

Follow-up report No.: 8

Report reference: , OIE Ref: 5178, Report Date: 14/03/2006, Country: Croatia

Report Summary

| | | | |
|--------------------------------------|---|-------------------------------------|--------------------------------------|
| Disease | Highly pathogenic avian influenza | Animal type | Terrestrial |
| Causal Agent | Highly pathogenic avian influenza virus | Serotype(s) | H5N1 |
| Clinical Signs | No | Reason | First occurrence of a listed disease |
| Date of confirmation of Event | 21/10/2005 | Date of Start of Event | 19/10/2005 |
| Date of report | 14/03/2006 | Diagnosis | Laboratory (advanced) |
| Number of reported outbreaks | Submitted= 9, Draft= 0 | Name of Sender of the report | Mr Mate Brstilo |
| Address | Ulica grada Vukovara 78 ZAGREB | Position | Chief Veterinary Officer |
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Outbreak (other report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|--|-----------------|-------------|-----------|----------|-----------|-------------|------------|------------|
| SPLITSKO-DALMATINSKA | Ciovo | | Village | Slatina | 43,49 | 16,32 | 15/02/2006 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | ... | 1 | 1 | 0 | 0 | | |
| Affected Population | | | | | | | | |
| Avian influenza virus type H5N1 was isolated from organs of a dead swan found at Slatina on the island of Ciovo. Nucleotide sequencing at the cleavage site of the haemagglutinin (HA) of the H5N1 avian influenza virus isolate revealed the multiple basic amino acid sequence 'PQGERRRKRGLF', which is consistent with highly pathogenic avian influenza. | | | | | | | | |

Outbreak (other report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|---|-----------------|-------------|-----------|--------------|-----------|-------------|------------|------------|
| OSIJECKO-BARANJSKA | Nasice | | Village | Ribnjak 1905 | 45,572222 | 18,380833 | 03/01/2006 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | 265 | ... | 0 | 4 | 0 | | |
| Affected Population | | | | | | | | |
| During regular monitoring activities conducted at 'Ribnjak 1905' fish pond, four swans in a flock of around 265 swans were shot for diagnostic purposes; samples were taken and sent to the Poultry Centre of the Croatian Veterinary Institute in Zagreb. Laboratory testing revealed that two samples were positive for avian influenza virus. All samples were found to be negative on virus isolation in chicken embryos. | | | | | | | | |
| In the same location, 26 other birds (wild ducks) were shot for diagnostic purposes. Samples from these 26 birds were tested at the Poultry Centre of the Croatian Veterinary Institute in Zagreb and were all found to be negative for avian influenza. | | | | | | | | |

Outbreak (other report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|-----------------------|-----------------|-------------|-----------|----------|-----------|-------------|------------|------------|
| VIROVITICKO-PODRAVSKA | Zdenci | | Village | Grudnjak | 45,646388 | 18,183888 | 19/11/2005 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | 300 | 1 | 0 | ... | 0 | | |

Affected Population

During regular monitoring activities conducted at 'Grudnjak' fish pond, one swan in a flock of around 280 swans showed clinical signs of avian influenza. The sick swan and two apparently healthy swans from the flock were shot for diagnostic purposes; samples were taken and sent to the Poultry Centre of the Croatian Veterinary Institute in Zagreb. Laboratory testing revealed that the samples taken from the swan that had shown clinical signs were positive for avian influenza virus subtype H5N1 (PQGERRRKKRGLF). The samples taken from the other two swans were found to be negative for avian influenza. The corpses of all three swans were destroyed.

In the same location, 13 other birds (coots, grebes and wild ducks) were shot for diagnostic purposes. Samples from these 13 birds were tested at the Poultry Centre of the Croatian Veterinary Institute in Zagreb and were all found to be negative for avian influenza.

Outbreak (other report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|--------------|-----------------|-------------|----------------|-------------|-----------|-------------|------------|------------|
| GRAD ZAGREB | Novi Zagreb | | Not applicable | Novi Zagreb | 45,81 | 15,97 | 28/03/2006 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | ... | 1 | 1 | 0 | 0 | | |

Affected Population

Samples were taken from a dead swan found at the construction site of the new University Hospital, near the river Sava, and sent to the Poultry Centre of the Croatian Veterinary Institute in Zagreb for analysis. Laboratory testing revealed that samples were positive for HPAI virus subtype H5N1.

Outbreak (this report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|--------------------|-----------------|-------------|----------------|----------|-----------|-------------|------------|------------|
| OSIJECKO-BARANJSKA | Draz | | Not applicable | Draz | 45,83 | 18,79 | 03/03/2006 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | ... | 1 | 1 | ... | ... | | |

Affected Population

Cloacal and tracheal swabs were taken from a dead swan found at Draz (a tributary of the river Danube) and tested positive for HPAI virus subtype H5N1.

Outbreak (this report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|----------------------|-----------------|-------------|----------------|----------|-----------|-------------|------------|------------|
| SPLITSKO-DALMATINSKA | Trogir | | Not applicable | Pantana | 43,51 | 16,24 | 03/03/2006 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | 74 | 30 | 0 | ... | ... | | |

Affected Population

During the regular surveillance from 28 February 2006 to 3 March 2006 at the same location, 74 wild birds of different species (e.g. gulls, shorebirds) were caught and cloacal swabs were taken; 30 black-headed gulls (*Larus ridibundus*) tested positive on HPAI virus subtype H5N1.

Outbreak (this report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|----------------------|-----------------|-------------|----------------|----------|-----------|-------------|------------|------------|
| SPLITSKO-DALMATINSKA | Trogir | | Not applicable | Pantana | 43,51 | 16,24 | 21/02/2006 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | ... | 1 | 1 | ... | ... | | |

| | |
|----------------------------|---|
| Affected Population | Avian influenza virus type H5N1 was isolated from organs of a dead swan found at Pantana. |
|----------------------------|---|

Outbreak (other report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|--------------------|-----------------|-------------|-----------|--------------|-----------|-------------|------------|------------|
| OSIJECKO-BARANJSKA | Nasice | | Village | Ribnjak 1905 | 45,49 | 18,08 | 21/10/2005 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | 244 | ... | 15 | ... | 0 | | |

Affected Population

Fifteen swans were found dead between 22 and 24 October 2005 on the fish farm 'Ribnjak 1905', in Nasice municipality. On 22 October, two dead swans were sent to the Poultry Centre of the Croatian Veterinary Institute. On 24 October they were found to be positive for avian influenza virus subtype H5.

On 23 October, in the same location, cloacal swabs were taken from 7 additional dead swans and from 4 hunted wild birds (3 shorebirds and 1 cormorant). Laboratory testing of these samples is on-going.

Outbreak (other report - submitted)

| county | municipality | village | Unit Type | Location | Latitude | Longitude | Start | End |
|-----------------------|-----------------|-------------|-----------|----------|-----------|-------------|------------|------------|
| VIROVITICKO-PODRAVSKA | Zdenci | | Village | Grudnjak | 45,57 | 17,94 | 19/10/2005 | 27/10/2006 |
| Species | Measuring units | Susceptible | Cases | Deaths | Destroyed | Slaughtered | | |
| Wild species | Animals | 1500 | 15 | 15 | 0 | 0 | | |

Affected Population

About 1,500 swans arrived on 19 October 2005 at the location of the fresh water fish farm 'Grudnjak' in Zdenci municipality. Fifteen swans died but only 6 of them were available for laboratory testing.

The bird deaths were notified by a farm worker to the veterinary inspector of the county. Organ samples were taken and submitted on 19 October to the Poultry Centre of the Croatian Veterinary Institute. Laboratory procedures started as soon as the samples arrived at the laboratory. On the afternoon of 21 October, avian influenza virus subtype H5 was isolated from the samples.

Outbreak summary: Total outbreaks = 9 (Submitted)

| Species | Susceptible | Cases | Deaths | Destroyed | Slaughtered |
|--------------|-------------|-------|--------|-----------|-------------|
| Wild species | 2383 | 50 | 34 | 4 | 0 |

Epidemiology

| | | |
|---------------------------------|----------------------------|--|
| Epidemiological comments | Source of Infection | • Seasonal migration of wild birds - swans |
|---------------------------------|----------------------------|--|

Control Measures

| | | | |
|------------------------|--|-------------------------------|-------------------------------|
| Applied | <ul style="list-style-type: none"> • Movement control inside the country • Screening • Disinfection of infected premises/establishment(s) • Quarantine • Control of wildlife reservoirs • Zoning | To be applied | • No Planned Control Measures |
| | | Vaccination Prohibited | Yes |
| Animals treated | No | | |

Country / Zone

| | |
|-----------------|-------------------|
| Country or zone | the whole country |
|-----------------|-------------------|

Diagnostic test results

| Laboratory Type | Name of Laboratory | Species | Test Type | Date Results Provided | Result |
|---------------------|---|--------------|--|-----------------------|----------|
| National laboratory | Poultry Centre of the Croatian Veterinary Institute | Wild species | reverse transcription – polymerase chain reaction (RT-PCR) | 13/03/2006 | Positive |
| National laboratory | Poultry Centre of the Croatian Veterinary Institute | Wild species | haemagglutination (HA) test | 13/03/2006 | Positive |
| National laboratory | Poultry Centre of the Croatian Veterinary Institute | Wild species | reverse transcription – polymerase chain reaction (RT-PCR) | 21/02/2006 | Positive |
| National laboratory | Poultry Centre of the Croatian Veterinary Institute | Wild species | haemagglutination (HA) test | 21/02/2006 | Positive |

Future Reporting

What further reports will be submitted in relation to this event? The event is resolved. No more reports will be submitted.

Outbreak map

