Highly Pathogenic Avian Influenza in the Czech Republic

SCOPAFF meeting, 13. 2. - 14. 2. 2020
History of Highly Pathogenic Avian Influenza (HPAI) in the Czech Republic

- 2006 – wild birds
- 2007 – poultry, wild birds
- 2017 – poultry, wild birds, captive birds

Outbreaks of HPAI in 2017

**Poultry**
- 39 HPAI outbreaks (H5N8, H5N5) in 11 regions
  - 33 HPAI H5N8 outbreaks in backyard flock
  - 5 HPAI H5N8 outbreaks in commercial poultry farm
  - 1 HPAI H5N5 outbreak in captive birds in ZOO Liberec

**Wild birds**
- 51 HPAI positive wild birds (H5N8) in 13 regions
  - 40 swans, 7 mallards, 2 geese, 2 herons
Outbreak HPAI 2020

- Region Vysočina
- District Žďár nad Sázavou
- Olešnička - cadastral territory 763454
- 49°29'57,05"N, 16°19'57,928"E

outbreak, protection zone (3 km), surveillance zone (10 km)
Outbreak description

✓ 1 outbreak of HPAI in poultry detected in a small backyard flock with 12 laying hens and 3 ducks - in total 15 birds

✓ 17. 1. 2020 - the owner informed the Regional Veterinary Administration (RVA) Vysočina about death of 6 hens during previous two days

✓ Clinical symptoms of dead birds: cyanosis of comb

✓ 17. 1. 2020 - the official samples of dead birds sent to the National reference laboratory in the State Veterinary Institute Prague

✓ 17. 1. 2020 - the NRL confirmed AI virus H5

✓ 18. 1. 2020 - the NRL confirmed HPAI H5N8

✓ 18. 1. 2020 - the culling and disposal of 9 birds in the affected flock
  - the culling and disposal of 13 birds in 2 flocks in the vicinity
  - disposal of poultry products, feeding stuffs and by-products
  - preliminary cleaning and disinfection
Measures in outbreak

Preliminary measures (17. 1. 2020)
- Census of susceptible animals
- Biosecurity - to keep birds on their living places
- Ban of all movement of poultry, poultry products, by-products
- Disinfection

Control measures (18. 1. 2020)
- Culling and disposal of all remaining poultry on the affected farm
- Disposal of poultry products, feeding stuffs and by-products
- Disinfection

The same measures were applied in two contact holdings (18. 1. 2020)

Epidemiological investigation
- Biosecurity: partly fenced backyard closed to stream, not protected free-range feeding, over fence contact with poultry in neighbourhood (12 laying hens and 1 rooster)
- Source of infection probably contact with wild birds
Measures in the protection zone

- Census of all poultry holdings (by 22. 1. 2020 at the latest)*
- To keep birds in closed facilities
- Ban of all movement of poultry, poultry products, by-products
- Disinfection and biosecurity measures on poultry holdings
- Poultry health monitoring, changes to be reported to RVA
- Ban of poultry and other birds exhibitions and markets
- Ban of the release of birds for restocking

* online recording questionnaire

- No commercial farm registered in protection zone

- Official checks of poultry holdings and sampling according to Diagnostic manual were performed
- The objective of the official controls was to check health status of birds and preventive measures and biosecurity on these farms
Measures in the surveillance zone

— Census of commercial poultry holdings (by 22. 1. 2020 at the latest)
— Ban of all movement of poultry and poultry products (exception approved by RVA only)
— Disinfection and biosecurity measures on poultry holdings
— Ban of poultry and other birds exhibitions and markets
— Ban of the release of birds for restocking
— One small registered commercial farm in surveillance zone – currently 430 broilers and 170 laying hens
Early warning system = for farmers with commercial holding is mandatory to record the changes in poultry health:

- Drop in feed and water intake higher than 20%,
- Drop in egg production higher than 5% for more than two days,
- Mortality rate higher than 3% in a week,
- Any clinical sign or post-mortem lesion suggesting avian influenza.

Surveillance programme in poultry and wild birds (in accordance with the Commission Decision 2010/367/EU)

**Poultry**

- active surveillance
- on the whole territory of the Czech Republic
- Categories included: laying hens flocks of Gallus gallus producing table eggs and breeding flocks of Gallus gallus; free range laying hens; turkey breeders; duck breeders; geese breeders; fattening turkeys; fattening ducks; fattening geese; farmed game birds (gallinaceous); farmed game birds (waterfowl)

**Wild birds**

- passive surveillance on sick and found dead wild birds
— No major migratory flight paths of birds are recognized in the Czech Republic. There are recognized only several minor flight paths of birds from north to south.

— Due to this reason and according to the epidemiological and ornithological data the Czech Republic has not identified any high risk area for the introduction of AI.

— The Czech Republic has identified „areas at risk“ with high density of poultry farming and landscape with more water bodies (ponds, rivers, dams, lakes), i.e. regions:

  ✓ **Southern Moravian region**
  ✓ **Southern Bohemian region**
  ✓ **Pardubice region**

— More intensive official checks in poultry holdings are performed in line with the multi-annual control plan in such areas
Thank you for your attention