

Updated Outbreak Assessment #20

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

28 March 2022

Ref: VITT/1200 HPAI in the UK and Europe

Disease report

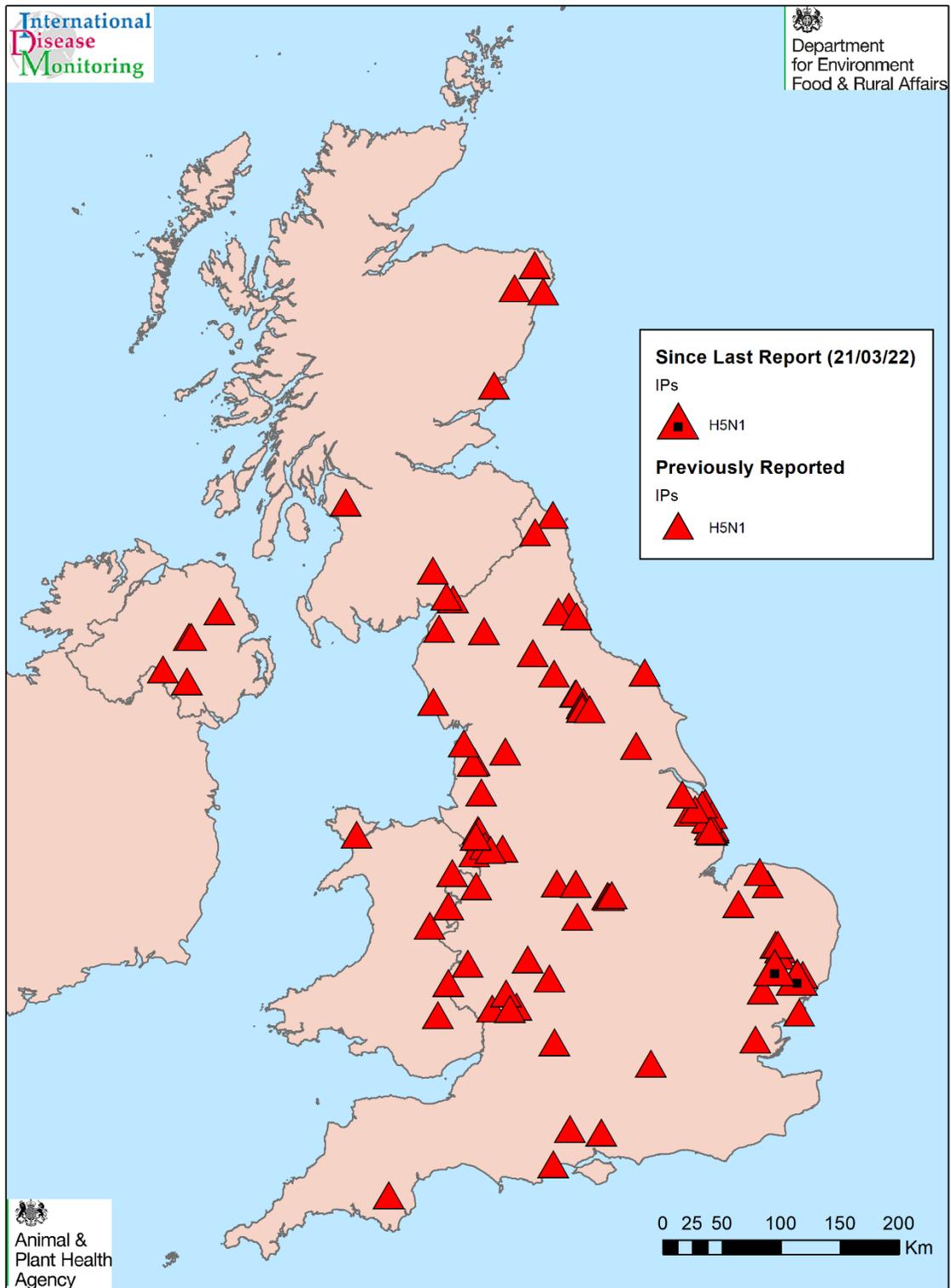
Since our last outbreak assessment on 21 March 2022, there have continued to be reports of high pathogenicity avian influenza (HPAI) H5 both in Europe and in the United Kingdom (UK). This includes two further confirmed infected premises (IPs) with HPAI H5N1 in domestic poultry in the UK. In Europe HPAI continues to be reported in poultry and wild birds.

Two new IPs with HPAI H5N1 in domestic poultry have been confirmed in England, Great Britain since our last assessment. There have been no further HPAI H5N1 IPs confirmed in Northern Ireland since our last assessment (DAERA, 2022).

The OIE has also reported new IPs with HPAI H5N1 in domestic poultry in France, Germany, Romania and Spain since our last report. Infection of poultry with HPAI H5N8 has been reported for the first time in Albania, in this 2021 to 2022 HPAI season.

Non-poultry IPs and wild bird cases of HPAI H5 continue to be reported in France, the Netherlands, the Republic of Ireland, Romania, Russia, Spain and Sweden.

Map 1: HPAI H5 outbreaks in domestic poultry¹ and captive birds across the United Kingdom, October 2021 to 28 March 2022.



Date: 29/03/2022
Map prepared by IDM

UK HPAI IPs
October 2021 - March 2022

Situation assessment

United Kingdom

The first detection of HPAI H5N1 virus this 2021 to 2022 HPAI season was in rescued wild swans and captive poultry at a swan sanctuary in Worcester (England) on 15 October 2021.

Since then, there have been 102 further confirmed IPs with HPAI H5N1 in poultry and captive birds across Great Britain (Map 1), (Table 1). Of these 102 IPs, 88 have occurred in England, nine have occurred in Scotland, and five in Wales.

In the week since our last assessment on 21 March 2022, HPAI H5N1 has been confirmed at a commercial laying duck premises, and a backyard premises with chickens, ducks and guinea fowl, both of which are in Suffolk, England.

There have been no new premises with HPAI H5N1 confirmed in Northern Ireland since 21 March 2022. The total number of poultry IPs in Northern Ireland remains at six: across the counties of Tyrone, Antrim, Armagh and Fermanagh (DAERA, 2022).

Table 1: Poultry¹ and captive bird premises with High Pathogenicity Avian Influenza (HPAI) H5N1 in Great Britain during the epizootic since 1 October 2021, as of 28 March 2022

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
1	27 October 2021	Near Wychavon, Worcester	Rescued wild swans (adults and young), rescued and captive geese, ducks, and chickens.	27 November 2021
2	2 November 2021	Near Chirk, Cheshire	Backyard chickens	3 December 2021
3	4 November 2021	Near Arbroath, Angus	Mixed backyard flock of 16 chickens, 20 guinea fowl and 12 ducks.	5 December 2021

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
4	8 November 2021	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken	8 December 2021
5	11 November 2021	Near Kirby Cross, Essex	Small flock of mixed geese, chickens, guinea fowl	17 December 2021
6	12 November 2021	Near Preston, Lancashire	Commercial turkey premises	29 December 2021
7	13 November 2021	Near Northallerton, North Yorkshire	Commercial free range laying hens	5 March 2022
8	16 November 2021	Near Preston, Lancashire	Backyard chickens	29 December 2021
9	17 November 2021	Near Willington, Derbyshire	Commercial turkey premises	14 February 2022
10	19 November 2021	Near Pokesdown, Bournemouth	Backyard ducks	20 December 2021
11	19 November 2021	Near Silecroft, Cumbria	Commercial free range laying hens	4 January 2022
12	21 November 2021	Near Mouldsworth, Chester	Commercial turkey premises	8 March 2022
13	21 November 2021	Near North Fambridge, Essex	Small flock of mixed geese, chickens, ducks	22 December 2021

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
14	21 November 2021	Near Holkham, Norfolk	Small flock of mixed chickens and turkeys	24 December 2021
15	21 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	5 March 2022
16	25 November 2021	Near Thirsk, Yorkshire	Commercial free range laying hens	5 March 2022
17	25 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	5 March 2022
18	26 November 2021	Near Loughborough, Leicestershire	Commercial free range laying hens	4 February 2022
19	26 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	5 March 2022
20	27 November 2021	Near Blackpool, Lancashire	Mixed ornamental birds	20 February 2022
21	26 November 2021	Near Anglesey, Wales	Backyard hobby farm	27 December 2021
22	26 November 2021	Near Clitheroe, Lancashire	Mixed captive birds	9 February 2022
23	28 November 2021	Near Thirsk, Yorkshire	Backyard hobby farm	5 March 2022
24	29 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	5 March 2022

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
25	01 December 2021	Leicestershire	Commercial free range laying hens	4 February 2022
26	02 December 2021	Near Thirsk, Yorkshire	Commercial free range laying hens	5 March 2022
27	02 December 2021	Staffordshire	Backyard hobby farm	29 January 2022
28	02 December 2021	Herefordshire	Commercial broiler farm	14 January 2022
29	04 December 2021	Dumfries	Commercial laying hens	18 January 2022
30	04 December 2021	Powys	Mixed captive birds	10 January 2022
31	04 December 2021	Yorkshire	Backyard turkeys	6 February 2022
32	04 December 2021	Gloucestershire	Wildfowl Park	24 January 2022
33	04 December 2021	Yorkshire	Commercial laying hens	5 March 2022
34	06 December 2021	Leicestershire	Commercial laying hens	4 February 2022
35	07 December 2021	Leicestershire	Commercial laying hens	4 February 2022
36	07 December 2021	Near Pocklington, East Yorkshire	Commercial ducks	19 February 2022

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
37	08 December 2021	Near Sudbury, South Suffolk	Commercial laying hens	26 January 2022
38	08 December 2021	Near Thirsk, North Yorkshire	Commercial turkeys	5 March 2022
39	09 December 2021	Cumbria	Commercial laying hens	31 January 2022
40	09 December 2021	Dumfries	Backyard mixed species	16 January 2022
41	10 December 2021	Near Moffat, Dumfriesshire	Backyard mixed species	14 January 2022
42	10 December 2021	Near Highworth, Wiltshire	Commercial turkeys	29 January 2022
43	10 December 2021	Near Clifford, Herefordshire	Commercial turkeys	25 January 2022
44	11 December 2021	Near Washington, Sunderland, Tyne & Wear	Mixed wildfowl	6 March 2022
45	11 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
46	11 December 2021	Near Willington, Derbyshire	Mixed poultry	14 February 2022
47	12 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
48	12 December 2021	Near Alford, Lincolnshire	Commercial laying hens	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
49	14 December 2021	Near Middleton-in-Teesdale, County Durham	Backyard chickens	17 February 2022
50	14 December 2021	Near Pocklington, Yorkshire	Commercial ducks	19 February 2022
51	14 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
52	14 December 2021	Near Alford, Lincolnshire	Commercial broiler breeder and laying hens	
53	15 December 2021	Near Atherstone, Leicestershire	Backyard mixed species	9 February 2022
54	15 December 2021	Near Wem, Shropshire	Commercial mixed species	9 February 2022
55	15 December 2021	Near Lockerbie, Dumfries and Galloway	Backyard mixed species	18 January 2022
56	16 December 2021	Near Alford, Lincolnshire	Commercial chickens	
57	16 December 2021	Near Thirsk, Yorkshire	Commercial broiler chickens	5 March 2022
58	16 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
59	17 December 2021	Near Alford, Lincolnshire	Commercial laying hens	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
60	18 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
61	18 December 2021	Near Frodsham, Cheshire	Commercial mixed species	8 March 2022
62	22 December 2021	Near Alvanley, Cheshire	Backyard ducks	8 March 2022
63	22 December 2021	Near Buckfastleigh, Devon	Backyard ducks	11 February 2022
64	28 December 2021	Near Pentney, Norfolk	Commercial turkeys	9 February 2022
65	28 December 2021	Near North Somercotes, Lincolnshire	Commercial turkeys	
66	30 December 2021	Near Romsey, Hampshire	Backyard mixed species	5 February 2022
67	31 December 2021	Near Theddlethorpe, Lincolnshire	Backyard mixed species	
68	31 December 2021	Near Melton Mowbray, Lincolnshire	Commercial turkeys	
69	02 January 2022	Near Eton, Berkshire	Rescued wild swans	
70	03 January 2022	Near Alford, Lincolnshire	Backyard chickens	

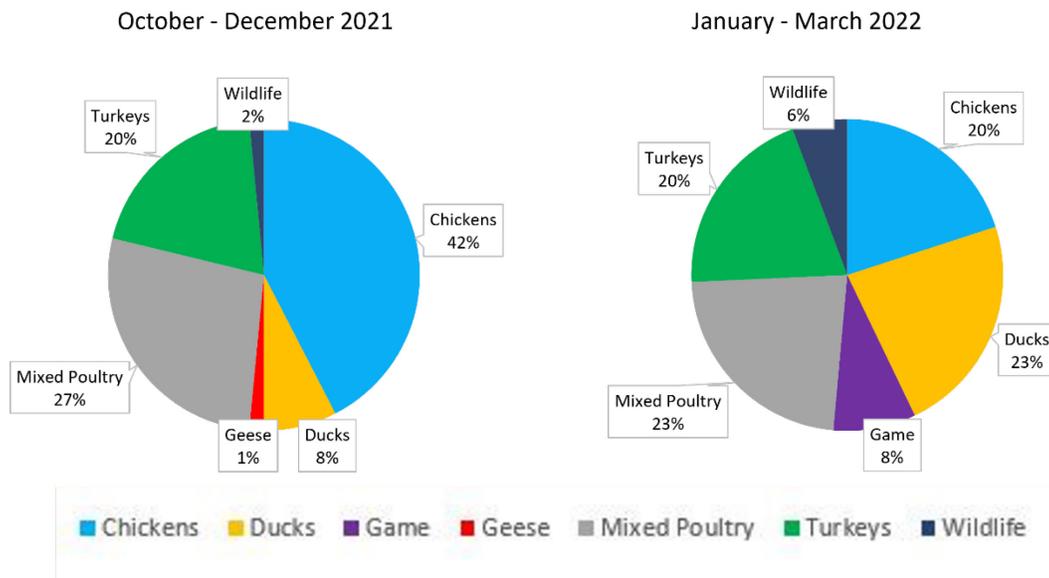
Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
71	04 January 2022	Near Carlisle, Cumbria	Commercial mixed species	12 March 2022
72	05 January 2022	Near Louth, Lincolnshire	Commercial turkeys	
73	07 January 2022	Near Upholland, Lancashire	Backyard mixed species	14 March 2022
74	10 January 2022	Near Louth, Lincolnshire	Commercial laying hens	
75	13 January 2022	Near Tattenhall, Cheshire	Commercial grandparent breeder turkeys	
76	13 January 2022	Near Tarporley, Cheshire	Commercial breeder turkeys	
77	20 January 2022	Near Ross on Wye, Herefordshire	Backyard mixed species	2 March 2022
78	22 January 2022	Near Crewe, Cheshire	Commercial turkeys	
79	22 January 2022	Near Inverurie, Aberdeenshire	Backyard mixed species	
80	25 January 2022	Near Newcastle upon Tyne, Tyne and Wear	City farm smallholder mixed species	
81	26 January 2022	Near Whitby, North Yorkshire	Wildlife rescue centre mixed species	11 March 2022
82	28 January 2022	Near Calveley, Cheshire	Commercial turkeys	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
83	28 January 2022	Near Ashleworth, Gloucestershire	Backyard chickens	15 March 2022
84	4 February 2022	Near Bishops Waltham, Hampshire	Commercial broiler breeder chickens	
85	5 February 2022	Near Fakenham, Norfolk	Conservation park mixed species	
86	9 February 2022	Near Berwick-upon-Tweed, Northumberland	Backyard mixed species	
87	14 February 2022	Near Wooler, Northumberland	Backyard mixed species	
88	21 February 2022	Near Grimsby, Lincolnshire	Commercial rearing turkeys	
89	21 February 2022	Near Newtown, Powys	Commercial breeding pheasants	
90	21 February 2022	Near Welshpool, Powys	Commercial breeding pheasants	
91	23 February 2022	Near Gateshead, Tyne and Wear	Commercial hobby flock mixed species	
92	25 February 2022	Near Ledbury, Herefordshire	Commercial game supplier	
93	26 February 2022	Near Westhorpe, Suffolk	Smallholding mixed species	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved
94	1 March 2022	Near Redgrave, Suffolk	Commercial fattening ducks	
95	11 March 2022	Near Ellon, Aberdeenshire	Backyard mixed species	
96	11 March 2022	Near Diss, Suffolk	Commercial fattening ducks	
97	12 March 2022	Near Diss, Suffolk	Commercial fattening ducks and chickens	
98	18 March 2022	Near Beith, North Ayrshire	Rescued pigeons, buzzards, swans, hens and ducks.	
99	19 March 2022	Near Strichen, Aberdeenshire	Commercial laying hens	
100	20 March 2022	Near Woodbridge, Suffolk	Commercial broiler ducks	
101	27 March 2022	Near Tuddenham St Martin, Suffolk	Commercial layer ducks	
102	28 March 2022	Near Stowmarket, Suffolk	Backyard mixed species	

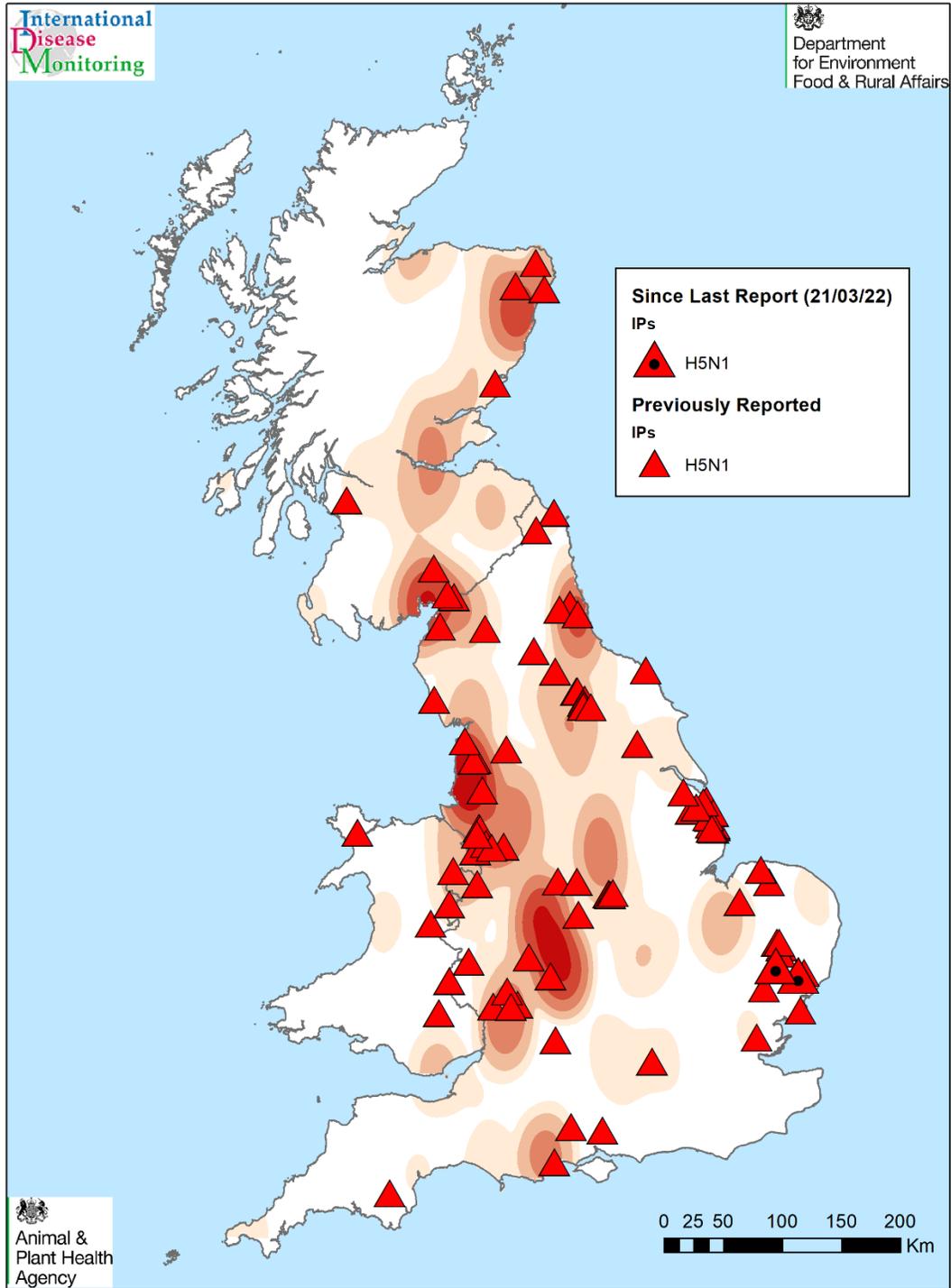
¹ According to the 2021 OIE definition of poultry: [Terrestrial Code Online Access - OIE - World Organisation for Animal Health](#)

Figure 1: Proportion of HPAI-positive premises according to species kept across the 2021 to 2022 season in Great Britain



Across the HPAI season, the majority of premises affected have been backyard (mixed species), commercial poultry (chicken, turkey and ducks) and captive birds (non-poultry species) (Figure 1). A greater proportion of duck premises have been affected between January and March 2022, compared with between October and December 2021 (23% versus 8%, respectively), as the outbreak in Great Britain has progressed (Figure 1).

Map 2: Map showing the relative density of HPAI H5 positive findings in wild birds and the outbreaks in poultry¹ and captive birds across Great Britain October 2021 to 28 March 2022



Date: 29/03/2022
Map prepared by IDM

GB HPAI Wild Bird Events (as Heat Map) & IPs
October 2021 - March 2022

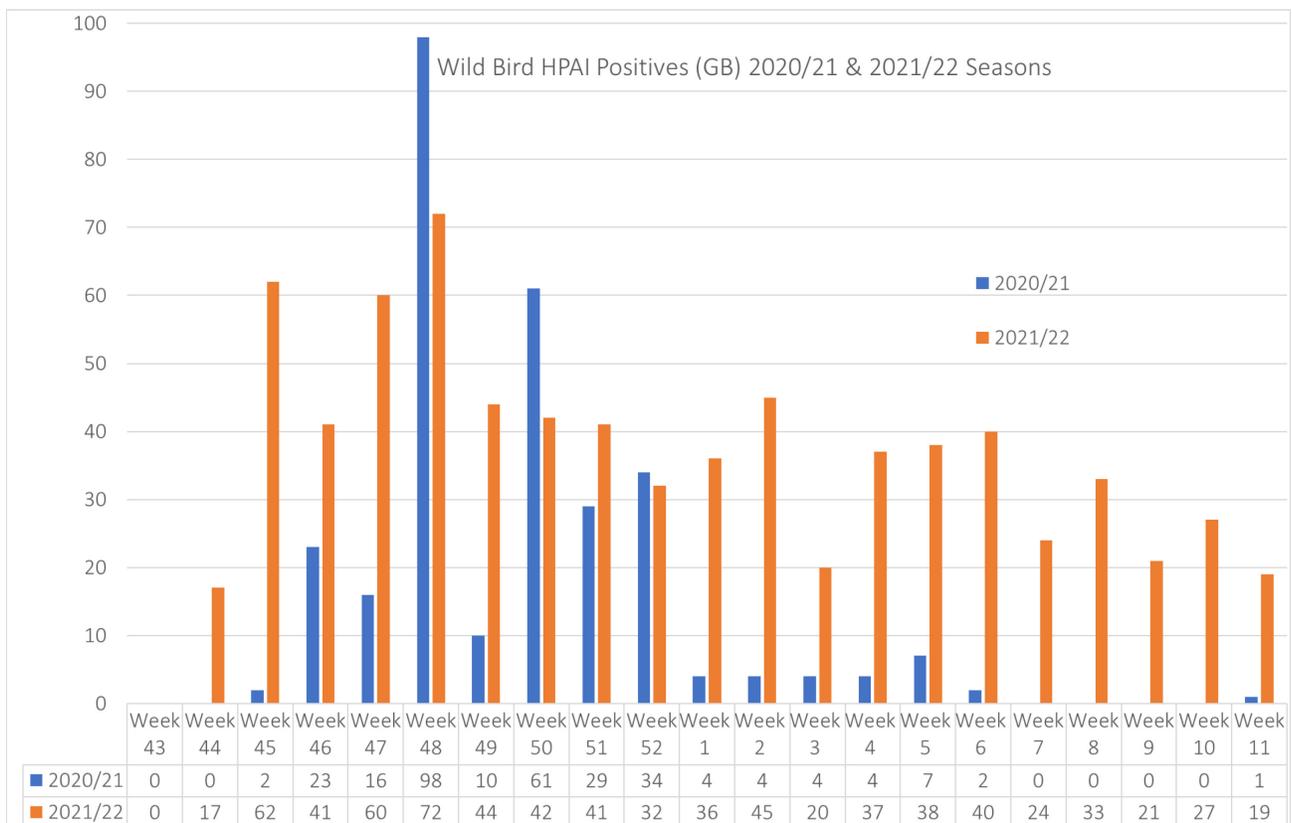
¹According to the 2021 OIE definition of poultry: [Terrestrial Code Online Access - OIE - World Organisation for Animal Health](#)

In the week since our last outbreak assessment on 21 March 2022, HPAI H5 has been detected in wild birds in a further seven locations in Great Britain, bringing the total to 242 separate wild bird positive locations, involving 39 different bird species (listed in Table 2) in 73 separate counties. The total number of positive wild bird findings is 841, with most in England (Table 2).

The majority of wild birds which have tested positive for HPAI in Great Britain during the 2021 to 2022 season have been infected with the H5N1 strain. HPAI continues to be detected in wild birds, with many more reports in the 2021 to 2022 season compared to the 2020 to 2021 season (Figure 2), though a general downward trend is being observed currently.

There have been 38 cases for which the HPAI H5 genotype has been identified but the NA subtype has not yet been ascertained due to very low viral load. These cases are currently undergoing further processing to attempt to identify the NA subtype.

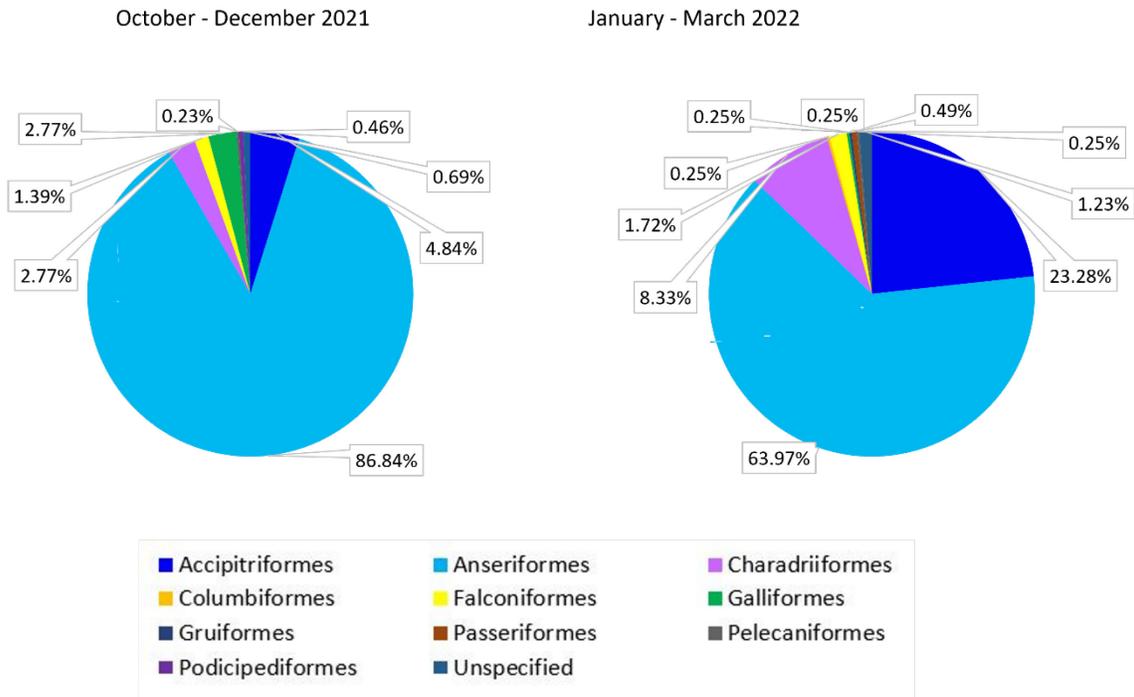
Figure 2: Wild bird HPAI positives across Great Britain 2020 to 2021 and 2021 to 2022 seasons



Further analysis of the Order profile of HPAI positive wild birds throughout the current 2021 to 2022 season has shown a shift to a greater variety of wild bird species overall. In particular, an increasing proportion of birds of prey (*Accipitriformes*) species have

become infected as the outbreak has progressed, although Anseriformes still represent the main order of birds affected, with some continued large mortality events (Figure 3).

Figure 3: Proportion of HPAI H5 wild bird positives by Order across the 2021 to 2022 HPAI season in Great Britain



For further details, please see the report (updated weekly) on findings of [HPAI in wild birds](#) in Great Britain and [Northern Ireland](#).

Table 2: Wild bird species in Great Britain that have tested positive for HPAI H5 as of 28 March 2022

Region and species	Total number of birds testing positive
England	566
Barnacle Goose	13
Bewick's Swan	1
Black headed gull	17
Black Swan	2
Canada Goose	106
Common Buzzard	52
Common Eider	1
Coot	1
Curlew	2

Region and species	Total number of birds testing positive
Goshawk	1
Great-crested Grebe	2
Grey Heron	2
Greylag goose	26
Guillemot	1
Gull sp	6
Hen Harrier	1
Herring Gull	7
Kestrel	6
Kittiwake	1
Lapwing	1
Little Gull	1
Mallard Duck	5
Mute Swan	213
Peregrine Falcon	5
Pheasant	8
Pink Footed Goose	16
Red Kite	1
Sea Eagle	1
Sparrowhawk	5
Unidentified Swan	17
Unspecified Duck	1
Unspecified Goose	12
Whooper Swan	31
Wigeon	1
Scotland	244
Barnacle Goose	34
Blackbird	1
Black headed gull	1
Canada Goose	3
Common Buzzard	44
Greylag Goose	17
Gull sp	5
Herring Gull	4
Kestrel	1
Magpie	1
Mute Swan	25
Pink Footed Goose	52
Red Kite	2

Region and species	Total number of birds testing positive
Sea Eagle	2
Sparrowhawk	5
Unidentified Swan	12
Unspecified Bird of Prey	3
Unspecified Duck	2
Unspecified Goose	20
Whooper Swan	9
Wood Pigeon	1
Wales	31
Canada Goose	4
Common Buzzard	4
Goshawk	1
Greylag goose	1
Herring Gull	1
Mute Swan	11
Peregrine Falcon	1
Pheasant	5
Unidentified Swan	1
Unspecified Goose	1
Unspecified Pigeon	1
Grand Total	841

Europe

The total numbers of IPs with HPAI H5 in poultry and cases in wild birds in Europe are presented in Table 3. New disease reports are still being made to the World Organisation for Animal Health (OIE) on a daily basis. Numbers reported are from OIE's WAHIS platform.

Table 3: Events (to 28 March 2022) of HPAI H5 in domestic poultry (P) and cases in wild birds (WB) since 1 October 2021 in Europe, excluding the UK, according to OIE report date

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	Total
Albania						1				1
Austria			32							32
Belgium	5		60	2						67
Bosnia and Herzegovina			2							2
Bulgaria		10								10
Croatia			8	2						10
Czech Republic			18	4						22
Denmark		1	108	4	1	1				115
Estonia			9		2	1				12
Faroe Islands			1							1
Finland			12		2					14
France			70	687						757
Germany			869	65			1		1	936
Greece			3							3

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	Total
Hungary			31	113						144
Ireland			74	6						80
Italy			21	248						269
Latvia			2							2
Lithuania			2							2
Luxembourg			4							4
Moldova				1						1
Netherlands	1		145	31	2					179
Norway			6	2						8
Poland			31	99				1		131
Portugal			12	4						16
Republic of North Macedonia			3							3
Romania			14	2						16
Russia	35	12	12	9						68
Serbia and Montenegro			3		3		1			7

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	Total
Slovakia			22	2	1					25
Slovenia			39	1						40
Spain			34	31						65
Sweden			36	4	1					41
Switzerland			3							3
Ukraine	2	1								3
United Kingdom	38		803	108	1					950

Northern Europe (OIE data only, by report date)

In the week since our last outbreak assessment on 21 March 2022, HPAI H5 has been reported in nine European countries (OIE). The total number of European countries affected this HPAI season according to IZS^{Ve} (2022) is currently 33.

Since our last assessment, OIE has reported HPAI in Albania for the first time this 2021 to 2022 season. The H5N8 strain was confirmed in a domestic poultry premises located in the village of Rrashbull, near the west coast.

In the last week, there have been 268 further IPs with HPAI H5N1 in domestic poultry reported for France, according to OIE. Most of these affected premises are located in the Vendée and Loire-Atlantique Departments. Extended restriction zones which form larger 'Zones at Risk of Diffusion' (ZRD) continue to be implemented (Gouv.fr, 2022), though the high numbers of new IPs continue to be reported weekly, mainly in waterfowl farms (Plateforme, 2022). The new detections in wildlife and outbreaks in poultry in new departments strongly indicates that there is still significant viral circulation and environmental contamination.

Phylogenetic analyses of 149 complete genome sequences of HPAI H5N1 (from wild birds and poultry) since November 2021 show great diversity, indicating that many

introductions have taken place throughout the 2021/22 season: currently, at least eight genotypes have been detected, while only three genotypes were detected during the 2020/21 season (Platforme 2022).

There have been three non-commercial IPs with HPAI H5N1 reported, these are backyard flocks of mixed bird species including hens, geese, palmipeds and pigeons. In addition, one HPAI event involving five wild mallards (*Anas platyrhynchos*) has been reported.

There has been one further IP with HPAI H5N1 reported for Germany since our last assessment. The premises had 1,809 poultry birds and is located in the northern municipality of Eddelak. There have been no further reports of HPAI events in wild birds in Germany in the last week by OIE.

The Netherlands has not reported any further poultry IPs with HPAI H5N1 since our last assessment, but disease has been reported in captive birds (*Phasianidae* family) at a petting zoo in Lunteren, Gelderland. Additional measures have been implemented during the culling process to help reduce the risk of fomite spread in high winds, including delayed carcass removal and water misting above the culling container (PAFF, Netherlands 2022). There have been no further HPAI H5N1 cases in wild birds reported by OIE in the last week.

The Republic of Ireland has not reported any further IPs with HPAI H5N1 in domestic poultry in the last week but has reported two HPAI H5N1 events in wild birds. One event involved a single barnacle goose (*Branta leucopsis*) in occurred in Naran, Co. Donegal. The other event involved a barnacle goose (*Branta leucopsis*) and a great cormorant (*Phalacrocorax carbo*) located in Drumnatiny, Co. Donegal.

In Romania, there has been a further report of HPAI H5N1 in poultry in the last week at a farm located in the southern commune of Braniște, with 6,770 deaths reported. There have also been two HPAI H5N1 events reported in wild birds. Both events involved Dalmatian pelicans (*Pelecanus crispus*) and occurred in natural parks: one located on Ceaplace Island on the east coast (57 birds), the other was located in Prundu which lies approximately 40km south of Bucharest (17 birds).

Increased biosecurity controls on poultry farms are in place at a national level, and biosecurity visits have been conducted to help identify areas for improvement and prevent further outbreaks.

Deficiencies in biosecurity were discovered in multiple premises across all sectors; including commercial farms, backyard premises and hatcheries (PAFF, Romania 2022).

There have been no further reports of HPAI in poultry in Russia since our last assessment. but there has been one HPAI H5 event reported which involved a total of nine Dalmatian pelicans (*Pelecanus crispus*). The birds were located in Obzhorovsky, within the Astrakhan nature reserve, in southern Russia.

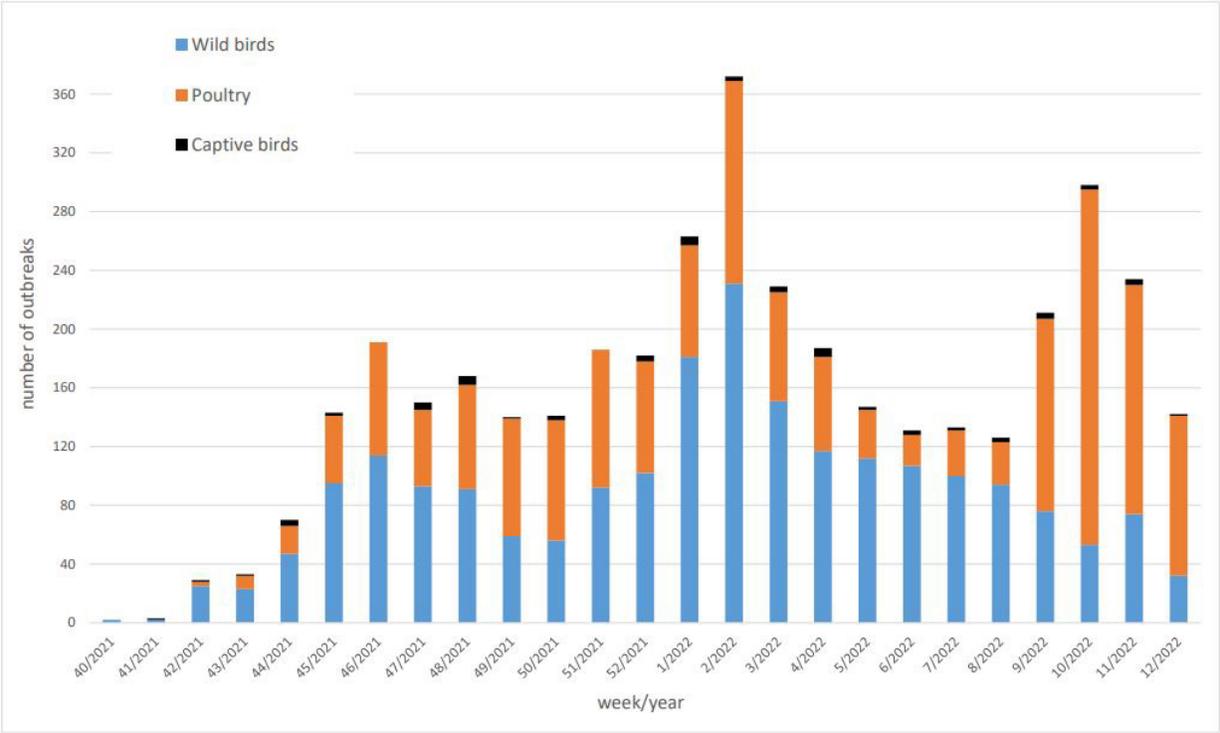
In Sweden, there have been no further reports of HPAI H5N1 in domestic poultry, but there have been two cases reported in wild birds which were a white stork (*Ciconia ciconia*) and a greylag goose (*Anser anser*). The birds were found dead at separate locations, both of which were in southern Sweden.

Southern Europe (OIE data only, by report date)

There have been a further eight IPs with HPAI H5N1 reported in Spain in the last week. Six of these farms are located within the province of Seville and two farms are located in Niebla, Huelva province. The number of bird deaths was reported for seven of the farms and this ranged from 500 to 20,000. There have also been three HPAI H5N1 events in wild birds involving a total of 123 greylag geese (*Anser anser*), nine Egyptian geese (*Alopochen aegyptiaca*), one white stork (*Ciconia ciconia*) and one mallard (*Anatidae*).

According to OIE, there have been no further reports of HPAI H5N1 outbreaks in domestic poultry or cases in wild birds between 21 March and 28 March in Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, the Faroe Islands, Finland, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Moldova, North Macedonia, Norway, Poland, Portugal, Serbia and Montenegro, Slovakia, Slovenia, Switzerland or Ukraine.

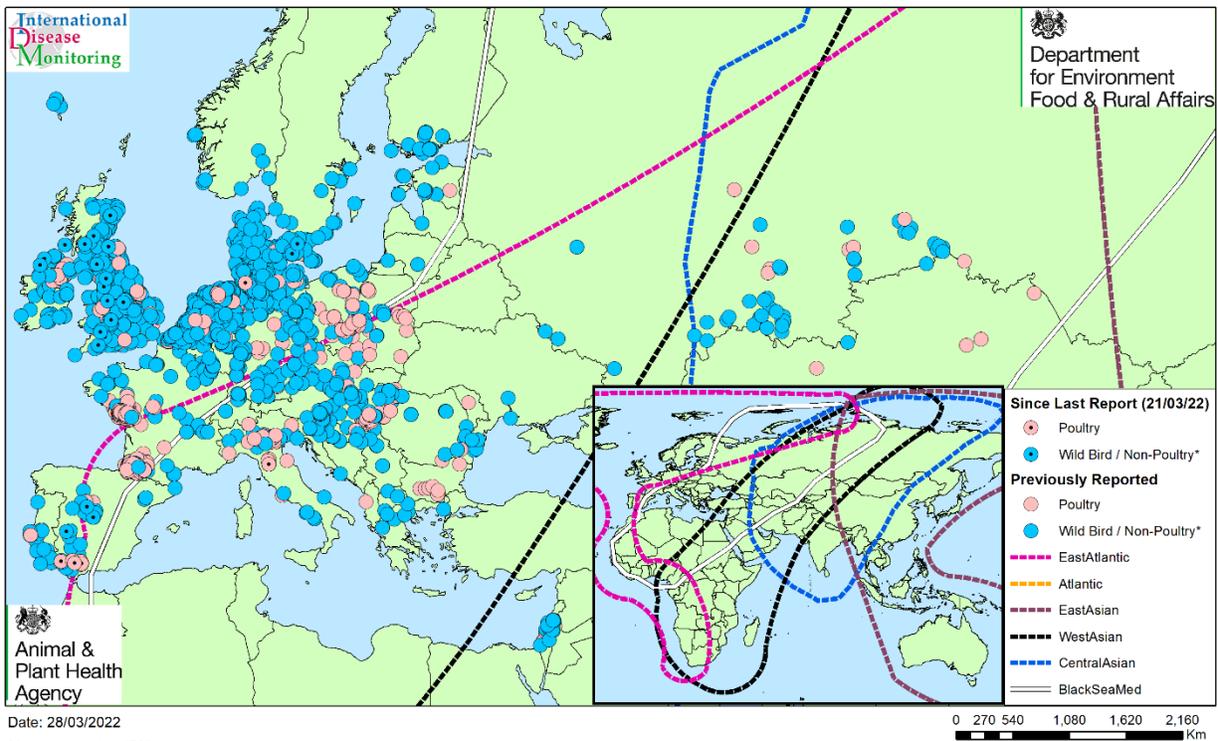
Figure 4: Number of HPAI positive events reported in poultry, captive and wild birds each week in Europe from October 2021 to 28 March 2022 (IZSVe, 2022)



Across Europe, the number of poultry IPs reported weekly has started to decrease from around 230 in week 10 to 160 and then 110 in weeks 11 and 12, respectively (Figure 4). The increased numbers are still mainly due to the outbreak in France for which the total is now 976 IPs, according to IZSVe data. Cases of HPAI infection in wild birds have fluctuated between weeks 9 and 11 (Figure 4), which may be anticipated in the spring months as migratory birds return to mainland Europe.

Map 3 shows the distribution of HPAI H5 outbreaks in poultry and captive birds, together with cases in wild birds, in Europe reported to OIE between September 2021 and 28 March 2022. Those events reported since our last outbreak assessment on 21 March are identified with black central dots.

Map 3: HPAI outbreaks (from OIE) in poultry, captive, and wild birds across Europe, September 2021 to 28 March 2022.



Highly Pathogenic Avian Influenza in Poultry and Non-Poultry*

September 2021 - March 2022

Overlay: Migratory Bird Flyways

OIE Data Only

*OIE Defined

Implications for the UK

Given the continuing reports of wild bird cases of HPAI H5N1 across Great Britain, the domestic poultry and captive bird populations in Great Britain continue to remain under high infection pressure, particularly where biosecurity is sub-optimal. Even where biosecurity is good, the ongoing high wild bird infection pressure will identify and focus in on any weaknesses that exist. It is imperative that biosecurity is maintained to the fullest extent possible to mitigate against the risk of ongoing infection posed by wild birds across the UK.

There has been an unprecedented number of HPAI H5N1 IPs with domestic poultry and captive birds, as well as wild bird cases reported in this 2021 to 2022 season, not only for the UK but also across Europe. It should be noted that trends in wild bird cases in Europe are now of relative minimal significance as a predictor for UK incursions during the spring.

Those birds that migrated from continental Europe to overwinter in Great Britain during the autumn and winter will now begin their return journeys back to Europe in late March and in early April. As the spring progresses, migratory ducks, geese and swans will depart the UK and Europe thereby reducing the background endemic infection pressure, while sedentary wild bird species will disperse from their winter aggregates in the UK.

This together with higher temperature and increased sunlight will increase virus degeneration and thus reduce the likelihood of disease infection from wild birds over the coming months, although how rapidly this will occur cannot be predicted given the scale of the current epizootic.

Conclusion

Cases of HPAI H5 in wild birds and confirmations in poultry premises have continued to be reported across Europe and in Great Britain since our last assessment.

Numbers of migrating wild water birds (ducks, geese, and some swan species) peaked in Great Britain in December to January and these birds have begun their return journeys through Europe during March.

There have been 841 confirmed cases of HPAI H5 in wild birds in Great Britain to 28 March 2022 across a range of species, with multiple detections in wild birds each week (Figure 2). The wild bird species 'order shift' observed (Figure 3) demonstrates that a greater proportion of raptors and potential bridging species such as pigeons, gulls and pheasants have tested positive as the outbreak has developed. This reflects HPAI infection spreading initially from migratory water birds at incursion, to more native, sedentary wild bird species, likely via environmental exposure.

The increased number of duck premises affected by HPAI during the latter part of the season in Great Britain (Figure 1) is similar to the infection trend currently being observed in France (Gouv.fr, 2022, PAFF France 2022). It is important however to note that the very high number of duck premises with HPAI confirmed in France is a reflection of the scale and location of the foie gras industry that exists in that country.

HPAI virus H5 is continuing to circulate within Great Britain. The risk level of HPAI H5 in wild birds is therefore maintained at very high across Great Britain .

The risk of exposure of poultry across the whole of Great Britain 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 Great Britain on 3 November 2021, and in Northern Ireland on 17 November 2021.

We are continuing to closely monitor the situation and reviewing the risk.

It is particularly important that stringent adherence to good biosecurity practices is now still maintained, even though the outbreak appears to be waning and the sunny weather is approaching. Strict attention should 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 recent storms.

Reinforcement of good biosecurity awareness behaviours and practices should be a constant reminder to all personnel working with birds; any drop in guard could still easily result in 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](#) 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.

- In England contact 03000 200 301
- In Wales, contact 0300 303 8268
- In Scotland, contact your [local field services office](#)

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](#)
- North Ireland is available on [DAERA's website](#)

The OIE, FAO International Reference Laboratory and the UK National Reference Laboratory at Weybridge has the necessary diagnostic capability for strains of avian influenza virus, whether of low or high pathogenicity, 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 the following dead wild birds found at the same location at the same time should be reported to the Wild bird Helpline (Telephone: 03459 33 55 77 – select option 7):

- any number of swans, geese, ducks, gulls, waders and raptors
- five or more birds of any species

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 (Telephone: 03459 33 55 77 – 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).

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