HPAI H5N8 outbreaks in Belgium

PAFF Committee July 13, 2017



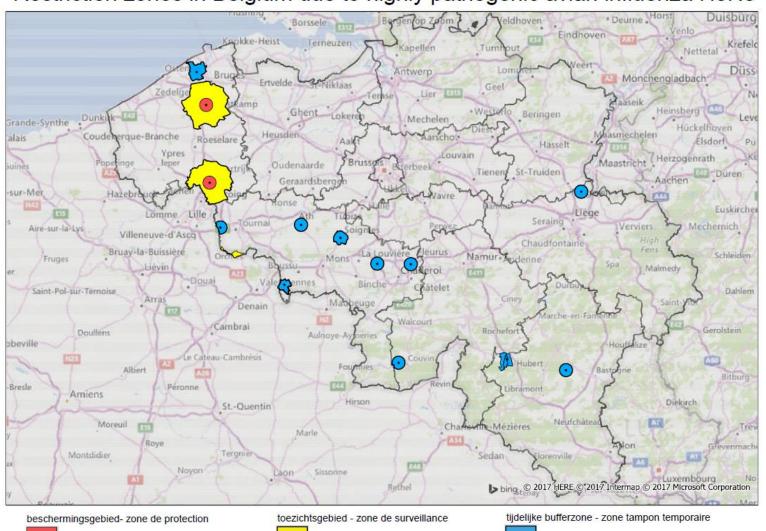
Highly Pathogenic Avian Influenza H5N8 in Belgium

- February and March 2017: 5 outbreaks in wild and captive birds
- From June 1st to July 7th, 2017: 13 outbreaks in various poultry and ornamental birds species (chickens, ducks, geese, guinea fowls, turkey, peacocks)
 - 2 professionals dealers (Flanders)
 - 11 hobbyists: 1 in Flanders, 10 in Wallonia



Outbreaks on map (July 12th, 2017)

Restriction zones in Belgium due to highly pathogenic avian influenza H5N8





Outbreak	Begin date (OIE)	Province	Municipality	Village	Ownership	Introduced animals	Positive animals	Number of heads	% mortality	Source of infection
1	1st June 2017	LUX	Wellin	Halma	Hobby	?	Chickens	11	36.3	Wildlife?
2	13 June 2017	LUX	Sainte-Ode	Amberloup	Hobby	Chickens	Chickens	25	40	Market
3	14 June 2017	HAI	Soignies	Soignies	Hobby	Ducks	Chickens	33	54.5	Market
4	15 June 2017	WVL	Zuienkerke	Houtave	Hobby	Chickens and ducks	Chickens, ducks, turkeys	43	39.6	Purchase to #6
5	16 June 2017	HAI	Quiévrain	Baisieux	Hobby	Duck	Chickens	26	80	Market
6	10 June 2017	WVL	Oostkamp	Waardamme	Dealer	Ducks	Guinea fowls, turkeys	4047	12.5	Purchase to #8
7	20 June 2017	HAI	Ath	Maffle	Hobby	Ducks and guin. fowls	Chickens and ducks	120	18.3	Market
8	20 June 2017	WVL	Menen	Menen	Dealer	Ducklings?	Ornamental hen (Brahma)	972	?	Investigation still ongoing
9	20 June 2017	NAM	Couvin	Dailly	Hobby	Ducklings?	Chickens	47	74.4	? Wildlife
10	20 June 2017	HAI	Courcelles	Trazegnies	Hobby	Chickens	Chickens	20	95	Market
11	22 June in 2017	HAI	Tournai	Hertain	Hobby	Ducks and turkeys	Chickens, g. fowls, turkeys, peacock	66	63.3	Market
12	23 June 2017	HAI	Fleurus	Wangenies	Hobby	Ducks	Chickens	78	15.3	Market
13	7 July 2017	LIE	Bassenge	Bassenge	Hobby	;	Silk hens	19	26.3	Wildlife?



H5N8 - 2017- Belgium : Same profile in 10/13 outbreaks

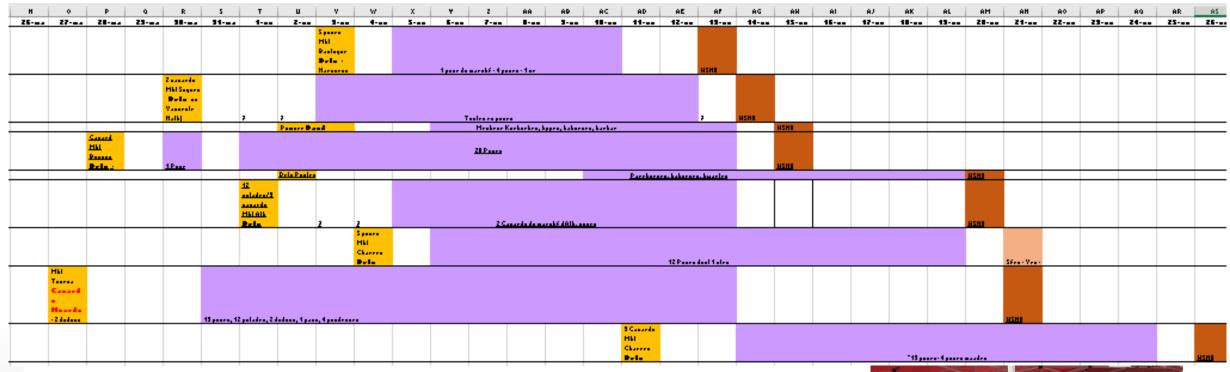
- Day-zero: Introduction of the virus
- [1-8 days]: apparition of clinical signs
- [9-14 days]: clinical disease
- After 14 days: remission and healing
- Quick clearance of the virus
- Mortality rate: variable: [12,5 95%]
- Chickens > guinea fowls > turkeys >>> ducks
- Young > old



1. Origin: markets

- Outbreaks #2-3-5-7-10-11-12 + GDL-2-3-4
- Same bird dealer (= outbreak #8) in 6 different markets
- Exchange/movement of dirty transport boxes?
- Purchase of 3-week old ducks and chickens (5 x) or turkey – goose – guinea fowl (1x)
- Investigation of #8 still ongoing





Each line is an outbreak's time line

Yellow: purchase of infected birds

Violet: clinical period

Red: confirmation of HPAI



2. Origin: purchase

- Outbreaks #4 6
- #6 (professional dealer): purchase of ducks at #8 (market bird dealer)
- #4 (hobbyist): purchase of these ducks (and chickens) to #6
- Same onset of clinical symptoms [2-7 days], high mortality in guinea fowls (#6) and chickens (Coucous de Malines) (#4)





3. Origin: wildlife?

- Hobby holdings in Wellin (#1, Lux), Couvin (#9, Nam), Bassenge (#13, Liège)
- Wallonia: villages, close to rivers and woods
- Ornamental birds and chickens
- Not or semi-confined: possible contact with wild birds
- No contact with other holdings
- No introduction of birds
- → Wildlife?





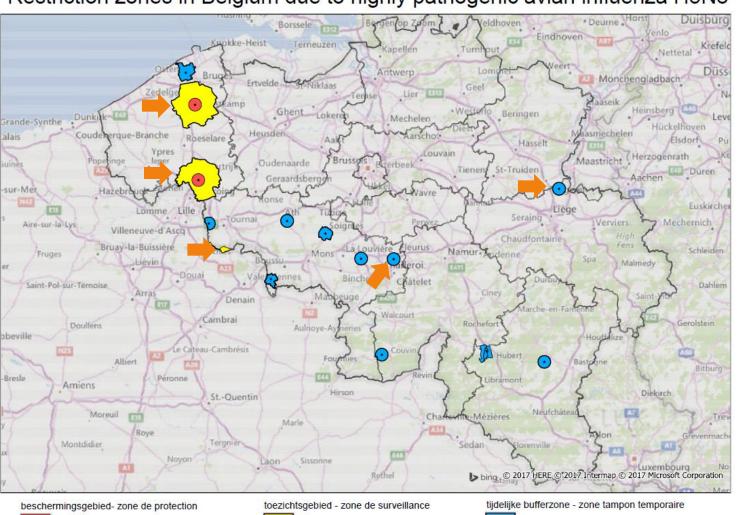
Sequencing: preliminary results

- Done by the NRL CODA-CERVA and the EURL APHA
- Strains of BE_Feb-March <u>different</u> from strains of BE_June
- Close relationship between strains from UK, GDL en BE_June
- Work in progress...



Zones on map

Restriction zones in Belgium due to highly pathogenic avian influenza H5N8



= zones wherein measures have not been lifted yet



Protection zone

- 3 km: #6 and #8 (commercial poultry)
- Inventory of poultry and other birds
- Movement ban of poultry, birds and hatching eggs
- Confinement of all birds
- Feeding and drinking only inside
- If no other cases, the zone is modified into a Surveillance zone after 3 weeks



Surveillance zone

- 10 km for #6-8
- Inventory of poultry and other birds
- Movement ban of poultry, birds and hatching eggs
- Prohibition of birds gathering events (exhibitions, markets...)
- Feeding and drinking only inside
- If no other cases, the zone will be lifted after 30 days



Temporary buffer zone

- 3 km
- Inventory of poultry and other birds
- Movement ban of poultry, birds and hatching eggs
- Prohibition of birds gathering events (exhibitions, markets...)
- Feeding and drinking only inside
- If no other cases the zone will be lifted after 3 weeks
- Hobbyists: up until now no professional holdings inside the zones



Lifting of measures in restriction zones

beperkingsgebied- zone de restriction	begin datum - date de début	vrij vanaf - levée à partir de			
Wellin	2/06/2017	23/06/2017			
Saint-Ode	13/06/2017	4/07/2017			
Soignies	13/06/2017	4/07/2017			
Zuienkerke	14/06/2017	5/07/2017			
Quiévrain	15/06/2017	6/07/2017			
Ath	16/06/2017	7/07/2017			
Couvin	19/06/2017	10/07/2017			
Trazegnies	22/06/2017	13/07/2017			
Hertain	22/06/2017	13/07/2017			
Oostkamp - 10 km	15/06/2017	15/07/2017			
Menen - 10 km	16/06/2017	16/07/2017			
Wangenies	27/06/2017	18/07/2017			
Brunehaut - Rumes	30/06/2017	30/07/2017			
Bassenge	03/7/2017	24/07/2017			



National measures

- Preventive measures already in place
 - Feeding and drinking inside for commercial poultry farms and also for non commercial holdings in higher risk zones
 - No outdoor access or at least protection by nets for commercial poultry in higher risk zones
 - Additional conditions for markets (no water birds allowed on markets...)
- Raising awareness of farmers and vets!

