://www.daera-ni.gov.uk/articles/avian-influenza-ai#AIPZ> for NI.

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.

In England, any findings **of three or more** dead wild birds of any species, found at the same location 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.

In Scotland and Wales, findings **of any number** of dead wild birds of any species, found at the same location 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).*

DAERA (2021) [Department of Agriculture, Environment and Rural Affairs Avian influenza information page](#)

FLI (2021) [FLI Animal disease survey report \(TSIS\)](#)

IZSVe (2021a) [IZSVe report - Number of highly pathogenic avian influenza positive events notified by country and poultry category \(pdf\)](#)

IZSVe (2021b) [IZSVe report - Highly Pathogenic Avian Influenza \(HPAI\) in Europe: update, Wild bird species affected \(pdf\)](#)

IZSVe (2021c) [IZSVe report - Number of highly pathogenic avian influenza positive events notified by country and poultry category \(2020, pdf\)](#)



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