



# State of play on recent outbreaks of avian influenza

CDG Animal Products – Sector Poultry and Eggs

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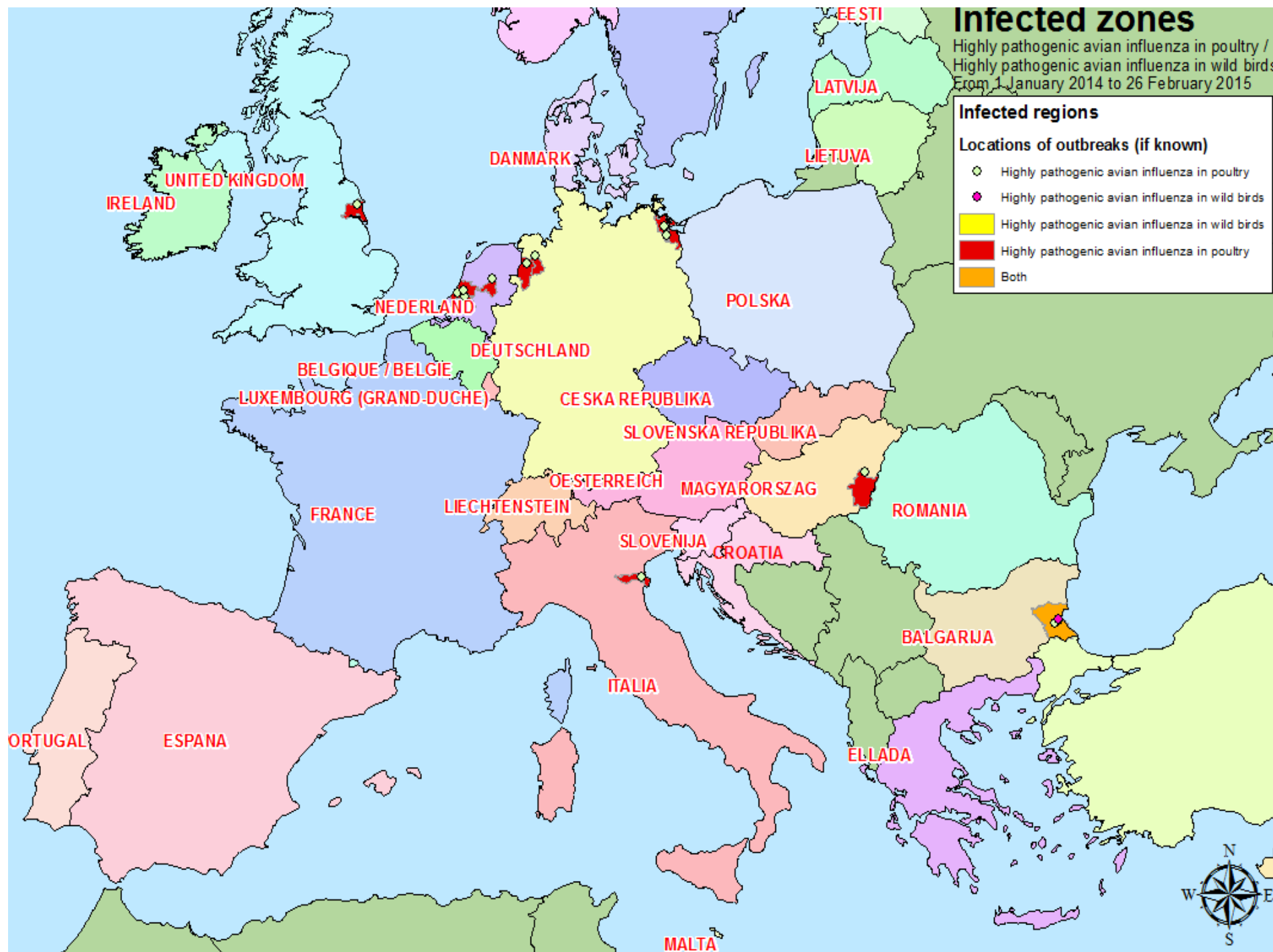
## Infected zones

Highly pathogenic avian influenza in poultry /  
Highly pathogenic avian influenza in wild birds  
From 1 January 2014 to 26 February 2015

### Infected regions

#### Locations of outbreaks (if known)

- Highly pathogenic avian influenza in poultry
- Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry
- Both





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## HPAI outbreaks between 05/11/2014 and 24/02/2015

Country	Affected region	HPAI subtype	Outbreak	Confirmation date	Flock size	Species / Production type	
<b>Germany</b>	Mecklenburg-Western Pomerania	H5N8	1	05/11/2014	30939	fattening turkeys	indoor
	Mecklenburg-Western Pomerania, island	H5N8		21/11/2014	1	common teal	live bird
	Lower Saxony, Cloppenburg	H5N8	1	16/12/2014	17887	fattening turkeys	indoor
	Lower Saxony, Emsland	H5N8	1	20/12/2014	10102	fattening ducks	indoor
	Sachsen-Anhalt, Anhalt-Bitterfeld	H5N8		20/12/2014	1	mallard	dead bird
	Rostock	H5N8	1	07/01/2015	496	zoo, white stork	dead bird
	Mecklenburg- Western Pomerania, Anklam	H5N8	1	20/01/2015	196	backyard	
	Mecklenburg- Western Pomerania, Anklam	H5N8	2	26/01/2015	36	backyard	
<b>Netherlands</b>	Utrecht province, Hekendorp	H5N8	1	16/11/2014	150000	laying hens	indoor
	Zuid-Holland province, Ter Aar	H5N8	1	21/11/2014	43000	laying hens	indoor
	Overijssel province, Kamperveen	H5N8	1	21/11/2014	10000	broiler breeder	indoor
	Overijssel province, Kamperveen	H5N8	2	23/11/2014	14600	fattening ducks	indoor
	Zuid Holland province, Zoeterwoude	H5N8	1	30/11/2014	28000	laying hens	indoor
	Utrecht province, Kamerik	H5N8		01/12/2014	2	Eurasian widgeon	live bird
<b>United Kingdom</b>	East Riding of Yorkshire	H5N8	1	16/11/2014	6178	breeding ducks	indoor
<b>Italy</b>	Veneto, Rovigo	H5N8	1	15/12/2014	31985	fattening turkeys	indoor
<b>Bulgaria</b>	Burgas Region, Poda protected area	H5N1		26/01/2015	1	Dalmation pelican	dead bird
	Burgas Region, Konstantinovo	H5N1		02/02/2015	22	backyard	
	Burgas Region, Poda protected area	H5N1		06/02/2015	2	dove / gull	dead bird
<b>Hungary</b>	Békés County, Füzesgyarmat	H5N8	1	24/02/2015	21170	fattening ducks	indoors

## Epidemiology (1)

**EFSA** – Report published on 15/12/2015

- Entry of H5N8 HPAI into Europe and subsequent spread are separate events and may involve different routes
- No known direct migration routes of wild birds from East Asia to Western Europe
- Long distance transmission could occur via cross infection of different species and populations, although full evidence is lacking

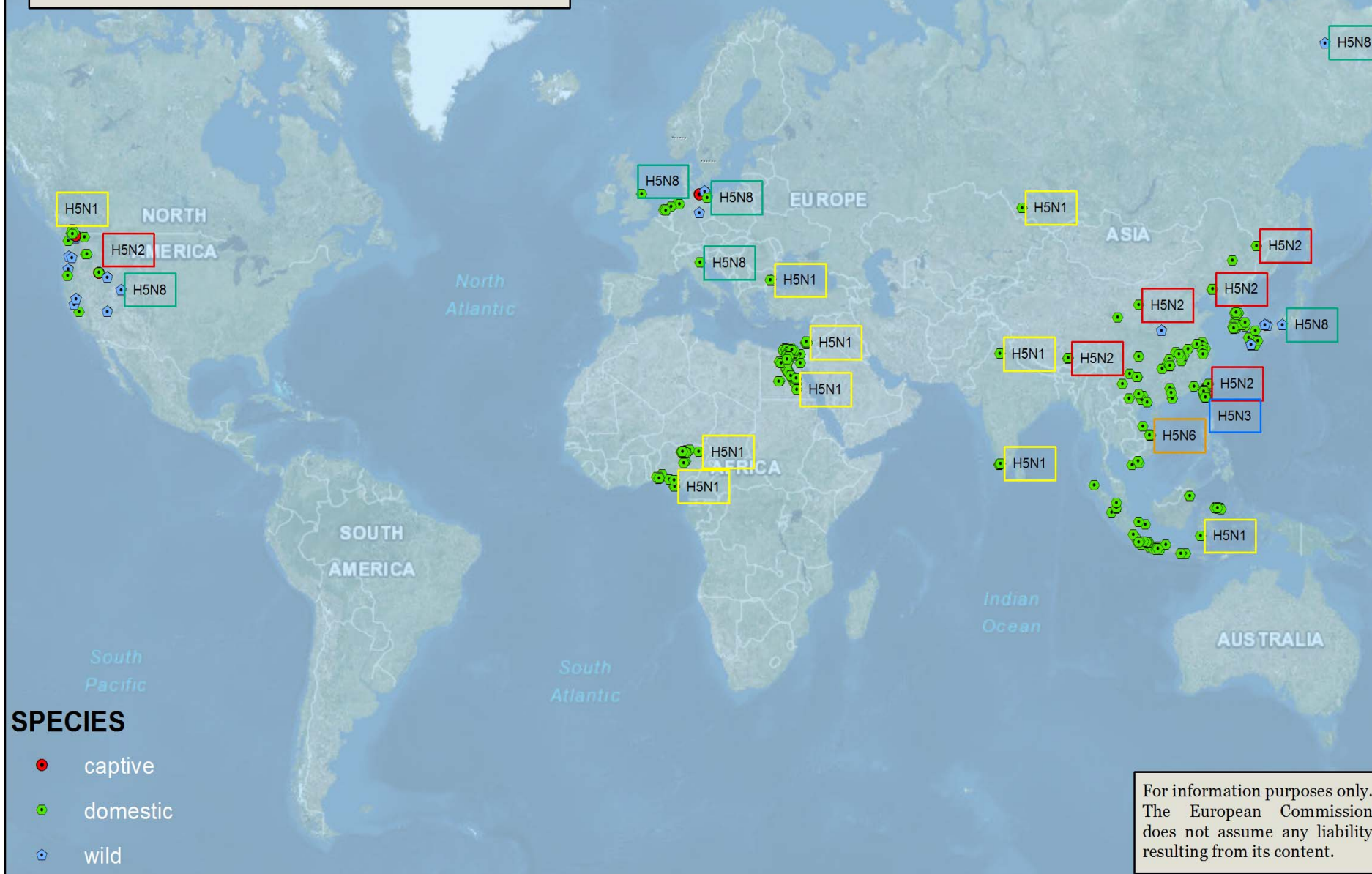
## Epidemiology (2)

- H5N8 HPAI appears to be less pathogenic than H5N1
- HPAI in some wild waterfowl and domestic ducks, although showing high pathogenicity in chickens and turkeys
- Clinical presentation in ducks and geese is challenging – may be inapparent infection
- Multiple incursions to holdings in Europe with indoor poultry emphasising potential role for fomite spread and improvements in biosecurity
- Environmental persistence
  - **H5 HPAI 4°C >50 days**

# HPAI

Outbreaks from 03/08/2014 to 30/01/2015

Data source: EMPRES-I





## HPAI in Canada and USA in poultry and wild birds

Multiple detections of H5Nx HPAI

Unprecedented intercontinental spread – along the Pacific flyway

Multiple reassortants with North American lineage viruses

**Mid 12/2014: H5N2 HPAI** in chicken and turkey holdings in Canada (British Columbia) and in backyard poultry and wild mallard, northern pintail in USA

**H5N8 HPAI** in commercial turkeys, backyard poultry, captive falcons, wild ducks (wigeon, green-winged teal, mallard and gadwall) in USA

**H5N1 HPAI** in Canada in poultry and in green-winged teal in USA

**06/03: HPAI H5N2** in turkey breeders in Minnesota

First finding in the Mississippi flyway!

Several Commission Decisions/Regulations adopted to apply regionalisation for imports of poultry and poultry products from these two countries

## Challenges - Biosecurity

- First line of defence against AI virus introduction in poultry flocks, but
- Solid scientific evidence about the real efficacy of these measures is often lacking or is not quantified
- Poultry with open air access and indoor farms affected
- Need for protection against direct and indirect virus introduction





# Challenges - Surveillance

- EU wide in poultry and wild birds
- since 2003
- risk-based
- fit for purpose, affordable
- clearly defined objectives
- inform risk manager in order to trigger veterinary action
- appropriate to species and poultry production systems
- wild bird surveillance  
EFSA/EURL recommend active & passive

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## Annual Report

on surveillance  
for avian influenza in  
poultry and in wild birds in  
Member States of the  
European Union  
in 2013



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# Challenges

## Vaccination against AI

- ***Emergency and preventive vaccination***
  - Member States' decision
  - Surveillance and control of movements
- ***Currently very little use of vaccination in poultry and zoo birds***
- ***Member States do not see the advantages in using emergency vaccination with currently available vaccines***
  - cumbersome, costly application
  - onset of immunity too slow, protection not always satisfactory
  - trade implications although internationally recognised measure



## **Some conclusions on avian influenza**

- Response to AI outbreaks works well
- Robust emergency procedures and contingency plans in place
- AI disease control are generally well accepted
- Good balance between prescription and flexibility for Member States
- No major shift in legislation (AHR) foreseen
- Fine-tuning of existing measures



***Thank you for  
your  
attention!!***

[http://ec.europa.eu/food/animal/diseases/controlmeasures/avian/index\\_en.htm](http://ec.europa.eu/food/animal/diseases/controlmeasures/avian/index_en.htm)

<http://www.efsa.europa.eu/en/efsajournal/pub/3941.htm>