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INFECTIOUS SALMON ANAEMIA IN THE FAROE ISLANDS

EMERGENCY REPORT

Text of a fax received on 7 April 2000 from Dr Bjørn Harlou, Chief Veterinary Officer, Ministry of Trade and Industry, Faroe Islands:

Report date: 7 April 2000.

Nature of diagnosis: clinical and laboratory.

Date of initial detection of animal health incident: 28 March 2000.

Outbreaks:

Location	No. of outbreaks
Fuglafjordur	1 sea farm

Diagnosis:

A. Laboratory where diagnosis was made: National Veterinary Institute, Norway.

B. Diagnostic tests used: fluorescence technique on kidney imprint smears.

On 28 March 2000, an outbreak of infectious salmon anaemia (ISA) was suspected in a group of salmon. Samples were collected for confirmation of the clinical diagnosis. The diagnosis of ISA was confirmed on 2 April 2000.

Epidemiology: data relating to the affected farm are as follows:

Total number of salmon (*Salmo salar*) and rainbow trout (*Oncorhynchus mykiss*): 940,000.

Number of rainbow trout without clinical signs: 87,000. Mortality: 0.28%. Average weight: 416 g.

Number of salmon without clinical signs: 728,000. Mortality: 0.64% ~ 4.19%. Average weight: 836 g ~ 1,640 g.

Number of infected salmon: 125,000. Mortality: 5.47%. Average weight: 927 g.

Samples have been taken from all groups of fish in the sea farm and will be sent to the laboratory.

No other aquaculture farms are under suspicion of being infected with ISA. Epidemiological investigations into possible infection routes are taking place.

Control measures during reporting period:

- measures to prevent the spread of the disease from the infected sea farm were implemented immediately;
- preliminary steps have been taken to destroy ISA infected fish and to slaughter out all fish remaining on the sea farm;
- preliminary ban on the export of slaughtered salmonid fish from the Faroe Islands to the countries of the European Union, unless head, gills and viscera are removed during the slaughter processing.

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NEWCASTLE DISEASE IN MEXICO
Follow-up report

FOLLOW-UP REPORT No. 1

Translation of an e-mail received on 8 April 2000 from Dr Angel Omar Flores Hernández, Director General of Animal Health, Secretariat for Agriculture, Animal Production and Rural Development, Mexico City:

End of previous report period: 31 March 2000 (see *Disease Information*, **13** [13], dated 7 April 2000).

End of this report period: 7 April 2000.

On 30 March 2000, the isolation of velogenic Newcastle disease virus in the metropolitan area of La Laguna⁽¹⁾ was officially confirmed.

To date, 28 broiler farms (totalling 3,947,187 birds) have been placed under quarantine. In some of these farms the disease has been confirmed by virus isolation or clinical examination, whereas in the remainder the disease is suspected. Eight farms (with a total of 1,236,650 birds) have been depopulated. In nine farms (with a total of 1,437,628 birds) eradication procedures are under way; in three of these farms, depopulation is due to be completed within two days of this report and in six farms within four days. In the remaining farms under quarantine investigations are in progress.

To assess the overall situation, testing has been carried out in 130 farms (49% of the total number of poultry farms in the region), including broiler and breeding flocks and commercial layer flocks.

Testing is also under way in backyard flocks; to date, 265 samples have been taken from 77 farms, and are currently being tested.

Since 31 March, the following control measures have been taken:

- The National Animal Health Emergency Plan has been put into effect and the entire area of La Laguna has been placed under quarantine.
- Farms where the virus has been isolated and those where clinical signs of Newcastle disease have been observed have been depopulated.
- Strict control measures on the movement of birds and poultry products and by-products from the area of La Laguna to the rest of the country and within the area itself have been established under official supervision.
- An epidemiological evaluation is being carried out in each farm to determine the existing or potential level of risk.
- The most stringent animal health restrictions have been applied to farms in the outbreak area and surrounding areas.
- Testing, and the epidemiological investigation into the origin of the problem, are continuing.

(1) Note by the OIE Central Bureau: the metropolitan area known as "La Laguna" is formed mainly by three cities: Torreón, in the State of Coahuila, and Gomez Palacio and Lerdo in the State of Durango.

NEW WORLD SCREWORM (*COCHLIOMYIA HOMINIVORAX*) IN THE UNITED STATES OF AMERICA Follow-up report

FOLLOW-UP REPORT No. 1

Text of a communication received on 11 April 2000 from Dr Alfonso Torres, Deputy Administrator, Veterinary Services, United States Department of Agriculture (USDA), Washington, DC:

End of previous report period: 6 March 2000.

End of this report period: 17 March 2000.

The affected horse and the paddock were treated on 3 March 2000 (see *Disease Information*, **13** [9], dated 10 March 2000). The horse received a second treatment on 6 March 2000 and remained in quarantine until its wound was completely healed. It was released from quarantine on 15 March 2000, after being examined by a Federal veterinarian.

This horse was in a one-eighth acre paddock that was isolated on three sides. Two or three horses in an adjacent paddock were examined; no wounds were observed on these horses.

The other 16 horses in the 27 February 2000 shipment were traced, and each horse was examined twice by a foreign animal disease diagnostician, at 3- to 5-day intervals. No further evidence of disease was found.

The National Veterinary Services Laboratory reported that the screwworm larvae were at least 24 hours from maturity when they were collected on 2 March 2000; thus, it is unlikely that any larvae dropped from the wound on or before 2 March 2000. Thorough treatment of the premises on 3 March 2000 was provided to ensure that any larvae that may have exited the wound were killed.

Release of sterile flies is not planned. Based on the screwworm life cycle, it would be 15 March 2000 before any new cases would be seen. As a precautionary measure, intensive surveillance is being conducted by Federal and State officials and accredited veterinarians in the State of Florida. Sentinel animals will be placed in the West Palm Beach area from 10 March to 17 April 2000. USDA's Animal Health and Plant Inspection Service will continue to monitor the situation.

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RABBIT HAEMORRHAGIC DISEASE IN THE UNITED STATES OF AMERICA

EMERGENCY REPORT

Text of a fax received on 12 April 2000 from Dr Alfonso Torres, Deputy Administrator, Veterinary Services, United States Department of Agriculture (USDA), Washington, DC:

Report date: 10 April 2000.

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

Date of initial detection of animal health incident: 31 March 2000.

Estimated date of first infection: 7 March 2000.

Outbreaks:

Location	No. of outbreaks
Crawford County, State of Iowa	1

Description of affected population: all rabbits on the affected premises, which is in a rural location, were being raised for the purposes of exhibition. They were all Palominos or California Whites.

Total number of animals in the outbreak:

<i>susceptible</i>	<i>cases</i>	<i>deaths</i>	<i>destroyed</i>	<i>slaughtered</i>
27	25	25	2	0

Diagnosis:

- The first rabbit, one allowed to roam near the house, died on 9 March 2000.
- Rabbits housed in hutches started dying on 16 March.
- On 22 March, a private veterinarian forwarded samples to Iowa State University Veterinary Diagnostic Laboratory. Rabbit haemorrhagic disease (RHD) or toxic hepatopathy was suspected based on the clinical history and microscopic lesions in the liver.
- On 24 March, a second rabbit was submitted with similar lesions.
- The State and Federal offices were notified on 27 March and a foreign animal disease investigation began immediately. Epidemiological information was collected and samples were sent to the USDA's Foreign Animal Disease Diagnostic Laboratory (FADDL), Orient Point, State of New York.
- On 31 March FADDL tentatively diagnosed RHD based on haemagglutination test on liver homogenate from inoculated rabbits and electron microscopy.
- FADDL forwarded samples to the National Institute for Agrarian Research (INIA), Madrid, Spain, for confirmation.
- Confirmation of RHD was received from INIA on 7 April, based on polymerase chain reaction tests.

Epidemiology:

- A. Source of agent / origin of infection:** despite extensive investigations, the source of the introduction of the virus onto the site has not yet been identified.
- B. Mode of spread:** spread has been confined to one premises. Spread on that premises has been by close contact with infected rabbits and indirect spread by materials contaminated with virus is also suspected.
- C. Other epidemiological details:**
 - There have been no introductions of rabbits onto the premises for the last two years.
 - The first week of August 1999 was the last time rabbits left the farm and returned.
 - In January 2000, six rabbits, all healthy and over two months old, were sold.

Control measures during reporting period:

- The affected premises are quarantined by the State authority.
- The State authority destroyed the remaining two rabbits on 8 April 2000.
- Cleaning and disinfection will be controlled by the State authority.
- Premises with rabbits in the near vicinity are being located, and owners are being contacted to determine whether similar circumstances have occurred elsewhere.

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VARROOSIS IN NEW ZEALAND

EMERGENCY REPORT

Text of a fax received on 12 April 2000 from Dr Barry O'Neil, Director, Animal Biosecurity, Ministry of Agriculture and Forestry (MAF), Wellington:

Report date: 12 April 2000.

Nature of diagnosis: suspicion based on clinical examination of bees and hives, confirmed by laboratory identification of the agent.

Date of initial detection of animal health incident: 11 April 2000.

Estimated date of first infection: unknown. Some infested hives examined were noted to have experienced population crashes, a symptom seen after infestation has been established for three to five years.

Outbreaks:

Location	No. of outbreaks
Otahuhu, South Auckland, North Island	1

Fourteen hives on four premises were initially visited and inspected. Eight of these hives were dead, with other showing low populations and other typical symptoms. Two hives on the first property identified were immediately destroyed by the owner.

The affected population at this stage comprises beehives kept by small hobby beekeepers. Larger commercial operations are, however, within the controlled area that MAF has described. MAF is working closely with the National Beekeepers Association to identify all beekeepers in the controlled area, to allow hive visits and inspections.

Diagnosis:

- A. **Laboratory where diagnosis was made:** National Plant Pest Reference Laboratory, Lincoln.
- B. **Diagnostic tests used:** identification of the agent (*Varroa jacobsoni*).

Epidemiology:

- A. **Source of agent / origin of infection:** unknown.
- B. **Mode of spread:** all the suspected infected premises are within a 10-km distance from each other, suggesting that natural dispersal through bee movements (abandoning and robbing of crashed hives) is the likely means of dissemination.
Tracing forwards and backwards from these premises, in particular identifying high risk movements such as bees, hives and equipment, is taking place.

Control measures during reporting period:

- A controlled area has been designated as being the area within the territorial authority boundaries of Rodney District, North Shore City, Waitakere City, Auckland City, Manukau City, Papakura District, Franklin District, Waikato District, Hamilton City, or Hauraki District.
- Movement controls, comprising restrictions on movement of live or dead bees, beehives and used beekeeping equipment, have been imposed. Movements of these items within and from the controlled area is prohibited. A further restriction has been imposed on movements of these items from the North Island to the South Island.
- A full-scale delimiting survey is to be undertaken within the controlled area. High priority has been assigned to visiting and inspecting beehives in the area immediately surrounding the infected premises, the outer perimeter of the controlled area, and high risk traces from infested premises. Reports in response to an MAF request that beekeepers nationally inspect hives looking for signs of *Varroa* infestation will also be investigated.

FOOT AND MOUTH DISEASE IN THE REPUBLIC OF KOREA
Confirmation

FOLLOW-UP REPORT No. 1

Text of an e-mail received on 12 April 2000 from Dr Joo-Ho Lee, Director of Animal Health Division, Ministry of Agriculture and Forestry, Seoul:

End of previous report period: 27 March 2000 (see *Disease Information*, **13** [12], dated 31 March 2000).

End of this report period: 12 April 2000.

New outbreaks:

Location	No. of outbreaks
HongSeong County, ChungNam Province (about 150 km south of the first suspected dairy farm)	7
Boryung County, ChungNam Province (neighbouring HongSeong County)	1
HwaSeong County, KyungGi Province (adjacent to YongIn City)	1
YongIn City, KyungGi Province (adjacent to HwaSeong county)	1
Chung Ju City, ChungBuk Province (about 140 km south-west of the first suspected dairy farm)	1

Total number of animals in the new outbreaks:

<i>species</i>	<i>susceptible</i>	<i>cases</i>	<i>deaths</i>	<i>destroyed</i>	<i>slaughtered</i>
bov	61	...	0	808*	0

* Destroyed animals comprise all cloven-hoofed animals (including all the above susceptible animals) in the infected farms and adjacent farms destroyed up to 11 April 2000.

Confirmatory diagnosis on the first outbreak:

- A. *Laboratory where diagnosis was made:*** National Veterinary Research and Quarantine Service (NVRQS, Anyang, Republic of Korea). Clinical material from the first suspected cows were sent to and diagnosed by Pirbright Laboratory, United Kingdom (4 April 2000), with the same result as that of the NVRQS.
- B. *Diagnostic tests used:*** in addition to the previous report:
 - mouse inoculation test;
 - virus isolation by the NVRQS (2 April 2000), with a result of cytopathic virus recovery after passage through foetal lung cells of the Korean native goat;
 - sequence analysis of VP1 gene (NVRQS, Korea, and Pirbright Laboratory).
- C. *Causal agent:*** sequence analysis of VP1 gene showed close similarity to FMD virus serotype O/TAW/1/99 and O/Kinmen/TAW/99.

Epidemiology:

- To date, infection has been confined to dairy cattle and Korean native cattle. There is no evidence of infection in pigs.
- In the case of HongSeong County, ChungNam Province, all seven outbreaks occurred within the 10-km-radius protection zone that has been set up around the primary infected farms.

Control measures during reporting period:

- Stamping out was applied to all susceptible animals in the infected farm and the adjacent farm and the farms were disinfected.
- A protection zone, with a radius of 10 km, has been set up around the infected farms. Movement of susceptible animals, livestock markets and artificial insemination have been prohibited. Emergency vaccination is being conducted within this zone.

- A surveillance zone, with a radius of 20 km, has been set up around the infected farms. Movement of susceptible animals out of this area has been prohibited and livestock markets have been suspended in this zone.
- Intensive surveillance, including serological testing and clinical investigation, has been taking place in the protection zone and surveillance zone as well as in epidemiologically related farms outside these zones. As of 11 April 2000, serum samples from 1,014 animals in the protection zone, surveillance zone and other areas have been tested, with no positive results. In addition to ante-mortem inspection, post-mortem inspection has been implemented at the slaughterhouse.
- An epidemiological survey is being undertaken.

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FOOT AND MOUTH DISEASE IN SAUDI ARABIA Identification of serotype SAT 2

Extract from a fax received on 13 April 2000 from the OIE World Reference Laboratory for Foot and Mouth Disease, Pirbright, United Kingdom:

Report date: 13 April 2000.

The World Reference Laboratory for Foot and Mouth Disease (FMD) has identified FMD virus type SAT 2 in samples received from a dairy farm in Saudi Arabia. This serotype is not included in the FMD vaccines used in Saudi Arabia or in neighbouring countries.

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