

Contents

Bluetongue in Spain: in the peninsular territory (additional information)	307
Highly pathogenic avian influenza in South Africa: follow-up report No. 2	310
Foot and mouth disease in Israel: final report (contd)	312
Foot and mouth disease in Mongolia: follow-up report No. 2 (final report)	312
Highly pathogenic avian influenza in Thailand: in felines in a zoo	313
Highly pathogenic avian influenza in Vietnam: follow-up report No. 9	313
Bluetongue in Spain: in the peninsular territory (follow-up report No. 1: clinical findings)	314
Classical swine fever in Nicaragua: in June 2004 (additional information)	315

BLUETONGUE IN SPAIN In the peninsular territory (additional information)

EMERGENCY REPORT - CONTD. (SEE *DISEASE INFORMATION*, 17 [42], 302, DATED 15 OCTOBER 2004)

Translation of information received on 15 October 2004 from Dr Arnaldo Cabello Navarro, Deputy Director General of Animal Health, Ministry of Agriculture, Fisheries and Food, Madrid:

Date of the report: 15 October 2004.

On 11 October 2004, the Central Veterinary Laboratory, Algete, reported bluetongue virus antigen detection by PCR⁽¹⁾ from three samples taken in a sentinel dairy farm involved in the bluetongue surveillance programme in Jimena de la Frontera municipality, Andalucía.

Legal measures (Royal Decree 1228/2001) have been implemented, as from 11 October and a new testing programme was carried out in order to confirm the results.

	Number of animals tested	Number of positive animals
First testing programme		
- competitive ELISA ⁽²⁾	8	0
- PCR (simple, real-time, nested)	8	3
Second testing programme in the same farm		
- ELISA	37	12
- PCR	37	24

Virus neutralisation and isolation are in progress.

As a precautionary measure, there has been a ban since 11 October 2004 on movements of susceptible animals from the farms located in the provinces and districts (*comarcas*) included in the protection and surveillance areas (see list and map below). Additional instructions were given, in particular with respect to the strict application of cleaning and disinsectisation measures in the affected zone.

- Cadiz province: all *comarcas*;
- Malaga province: all *comarcas*;
- Sevilla province: all *comarcas*;
- Huelva province: *comarcas* of La Palma del Condado and Ayamonte;
- Cordoba province: *comarcas* of Lucena, Montilla and Posada;
- Granada province: *comarcas* of Alhama de Granada and Loja.



- (1) PCR: polymerase chain reaction
- (2) ELISA: enzyme-linked immunosorbent assay

*
* *

HIGHLY PATHOGENIC AVIAN INFLUENZA IN SOUTH AFRICA
Follow-up report No. 2

Information received on 16 October 2004 from Dr Emily Mmamakgaba Mogajane, Assistant Director General, National Regulatory Services, National Department of Agriculture, Pretoria:

End of previous report period: 26 August 2004 (see *Disease Information*, **17** [35], 243, dated 27 August 2004).

End of this report period: 16 September 2004.

Background information on the outbreak in The Blue Crane Route:

The disease was reported in two ostrich farms in The Blue Crane Route Municipality Area around Bedford and Somerset-East in the Eastern Cape Province (see *Disease Information*, **17** [33], 231, dated 13 August 2004).

As a result of a strengthened surveillance programme, three other farms within the same locality were found to be positive (see *Disease Information*, **17** [35], 243, dated 27 August 2004).

The virus was identified and confirmed as H5N2 avian influenza virus by the Onderstepoort Veterinary Institute and later confirmed by the VLA Weybridge, United Kingdom (OIE Reference Laboratory for avian influenza).

There are no commercial poultry in The Blue Crane Route Municipality Area.

No clinical signs or positive serological results have been found in the indigenous poultry in the infected area.

Total number of animals in the outbreak in The Blue Crane Route (updated data):

<i>species</i>	<i>susceptible</i>	<i>cases</i>	<i>deaths</i>	<i>destroyed</i>	<i>slaughtered</i>
avi*	16,000	1,500	1,000	13,624	0
avi**	...	0	0	almost 600	...

* ostriches; ** chickens, ducks, geese and turkeys

New outbreak:

Forward and backward tracing, as well as extensive serological testing, revealed two ostrich farms, in the Grahamstown Municipality Area of the Eastern Cape Province, with ostriches that tested positive for avian influenza. On the first round of tests performed on the ostriches, 19 out of 29 ostriches tested positive. With the second round of tests performed on these two farms, 30 out of 30 ostriches tested were positive for avian influenza. The titres were higher than in the first round of tests.

It must be noted that no clinical signs or deaths due to avian influenza have been reported on these two farms. No chickens or other birds were found with clinical signs, or tested seropositive for avian influenza.

On a third farm, 12 out of 78 ostriches tested positive in the first round of tests. The results of the second round of tests (blood collected on 1 September 2004) were all negative. A larger number of samples were collected from this farm during the week of 6 September and were tested to be totally sure that the farm is negative.

Total number of animals in the outbreak in Grahamstown:

<i>species</i>	<i>susceptible</i>	<i>cases</i>	<i>deaths</i>	<i>destroyed</i>	<i>slaughtered</i>
avi*	...	0	0	2,237	...
avi**	1,500	0	0	1,500	0

* ostriches in two ostrich farms

** broiler chickens in a broiler establishment situated within the 5-km area defined around the two infected ostrich farms

Control measures during reporting period:

a) Surveillance: There is currently no indication that the disease has been seen anywhere else in the country. However, the Department of Agriculture has strengthened the surveillance by conducting a countrywide survey. This will assist in confirming the localised nature of the problem.

b) Exports of poultry and poultry products from South Africa have been voluntarily stopped until the outbreak has been successfully dealt with. This precautionary measure has been taken to safeguard the international credibility of South Africa's agricultural industry.

South Africa received a number of enquiries on those animals and animal products exported before the outbreak. Most poultry and poultry products exported from South Africa were exported long before the outbreak. Should there be any requests for additional information, please do not hesitate to contact the Delegate of South Africa to the OIE.

c) Around Middleton in The Blue Crane Route Municipality Area of the Eastern Cape Province, a *Controlled Area* was established which consists of:

- an inner *Infected Area* with a 5-km radius around the initial infection (epicentre),
- a middle *Quarantine Area* with a radius of 15 km around the epicentre, and
- an outer *Surveillance Area* with a radius of 30 km around the epicentre of infection.

In order to prevent further spread of the disease, all poultry, including ostriches, in the Infected Area were slaughtered. Up to 3 September 2004, 13,624 ostriches and almost 600 chickens, ducks, geese and turkeys were killed and buried. This included the destruction of birds on the 5 infected farms and susceptible animals on 17 farms in the Infected and Quarantine Areas. This was a precautionary measure taken by the government of South Africa to contain the disease.

Strict movement restrictions are still enforced by a roadblock cordon and the public are prohibited from taking any poultry (including ostriches, birds and other fowl) or their products, including eggs, out of or into the affected area.

d) Around the farms Avondale and Salem Park in the Grahamstown Municipality Area of the Eastern Cape Province, a *Controlled Area* was established which consists of:

- an inner *Infected Area* with a 5-km radius around the initial infection (epicentre),
- a middle *Quarantine Area* with a radius of 15 km around the epicentre, and
- an outer *Surveillance Area* with a radius of 30 km around the epicentre of infection.

The affected farms have been placed under quarantine to prevent any movement of ostriches and other birds.

The culling of ostriches on the two positive ostrich farms in the Grahamstown Municipality Area started on 6 September 2004. A total of 2,237 ostriches were culled on both farms.

A chicken broiler establishment is situated within the 5-km Infected Area that was defined around these two farms. Chickens in this broiler establishment, totalling 1,500, were culled together with the ostriches. It is important to note that the chickens did not show any clinical signs but were nevertheless included in the culling process to ensure that they did not pose any possible risk in the future.

The method of slaughter is electric stunning and using a captive bolt. The place where animals are being buried is covered with lime and the South African National Defense Force is patrolling the area for at least four days to ensure that it is well secured.

Compensation has been paid to farmers whose animals have been destroyed as a result of these disease control measures.

The South African National Defense Force, the South African Police Services, traffic officials and disaster management teams assist the Department of Agriculture in enforcing the movement controls.

*
* *

FOOT AND MOUTH DISEASE IN ISRAEL
Final report (contd)

Information received on 17 October 2004 from Dr Moshe Chaimovitz, Director of Veterinary and Animal Health Services, Ministry of Agriculture and Rural Development, Beit-Dagan:

End of previous report period: 29 April 2004 (see *Disease Information*, **17** [19], 127, dated 7 May 2004).

End of this report period: 17 October 2004.

No new cases of foot and mouth disease have been reported since 17 March 2004.

Six months after the last outbreak, movement restrictions were lifted through the whole country.

*
* *

FOOT AND MOUTH DISEASE IN MONGOLIA
Follow-up report No. 2 (final report)

Information received on 19 October 2004 from Dr Ravdan Sanjaatogtokh, Director, State Veterinary Services, Ministry of Food and Agriculture, Ulaanbaatar:

End of previous report period: 16 February 2004 (see *Disease Information*, **17** [8], 47, dated 20 February 2004).

End of this report period: 19 October 2004.

No new outbreaks of foot and mouth disease have been reported since 11 February 2004.

Vaccination continues every 6 months in the outbreak, buffer and vaccinated zones; 4.4 million animals have been vaccinated, including cattle, goats, sheep and camels.

Quarantine measures were lifted, with effect from 5 May 2004, through a Resolution by the government of Mongolia.

*
* *

**HIGHLY PATHOGENIC AVIAN INFLUENZA IN THAILAND
in felines in a zoo**

EMERGENCY REPORT

Information received on 19 and 20 October 2004 from Dr Yukol Limlamthong, Director General, Department of Livestock Development (DLD), Ministry of Agriculture and Cooperatives, Bangkok:

Date of the report: 20 October 2004.

Nature of diagnosis: clinical and laboratory.

Date of initial detection of animal health incident: 11 October 2004.

Estimated date of primary infection: 8 October 2004.

Date of confirmation of diagnosis: 18 October 2004.

Outbreak:

Location	No. of outbreaks
Chon Buri province, Si Racha district	1 (a zoo)

Description of affected population: tigers (*Panthera tigris*) in captivity. The sick and dead tigers are aged between 8 months and 2 years.

Total number of animals in the outbreak:

species	susceptible	cases	deaths	destroyed	slaughtered
fau	441	55	30
avi*	12	0	0

* 10 peacocks and 2 ostriches kept in a separate area of the zoo

Diagnosis: the clinical manifestations began on 11 October 2004 with weakness, lethargy, respiratory distress and high fever (about 41-42 degrees Celsius). There was no response to any antibiotic treatment. Death occurred within three days following the onset of clinical signs with severe pulmonary lesions.

A. Laboratories where diagnosis was made: National Institute of Animal Health and Laboratories of the Veterinary Faculties of Kasetsart and Chulalongkorn Universities.

B. Diagnostic tests used:

- real-time PCR⁽¹⁾ (18 October 2004): positive;
- virus isolation by egg inoculation (19 October 2004): positive.

C. Causal agent: highly pathogenic avian influenza virus type A (H5).

Epidemiology:

A. Source of agent / origin of infection: chicken carcass feeding appears to be the probable cause of infection. The tigers in this zoo have been fed with chicken carcasses for many years. A single feed supplier is responsible for provision of tiger feed for the affected zoo. Preliminary investigations revealed that the feeding stuffs consisted not only of fresh chicken carcasses from a local slaughterhouse but also whole chickens from other sources in the area. The whole chickens are the potential cause of the infection. The DLD investigation team is endeavouring to trace the source of these chickens.

B. Mode of spread: at present, the preliminary conclusion is that the disease is attributable to a common source of infection by chicken feeding rather than animal-to-animal transmission.

C. Other epidemiological details: there are 10 peacocks and 2 ostriches in a separate area of the zoo. These birds' health is still normal. They will be used as sentinel animals for both clinical and serological monitoring.

Control measures:

- the zoo has been in quarantine since 19 October 2004;
- veterinary officials have conducted 5-km radius movement management and surveillance;

- well-cooked chicken carcasses or pork and beef are recommended for feeding the tigers for the time being;

Vaccination remains prohibited.

(1) PCR: polymerase chain reaction

*
* *

HIGHLY PATHOGENIC AVIAN INFLUENZA IN VIETNAM Follow-up report No. 9

Information received on 21 October 2004 from Dr Bui Quang Anh, Director, Department of Animal Health, Ministry of Agriculture and Rural Development, Hanoi:

End of previous report period: 22 September 2004 (see *Disease Information*, **17** [39], 278, dated 24 September 2004).

End of this report period: 21 October 2004.

New outbreaks:

Location	No. of outbreaks
Tien Giang	1
Long An	1
Soc Trang	1

Number of animals in the new outbreaks:

Location of the outbreaks	species	susceptible	cases	deaths	destroyed	slaughtered
Tien Giang	avi	3,000	...	1,200	1,800	0
Long An	avi	2,600	...	200	2,400	0
Soc Trang	avi	880	...	120	760	0
Total	avi	6,480	...	1,520	4,960	0

Diagnosis:

- A. Laboratories where diagnosis was made:** Regional Veterinary Center, Ho Chi Minh City.
- B. Diagnostic tests used:** haemagglutination inhibition test positive on 17 October 2004.
- C. Causal agent:** avian influenza virus subtype H5.

*
* *

BLUETONGUE IN SPAIN
In the peninsular territory (follow-up report No. 1: clinical findings)

Translation of information received on 21 and 22 October 2004 from Dr Arnaldo Cabello Navarro, Deputy Director General of Animal Health, Ministry of Agriculture, Fisheries and Food, Madrid:

End of previous report period: 15 October 2004 (see *Disease Information*, **17** [43], 307, dated 22 October 2004).

End of this report period: 22 October 2004.

Summary of outbreaks:

Outbreak reference No.	Date of			Location*	Number of					
	notification	confirmation	suspicion		bovines	sheep	goats	cases	deaths	slaughtered
01/2004	13/10/04	12/10/04	09/10/04	Jimena de la Frontera	695	0	0	0	0	0
02/2004	15/10/04	15/10/04	13/10/04	Jimena de la Frontera	41	70	141	0	0	0
03/2004	15/10/04	15/10/04	13/10/04	Jimena de la Frontera	20	0	10	0	0	0
04/2004	18/10/04	15/10/04	13/10/04	Jimena de la Frontera	59	41	210	0	0	0
05/2004	18/10/04	15/10/04	13/10/04	Jimena de la Frontera	82	62	1	...	4	0
06/2004	18/10/04	15/10/04	13/10/04	Jimena de la Frontera	0	1,950	0	...	4	0
07/2004	18/10/04	15/10/04	13/10/04	Jimena de la Frontera	453	0	0	0	0	0
08/2004	18/10/04	15/10/04	14/10/04	Jimena de la Frontera	23	60	128	8	0	0
09/2004	18/10/04	15/10/04	14/10/04	Grazalema	42	179	265	4	0	2
10/2004	18/10/04	15/10/04	14/10/04	Alcalá de los Gazules	41	177	0	24	4	0
11/2004	18/10/04	15/10/04	14/10/04	Benalup	0	372	0	40	20	0
12/2004	18/10/04	15/10/04	13/10/04	Barbate	0	0	247	0	0	0
13/2004	18/10/04	15/10/04	14/10/04	Medina Sidonia	0	153	0	6	3	0
14/2004	18/10/04	15/10/04	14/10/04	Medina Sidonia	0	92	31	8	0	0
15/2004	18/10/04	15/10/04	13/10/04	Barbate	102	0	0	0	0	0
16/2004	18/10/04	15/10/04	13/10/04	Medina Sidonia	0	230	0	65	5	0
17/2004	18/10/04	15/10/04	15/10/04	Vejer de la Frontera	111	0	0	0	0	0
18/2004	18/10/04	15/10/04	14/10/04	Benalup	0	420	0	65	0	0

All outbreaks listed above occurred in Cadiz province, Andalucía Autonomous Community, and are included within the protection zone set up around outbreak No. 01/2004.

Diagnosis:

A. Laboratories where diagnosis was confirmed:

- Central Veterinary Laboratory, Algete;
- CISA-INIA⁽¹⁾, Valdeolmos.

B. Diagnostic tests used: ELISA⁽²⁾ and RT-PCR⁽³⁾.

C. Causal agent: virus serotyping in progress.

Epidemiology:

A. Source of agent / origin of infection: unknown.

B. Mode of spread: unknown.

Control measures:

- control of arthropods;
- modified stamping out;
- processing of dead animals in authorised plants in accordance with the standards in force;
- movement control inside the country;
- zoning.

(1) CISA-INIA: *Centro de Investigación en Sanidad Animal - Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria*

(2) ELISA: enzyme-linked immunosorbent assay

(3) RT-PCR: reverse transcriptase – polymerase chain reaction

**CLASSICAL SWINE FEVER IN NICARAGUA
in June 2004 (additional information)**

EMERGENCY REPORT - CONTD (SEE DISEASE INFORMATION, 17 [42], 305, DATED 15 OCTOBER 2004)

Translation of information received on 21 October 2004 from Dr Omar García Corrales, Director of Animal Health, Directorate General of Animal and Plant Health and Protection, Ministry of Agriculture, Animal Production and Forestry, Managua:

Date of the report: 18 October 2004.

Nature of diagnosis: clinical, post-mortem and laboratory.

Date of initial detection of animal health incident: 1 June 2004.

Date of confirmation of diagnosis: 25 June 2004.

Diagnosis:

A. Laboratory where diagnosis was made: National Veterinary Diagnostic Laboratory, Managua.

B. Diagnostic tests used:

- direct immunoperoxidase test on cryostat sections of organs from affected pigs (positive result);
- PCR (polymerase chain reaction).

Source of agent / origin of infection: carrier pigs are probably the origin of infection. It should be noted that before this outbreak there had already been deaths of animals showing suggestive clinical signs, but due to the late notification of these deaths, no samples were taken at that time. Vaccination was nevertheless applied in the zone; however, the coverage did not reach 100% and unvaccinated susceptible animals might have been the main factor responsible for the new outbreak in June.

Control measures: the sick animals were slaughtered and the remainder of the susceptible population was vaccinated.

It should be noted that Nicaragua is currently carrying out a Classical Swine Fever Eradication Programme through mass vaccination of the pig population. To date, 60% of the country has entered the disease control phase.

*
* *

All OIE (World Organisation for Animal Health) publications are protected by international copyright law. Extracts may be copied, reproduced, translated, adapted or published in journals, documents, books, electronic media and any other medium destined for the public, for information, educational or commercial purposes, provided prior written permission has been granted by the OIE.

The designations and denominations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the OIE concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

The views expressed in signed articles are solely the responsibility of the authors. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by the OIE in preference to others of a similar nature that are not mentioned.