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Contents

Bovine spongiform encephalopathy in Poland: additional information	79
Foot and mouth disease in the Republic of Korea: follow-up report No. 1	80
Classical swine fever in the Republic of Korea: follow-up report No. 2	81
Highly pathogenic avian influenza in the Hong Kong Special Administrative Region of the People's Republic of China	82
Acariosis of bees in Norway: follow-up report No. 1	83
Scrapie in Belgium	84
Avian influenza in Chile: suspicion	85
Newcastle disease in Australia: follow-up report No. 3	85

BOVINE SPONGIFORM ENCEPHALOPATHY IN POLAND Additional information

Information received on 23 May 2002 from Dr Piotr Kolodziej, Chief Veterinary Officer, Ministry of Agriculture and Food Economy, Warsaw:

End of previous report period: 6 May 2002 (see *Disease Information*, 15 [19], 62, dated 10 May 2002).

End of this report period: 23 May 2002.

In the emergency report, information was provided that 3 animals had been destroyed. Two of them were a 13-month-old heifer and a 2-month-old calf. They were not the progeny of the "positive" cow. They had been kept together with the "positive" cow and were suspected of having received the same feed. The third cow was considered as the potential mother of the "positive" cow.

Diagnosis: the bovine spongiform encephalopathy (BSE) case was detected during routine testing of abattoir samples in regional laboratories for rapid diagnosis of BSE.

Epidemiology: the affected farm is very small and located in a medium-sized village. The products from bovine animals kept on the farm are used for the owners' own consumption. The source of the BSE agent has not yet been found.

Given the fact that the identification and registration system in Poland is still being set up, there is no possible way of confirming that specific animals will be destroyed, the Polish authorities decided to undertake genetic tests to confirm the relationship between the suspect animals and the "positive" cow. These tests were performed by the Zootechnical Institute in Balice, near Cracow. The tests excluded any relationship between the two bovine animals kept together with the "positive" cow, but confirmed the relationship with the cow considered to be the mother.

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FOOT AND MOUTH DISEASE IN THE REPUBLIC OF KOREA
Follow-up report No. 1

Information received on 24 and 29 May 2002 from Dr Hee-Woo Lee, Director, Animal Health Division, Ministry of Agriculture and Forestry (MAF), Seoul:

End of previous report period: 4 May 2002 (see *Disease Information*, **15** [19], 61, dated 10 May 2002).

End of this report period: 29 May 2002.

Cumulative data on outbreaks:

Location			No. of outbreaks	Species code	Susceptible	Cases	Deaths	Destroyed
Province	District	Settlement						
Kyonggi	Anseong	Samjuk	2*	sui	8,164*	501	280	8,164
				bov	116	0	0	116
		Bogae	2	sui	7,190	6	1	7,190
				cer	9	0	0	9
	Iljuk	2	sui	2,044	18	1	2,043	
Yongin	Baekam	3	sui	12,759	34	14	12,745	
	Wonsam	1	sui	2,687	1	0	2,687	
Chungbuk	Jinchon	Ewol	1*	sui	1,006*	50	1	1,005
		Janggwan	1	sui	17,380	3	0	17,380
Total			12*					

* sui (swine): the number of animals and foot and mouth disease (FMD) cases include the first reported cases (see *Disease Information*, **15** [19], 61, dated 10 May 2002).

Description of affected population in the new outbreaks:

- All the affected farms were pig holdings, two of which included a small number of cattle and deer none of which presented clinical signs of FMD and none of which were infected with the FMD virus.
- All the affected farms were located within a 9-km radius of the first affected farms: in Anseong City and Yongin City, 5 farms within the 3-km-radius at-risk zone and 5 farms within the 10-km-radius protection zone; in Jinchon County, 2 farms within the 3-km-radius at-risk zone.
- The distance between the remotest affected farms is less than 30 km and that between the primary epicentres is about 21 km.

Diagnosis:

- A. **Laboratory where diagnosis was made:** National Veterinary Research and Quarantine Service, Anyang, Kyonggi, Republic of Korea.
- B. **Diagnostic tests used:** clinical inspection, serological and virological tests.
- C. **Causal agent:** FMDV serotype O.

Epidemiology:

- A. **Source of agent / origin of infection:** under investigation.
- B. **Mode of spread:** under investigation.
- C. **Other epidemiological details:**
 - only pigs have been affected.
 - serological and virological tests have shown the FMD virus to be different from the causative agent responsible for the 2000 outbreaks.
 - The chronology of the reported outbreaks is as follows: 2 outbreaks on 2 and 3 May, 4 outbreaks on 10 May, 2 outbreaks on 12 May, 1 outbreak on 18 May and 3 outbreaks on 19 May. The total number of outbreaks to date is 12. The last cases were reported on 19 May.

Control measures during reporting period:

- Movement control has been effectively maintained.
- All animals in the 12 affected farms have been destroyed: 51,233 pigs, 116 cattle and 9 deer.
- Pre-emptive slaughter has been employed to contain the spread of FMD within the controlled areas, including all susceptible livestock within a 500-m radius of the affected farms and all pigs within a 3-km radius of the primary outbreak farms. As of 23 May, 29,717 animals from 45 holdings had been destroyed within a 500-m radius of the affected farms and 30,139 animals from 39 holdings within a 3-km radius of the primary affected farms.
- FMD outbreaks have been limited to a restricted area.

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**CLASSICAL SWINE FEVER IN THE REPUBLIC OF KOREA
Follow-up report No. 2**

Information received on 24 May 2002 from Dr Hee-Woo Lee, Director, Animal Health Division, Ministry of Agriculture and Forestry (MAF), Seoul:

End of previous report period: 29 April 2002 (see *Disease Information*, **15** [18], 57, dated 3 May 2002).

End of this report period: 24 May 2002.

Immediately after the outbreak of classical swine fever (CSF) (see *Disease Information*, **15** [16], 49, dated 19 April 2002), the Korean government implemented its contingency plan for CSF, which had already been adopted in accordance with the Korean Livestock Epidemics Prevention and Control Act, to eradicate CSF and avoid any spread of the disease.

Among the emergency response measures taken were the following:

- immediate destruction of pigs in the affected pig holdings and neighboring holdings within a 300-m radius: 8,815 pigs were thus destroyed;
- establishment of control areas comprising a 3-km-radius protection zone and a 10-km-radius surveillance zone;
- restriction on the movement of potentially infected or contaminated items, in particular pigs and their products, into and out of the control area;
- serological and virological tests for CSF infection in pig holdings located in the protection and surveillance zones;
- clinical examination of pig herds nation-wide.

In order to determine whether or not to lift the movement restrictions in the surveillance zone, the Korean government has maintained surveillance activities in the control areas. On 17 May, 1,815 blood samples were taken from 47 pig holdings in the surveillance zone and subjected to serological and virological tests.

The test methods used were: ELISA for antibody detection, PCR, white blood cell count and antigen-ELISA for antigen detection.

As all the test results were found to be negative and there have been no further outbreaks of CSF on or since 19 May 2002, the movement restrictions in the surveillance zone have been lifted. However, the 3-km-radius protection zone will be maintained until 11 June 2002.

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HIGHLY PATHOGENIC AVIAN INFLUENZA IN THE HONG KONG SPECIAL ADMINISTRATIVE REGION OF THE PEOPLE'S REPUBLIC OF CHINA

Information received on 27 May 2002 from the Director of Agriculture, Fisheries and Conservation Department, Hong Kong:

Report date: 24 May 2002.

Nature of diagnosis: clinico-pathology plus laboratory.

An outbreak of highly pathogenic avian influenza virus was detected in samples collected in January 2002 from retail markets and the main poultry wholesale market with no reported increase in disease or mortality.

The first case of disease on a local farm was detected on 1 February. By 9 February, 15 farms were infected and by late March a total of 22 infected farms had been identified. No new infected farms have been identified since then.

Estimated date of first infection: late January 2002.

Outbreaks:

Location	No. of outbreaks
22° 25' 45.6" N – 114° 4' 33.9" E	1

Description of affected population: chickens in local farms.

Estimated total number of animals in the outbreak:

species	susceptible	cases	deaths	destroyed	slaughtered
avi	120,000	20,000	20,000	100,000	0

Diagnosis:

A. Laboratory where diagnosis was made: Agriculture, Fisheries and Conservation Department Veterinary Laboratory, Tai Lung Experimental Station, Lin Tong Mei, Sheung Shui N.T.

B. Diagnostic tests used:

- chick embryo inoculation with haemagglutination inhibition testing by specific reference sera from CVL Weybridge, United Kingdom.
- H5 pathogenic genome detection by nucleic acid amplification.

Epidemiology: .

A. Source of agent / origin of infection: under investigation.

B. Mode of spread: under investigation.

Control measures: Epidemiological investigations of infected farms suggested a limited number of incursions of virus with subsequent lateral spread to neighbouring farm within a 5 km radius. Control of this disease has been effected through a combination of quarantine, tightening of biosecurity measures and depopulation of infected and "contact" farms. Some 950,000 poultry have been destroyed. Vaccination using a killed H5 vaccine was introduced in April 2002 to farms in one zone where the virus was still known to be present in March. None of the viruses isolated contained the combination of internal genes found in the 1997 H5N1 virus.

ACARIOSIS OF BEES IN NORWAY
Follow-up report No. 1

Information received on 27 May 2002 from Dr Eivind Liven, Chief Veterinary Officer, Royal Ministry of Agriculture, Oslo:

End of previous report period: 14 May 2002 (see *Disease Information*, **15** [20], 72, dated 17 May 2002).

End of this report period: 24 May 2002.

New outbreak:

Location	No. of outbreaks
Balestrand municipality, Sogn og Fjordane county (in the western part of the country)	1

Description of affected population in the new outbreak: apiary.

Total number of animals in the new outbreak:

species	susceptible	cases	deaths	destroyed	slaughtered
api	9	1	0	0	0

Diagnosis:

- A. **Laboratory where diagnosis was made:** Norwegian College of Veterinary Medicine, Oslo.
- B. **Diagnostic tests used:** dissection.
- C. **Causal agent:** *Acarapis woodi*.

Epidemiology:

- A. **Source of agent / origin of infection:** tracing from case No. 2/2002 (see emergency report).
- B. **Mode of spread:** unknown.

Control measures during reporting period: see emergency report.

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SCRAPIE IN BELGIUM

(Date of previous reported outbreak: 1999).

EMERGENCY REPORT

Translation of information received on 29 May 2002 from Dr Luc Lengele, Director, Veterinary Services, Ministry of Small Enterprises, Traders and Agriculture, Brussels:

Report date: 23 May 2002.

Nature of diagnosis: laboratory.

Date of initial detection of animal health incident: 8 May 2002.

Estimated date of first infection: May 1999.

Outbreaks:

Location	No. of outbreaks
District of Astene, Province of Eastern Flanders	1

Description of affected population: During epidemiological surveillance of sheep/goats in farms, a case of scrapie was detected on a farm on 8 May 2002 using the Bio-Rad test. The affected animal was a crossbred ewe (Hampshire Down sire and Texel dam) born on 2 March 1999 in a farm in Astene district, Eastern Flanders province. The sheep population on the affected farm consisted of 6 ewes and 11 lambs. The Bio-Rad test was confirmed on 21 May 2002 by immunocytochemistry, histopathology, SAF⁽¹⁾ and Western blotting. The other sheep on the farm will be slaughtered and their carcasses destroyed. The brains of the animals over one year old will also be subjected to the Bio-Rad test and, if the test is positive, they will undergo histopathological and immunocytochemical examination.

Total number of animals in the outbreak:

species	susceptible	cases	deaths	destroyed	slaughtered
ovi	17*	1	0	17	0

* 6 ewes and 11 lambs.

Diagnosis:

- A. **Laboratory where diagnosis was made:** VAR⁽²⁾, Brussels.
- B. **Diagnostic tests used:** SAF, histology and immunocytochemical examination.
- C. **Causal agent:** prion.

Epidemiology:

- A. **Source of agent / origin of infection:** epidemiological investigation in progress.
- B. **Mode of spread:** epidemiological investigation in progress.
- C. **Other epidemiological details:** epidemiological investigation in progress.

Control measures:

- control programme covering the whole country;
- stamping-out policy;
- screening.

(1) SAF: scrapie-associated fibrils.

(2) VAR: Veterinary and Agrochemical Research Centre.

AVIAN INFLUENZA IN CHILE Suspicion

(Disease never reported before).

EMERGENCY REPORT

Translation of information received on 30 May 2002 from Dr Hernan Rojas Olavarria, Director, Department of Animal Protection, Department of Agriculture and Animal Production (SAG), Ministry of Agriculture, Santiago:

Report date: 29 May 2002.

The SAG has detected a higher than normal mortality rate among hens in a hen breeding farm in the Province of San Antonio, Fifth Region (Valparaíso).

The sanitary measures provided for in such cases were immediately adopted, with the breeding farm in question being placed under quarantine, control of movements and biosafety measures. Likewise, a sanitary control zone was established within a 10-km radius of the breeding farm. At the same time, the national animal health emergency system was activated.

The respective epidemiological investigations are being carried out and samples have been sent to the SAG Central Laboratory in Santiago and to the international reference laboratories.

The preliminary results from the SAG Central Laboratory indicate the detection of serological evidence of avian influenza infection, using ELISA⁽¹⁾ and AGID⁽²⁾, in samples taken from hens from the breeding unit.

Note: No positive serology of avian influenza has ever been detected in Chile. Since January 2000, more than 70,000 serological tests have been carried out, with negative results.

(1) ELISA: enzyme-linked immunosorbent assay.

(2) AGID: agar gel immunodiffusion.

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NEWCASTLE DISEASE IN AUSTRALIA Follow-up report No. 3

Information received on 31 May 2002 from Dr Gardner Murray, Chief Veterinary Officer, Department of Agriculture, Fisheries and Forestry Australia (AFFA), Canberra:

End of previous report period: 24 May 2002 (see *Disease Information*, **15** [21], 77, dated 24 May 2002).

End of this report period: 31 May 2002.

Total number of animals in the outbreak (updated data):

<i>species</i>	<i>susceptible</i>	<i>cases</i>	<i>deaths</i>	<i>destroyed</i>	<i>slaughtered</i>
avi	249,069	...*	between 500 and 1,000 over 4-6 weeks	249,069**	0

* up to 40% drop in egg production over 4-6 weeks.

** provisional data.

Update on diagnosis: intracerebral pathogenicity index (ICPI) = 1.61.

Update on control measures and surveillance:

Destruction and disposal of all birds on the infected farm was completed on 24 May 2002. A cleaning and disinfection programme for the infected premises has commenced. This programme and subsequent surveillance will be conducted consistent with the Australian Veterinary Emergency Plan (AUSVETPLAN) for Newcastle disease (<http://www.aahc.com.au/ausvetplan/>).

The rest of Victoria and Australia outside of the Control Area continues to remain free of Newcastle disease. No additional quarantine or movement restrictions have been imposed by other Australian States and Territories, beyond those imposed by Victorian authorities.

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