

Newcastle disease

in the Czech Republic

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Prevention of Newcastle Disease in the Czech Republic

- Vaccination against Newcastle disease
 - ✓ Mandatory for:
 - ✓ Registered holding with breeding flocks of Gallus Gallus (with more than 100 birds)
 - Registered holding with laying hens of Gallus Gallus (with more than 500 birds)
- ✓ 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.



Previous cases of Newcastle disease in the Czech Republic

- √ 1998 poultry backyard flock
- √ 2007 captive birds pigeons
- √ 2012 captive birds pigeons
- ✓ 2013 wild birds



Current epidemiological situation

- ✓ 1 singl outbreak of Newcastle disease in poultry on back yard flock of laying hens (Gallus Gallus)
- ✓ in total 34 birds in the flock
- ✓ 9. 4 2018 at 18:30 the farmer recorded to Regional State Veterinary
 Administration of Zlín information about death of 11 hens
- ✓ clinical symptoms before death: respiratory disorders occur breathe with an open beak, apathy, stop of laying.
- √ 10. 4. 2018 the sample of dead birds sent to National reference laboratory in the State Veterinary Institute Prague (to test for avian influenza and Newcastle disease)
- √ 13. 4. 2018 National reference laboratory confirmed the Newcastle disease



Laboratory testing

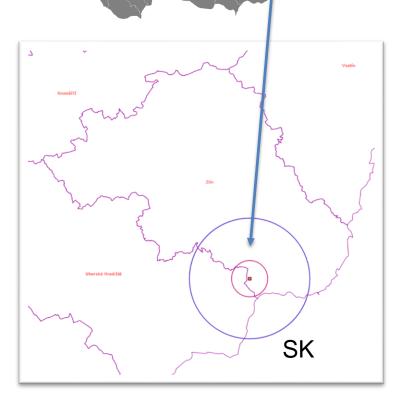
- ✓ Avian paramyxovirus -1 virus RT-PCR polymerase chain reaction
- ✓ Avian paramyxovirus -1 virus sequence analysis
- ✓ Avian influenza RT-PCR AIV polymerase chain reaction
- ✓ Result:
 - ✓ RT-PCR and sequence analysis confirmed virulent avian paramyxovirus 1 (Newcastle disease)
 - Avian influenza virus was not detected

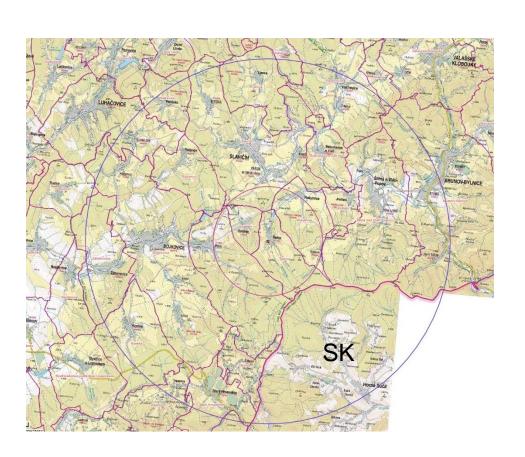


Localization of the outbreak



- ✓ The District of Zlín
- ✓ Municipality Šanov
- ✓ 49°2'3,737"N, 17°54'30,351"E





Epidemiological investigation

- Age of birds: 1 3 years
- Vaccination against NCD: only some birds from the flock came from the holding with rearing hens, where the vaccination was carried out
- Biosecurity: fenced yard, feed held inside, over fence contact with poultry in the neighboring yard → one contact holding with 50 laying hens and one guinea-fowl. No clinical signs in contact holding.
- No movement of birds, products or ABP.
- A probably source of infection = wild birds



After confirmation on 13. 4. 2018

- Culling of all poultry in outbreak and contact holding
- Disposal of poultry products, feeding stuffs and by-products
- Disinfection
- The same measures ordered for one contact holding (13. 4. 2018)









Veterinary Administration Measures in the protection zone

- To carry out a list of backyard poultry (by 20. 4. 2018 at the latest)*
- To keep birds on their living places
- Ban of all movement of poultry, poultry products, byproducts
- Disinfection and biosecurity measures on poultry holdings
- To monitor health of poultry and to report changes to RVA
- Ban of poultry and other birds exhibitions and markets
- Ban of the release of birds for restocking

*possibility of on line recording Hlášení počtů ptactva v chovech v pásmu Newcastleské choroby Ohlašovatel Obec: 1 --- vyberte ---Tabulku vyplnil (jméno): Email: 1 Telefon: V obci nejsou chovy ptactva Seznam chovů ptactva v obci: Chovatel Adresa chovatele Kontaktní osoba Kontakt KU 1 Místo chovu (iméno, název) (adresa) Přidat řádek



Measures in the surveillance zone

- To carry out a list of poultry (by 20. 4. 2018 at the latest)
- Ban of all movement of poultry and poultry products (only with the exception approved by RVA)
- 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 registered commercial farm in surveillance zone: broilers farm with currently 21 000 birds

Surveillance zone extends on the territory of Slovakia Competent authority of Slovakia was informed on 13. 4. 2018

Thank you for your attention