

23 March 2001

Vol. 14 – No. 12

Contents

Foot and mouth disease in Malawi	59
Infectious salmon anaemia in the Faroe Islands: suspicion	60
Foot and mouth disease in Argentina: follow-up report No. 1	61
Peste des petits ruminants in Bangladesh	62
Foot and mouth disease in France: follow-up report No. 1	63
Foot and mouth disease in Mongolia: follow-up report No. 3	65
Infectious salmon anaemia in the United States of America	65
Foot and mouth disease in Ireland	66
Foot and mouth disease in the United Kingdom / Great Britain: follow-up report No. 3	67
Foot and mouth disease in the Netherlands	67

FOOT AND MOUTH DISEASE IN MALAWI

(Date of last previously reported outbreak: May 2000).

EMERGENCY REPORT

Text of a fax received on 16 March 2001 from Dr Chinthu B. Chizonda, Director of Animal Health and Industry, Ministry of Agriculture, Lilongwe:

Report date: 15 March 2001.

Two suspected cases of foot and mouth disease have been confirmed in an area where Malawi experienced an outbreak in April/May 2000. The cases were detected in a cattle population, which was subjected to ring vaccination. A total of 5,642 cattle at risk have been vaccinated to date in this previously unvaccinated population. We believe the cases are linked to the previous outbreak (SAT1) because they are found in naïve herds within the previously infected but unvaccinated population.

Slaughter, movements and markets have been suspended.

*
* *

INFECTIOUS SALMON ANAEMIA IN THE FAROE ISLANDS Suspicion

EMERGENCY REPORT

Extract from a fax received on 18 March 2001 from Dr Bjørn Harlou, Chief Veterinary Officer, Ministry of Trade and Industry, Faroe Islands:

Report date: 15 March 2001.

Nature of diagnosis: clinical.

Date of initial detection of animal health incident: 14 March 2001.

Based on the clinical examination of dead salmon (*Salmo salar*), a suspected outbreak of infectious salmon anaemia (ISA) was reported on 14 March 2001 in a sea farm in Oyndarfjordur. Samples from the suspected group of salmon were sent to the National Veterinary Institute in Norway on 15 March 2001 for confirmation of the clinical diagnosis.

Source of agent / origin of infection: the sea farm where ISA is suspected is owned by the same company that owns the salmon sea farm in Fuglafjordur, where the first outbreak of ISA in the Faroe Islands was diagnosed on 28 March 2000 (see *Disease Information*, **13** [14], 53, dated 14 April 2000).

Positive results with ELISA⁽¹⁾ tests indicate that fish that had been infected by ISA virus were present on the sea farm in Fuglafjordur as late as September-October 2000. Spreading of ISA virus from Fuglafjordur to Oyndarfjordur over a distance of 10 km by sea current, escaped salmon or wild marine fish seems to be the most likely explanation for the suspected outbreak of ISA on the sea farm in Oyndarfjordur. A natural marine reservoir for ISA virus cannot be ruled out.

Other epidemiological details: the distance between the sea farm in Oyndarfjordur and the sea farm in Fuglafjordur is approximately 10 km. According to the manager of the sea farm in Oyndarfjordur there has been no contact by staff or equipment between the two sea farms.

Control measures during reporting period: measures to prevent spreading of the disease from the sea farm where ISA is suspected were implemented immediately in accordance with Council Directive 93/53/EEC.

If the ISA diagnosis is confirmed by the National Veterinary Institute in Norway, ISA infected fish will be destroyed and the remaining fish on the sea farm will be slaughtered out in accordance with Council Directive 93/53/EEC.

(1) ELISA: enzyme-linked immunosorbent assay.

FOOT AND MOUTH DISEASE IN ARGENTINA
Follow-up report No. 1

Synthesis of two e-mails received on 17 and 19 March 2001 from Dr Eduardo Jesús Greco, Deputy Executive President, National Service for Agrifood Health and Quality (SENASA), Secretariat for Agriculture, Livestock, Fisheries and Food, Buenos Aires:

End of previous report period: 15 March 2001 (see *Disease Information*, **14** [11], 56 dated 16 March 2001).

End of this report period: 16 March 2001.

Outbreaks:

Location	No. of outbreaks
Buenos Aires province	21
Cordoba province	1
La Pampa province	1
San Luis province	1
Santa Fe province	2

Description of affected population: young bulls and other cattle at least 1 year old.

Total number of animals in the outbreaks:

species	susceptible	cases	deaths	destroyed	slaughtered
bov	26,707	2,095

Diagnosis:

A. Laboratory where diagnosis was made: Central Laboratory of SENASA.

B. Diagnostic tests used: direct ELISA⁽¹⁾ on epithelium samples.

Epidemiology:

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

B. Mode of spread: under investigation.

Control measures:

- Nationwide ban on the movement of animals susceptible to foot and mouth disease, other than for immediate slaughter;
- Infected farms and adjoining farms placed under quarantine;
- Determination of infected zones, buffer zones and surveillance zones;
- Controls and inspections in the buffer and surveillance zones;
- Tracing-back and tracing-forward investigations for each outbreak;
- Setting up of strategic control and disinfection posts;
- Strategic ring vaccination around the outbreaks;
- Generalised vaccination in the province of Formosa and in the centre of the country (Regional Disease Prevention Plan);
- Setting up of internal sanitary barriers (Patagonia);
- Strengthening of the epidemiological information and surveillance system.

(1) ELISA: enzyme-linked immunosorbent assay.

PESTE DES PETITS RUMINANTS IN BANGLADESH

Text of a fax received on 19 March 2001 from Dr Kazi Abdul Fattah, Director General of Livestock Services, Ministry of Fisheries and Livestock, Farmgate, Dhaka:

Report date: 19 March 2001.

Nature of diagnosis: clinical and laboratory.

Date of initial detection of animal health incident: 5 February 2001.

Affected population: goat herds.

Outbreaks:

Location	No. of outbreaks
Merherpur district	...
Rajshahi district (western border of Bangladesh)	...
Dhaka district (central Bangladesh)	...

Comments: it is impossible to define accurately the number of outbreaks since the populations of goats affected are found in family holdings throughout extensive and often contiguous urban, suburban and village environments and not in discrete herds.

Total number of animals in the outbreaks: the number of goats affected is too large to estimate reliably; virtually the entire goat population of Bangladesh is at risk approximately 20 million animals.

Diagnosis:

- A. Laboratory where diagnosis was made:** Bangladesh Livestock Research Institute, Savar, Dhaka.
- B. Diagnostic tests used:** Slide-ELISA⁽¹⁾ antigen detection test, which is monoclonal antibody-based and discriminates between peste des petits ruminants (PPR) and rinderpest.
- C. Causal agent:** characterisation of the virus is to be requested from the FAO World Reference Laboratory for Rinderpest and PPR, and the FAO Morbillivirus Collaborating Centre, CIRAD-EMVT, Montpellier, France.

Epidemiology:

- A. Source of agent / origin of infection:** most likely reintroduction from a neighbouring country.
- B. Mode of spread:** direct contact locally and through trade in goats over longer distances.
- C. Other epidemiological details:** PPR was first detected in Bangladesh in 1993, in the west of the country. An epidemic ensued which covered virtually the entire country, peaking in 1995 but lasting until 1998. Since that time the disease has been occurring at low incidence, and is observed sporadically. A noticeable increase in the incidence of outbreaks of PPR was detected once again in the west of Bangladesh, in February 2001, in Meherpur district of Khulna division. By early March 2001 it had spread to Rasjahi district of Rajshahi division and has now been detected in Dhaka district of Dhaka division, where it is thought to have been introduced in the second week of March. PPR is spreading rapidly causing high morbidity and mortality. Investigations are proceeding to establish the extent of the spread.

D. Control measures: it is not feasible to enforce movement restrictions and other zoosanitary measures at present. A locally isolated and attenuated strain of virus is undergoing evaluation for use as a vaccine; initial results of efficacy and innocuity testing and field trials in more than 15,000 goats are very promising. Production capacity is low but an attempt will be made to produce sufficient vaccine to immunise at least a proportion of the population at risk in areas of the country not yet affected. Tissue culture rinderpest vaccine is not available in Bangladesh and could not be used because to do so would compromise Bangladesh's position on the OIE pathway to verify freedom from rinderpest.

(1) ELISA: enzyme-linked immunosorbent assay.

*
* *

FOOT AND MOUTH DISEASE IN FRANCE Follow-up report No. 1

Translation of an e-mail received on 21 March 2001 from Dr Isabelle Chmitelin, Deputy Director General, General Directorate for Food, Ministry of Agriculture and Fisheries, Paris:

Date of previous report: 16 March 2001 (see *Disease Information*, **14** [11], 52, dated 16 March 2001).

Date of this report: 21 March 2001.

Results of serological investigations in progress:

To date, 46,551 animals (18,202 sheep and 1 pig, all originating from the United Kingdom, 24,509 "contact" sheep, 506 "contact" bovines, 3,221 other "contact" animals and 3,223 pigs originating from an establishment situated in the 3km protection zone around the foot and mouth disease (FMD) outbreak detected in Mayenne department) have been euthanised in 112 establishments situated in 39 departments.

Of the 4,973 blood samples collected, the latest results communicated by the Agence Française de Sécurité Sanitaire des Aliments (AFSSA: French Agency for Food Safety) on 19 March 2001 are as follows:

- 4,648 negative samples;
- 28 positive samples by ELISA, derived from six establishments which held sheep originating from the United Kingdom.

Initially, the tests were carried out by AFSSA using virus neutralisation. From 12 March 2001, this technique was used in combination with ELISA⁽¹⁾. The latter technique enabled a number of false positives to be eliminated, bringing the number of serologically positive establishments to six.

To date, the definitive results issued by AFSSA have enabled 155 "serologically negative" establishments to be released from surveillance, after disinfection.

The six establishments holding serologically positive animals are located in the following five departments:

Department	Establishments	No. of animals euthanised	
		originating from United Kingdom	in-contact animals
Cher	1	62 sheep	44 sheep and 65 cattle*
Mayenne	2	769 sheep	117 sheep and 3 pigs
Oise	1	11 sheep	35 sheep
Rhône	1	42 sheep	45 sheep, 80 cattle and 40 pigs
Seine-et-Marne	1	400 sheep	1,400 sheep, 30 cattle and 12 pigs

* samples taken from two bovines presenting clinical signs suggestive of FMD proved to be negative.

All the susceptible animals at risk held in these establishments have been euthanised.

The two serologically positive establishments in Mayenne department are within the surveillance zone around the outbreak and are therefore subject to the restriction measures imposed by the order declaring infection.

Prefectorial orders have been issued establishing 3-km quarantine zones around the five other establishments that are serologically positive or awaiting the results of confirmatory tests.

Confirmatory tests have enabled the lifting of the quarantine area established around an establishment in Loire-Atlantique department in which 30 sheep originating from the United Kingdom and 190 "contact" sheep were euthanised.

Results of the reported clinical suspicions:

Since the setting up of intensified FMD surveillance measures, 64 "clinical suspicions" have been officially reported to the Veterinary Services in 42 departments.

To date, 37 of these have been ruled out in respect of animals not presenting clinical signs suggestive of FMD.

In 27 other establishments, distributed throughout France, samples have been taken and forwarded to AFSSA.

To date, excluding the confirmed outbreak in an establishment in Mayenne department, adjoining an establishment that had imported British sheep in February, these suspicions have all been ruled out (i.e. 26 establishments).

(1) ELISA: enzyme-linked immunosorbent assay.

FOOT AND MOUTH DISEASE IN MONGOLIA
Follow-up report No. 3

Text of a fax received on 20 March 2001 from Dr Ravdan Sanjaatogtokh, Director, State Veterinary Services, Ministry of Food and Agriculture, Ulaanbaatar:

End of previous report period: 19 February 2001 (see *Disease Information*, **14** [11], 51, dated 16 March 2001).

End of this report period: 16 March 2001.

New outbreaks:

Location	No. of outbreaks
Ulaanbaatar city	1

Total number of animals in the new outbreaks:

species	susceptible	cases	deaths	destroyed	slaughtered
bov	55	14	0	14	-
ovi	0	0	0	0	-
cap	17	0	0	0	-

Causal agent: foot and mouth disease virus type O.

Control measures during reporting period: quarantine and movement controls have been imposed in the Chingeltei district of the city. Vaccination has started in sixteen districts of the city.

*
* *

INFECTIOUS SALMON ANAEMIA IN THE UNITED STATES OF AMERICA

EMERGENCY REPORT

Text of an e-mail received on 21 March 2001 from Dr Alfonso Torres, Deputy Administrator, Veterinary Services, United States Department of Agriculture, Washington:

Nature of diagnosis: laboratory.

Date of initial detection of animal health incident: 9 February 2001.

Outbreaks:

Location	No. of outbreaks
Cobscook Bay, State of Maine	1

Total number of animals in the outbreak:

species	susceptible	cases	deaths	destroyed	slaughtered
salmon	53,000	1	...	0	53,000

Description of affected population: infectious salmon anaemia (ISA) virus was detected in one of six (6) cages stocked with smolts. The affected cage was stocked with about 68,000 fish.

Diagnosis: All fish had tested negative for diseases of regulatory concern, including ISA virus, prior to transfer from the freshwater holding area to the marine site. Mortality rates of about 150 fish per day about three weeks after a bird predation triggered a diagnostic investigation in which ISA virus was detected.

A. Laboratory where diagnosis was made: Microtechnologies, Inc., Richmond, Maine.

B. Diagnostic tests used: virus isolation in SHK and CSHE cells, indirect fluorescent antibody test (IFAT), RT-PCR⁽¹⁾.

C. Source of agent: unknown.

Other epidemiological details: ISA virus is considered a slow spreading low virulent virus. In October 1999, ISA was reported in the vicinity in a neighbouring country. The mode of spread of ISA remains unclear. In this occurrence, the affected fish were confined to one cage on one salmon rearing facility at the extreme eastern end of Maine.

Control measures during reporting period: Biosecurity measures were immediately strengthened upon this preliminary diagnosis, to include isolation of both the affected cage and the site, daily removal of dead fish and burial in a landfill, and slaughter of all fish in the affected cage. Increased surveillance of neighbouring cages, and disinfection of equipment were instituted.

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

*
* *

FOOT AND MOUTH DISEASE IN IRELAND

(Date of last previously reported outbreak: 1941).

EMERGENCY REPORT

Text of a fax received on 22 March 2001 from Dr M.C. Gaynor, Chief Veterinary Officer, Department of Agriculture, Food and Forestry, Dublin:

Report date: 22 March 2001.

A sample sent to Pirbright Laboratory (United Kingdom) has been confirmed positive for foot and mouth disease in Ireland. This case was suspected on the night of 20 March 2001 and the precautionary slaughter of all the animals in the flock took place on that date.

The farm in question is located 3 kilometres from the border with Northern Ireland, in the area adjacent to the outbreak confirmed in Northern Ireland on 1 March. The farm is within the existing surveillance area established as a result of the outbreak in Northern Ireland. An aggressive cull will be implemented in the area around the outbreak.

*
* *

FOOT AND MOUTH DISEASE IN THE UNITED KINGDOM / GREAT BRITAIN
Follow-up report No. 3

Extract from a fax received on 21 March 2001 from Dr J.M. Scudamore, Chief Veterinary Officer, Ministry of Agriculture, Fisheries and Food, London:

Report date: 21 March 2001.

Number of outbreaks confirmed as of 21 March 2001: 437.

Number of susceptible animals in the outbreaks:

bov	ovi	sui	cap
69,047	224,096	3,227	53

*
* *

FOOT AND MOUTH DISEASE IN THE NETHERLANDS

(Date of last previously reported outbreak: February 1984).

EMERGENCY REPORT

Text of a fax received on 22 March 2001 from Dr Frederik H. Pluimers, Chief Veterinary Officer, Ministry of Agriculture, Nature Management and Fisheries, The Hague:

Report date: 22 March 2001.

Nature of diagnosis: clinical and laboratory.

Date of initial detection of animal health incident: 21 March 2001.

Estimated date of first infection: 24 February 2001.

Outbreaks:

Location	No. of outbreaks
Olst, Overijssel province	1
Welsum, Gelderland province	1
Oene, Gelderland province	1

Description of affected population:

- Olst and Welsum outbreaks: dairy animals.
- Oene outbreak: fattening calves and dairy goats.

Total number of animals in the outbreak:

<i>species</i>	<i>susceptible</i>	<i>cases</i>	<i>deaths</i>	<i>destroyed</i>	<i>slaughtered</i>
bov	232	5	0	232	0
ovi	75	0	0	75	0
cap	545	130	0	545	0

Diagnosis: .

A Diagnostic tests used: ELISA⁽¹⁾.

B Causal agent: virus of serotype O.

Epidemiology:

- Outbreak in Olst: in the evening of 20 March 2001, the local veterinarian reported a suspected case of foot and mouth disease (FMD) to the central veterinary authorities. In the night of 20 to 21 March 2001, the official veterinarian confirmed the clinical diagnosis and within four hours the laboratory test was positive.
- Outbreak in Welsum: On 21 March 2001, the local veterinarian reported a suspected case of FMD to the central veterinary authorities. The official veterinarian confirmed the clinical diagnosis and within four hours the laboratory test was positive.
- Outbreak in Oene: On 15 March 2001, the local veterinarian reported a suspected case of FMD to the central veterinary authorities. Clinically, the dairy goats present on the farm showed FMD signs; the 74 calves revealed no signs. The rapid laboratory test for the goats was negative. On the basis of additional laboratory results, the clinical diagnosis was confirmed on 24 March 2001.

The 74 calves present on the farm in Oene originated from Ireland. Investigations revealed that they were imported through France and stayed at a staging point in Mayenne (France). In the days before the calves arrived, English sheep were present at this staging point. These sheep originated from outbreak No. 11 in the United Kingdom. The calves arrived in the Netherlands on 24 February 2001. As it seems, these calves could have caused the outbreak of FMD in the Netherlands.

The owner of the farm in Welsum is related to the owner of the farm in Oene. He also occasionally worked on this farm.

The FMD infection on the farm in Welsum was caused by personal contact or transport contact.

The outbreak in Olst is situated 1 km from the outbreak in Welsum.

Control measures: on 21 March 2001, all animals present on the farm in Olst were destroyed. Preventive culling of all animals susceptible to FMD on six farms in a zone with a radius of 1 km around the affected farm took place on 21 March 2001.

On 22 March 2001, all animals present on the affected farms in Welsum and Oene were destroyed. Preventive culling in a zone with a radius of 1 km around the affected farms will be carried out in the next few days.

A protection zone (3 km) and a surveillance zone (10 km) were put in place in accordance with national and Community regulations.

A total standstill for all animals (horses included) and products of animal origin has been put in place, with effect from 21 March 2001.

Screening is taking place on all farms situated in the protection zones.

(1) ELISA: enzyme-linked immunosorbent assay.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever by the Central Bureau of the Office International des Epizooties concerning the legal status of any country or territory mentioned, or its authorities, or concerning the delineation of its frontiers or boundaries.

Unless otherwise stated, material published is derived from declarations made to the Central Bureau by the Veterinary Administrations of the countries and territories mentioned.