Updated Outbreak Assessment #19

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

21 March 2022

Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

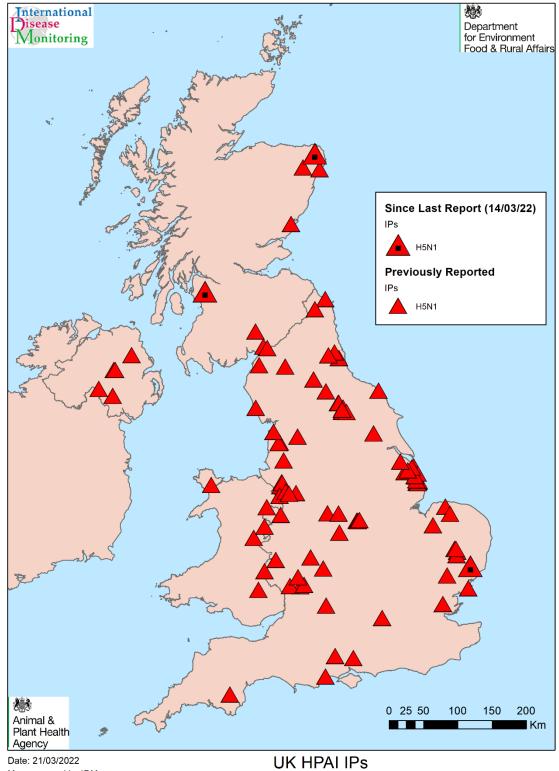
Since our last outbreak assessment on 14 March 2022, there continue to be reports of highly pathogenic avian influenza (HPAI) H5 both in Europe and in the United Kingdom (UK). This includes three further confirmed infected premises (IPs) with HPAI H5N1 in domestic poultry and captive birds in the UK. In Europe, a high number of confirmed IPs with HPAI in poultry continue to be reported from France.

Three new IPs with HPAI H5N1 in domestic poultry and captive birds have been confirmed in Great Britain (GB) since our last assessment: two in Scotland and one in England. There have been no further HPAI H5N1 IPs confirmed in Northern Ireland (NI) since our last assessment (DAERA 2022).

The OIE has also since reported new IPs with HPAI H5N1 in domestic poultry in France, Germany, Italy and the Netherlands.

Non-poultry IPs and wild bird cases of HPAI H5N1 continue to be reported in Austria, Belgium, Denmark, France, Hungary, the Republic of Ireland, Portugal, Romania and Switzerland.

Map 1: HPAI H5 outbreaks in domestic poultry¹ and captive birds across the United Kingdom, October 2021 to 21 March 2022.



Map prepared by IDM

October 2021 - March 2022

Situation Assessment

United Kingdom

The first detection of HPAI H5N1 virus this 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 99 further confirmed IPs with HPAI H5N1 in poultry and captive birds across Great Britain (Map 1), (Table 1) taking the total to 100. Of these 100 IPs, 86 have occurred in England, nine have occurred in Scotland and five in Wales.

In the week since our last assessment on 14 March 2022 there have been three new IPs with HPAI H5N1 in GB, two of which were in Scotland and one in England. These were detected in a wildlife rescue centre in North Ayrshire, a commercial laying hen premises in Aberdeenshire and a commercial broiler duck premises in Suffolk.

Since our last report, there have been no new premises with HPAI H5N1 confirmed in NI. The total number of poultry IPs in NI remains at six across the counties of Tyrone, Antrim, Armagh and Fermanagh (DAERA, 2022).

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

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 21 March 2022

¹ According to the 2021 OIE definition of poultry: <u>Terrestrial Code Online Access - OIE - World</u> <u>Organisation for Animal Health</u>

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
4	8 November 2021	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken
5	11 November 2021	Near Kirby Cross, Essex	Small flock of mixed geese, chickens, guinea fowl
6	12 November 2021	Near Preston, Lancashire	Commercial turkey premises
7	13 November 2021	Near Northallerton, North Yorkshire	Commercial free range laying hens
8	16 November 2021	Near Preston, Lancashire	Backyard chickens
9	17 November 2021	Near Willington, Derbyshire	Commercial turkey premises
10	19 November 2021	Near Pokesdown, Bournemouth	Backyard ducks
11	19 November 2021	Near Silecroft, Cumbria	Commercial free range laying hens
12	21 November 2021	Near Mouldsworth, Chester	Commercial turkey premises
13	21 November 2021	Near North Fambridge, Essex	Small flock of mixed geese, chickens, ducks
14	21 November 2021	Near Holkham, Norfolk	Small flock of mixed chickens and turkeys
15	21 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
16	25 November 2021	Near Thirsk, Yorkshire	Commercial free range laying hens
17	25 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises
18	26 November 2021	Near Loughborough, Leicestershire	Commercial free range laying hens
19	26 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises
20	27 November 2021	Near Blackpool, Lancashire	Mixed ornamental birds
21	26 November 2021	Near Anglesey, Wales	Backyard hobby farm
22	26 November 2021	Near Clitheroe, Lancashire	Mixed captive birds
23	28 November 2021	Near Thirsk, Yorkshire	Backyard hobby farm
24	29 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises
25	01 December 2021	Leicestershire	Commercial free range laying hens
26	02 December 2021	Near Thirsk, Yorkshire	Commercial free range laying hens
27	02 December 2021	Staffordshire	Backyard hobby farm
28	02 December 2021	Herefordshire	Commercial broiler farm

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
29	04 December 2021	Dumfries	Commercial laying hens
30	04 December 2021	Powys	Mixed captive birds
31	04 December 2021	Yorkshire	Backyard turkeys
32	04 December 2021	Gloucestershire	Wildfowl Park
33	04 December 2021	Yorkshire	Commercial laying hens
34	06 December 2021	Leicestershire	Commercial laying hens
35	07 December 2021	Leicestershire	Commercial laying hens
36	07 December 2021	Near Pocklington, East Yorkshire	Commercial ducks
37	08 December 2021	Near Sudbury, South Suffolk	Commercial laying hens
38	08 December 2021	Near Thirsk, North Yorkshire	Commercial turkeys
39	09 December 2021	Cumbria	Commercial laying hens
40	09 December 2021	Dumfries	Backyard mixed species
41	10 December 2021	Near Moffat, Dumfriesshire	Backyard mixed species

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
42	10 December 2021	Near Highworth, Wiltshire	Commercial turkeys
43	10 December 2021	Near Clifford, Herefordshire	Commercial turkeys
44	11 December 2021	Near Washington, Sunderland, Tyne & Wear	Mixed wildfowl
45	11 December 2021	Near Alford, Lincolnshire	Commercial laying hens
46	11 December 2021	Near Willington, Derbyshire	Mixed poultry
47	12 December 2021	Near Alford, Lincolnshire	Commercial laying hens
48	12 December 2021	Near Alford, Lincolnshire	Commercial laying hens
49	14 December 2021	Near Middleton-in- Teesdale, County Durham	Backyard chickens
50	14 December 2021	Near Pocklington, Yorkshire	Commercial ducks
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

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
54	15 December 2021	Near Wem, Shropshire	Commercial mixed species
55	15 December 2021	Near Lockerbie, Dumfries and Galloway	Backyard mixed species
56	16 December 2021	Near Alford, Lincolnshire	Commercial chickens
57	16 December 2021	Near Thirsk, Yorkshire	Commercial broiler chickens
58	16 December 2021	Near Alford, Lincolnshire	Commercial laying hens
59	17 December 2021	Near Alford, Lincolnshire	Commercial laying hens
60	18 December 2021	Near Alford, Lincolnshire	Commercial laying hens
61	18 December 2021	Near Frodsham, Cheshire	Commercial mixed species
62	22 December 2021	Near Alvanley, Cheshire	Backyard ducks
63	22 December 2021	Near Buckfastleigh, Devon	Backyard ducks
64	28 December 2021	Near Pentney, Norfolk	Commercial turkeys
65	28 December 2021	Near North Somercotes, Lincolnshire	Commercial turkeys

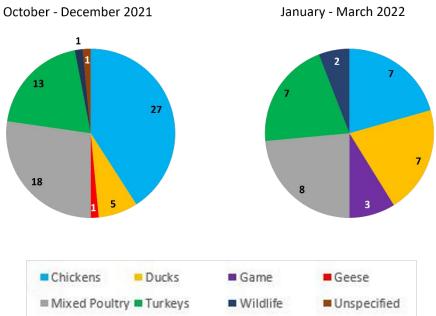
Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
66	30 December 2021	Near Romsey, Hampshire	Backyard mixed species
67	31 December 2021	Near Theddlethorpe, Lincolnshire	Backyard mixed species
68	31 December 2021	Near Melton Mowbray, Lincolnshire	Commercial turkeys
69	02 January 2022	Near Eton, Berkshire	Rescued wild swans
70	03 January 2022	Near Alford, Lincolnshire	Backyard chickens
71	04 January 2022	Near Carlisle, Cumbria	Commercial mixed species
72	05 January 2022	Near Louth, Lincolnshire	Commercial turkeys
73	07 January 2022	Near Upholland, Lancashire	Backyard mixed species
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
78	22 January 2022	Near Crewe, Cheshire	Commercial turkeys

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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
82	28 January 2022	Near Calveley, Cheshire	Commercial turkeys
83	28 January 2022	Near Ashleworth, Gloucestershire	Backyard chickens
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

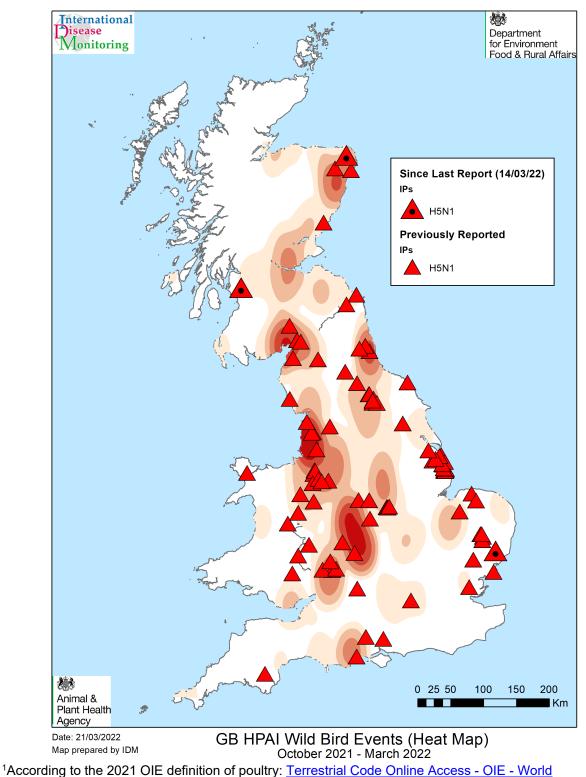
Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
91	23 February 2022	Near Gateshead, Tyne and Wear	Commercial hobby flock mixed species
92	25 February 2022	Near Ledbury, Herefordshire	Commercial game supplier
93	26 February 2022	Near Westhorpe, Suffolk	Smallholding mixed species
94	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

¹ According to the 2021 OIE definition of poultry: <u>Terrestrial Code Online Access - OIE - World</u> <u>Organisation for Animal Health</u>

Figure 1: Number of HPAI-positive premises according to species kept across the 2021/22 season in GB



Across the HPAI season, the majority of premises affected have been chicken, turkey and mixed poultry premises (Figure 1). There has been an increased number of duck premises affected between January and March 2022, compared with the number affected between October and December 2021, as the outbreak in GB 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 GB October 2021 to 21 March 2022



Organisation for Animal Health

In the week since our last outbreak assessment on 14 March 2022, HPAI H5 has been detected in wild birds in a further six locations in GB, bringing the total to 235 separate wild bird positive locations, involving 38 different bird species (listed in Table 2) in 72 separate counties. The total number of positive wild bird findings is 808 with most in England (Table 2). The majority of wild birds which have tested positive for HPAI in GB during the 2021/22 season have been infected with the H5N1 strain. One case of HPAI in a wild swan was recently tested and found to be of the H5N8 strain, however this bird was found dead and collected in early November 2021. The lack of any subsequent H5N8 findings in this current season suggests that this bird was detected as a spill over from last year's H5N8 outbreak season. It is therefore considered to be an isolated finding of relatively little epidemiological significance to the current 2021/22 outbreak.

There have been 32 cases for which the HPAI H5 genotype has been identified but the N subtype has not yet been ascertained due to very low viral load. These cases are currently undergoing further processing to identify the N subtype.

Further analysis of the Order profile of HPAI positive wild birds throughout the current 2021/22 season has shown a shift with a greater variety of wild bird species overall. In particular, an increasing proportion of birds of prey (*Accipitriformes*) species are becoming infected as the outbreak has progressed, although Anseriformes still represent the main order of birds affected. (Figure 2).

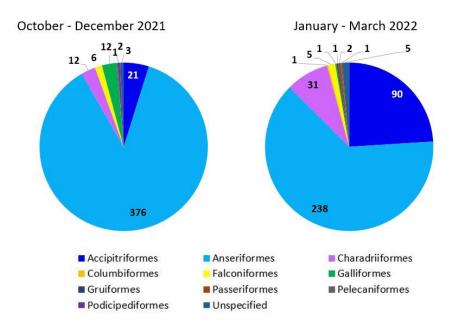


Figure 2: Number of HPAI H5 Wild bird positives by Order across the 2021-2022 HPAI season in GB

For further details, please see the report (updated weekly) on findings of <u>HPAI in wild</u> <u>birds</u> in GB and <u>NI</u>.

Table 2: Wild bird species in Great Britain that have tested positive for HPAI H5 as	
of 21 March 2022	

Barnacle Goose13Barnacle Goose13Bewick's Swan1Black headed gull17Black Swan2Canada Goose105Common Buzzard52Common Eider1Cot11Curlew22Goshawk11Great-crested Grebe2Grey Heron2Guillemot1Gull sp66Herring Gull77Kestrel55Kittiwake11Lapwing11Malard Duck55Mute Swan2100Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sparrowhawk55Unidentified Swan17Unspecified Duck11Whooper Swan31	Region and species	Total number of birds testing positive
Bewick's Swan1Black headed gull17Black Swan2Canada Goose105Common Buzzard52Common Eider1Coot1Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Gull sp66Herring Gull7Kittiwake11Lapwing11Little Gull11Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	England	559
Black headed gull17Black Swan2Canada Goose105Common Buzzard52Common Eider1Coot1Curlew22Goshawk11Great-crested Grebe2Grey Heron22Grey lag goose26Guillemot11Gull sp66Herring Gull7Kestrel55Kittiwake11Lapwing11Little Gull11Malard Duck55Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Barnacle Goose	13
Black Swan2Canada Goose105Common Buzzard52Common Eider1Coot1Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Guill sp66Herring Gull77Kestrel55Kittiwake11Lapwing11Little Gull1Mallard Duck50Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Bewick's Swan	1
Canada Goose105Common Buzzard52Common Eider1Coot1Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Gull sp66Herring Gull7Kestrel55Kittiwake11Lapwing11Little Gull11Mallard Duck55Mute Swan2100Peregrine Falcon4Pheasant16Red Kite11Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Black headed gull	17
Common Buzzard52Common Eider1Coot1Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Gull sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Utile Gull1Mallard Duck5Mute Swan2100Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	Black Swan	2
Common Eider1Coot1Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag gosse26Guillemot1Gull sp66Herring Gull77Kestrel55Kittiwake11Lapwing11Little Gull11Mallard Duck55Mute Swan2100Peregrine Falcon4Pheasant88Pink Footed Goose16Red Kite11Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Canada Goose	105
Coot1Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Gull sp6Herring Gull7Kestrel5Kittiwake11Lapwing11Little Gull11Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Common Buzzard	52
Curlew2Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Guill sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	Common Eider	1
Goshawk1Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Gull sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk55Unidentified Swan17Unspecified Duck1Whooper Swan31	Coot	1
Great-crested Grebe2Grey Heron2Greylag goose26Guillemot1Gull sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant1Sea Eagle1Sparrowhawk5Unidentified Swan17Unspecified Duck1Whooper Swan31	Curlew	2
Grey Heron2Greylag goose26Guillemot1Guill sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	Goshawk	1
Greylag goose26Guillemot1Gull sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan2100Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	Great-crested Grebe	2
Guillemot1Guil sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sea Eagle1Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	Grey Heron	2
Gull sp6Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk5Unidentified Swan17Unspecified Duck1Whooper Swan12	Greylag goose	26
Herring Gull7Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Guillemot	1
Kestrel5Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan2100Peregrine Falcon4Pheasant88Pink Footed Goose16Red Kite1Sea Eagle1Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Gull sp	6
Kittiwake1Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite1Sea Eagle1Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Herring Gull	7
Lapwing1Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant88Pink Footed Goose16Red Kite1Sea Eagle1Sparrowhawk55Unidentified Swan17Unspecified Duck12Whooper Swan31	Kestrel	5
Little Gull1Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant88Pink Footed Goose16Red Kite11Sea Eagle11Sparrowhawk55Unidentified Swan17Unspecified Duck11Unspecified Goose12Whooper Swan31	Kittiwake	1
Mallard Duck5Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sea Eagle11Sparrowhawk55Unidentified Swan17Unspecified Duck11Unspecified Goose12Whooper Swan31	Lapwing	1
Mute Swan210Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sea Eagle11Sparrowhawk5Unidentified Swan17Unspecified Duck12Whooper Swan31	Little Gull	1
Peregrine Falcon4Pheasant8Pink Footed Goose16Red Kite11Sea Eagle11Sparrowhawk5Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Mallard Duck	5
Pheasant8Pink Footed Goose16Red Kite1Sea Eagle1Sparrowhawk5Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Mute Swan	210
Pink Footed Goose16Red Kite1Sea Eagle1Sparrowhawk5Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Peregrine Falcon	4
Red Kite1Sea Eagle1Sparrowhawk5Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Pheasant	8
New New1Sea Eagle1Sparrowhawk5Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Pink Footed Goose	16
Sparrowhawk5Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Red Kite	1
Unidentified Swan17Unspecified Duck1Unspecified Goose12Whooper Swan31	Sea Eagle	1
Unspecified Duck1Unspecified Goose12Whooper Swan31	Sparrowhawk	5
Unspecified Goose12Whooper Swan31	Unidentified Swan	17
Whooper Swan 31	Unspecified Duck	1
	Unspecified Goose	12
Wigeon 1	Whooper Swan	31
	Wigeon	1

Region and species	Total number of birds testing positive
Scotland	221
Barnacle Goose	34
Blackbird	1
Black headed gull	1
Canada Goose	3
Common Buzzard	42
Greylag Goose	11
Gull sp	4
Herring Gull	2
Kestrel	1
Magpie	1
Mute Swan	23
Pink Footed Goose	45
Red Kite	1
Sea Eagle	2
Sparrowhawk	5
Unidentified Swan	12
Unspecified Bird of Prey	3
Unspecified Duck	2
Unspecified Goose	19
Whooper Swan	8
Wood Pigeon	1
Wales	28
Canada Goose	3
Common Buzzard	4
Greylag goose	1
Herring Gull	1
Mute Swan	10
Peregrine Falcon	1
Pheasant	5
Unidentified Swan	1
Unspecified Goose	1
Unspecified Pigeon	1
Grand Total	808

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 21 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
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			66	419						485
Germany			869	64			1		1	935

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	Total
Greece			3							3
Hungary			31	113						144
Ireland			72	6						78
Italy			21	247						268
Latvia			2							2
Lithuania			2							2
Luxembourg			4							4
Moldova				1						1
Netherlands	1		144	31	2					178
Norway			6	2						8
Poland			31	99				1		131
Portugal			12	4						16
Republic of North Macedonia			3							3
Romania			12	1						13
Russia	34	12	12	9						67

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	Total
Serbia and Montenegro			3		3		1			7
Slovakia			22	2	1					25
Slovenia			39	1						40
Spain			31	23						54
Sweden			34	4	1					39
Switzerland			3							3
Ukraine	2	1								3

Northern Europe (OIE data only, by report date)

In the week since our last outbreak assessment on 14 March 2022, HPAI H5 has been reported in 12 European countries (OIE). The total number of European countries affected this HPAI season according to IZSVe (2022) is currently 32.

There has been a further HPAI H5N1 event reported in **Austria** in the last week. The event involved two unidentified Anatidae species and occurred in the northern town of Schärding. There have been no further reports of HPAI H5 in poultry.

Since our last assessment, **Belgium** has not reported any new IPs with HPAI H5N1 in domestic poultry but has reported an outbreak in a non-commercial backyard flock of 44 birds located in Vrasene, approximately 15km west of Antwerp. There have also been four cases of H5N1 reported in wild birds, comprising of two barnacle geese (*Branta leucopsis*), a great black-backed gull (*Larus marinus*) and a peregrine falcon (*Falco peregrinus*).

Denmark has not reported any further IPs with HPAI H5N1 in poultry in the last week but has reported 12 HPAI H5N1 events in wild birds. The events involved a total of six common buzzards (*Buteo buteo*), two barnacle geese (*Branta leucopsis*), four mute swans (*Cygnus olor*), a rough-legged buzzard (*Buteo lagopus*) and a European herring gull (*Larus argentatus*).

In the last week, there have been 144 further IPs with HPAI H5N1 in poultry reported for **France**, according to OIE. Most of the affected premises are duck rearing farms located in the Pays de la Loire region. These reports from OIE follow a recent ministerial update on the disease situation which commented on the rapid spread of HPAI currently being observed in the Vendée and Loire-Atlantique departments (https://agriculture.gouv.fr/influenza-aviaire-la-situation-en-france). Extended restriction zones which form larger 'Zones at Risk of Diffusion' (ZRD) continue to be implemented (Gouv.fr, 2022). There has also been an additional case of HPAI H5N1 reported in a wild greylag goose (Anser anser) which was found dead as part of the SAGIR National Network for Wildlife Disease Surveillance. A Zone à dépeupler (ZAD) has been implemented in south-west France as part of a control strategy, with depopulation of all poultry farms in the area to reduce animal density and stop disease spread (PAFF, France 2022). French authorities have stated that no new HPAI incidents need to occur in the zone for 21 days before it can be considered stable and under control (PAFF, France 2022). A similar approach is being adopted in the west region with the addition of a stand-still and a ban of movements, except for movements to slaughter in the restricted area. Hatching eggs and day-old chicks are also permitted to move to the free zone but only if strengthened biosecurity protocols are adhered to and the passage occurs through a mandatory washing station (PAFF, France 2022)

There have been two further IPs with HPAI H5N1 reported for **Germany** since our last assessment. One occurred at a premises with 19,170 birds located in Wangerland, Lower Saxony. The other was a premises with 227 birds located in the town of Münnerstadt, Bavaria. There have been no further reports of HPAI events in wild birds in Germany in the last week.

In **Hungary**, there have been no further reports of HPAI H5N1 in domestic poultry since our last assessment but there have been three HPAI H5N1 events reported in wild birds. These were a grey heron (*Ardea cinerea*), a common buzzard (*Buteo buteo*) and a tawny owl (*Strix aluco*). While the grey heron was located in the north-western Hungarian town of Tata, both the common buzzard and tawny owl were located in the Southern Great Plain region, in two separate locations.

The **Netherlands** has reported one further IP with HPAI H5N1 in poultry, based on OIE data. This was confirmed in the town of Lunteren, Gelderland on an organic layer farm where 20 deaths and 170 cases of HPAI H5N1 have been reported. Additional measures were implemented during the culling process to help reduce the risk of fomite spread in high winds: carcass removal was delayed and water misting above the culling

container was instigated (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 three cases of HPAI H5N1 involving three wild barnacle geese (*Branta leucopsis*). Two birds were located in the village of Rosses Point, County Sligo and the third bird was located in Ballygibbon, County Cork.

In **Romania**, there have been no further reports of HPAI H5N1 in poultry in the last week, there has been one HPAI H5N1 event reported involving a single common gull (*Larus canus*) located in the city of Brăila, in eastern Romania. 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).

Switzerland has not reported any further IPs with HPAI H5N1 in poultry since our last assessment but has reported two HPAI events in wild birds, both of which were caused by the H5N1 strain. One event involved a grey heron (*Ardea cinerea*) which was found dead on the banks of the river Aare in Bern. The other event concerned a found dead black-headed gull (*Chroicocephalus ridibundus*) located in the northern town of Schaffhausen near the German border.

Southern Europe (OIE data only, by report date)

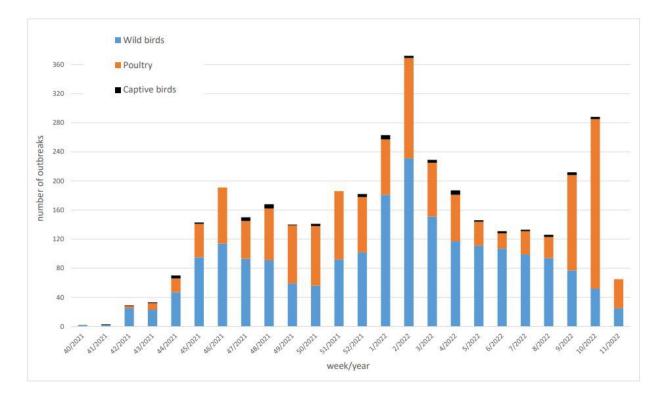
In **Italy**, there has been one further IP with HPAI H5N1 reported in the last week at a backyard poultry premises located in Scandicci, Florence with a total of 24 birds. There have been no additional HPAI events in wild birds reported in Italy since our last assessment. While Italy had reported a large number of outbreaks earlier on in the season, these appear to have peaked in mid-to-end December, with relatively few IPs being reported in 2022 (PAFF, Italy 2022).

Portugal has not reported any further IPs with HPAI H5N1 in commercial poultry but the disease has been confirmed in a non-commercial flock since our last assessment. This was in a backyard flock comprising of 44 chickens, seven Muscovy ducks and two geese (total 53 birds) located in Azinhal, southern Portugal, close to the border with Spain. There have been no further HPAI H5N1 events reported in wild birds in the last week.

According to OIE, there have been no further reports of HPAI H5N1 outbreaks in domestic poultry or cases in wild birds between 14 March and 21 March in **Bosnia and Herzegovina**, **Bulgaria**, **Croatia**, the **Czech Republic**, **Estonia**, the **Faroe Islands**,

Finland, Greece, Latvia, Lithuania, Luxembourg, Moldova, North Macedonia, Norway, Poland, Russia, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden or Ukraine.

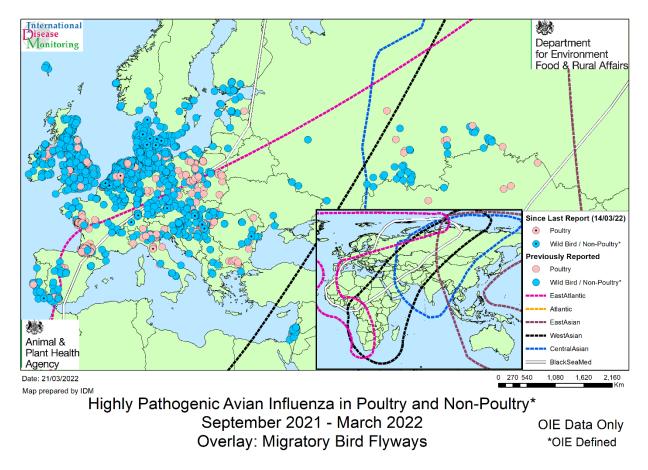
Figure 3: Number of HPAI positive events reported in poultry, captive and wild birds each week in Europe from October 2021 to 17 March 2022 (IZSVe, 2022)



Across Europe, the number of poultry/captive bird IPs reported weekly has increased further in week 10 at around 230 (Figure 3). This increase is mainly due to the outbreak in France for which the total is now 751 IPs. Around 40 outbreaks have been reported so far in week 11. Although cases of HPAI infection in wild birds are decreasing week on week (Figure 3), more cases may still be anticipated into the spring months at least in Europe.

The map below (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 21 March 2022. Those events reported since our last outbreak assessment on 14 March are identified with dots, although many of the French poultry outbreaks are yet to be reported on OIE.

Map 3: HPAI outbreaks (from OIE) in poultry, captive, and wild birds across Europe, September 2021 to 21 March 2022.



Implications for the UK

Given the continuing reports of wild bird cases of HPAI H5N1 across GB, the domestic poultry and captive bird populations in GB 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 2021/22 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 GB during the autumn/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 continue to be reported across Europe and in GB since our last assessment.

Numbers of migrating wild water birds (ducks, geese, and some swan species) peaked in GB in December/January and these birds will begin their return journey through Europe during March. There have been 808 confirmed cases of HPAI H5 in wild birds in GB to 21 March 2022 across a range of species. The wild bird species 'order shift' observed (Figure 2) 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. In continental Europe, pigeons, corvids and sparrows which could also serve as bridging species continue to be reported as infected. The increased number of duck premises affected by HPAI during the latter part of the season in GB (Figure 1) is similar to the infection trend currently being observed in France (Gouv.fr, 2022; PAFF France 2022). It is important 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 GB. 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 of 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 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, which can be found here: <u>https://www.gov.uk/guidance/avian-influenza-bird-flu#biosecurity-advice</u>.

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 <u>Field</u> <u>Services Office</u>. Further information is available here:

<u>https://www.gov.uk/guidance/avian-influenza-bird-flu</u> including updated biosecurity advice for poultry keepers for England; <u>https://gov.wales/avian-influenza</u> for Wales; <u>http://gov.scot/avianinfluenza</u> for Scotland and; <u>https://www.daera-</u> 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 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 (Tel: 03459 33 55 77 – please select option 7):

- Three or more swans or geese.
- Any number of 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 (Tel: 03459 33 55 77 – please select option 7). It is advisable that you do not touch these birds.

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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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