



Summary of Selected Disease Events: July - December 2000

This report summarizes disease events that occurred during July through December 2000, and presents selected research results which were released during that time period. The listing is not intended to be comprehensive. Selected occurrences of OIE List A diseases and BSE are presented first, followed by various other animal diseases.

A. List A diseases and BSE

Classical swine fever

CSF in Great Britain, Aug 2000 - An outbreak of classical swine fever (CSF) was confirmed in Suffolk County, England on 8 August 2000. Prior to this outbreak, Great Britain (England, Scotland, Wales, and Isle of Man) was considered by the USDA to be free of CSF. Between August and late December, a total of 16 premises had been confirmed with CSF, the last of which was confirmed on November 4. As of January 4, 2001, 21 individual premises were under movement restrictions, including the 16 premises with confirmed cases and 5 premises still under investigation. However, all area movement restrictions around known infected premises (10 km surveillance zone) had been lifted. All cases subsequent to the index case are thought to be due to animal movement.

Genetic typing has shown that this outbreak was caused by the introduction of a virus strain not currently present in Europe. The most likely source of the virus is thought to be infected pork product, although investigations into the origin are not complete.

Foot and mouth disease

FMD in Egypt, Sep 2000 - An outbreak of foot and mouth disease (FMD) in Egypt was reported by the OIE on September 15, 2000. The outbreak occurred in the Fayoum governorate of north central Egypt. Egypt apparently first became aware of this outbreak in June 2000.

Prior to the outbreak, the US had not recognized Egypt as an FMD-free country. The last FMD outbreak in Egypt that was formally reported to OIE occurred in December 1997.

As of December 2000, no information on virus type or suspected origin of the outbreak had been reported to the OIE. Egypt is located across the Mediterranean Sea from

Greece, which experienced outbreaks of FMD type Asia 1 in Summer 2000, and adjacent to Israel, which experienced FMD outbreaks in 1999.

FMD in Greece, Jul 2000 - An outbreak of foot and mouth disease (FMD) virus type Asia 1 in Greece was reported to the OIE on July 12, 2000. This was the first FMD outbreak reported by Greece since 1996. The outbreak occurred in two free-grazing beef herds in northeastern Greece near the border with Turkey.

Between July and September 2000, 14 outbreaks were reported. The origin of all primary outbreaks was direct contact between animals along 'weak' points of the Greek-Turkish border. The virus strain isolated from the Greek outbreaks was identical to the strain found in Turkey, which had been advancing westward between 1999 and 2000.

It appears that all outbreaks have been eradicated, and Greek authorities have claimed freedom of FMD as of November 2000.

FMD in South America

FMD in Argentina, Aug 2000 - A serologic diagnosis of foot and mouth disease (FMD) in cattle in Argentina was reported to the OIE on August 10, 2000. The locations included municipalities (Clorinda, Mercedes, and Concepcion del Uruguay) in three provinces near the borders with Paraguay, Uruguay, and southern Brazil. Routine epidemiologic surveillance activities carried out in Argentina's border zones uncovered the affected animals, which were found to be illegally imported from a neighboring country and were consequently subjected to screening for FMD. Laboratory confirmation yielded FMD virus type A24.

An OIE delegation reviewed the situation in September and concluded that the outbreak was the result of an isolated incursion of infected animals and that appropriate control measures had been taken. As a result, the OIE has not revoked Argentina's status as FMD-free without vaccination.

The USDA issued a temporary hold on all beef imports from Argentina immediately following the outbreak. A second interim ruling was issued in late December, allowing the resumption of beef imports from Argentina, with certification that the beef does not come from animals that have ever been in specified areas along Argentina's borders with Paraguay, Brazil, Bolivia, and Uruguay. A shipment of beef from Argentina was expected to arrive in the US before the end of 2000.

FMD in Brazil, Aug 2000 - An outbreak of foot and mouth disease (FMD) in its southernmost State of Rio Grande do Sul was reported by Brazil to the OIE on August 23, 2000. Bovine and swine were involved in the outbreak and virus type O was identified. In 1999, Brazil had FMD outbreaks, virus type O, in its more northern states. The last clinical case of FMD in Rio Grande do Sul and the other southern states was found in 1993.

At the time of the latest report to the OIE in October, a total of 22 outbreaks had occurred, all in the State of Rio Grande do Sul, and most within the same municipality. The origin of the outbreaks was not yet known.

Parts of southern Brazil including Rio Grande do Sul, Santa Catarina and part of Parana had been recognized by the OIE as FMD-free with vaccination in 1998. In May 2000, vaccination was terminated in these areas in order to gain recognition as free without vaccination. The ban on vaccination in these states remained in force following the outbreaks. The OIE suspended its designation of Rio Grande do Sul as free with vaccination as a result of this event. The USDA had not recognized any regions in Brazil as FMD-free.

FMD in Uruguay, Oct 2000 - Laboratory confirmation of an outbreak of foot and mouth disease (FMD), Type O, in Uruguay was reported by OIE on 27 October 2000. Clinical signs of FMD appeared in cattle and swine on a farm in the northern department of Artigas, about two miles from the border with Brazil. The source of the outbreak was thought to be contaminated animal feed or slaughterhouse waste.

Emergency alert measures in Uruguay had been in place since the August 2000 FMD outbreaks in Argentina (type A24) and Brazil (type O). The last previously reported outbreak of FMD in Uruguay was in 1990. In 1995 Uruguay attained internationally recognized FMD-free status, which enabled the country to export beef to the US.

As of December 2000, clinical and serologic screening had uncovered no further cases. An international delegation concluded in late November that verification of eradication was pending results from sentinel animals. The USDA issued an interim rule removing Artigas from the list of regions considered to be free of FMD.



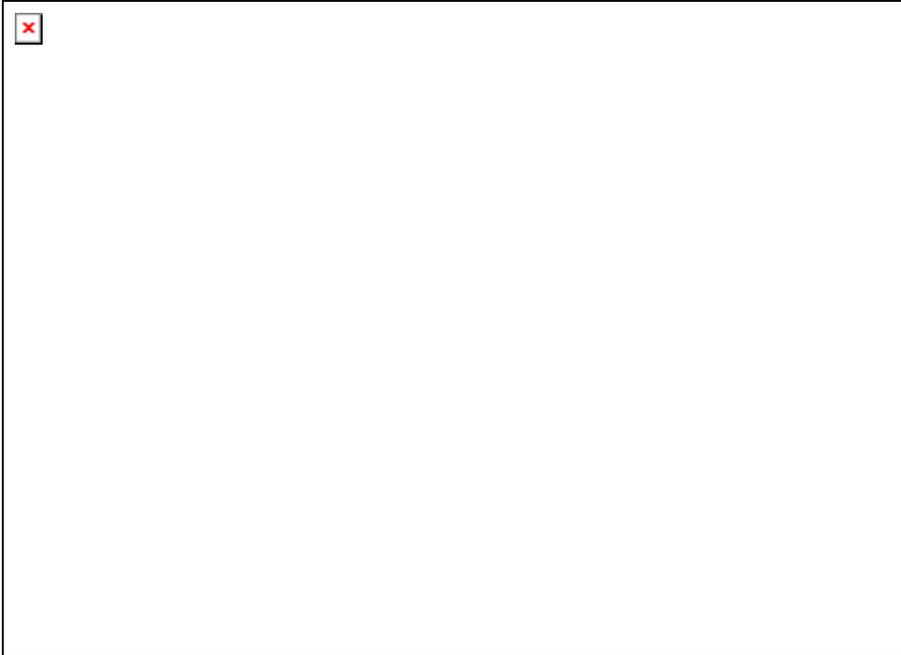
FMD in southern Africa

FMD in South Africa, Sep 2000 - On September 17, 2000, the Republic of South Africa reported to the OIE an outbreak of foot and mouth disease (FMD) in the province of Kwazulu-Natal. This area of the country had been free of FMD since 1957 and was recognized as FMD-free by the OIE and the USDA. The source of the outbreak was traced to swill that was illegally obtained from a foreign ship and fed to pigs. This outbreak was caused by FMD virus type O, the first occurrence of this type in South Africa. As of mid December, several additional outbreaks were detected, including some outside of the 15-km quarantine zone but within the 30-km surveillance zone. Officials had abandoned the initial stamping-out policy and instead instituted vaccination. The USDA issued an interim rule removing Kwazulu-Natal from the list of regions considered to be free of FMD.

An unrelated FMD outbreak in a feedlot located in Mpumalanga province was reported to the OIE on Nov 30. Virus sequencing showed that this virus closely resembled the serotype of SAT 1 virus that occurs in African buffalo in the southern part of Kruger National Park. The origin of infection is suspected contact between domestic cattle sourced within the province and infected buffalo or impala. All cattle and small stock in this affected area were to be vaccinated.

FMD in Swaziland, Nov 2000 Swaziland reported on November 29 an outbreak of FMD virus type SAT 1 in animals that had been imported from South Africa. The animals were detected at a slaughterhouse, which was subsequently quarantined and surrounded by a quarantine zone and a surveillance zone. Importation of cloven-hoofed animals and their products from the affected provinces in South Africa was banned. The last outbreak of FMD in indigenous animals in Swaziland occurred in 1969.

On December 23 another outbreak at a dip tank near the northern border of Swaziland was reported to the OIE. It was found that fences along Swaziland's border had been cut, leading to the suspicion that animals had been moved across the border. Strict control measures continue to be applied while investigations into the extent of the outbreak continue.



FMD in Taiwan, Oct 2000 - FMD resurfaced in Taiwan during October 2000. Vaccination had been implemented as a result of the major 1997 outbreak. This new outbreak is thought to be the result of failure to vaccinate on some small swine farms.

Rift Valley fever

RVF in Saudi Arabia and Yemen, Sep 2000 - An outbreak of Rift Valley fever (RVF) in southwest Saudi Arabia near the Yemeni border was reported to the OIE on September 22, 2000. The primary significance of this outbreak is that it marked the first time that RVF was documented outside of Africa.

The Saudi Arabian Health Ministry reported on December 15, 2000 that almost 800 people had become ill from RVF, and 109 people had died. There was no indication that the outbreak had subsided.

There has been a simultaneous outbreak of RVF in Yemen. Sequencing of the virus from Saudi Arabia indicates that it is similar to the RVF viruses isolated from East Africa in 1998.

Bovine spongiform encephalopathy

BSE in Germany, Nov 2000 - Germany announced on November 26, 2000 the first case of bovine spongiform encephalopathy (BSE) in a native-born cow. Until this time, Germany had declared itself as free of BSE, despite the fact that it had reported 6 prior

cases of BSE between 1992 and 1997. However, all previously reported cases were in imported animals.

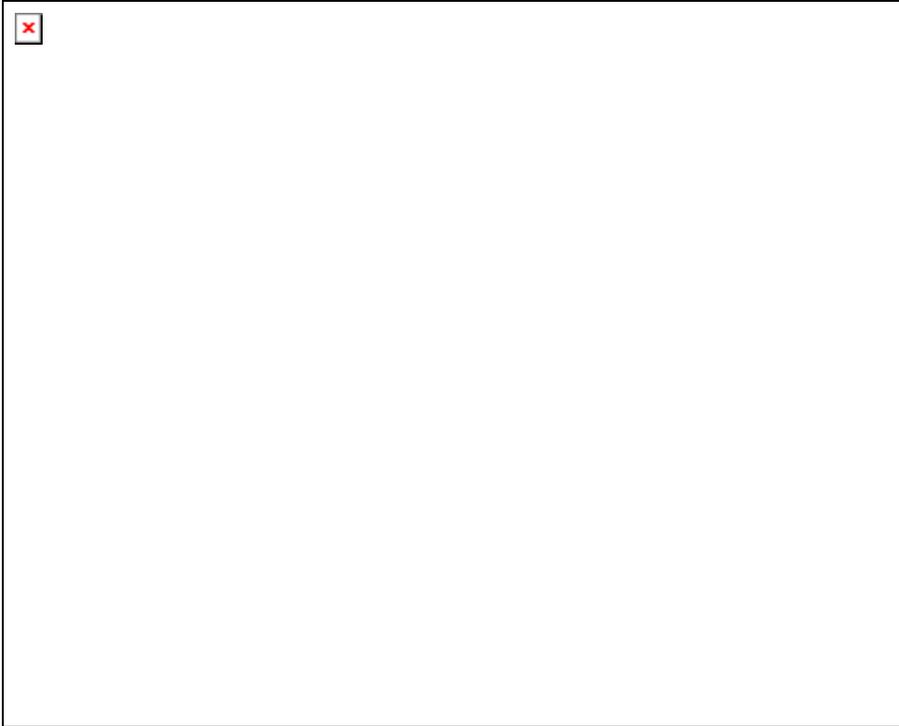
As of late December, a total of 6 native BSE cases had been confirmed. All 6 confirmed cases were from different breeding farms; 1 in the northern state of Schleswig-Holstein and 5 in the southern state of Bavaria.

In December 1997, the USDA enacted regulations which prohibited the importation of live ruminants and ruminant meat from all European countries including Germany. These import restrictions also applied to bone meal, blood meal, meat meal, offal, fat, glands, and serum from ruminants.

BSE in Spain, Nov 2000 - Spain reported its first case of BSE to the OIE on November 22, 2000. A second case was reported to the OIE on December 7, and an additional two suspected cases were reported in the media on January 2, 2001. All four cases were uncovered in the northwestern part of Spain, in the regions of Galicia and Leon-Castille. Epidemiologic investigations are still underway; however, there are no indications that these were not native animals.

The regulations pertaining to BSE that the USDA enacted in December 1997 also applied to Spain (see BSE in Germany).

BSE Overview, Jan 2001 - The darker shaded countries pictured here reported native cases of BSE between 1989 and January 30, 2001. Countries reporting their first case of BSE in a native animal recently include Denmark (Mar 2000), Germany (Nov 2000), Spain (Nov 2000), and Italy (Jan 2001).



B. Other disease event updates

Canada

Avian influenza in Canada - The first North American case of an exclusively avian influenza virus crossing to another animal species was documented and published in the October 2000 issue of the Journal of Virology. The incident involved H4N6, a relative of strains commonly found in Canadian ducks, which was found to be causing pneumonia in hundreds of pigs on an Ontario farm in October 1999. The farm was located near a large lake where waterfowl congregate at the beginning of their southbound migration.

Chronic wasting disease in Canada - Chronic wasting disease (CWD) reoccurred in Saskatchewan elk, 2 years after the last reported case. As of mid December 2000, 6 herds with infected animals had been found. The first case of CWD in Saskatchewan occurred in 1996 and a second case occurred in 1998. In May 2000 the same farm that had the 1998 case was again confirmed with a CWD-infected animal. The Canadian Food Inspection Agency believes that all 5 additional infected farms are connected to this latter farm through sales and animal movement. It is further believed that CWD was first introduced into Saskatchewan by elk imported from South Dakota prior to 1990. Government agencies are instituting a monitoring program in wild deer and elk, as well as a voluntary surveillance program for game farmers.

Japan

Anthrax in Japan - Japan had its first case of bovine anthrax since 1991. A beef cow on a farm in Miyazaki Prefecture died of the disease in July 2000. Control measures included vaccination and a ban on movement of cattle from the area. There were no reports of any additional cases.

United States

Anthrax in the US - An outbreak of anthrax in North Dakota resulted in 180 deaths, primarily in beef cattle but including 8 horses and 6 bison. Thirty-three (33) herds were affected between mid-July and late September 2000. This compares with a total of 26 affected herds between 1989 and 1999. The majority of affected herds in ND were in an area that had had heavy rains and flooding in early June. Surrounding states and southern Canada also experienced anthrax deaths. Canada had 7 affected herds and about 80 cattle deaths. Other states that reported affected herds were Minnesota (7 herds) and South Dakota (3 herds).

Avian vacuolar myelinopathy in the US - Avian vacuolar myelinopathy (AVM) was confirmed for the first time in Canada geese. The disease, which damages the brain, was first identified in 1994 and has affected coots, mallards, and eagles at lakes in the southeastern US. In December 2000 the US Geological Survey reported that AVM was found in a Canada goose at a lake on the border of North and South Carolina. Although scientists think AVM is caused by a toxin, this has not been determined. To date there is no confirmed outbreak of AVM in domesticated birds, and there is no evidence that AVM is transmissible to humans.

Leishmaniasis in the US - Leishmaniasis was confirmed in foxhounds in 21 states and southern Canada, as reported in the October 2000 issue of DVM Newsmagazine. This finding resulted from research to facilitate more widespread testing for the disease following an outbreak in a New York hunt club in the late summer of 1999 through early spring of 2000. Leishmaniasis is prevalent in southern Europe, India, and South America, and isolated cases have occurred in the US among pet dogs returning to the US with military personnel. A few locally acquired cases, for which the source was never ascertained, have also been reported in Oklahoma, Kansas, Michigan, and Alabama. However, the disease, which is transmitted by sandflies in enzootic parts of the world, was not known to be naturally transmitted in the US. Research regarding transmission of Leishmaniasis in the US is ongoing.

New screwworm regulations in the US - Screwworm was found on a cat that had entered the US with a military employee returning from Cuba in December 2000. The incident followed the release by APHIS of an interim rule in November 2000 requiring that horses, ruminants, swine, and dogs imported from regions of the world where screwworm exists be inspected and, if necessary treated, for screwworm. This action was precipitated by the finding of screwworm on horses that were imported from South America in February and March of 2000. Prior to this rule, restrictions on the importation of these animals did not specifically address screwworm.

West Nile virus in the US - West Nile Virus (WNV) infection reoccurred in the eastern US, with 59 confirmed equine cases having clinical onset between mid-August and the end of October 2000. Twenty-three (39%) of the horses died or were euthanized. In addition, infection was confirmed in 20 humans, 6 wild mammals of 5 types (bat, skunk, rabbit, squirrel, chipmunk), over 4,300 birds, and 481 mosquito pools. Twelve states and the District of Columbia had a confirmed case in a human, mammal, bird, or mosquito. Surveillance of wild birds indicates that there was geographic expansion of WNV infection since 1999. While the affected area in 1999 was limited to parts of Connecticut, New York, New Jersey, and Maryland, the affected area in 2000 was from Vermont to North Carolina.

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