International Animal Health Epidemic Intelligence team	
Situation report	03 Jan 2017

Epidemiological situation of HPAI H5 in Europe since October 2016: situation as of 2nd January 2017

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Source: Data updated on 01/01/2017 (inclusive) ADNS/FAO/OIE/Promed, DGAL (General Directorate of Food – French Ministry of Agriculture), European Commission

Since the last report, some countries have detected a highly pathogenic avian influenza (HPAI) H5N5 virus in wild birds: Montenegro (source: OIE 23/12/2016), Italy (source: ADNS 30/12/2016) and the Netherlands (co-infection with H5N8 – source: ADNS 15/12/2016).

Since the last situation report on 26 Dec 2016, 57 new HPAI H5N8 outbreaks were reported in Europe (European Union and Switzerland), mainly in France (23 outbreaks in farms), Poland (10 outbreaks in farms), Germany (6 outbreaks in farms) and Hungary (5 outbreaks of which one in wild birds). The virus has been detected for the first time in Slovakia (in a poultry farm in Bratislava) and Ireland (in a widgeon in Wexford County). The total number of outbreaks and cases reported in Europe continues to increase and is now 724 (compared to 667 last week), of which 351 were wild birds (57 species affected), 364 in farms, and 9 in captive birds (Table 1 & 2).

The HPAI H5N8 situation in France is detailed in the website of the ESA Platform in reports from 20 Dec (link), 16 Dec (link), 5 Dec (link), 2 Dec (link), and 30 Nov (link).

An interactive map of outbreaks and cases of HPAI H5N8 in Europe is also provided (link)

The HP H5N8 virus is also present beyond Europe. After having been detected in Israel (21 outbreaks since November – source: Promed 30/12/2016), Egypt, Tunisia, Iran, Russia and Ukraine (see previous reports), the virus is now present in South Korea (last cases identified in March 2016 – source: Promed 31/03/2016 and 25/12/2016) and Nigeria.

Table 1: Evolution of number of outbreaks and cases of HPAI H5N8 in the European Union and Switzerland and number of countries affected (in parentheses) reported from 26 Oct 2016 to 1st Jan 2017 (inclusive) (sources: OIE/ADNS/DGAL/European Commission)

Date of report	Nb of outbreaks Captive birds (nb of countries)	Nb of outbreaks Farms (nb of countries)	Nb of outbreaks Wild birds (nb of countries)
10/11	0	1 (1)	5 (5)
14/11	0	10 (3)	9 (8)
17/11	1 (1)	11 (3)	40 (8)
22/11	2 (2)	16 (5)	76 (8)
28/11	3 (2)	36 (6)	127 (11)
05/12	6 (3)	70 (8)	194 (12)
12/12	7 (4)	156 (8)	244 (13)
19/12	7 (4)	259 (10)	292 (13)
26/12	7 (4)	315 (11)	345 (17)
02/01	8 (5) *	364 (12) **	351 (18) ***

*New countries since the last report for each category: * Slovakia, ** Romania, *** Ireland*

Table 2: Number of outbreaks and cases of HPAI H5N8 in the European Union and Switzerland reported from 26 Oct 2016 to 1st Jan 2017 (inclusive) (sources: OIE/ADNS/DGAL/European Commission).

	Captive	Breeding	Wild
Germany	4	25	139
Austria		2	3
Bulgaria		8	1
Croatia			2
Denmark		1	35
Finland	1		8
France	1	72	5
Greece			1
Hungary		218	5
Ireland			1
Montenegro			1
Netherlands	2	9	38

Poland		22	5
Romania		1	5
United-Kingdom		1	7
Serbia		3	1
Slovakia	1		
Sweden		2	10
Switzerland			84
Total	**9**	**364**	**351**

The mortality reported in farms is variable depending on the species, but also for a given species, and is calculated based on a limited number of outbreaks. For mono-species farms, the mortality varied from 0.06 to 33% in *Gallus gallus* farms, around 20 % in turkey farms (except for the UK outbreak with a 99% mortality rate), and from 0 to 70% in palmipeds. Although the data must be carefully interpreted (as time of intervention in relation to infection varied, some farms are epidemiologically linked, the beginning of infection is unknown, etc.), it should be noted that this strain appears to have an unusual virulence in breeding palmipeds.

The 57 different species of birds infected in the avifauna in Europe, with their families, are:

- **Accipitridae**: Eurasian Buzzard, Rough-legged Buzzard, White-tailed Eagle, Eagle spp, Northern Goshawk, Sparrow Hawk

- **Anatidae**: Northern Pintail, Common Teal, Common Pochard, Tufted Duck, Common Goldeneye, Mallard, Eurasian Wigeon, Gadwall, Whooper Swan, Mute Swan, Northern pintail, Greylag goose, Bean goose, White-fronted Goose, Pink-footed Goose, Greater Scaup, Dark-bellied Brant, Canada Goose, Barnacle Goose, Res-breasted Goose, Black Swan, Common Shelduck, Common Eider, Red-crested Pochard, Common Scoter, Common Merganser

- **Ardeidae**: Grey Heron

- **Ciconiidae**: Stork

- **Colombidae**: Collared Dove

- **Corvidae**: Eurasian Magpie, Hooded Crow, Common Raven, Carrion Crow

- **Dromaiidae**: Emu

- **Falconidae**: Peregrine Falcon

- **Laridae**: Black-headed Gull, Huahine Gull, Herring Gull, Mew Gull, Great Black-backed Gull, Yellow-legged Gull

- **Pelecanidae**: Great white Pelican

- **Phalacrocoracidae**: Great Cormorant

- **Podicipedidae**: Great-crested Grebe, Little Grebe

- **Rallidae**: Common Moorhen, Eurasian Coot

- **Scolopacidae**: Curlew spp and Green Sandpiper

- **Strigidae**: Eagle Owl

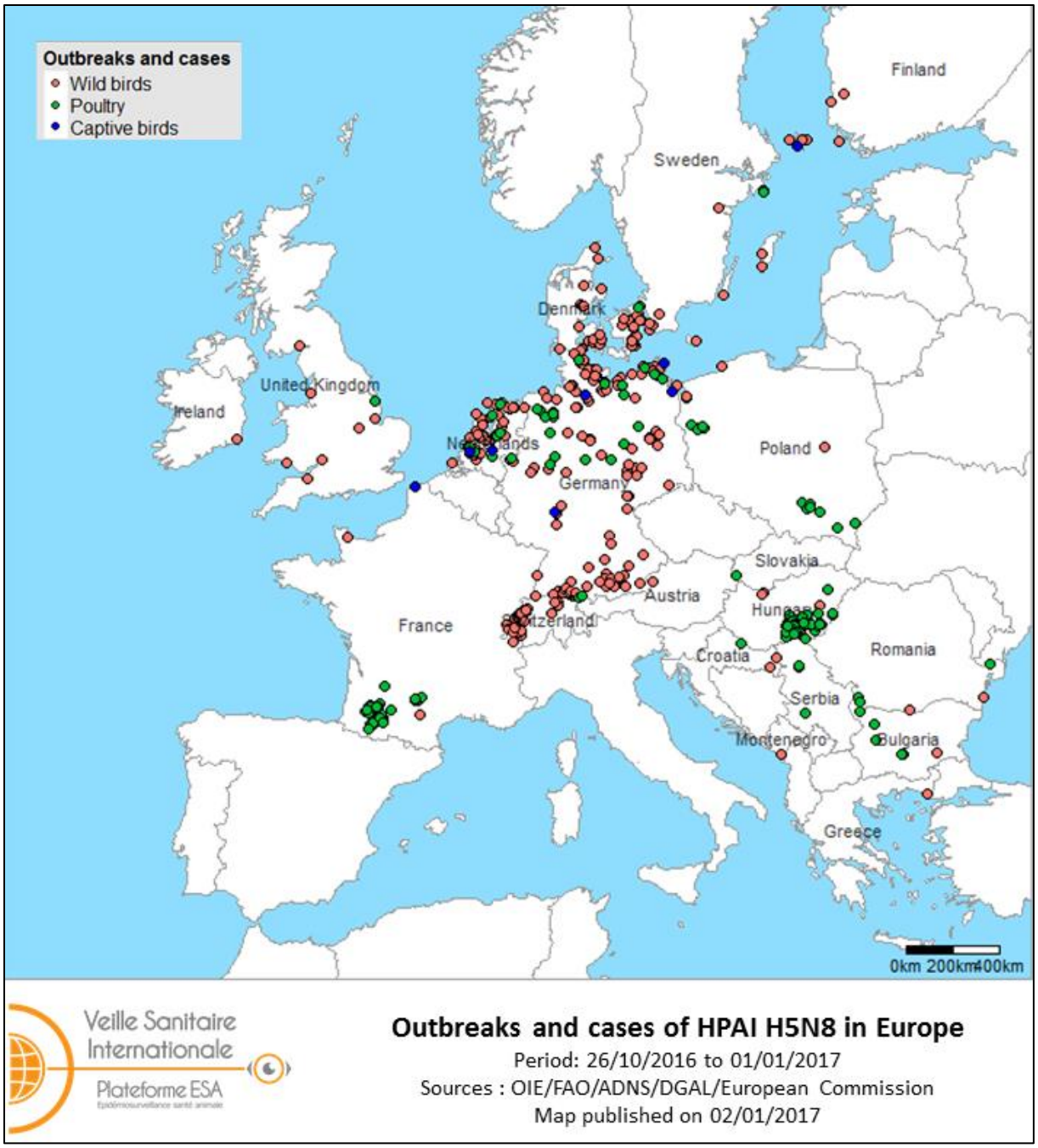

Figure 1: Outbreaks and cases of HPAI H5N8 reported in the European Union and Switzerland from 26 Oct 2016 to 1st Jan 2017 (inclusive) (sources: OIE/FAO/ADNS/DGAL/European Commission).

The European Commission and the FAO are calling on Member States to reinforce and maintain vigilance for wild birds and poultry.

References:

- The Global Consortium for H5N8 and Related Influenza Viruses 2016. Role for migratory wild birds in the global spread of avian influenza H5N8, Science, 14 Oct 2016:Vol. 354, Issue 6309, pp. 213-217. DOI: 10.1126/science.aaf8852

- H5N8 highly pathogenic avian influenza (HPAI) of clade 2.3.4.4 detected through surveillance of wild migratory birds in the Tyva Republic, the Russian Federation – potential for international spread, Empreswatch septembre 2016

- EFSA, 2014. Highly pathogenic avian influenza A subtype H5N8. EFSA Journal 2014;12(12):3941, 32 pp. doi:10.2903/j.efsa.2014.3941

Previous reports:

- « Situation épidémiologique IAHP H5N8 en Europe depuis octobre 2016 : point de situation au 26/12/2016 » du 27/12/2016 (lien)

- « Situation épidémiologique IAHP H5N8 en Europe depuis octobre 2016 : point de situation au 19/12/2016 » du 19/12/2016 (lien)

- « Situation épidémiologique IAHP H5N8 en Europe depuis octobre 2016 : point de situation au 12/12/2016 » du 12/12/2016 (lien)

- « Situation épidémiologique IAHP H5N8 en Europe depuis octobre 2016 : point de situation au 05/12/2016 » du 05/12/2016 (lien)

- « Recrudescence de foyers d'IAHP H5N8 en Europe en octobre et novembre 2016 : actualisation au 28/11/2016 à 12h00 » du 28/11/2016 (lien)

- « Recrudescence de foyers d'IAHP H5N8 en Europe en octobre et novembre 2016 : actualisation au 22/11/2016 » du 24/11/2016 (lien)

- « Recrudescence de foyers d'IAHP H5N8 en Europe en octobre et novembre 2016 : actualisation au 17/11/2016 » du 17/11/2016 (lien)

- « Recrudescence de foyers d'IAHP H5N8 en Europe en octobre et novembre 2016 » du 10/11/2016 (lien)