

National Sanitary Veterinary and Food Safety Authority of Romania

Information on two Newcastle disease outbreaks in commercial broiler farms in Romania

PAFF Committee, 3-4 May 2016
Bruxelles



Location of the outbreaks

- Location of the two outbreaks: Prahova County
- · Outbreak in Gornet locality
- Date of confirmation:

09.04.2016

· Longitude: 26.080181

· Latitude: 45.110460

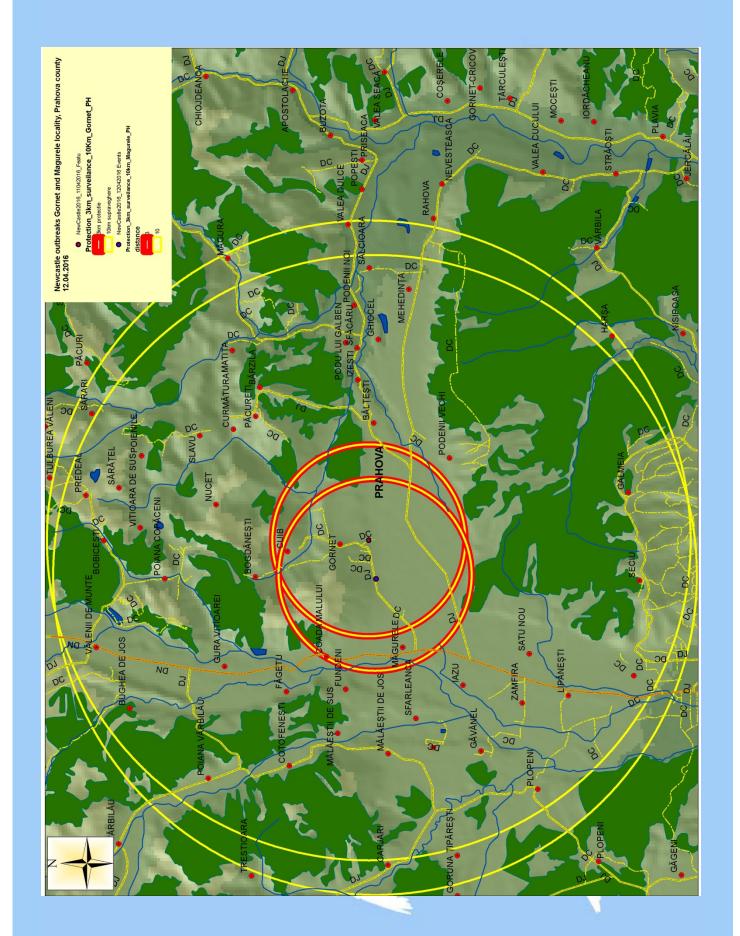
- outbreak in Măgurele locality
- Date of confirmation:

13.04.2016

· Longitude: 26.066434

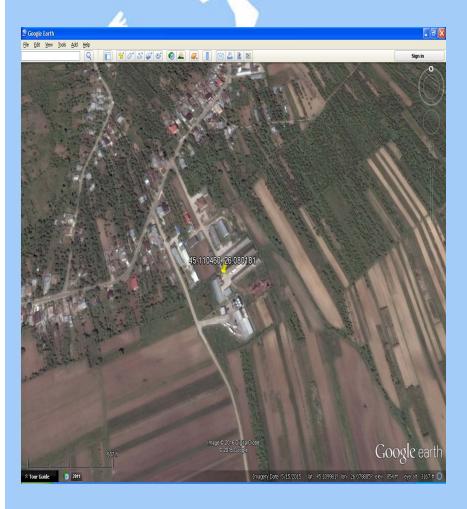
Latitude: 45.108841







Primary outbreak: Gornet locality



Outbreak holding: 70000 chickens, aged from 9 to 32 days old. Three shelters, each one with two compartments. The infected compartment was that from the shelter no. 2, compartment A. In the infected compartment were kept 13314 chickens.

First signs of disease: on 07.04.2016, until the date of confirmation, 975 chicken died.

Suspicion: notified by phone by the County Veterinary Authority (SVFSD), on 8-th of April; restriction on poultry movement established, measures according with the provisions of the Council Directive 92/66/EEC.

Confirmation: 12 samples were analyzed at the National Reference Laboratory by RT-PCR and anathomo-pathologically, and reacted positive on 9.04.2016.



Immunization, epidemiological investigation primary outbreak: Gornet locality

- The farmer has two more other commercial holdings, of the same capacity; one of them, in Magurele, was also infected as a secondary outbreak.
- The poultry have been immunized three times: on 07.03.2016, on 17.03.2016, the last one on 03.04.2016 with a live, attenuated vaccine.
- Even the farmer declared that the flock was vaccinated, the antibodies tittered in the laboratory on 18 samples were found at a low level.
- The preliminary epidemiological investigation did not reveal the origin of the virus, but it could be suspected a combination of lack of bio-security measures and wrong application of the vaccination procedures.
- have been established the restriction zones: a 3 km zone the protection zone, and a 10 km zone - the surveillance zone.
- In the protection zone, there are two localities (Cuib and Gornet)
- In the surveillance zone, there are more localities and four other commercial farms.



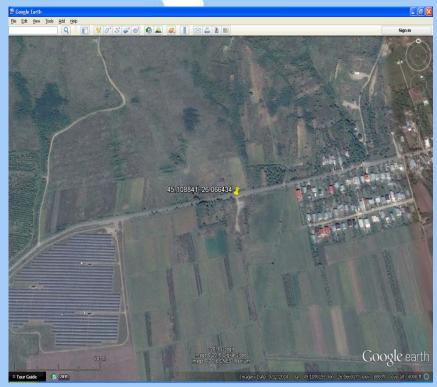
Secondary outbreak Magurele locality

Outbreak holding: 78500 chickens, aged from 11 to 27 days old, and sheltered in five sheds. In the infected shed were kept 11000 chickens.

First signs of disease: were notified on 11.04.2016, when chickens lost their appetite, showed apathy and, until the date of confirmation, 1170 chicken died.

Suspicion: notified by phone by the County Veterinary Authority (SVFSD), on 10-th of April; restriction on poultry movement established, measures according with the provisions of the Council Directive 92/66/EEC.

Confirmation: The samples collected from the holding were analyzed at the National Reference Laboratory by RT-PCR and anathomo-pathologically and reacted positive on 13.04.2016.





Immunization, epidemiological investigation secondary outbreak: Magurele locality

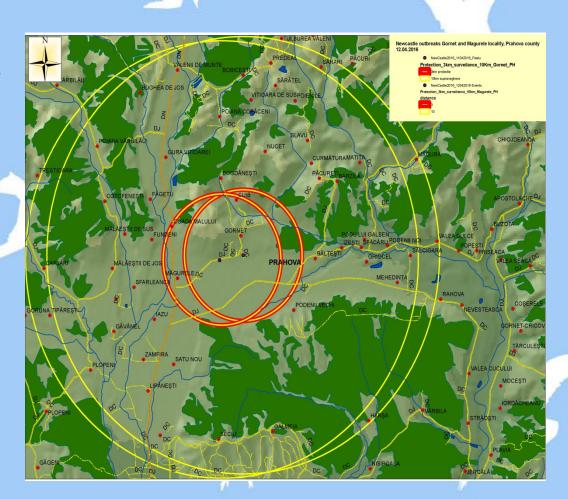
- The way in which the second holdings presumed to get infected was the luck in respecting the bio-security measures, taking into consideration that the holdings belongs to the same farmer, the infection in the second farm appeared a few days later after the first one.
- The flock has been also immunized three times: on 04.03.2016, in hatchery, on 25.03.2016, the last one on 06.04.2016. The titers of antibodies tested in the laboratory were, also under the acceptable limit.
- The preliminary epidemiological investigation did not revealed the origin of the virus, but it could also be suspected a combination of lack of bio-security measures and wrong application of the vaccination procedures.
- Also in the case of the second outbreak have been established the restriction zones: a 3 km zone - the protection zone, and a 10 km zone - the surveillance zone.



Protection and surveillance zone for both outbreaks

3 km protection zone

10 km surveillance zone



Surveillance in the protection zone

| Protection zone (4 localities) | | | | | | | | | | | |
|--------------------------------|---------|---------------------|------------------|------------------------------|--------------------------|--------------------|-----------|--|--|--|--|
| | 1/ | | | | | Examination result | | | | | |
| Locality | Village | Date of examination | Total holding | Backyar d with poultry | No. of receptive poultry | Healthy | Suspected | | | | |
| Gornet | Gornet | 15.04.2016 | 84 | 46 | 494 | 494 | 0 | | | | |
| Gornet | Cuib | 11-14.04.2016 | 331 | 184 | 1741 | 1741 | 0 | | | | |
| Magurele | | 19-19.04.2016 | 628 | 354 | 3822 | 3822 | 0 | | | | |
| Coada Malului | | 20-21.04.2016 | 162 | 106 | 1235 | 1235 | 0 | | | | |
| Total | 5 | | 1205 | 690 | 7292 | 7292 | 0 | | | | |

Inspections in the surveillance zones

| No | | | | Backyards | | Result of examination | | | |
|----|----------------------|---------------------|--------------------|----------------------------------|----------------------|-----------------------|-----------|--|--|
| | No. of localities | Date of examination | Total backyards | with recepti ve poultry | No. of poultry heads | Healthy | Suspected | | |
| | 50 | 15-27.04.2016 | 3230 | 1682 | 19578 | 19578 | 0 | | |

| | | | | | | Focare 1 | pseudope | sta aviara, Gorn | et si Magurele | | | | | | |
|--|--------|--------------------|-----------------------------------|-------------------------------|--------------------------------------|------------------------|--------------------------|-------------------|------------------------|-----------------|-----------------------------------|-------------------------------|--------------------------------------|-------|-----------------------|
| | | | | | | | | Localitati din: | | | | | | | |
| Zona de protectie | | | | | | | | | Zona de s | supraveghe | re | | | | |
| Localitate | Sat | Data examinarii | Total exploatatii existente | Exploa- tatii cu pasari | Efectiv de pasari la data examinarii | Nr pasari sanatoase | Nr pasari suspecte | Localitate | Sat | Data examinarii | Total exploatatii existente | Exploa- tatii cu pasari | Efectiv de pasari la data examinarii | | Nr pasari suspecte |
| Gornet | Gornet | 15.04.2016 | 84 | 46 | 494 | 494 | 0 | Valenii de Munte | 1,500 | 15.04.2016 | 1244 | 370 | 4300 | 4300 | 0 |
| Gornet | Cuib | 11-14.04.2016 | 331 | 184 | 1741 | 1741 | 0 | Predeal Sarari | Bobicesti | 21.04.2016 | 104 | 73 | 473 | 473 | 0 |
| Magurele | | 19-19.04.2016 | 628 | 354 | 3822 | 3822 | 0 | | Sarari | 24.04.2016 | 10 | 7 | 56 | 56 | 0 |
| Coada Malului | | 20-21.04.2016 | 162 | 106 | 1235 | 1235 | 0 | A | Saratel | 23.04.2016 | 45 | 21 | 174 | 174 | 0 |
| | | | 1205 | 690 | 7292 | 7292 | 0 | A A | Vitioara de Sus | 17.04.2016 | 175 | 81 | 470 | 470 | 0 |
| | | 1.9 | | | | | | | Poienile | 18.04.2016 | 119 | 80 | 534 | 534 | 0 |
| | | | | | | | | | Predeal | 15.04.2016 | 169 | 110 | 580 | 580 | 0 |
| 1,100 | | 28 17 | | | | | | Gura Vitioarei | Bughea de Jos | 16 - 18.04.2016 | 238 | 143 | 1511 | 1511 | 0 |
| 1/5 | | | | | | | | | Gura Vitioarei | 19 - 21.04.2016 | 363 | 220 | 2018 | 2018 | 0 |
| 1 2 | | | 1 | | | | | | Fagetu | 22 - 23.04.2016 | 162 | 104 | 1138 | 1138 | 0 |
| 1 1 | | | 1 1/2 | | | | | | Fundeni | 22 - 23.04.2016 | 152 | 96 | 1014 | 1014 | 0 |
| W n | | | 1/2 | | | | | | Poiana Copaceni | 24 - 25.04.2016 | 173 | 109 | 1242 | 1242 | 0 |
| | | | // | | | | | Vărbilău | Poiana Varbilau | 15-16.04.2016 | 318 | 206 | 2080 | 2080 | 0 |
| | | | | | | | | | Cotofenesti | 17-19.04.2016 | 304 | 186 | 1860 | 1860 | 0 |
| | | | | | | | | Dumbrăvești | Malaestii de Sus | 26.04.2016 | 30 | 15 | 540 | 540 | 0 |
| | | | | | | | | | Malaestii de Jos | 26.04.2016 | 60 | 35 | 620 | 620 | 0 |
| Y | | | | | | 11/1 | | | Sfarleanca | 25.04.2016 | 50 | 30 | 840 | 840 | 0 |
| | | | | | | 35.7 | | | Gavanel | 24.04.2016 | 30 | 12 | 156 | 156 | 0 |
| | | | | | | | | Magurele | Iazu | 16 - 17.04.2016 | 145 | 112 | 1248 | 1248 | 0 |
| A | | | | | | 7 | | Lipănești | Zamfira | 22-23.04.2016 | 220 | 179 | 1600 | 1600 | 0 |
| | | | | - 0 | | | | 36 16 | Satu Nou | 21.04.2016 | 47 | 29 | 275 | 275 | 0 |
| 1 | | | | - (| | السي | | | Lipanesti | 18-20.04.2016 | 746 | 575 | 4800 | 4800 | 0 |
| Al- | | | | | | V | | | Sipot | 15-17.04.2016 | 520 | 470 | 3700 | 3700 | 0 |
| | | | | | | 1 | | Microsoft Office | Blopeni Plopeni sat | 27.04.2016 | 80 | 55 | 1210 | 1210 | 0 |
| | | | | | 37 | 19.00 | | For all Charact | Plopeni sat | 26.04.2016 | 100 | 60 | 2890 | 2890 | 0 |
| | | | | | (A) | 101 | | Boldeşti Scaleni | | 24-25.04.2016 | 370 | 284 | 2700 | 2700 | 0 |
| | | | | | | | | Pacureti | Slavu | 12-26.04.2016 | 64 | 28 | 327 | 327 | 0 |
| | | | | | | | | | Matita | 12-26.04.2016 | 262 | 90 | 860 | 860 | 0 |
| | | | | | | | | | Pacureti | 12-26.04.2016 | 128 | 46 | 443 | 443 | 0 |
| | | | | | | | | | Barzila | 12-26.04.2016 | 154 | 85 | 900 | 900 | 0 |
| | | | | | | | | C 1 | Curmatura | 12-26.04.2016 | 124 | 24 | 630 | 630 | 0 |
| | | | | | | | | Gornet | Nucet | 14.04.2016 | 86 | 41 | 395 | 395 | 0 |
| | | | | | | | | D. fr. c' | Bogdanesti Izesti | 15.04.2016 | 21 | 12 | 134 | 134 | 0 |
| | | | | | | | | Baltesti | | 12-26.04.2016 | 80 | 35 | 522 | 522 | 0 |
| | | | | | | | | | Baltesti | 12-26.04.2016 | 329 | 141 | 2250 | 2250 | 0 |
| | | | | | | | | | Podenii Vechi | 12-26.04.2016 | 562 | 262 | 3778 | 3778 | 0 |
| | | | | | | | | Podenii Noi | Podu lui Galben | 27.04.2016 | 47 | 26 | 197 | 197 | 0 |
| | - y * | | | | | | | 10 | Sfacaru | 18.04.2016 | 120 | 75 | 675 | 675 | 0 |
| | | | | | | | | - 1 | Podenii Noi | 24-25.04.2016 | 317 | 275 | 2242 | 2242 | 0 |
| | | | | | | | | | Salcioara | 23.04.2016 | 32 | 27 | 220 | 220 | 0 |
| | | 200 | 100 | | | | | | Valea Dulce | 26.04.2016 | 147 | 118 | 947 | 947 | 0 |
| | | | | | | | | | Ghiocel | 19.04.2016 | 76 | 52 | 450 | 450 | 0 |
| The same of the sa | | - | | ` | | | | | Mehedinta | 15-17.04.2016 | 280 | 193 | 2075 | 2075 | 0 |
| | | 1 | | | | | | 3/ | Nevesteasca | 20.04.2016 | 56 | 37 | 350 | 350 | 0 |
| | DO: | | | | | | | 1 | Popesti | 21.04.2016 | 47 | 37 | 327 | 327 | 0 |
| | | \ | | | | | | n. | Rahova | 22.04.2016 | 84 | 62 | 520 | 520 | 0 |
| | | 0. | | | | | | Plopu | Harsa | 20.04.2016 | 114 | 50 | 650 | 650 | 0 |
| | 11/46 | -2 | | | | | | Cocorastii Mislii | Cocorastii Mislii | 27.04.2016 | 120 | 80 | 2365 | 2365 | 0 |
| | | - | | | | | | | Goruna | 27.04.2016 | 70 | 35 | 2460 | 2460 | 0 |
| | | | | | | | | | Tiparestt | 27.04.2016 | 75 | 45 | 1053 | 1053 | 0 |
| | | | | | | | | | | | 9369 | 5538 | 62799 | 62799 | 0 |



Culling, disposal, disinfection

- The culling of the poultry was completed on 12.04.2016 in Gornet outbreak, and on 14.04.2016 in Mägurele outbreak;
- · All cadavers have been disposed in a rendering plant;
- The fixation disinfection was completed on 11.04.2016 in Gornet outbreak; the cleaning of manure and the washing was completed from 18th to 25th April 2016, and the final disinfection was done on 26th April.
- In Mägurele outbreak fixation disinfection was completed on 13.04.2016; and was completed the cleaning of manure from 21-23th April.
- Local CA ordered no trade in live poultry, eggs, poultry products, manure or bedding out of the restriction zones in Prahova County, but some derogation for for transporting poultry to slaughterhouse from commercial farms in the surveillance zone were issued;



Epidemiology

- Epidemiology, tracing back: According to results of the EURL, it seems that the source of virus in Romania it is maintained in wild birds. Accidentally, some breaches in the bio-security system could allow the contact of wild birds with domestic poultry.
- Tracings of people and vehicles had not relevant answers.
- The relationship of infection between the two holdings was not found out, the single evidence is that they belongs to the same owner and the poultry in the second outbreak get sick a few days after the primary outbreak.
- · No other poultry were reported as sick or found dead in the area
- Spread/Trace Forward: We have not identified any movement of live poultry, or day old chicks from Prahova County to other Member States during the high risk period.

Thank you for your attention!



