Summary of Selected Disease Events
April–June 2008

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Ruminants (bovine, caprine, ovine)

Foot-and-Mouth Disease (FMD)

Colombia and Venezuela
On May 30 Colombia’s National Health Service reported an outbreak of foot-and-mouth disease (FMD) to the OIE. The outbreak occurred in a herd of cattle in the city of Cucuta in Norte de Santander department (Figure 1). The affected premises is located 4 km from the Venezuelan border and within an existing surveillance zone maintained by Colombia. Twenty-nine of 188 head of cattle presented with lesions and 27 of 30 tested cattle were found FMD-positive. Three additional outbreaks involving a total of 46 head of cattle were reported to the OIE on June 17. All of the subsequent outbreaks were within the vicinity of the index farm. Prior to the current outbreak, Colombia most recently reported FMD to the OIE in 2005 when a laboratory strain infected cattle at a research station in Bogota.

Figure 1. In May an FMD outbreak was reported in a herd of cattle in the city of Cucuta in Norte de Santander department, Colombia, near the border with Venezuela.

FMD is considered endemic in Venezuela and the country continues to experience FMD outbreaks while striving to attain FMD-free status. Exchange rate disparities between the Venezuelan and Colombian currencies have resulted in increased cattle smuggling from Venezuela to Colombia. Earlier this year, press reports stated that illegally introduced Venezuelan cattle were seized on Colombian territory. Following the most recent outbreaks, Animal Health Services personnel from Colombia and Venezuela met in Caracas to organize a workshop on FMD surveillance and control in the border areas. In addition to the involvement of both governments, the forthcoming workshop will include representatives from industry and the Pan American Foot-and-Mouth Disease Center (PANAFTOSA).
Madagascar

On April 9 Madagascar reported an outbreak of RVF to the OIE. According to the report, two out of nine cattle on a premises in Antananarivo province (Figure 2) had been affected since the outbreak began on February 4. Beginning in February 2008, there were media reports of disease occurrences of unknown cause involving animals and humans on Madagascar. Initially, the focus was on tick-borne diseases and cases of heartwater in cattle were documented. Cattle die-offs continued in areas where humans were experiencing illness associated with fever, stiff neck, and headaches. Initially, humans presenting with these signs were treated for malaria. Subsequently, RVF was diagnosed in these areas in both cattle and humans. By mid-May, Madagascar’s Minister of Health reported that the RVF outbreaks were under control. Since the beginning of the outbreaks 60 of the 500 cattle suspected to have died from RVF were confirmed as RVF-positive.

Sources:

Mayotte

On May 14 the island of Mayotte reported its first-ever outbreak of RVF in cattle on a communal farm on the northeastern part of the island (Figure 2). Additionally, goats that were tested were found to have antibodies to RVF. The positive test results originated from samples collected in November 2007. The cause of the outbreak was attributed to the illegal importation of animals from Anjouan, a neighboring Comoro Island. As reported to the OIE by Mayotte, frequent imports of live cattle from Madagascar and Tanzania by the Comoro Islands have increased the risk of RVF incursion on Mayotte. During November 2007 a child from Grande Comore Island was hospitalized on Mayotte with a clinically severe RVF infection.

Sources:

Hemorrhagic Septicemia

Iraq

National Iraqi media reported that an official of the Dhi Qar province had requested that the Ministry of Agriculture and Ministry of Water Resources declare a state of emergency in Dhi Qar due to the rapid spread of hemorrhagic septicemia in the province. Residents of An-Nasiriyyah governate in Dhi Qar reported deaths of “hundreds” of buffalo and cattle in the marshland areas. Cattle deaths have also been recorded in Missan province, where, according to the environment directorate, polluted water is contributing to the deaths. The director of Dhi Qar Veterinary Hospital stated that the spread of the disease is being exacerbated by livestock owners’ unwillingness to vaccinate herds and by the incentive to collect compensation for livestock deaths from the government.

Sources:
**Thailand**

National media reported that the governor of Narathiwat province in the very south of Thailand, on the Malay border, had declared Sungai Kolok district a "disaster zone of infectious disease" due to an intense focus of hemorrhagic septicemia in the district. By mid-June 127 cows and buffaloes had died of the disease, according to media reports. Officials have implemented movement controls and an awareness campaign on proper carcass disposal methods.

Source:

**Vietnam**

According to Vietnamese media reports, an outbreak of "plasmodium congestion" disease that began around the end of May in Nghe An province has spread to 19 communes in three districts, causing the deaths of 116 buffaloes and cows. It is unclear to which specific clinical signs or etiologic agent the term "plasmodium congestion" is referring. However, because of the known presence of hemorrhagic septicemia in the region along with treatment protocols applied to this outbreak, it appears likely that this is an outbreak of hemorrhagic septicemia.

Source:

**Peste de Petits Ruminants, Uganda**

Uganda reported peste de petits ruminants (PPR) to the OIE for the first time in July 2007. Since then, PPR has been spreading rapidly and officials are having a difficult time halting its advance. Approximately 100,000 sheep and goats have been affected in Uganda’s Karamoja region, comprising an estimated 5% of small ruminants in the region. Within the Moroto district of Karamoja, up to 40% of all goats may have died due to the disease. In response, the government has closed livestock markets, imposed movement controls, and embarked on vaccination and education campaigns.

Sources:

**Bovine Tuberculosis, Mexico**

At the end of April, there were 176 ranches under quarantine for bovine tuberculosis in Veracruz state, 36 in the north and 140 in the southern part of the state. By mid-May 48 ranches in southern Veracruz remained under quarantine.

Sources:

**Equids**

**Equine Influenza (EI), Australia**

Since the last positive case of EI in December 2007, authorities have continued surveillance in previously infected and unaffected areas of Australia. After almost 79,000 laboratory tests and the clearance of 600 suspected properties, Australia was officially declared free of equine influenza. To satisfy World Organisation for Animal Health (OIE) requirements, the country will have to maintain effective surveillance for equine influenza until the end of 2008.

Sources:


**Wildebeest-Associated Malignant Catarrhal Fever, United States**

On April 17, 2008 the United States reported to the OIE that it had diagnosed malignant catarrhal fever (MCF) in a cow from a mixed-use ranch in Texas. Tests confirmed that the cow was infected with wildebeest-associated MCF, caused by alcelaphine herpesvirus (AHV-1). Cattle on the ranch had fence-line contact with wildebeest that were raised in an adjacent pasture on the property.

An investigation conducted jointly by the Texas Animal Health Commission and APHIS Veterinary Services determined that 589 cattle were potentially exposed to AHV-1. More than 130 of the cattle were shipped from the index ranch to multiple states. A total of six clinically affected cattle, three on the Texas ranch and three that had been shipped out of state, were ultimately diagnosed with AHV-1. State animal health officials placed the Texas ranch under quarantine and halted all movement of cattle from the index herd. APHIS:VS has been tracing animal movements and working with affected States to depopulate the exposed cattle and indemnify owners.

Cattle are considered dead-end hosts for MCF and the disease does not affect humans. While there are occurrences of sheep-associated MCF in the United States, wildebeest-associated MCF is considered a foreign animal disease. Since the 1970s there have been several isolated incidents of wildebeest-associated MCF in the United States in zoo animals.

Sources:
Eastern Equine Encephalitis (EEE), United States

Florida and Georgia both have reported numerous cases of EEE this year. State agriculture officials in Florida indicated that there are four times more cases of EEE this year than in the same period last year. Mosquitoes are vectors for EEE and have been flourishing as a result of this year’s increased precipitation. Through June 2008 there have been 45 identified cases in Florida, up from 11 cases in the first six months of both 2006 and 2007. All of the 45 cases detected this year have died. According to the agriculture department, only a few of the infected horses had been recently vaccinated. Georgia has confirmed nine cases of EEE so far in 2008, in contrast to a total of six confirmed cases in all of 2007.

Sources:

Poultry

Newcastle Disease

Germany

On April 23 German animal health officials reported an outbreak of Newcastle disease to the OIE. The outbreak occurred on a farm with chickens, geese, ducks, turkeys, and pigeons. Only the pigeons exhibited clinical signs. Control measures were applied and included depopulation, quarantine, movement controls, zoning, and disinfection of infected premises. The affected farm is located in southeast Germany near the border with Austria. The last reported occurrence of Newcastle disease in Germany was in 1996.

Source:

Low Pathogenic Avian Influenza (LPAI)

Denmark, H7N1

On April 29 Danish animal health officials reported to the OIE an outbreak of LPAI H7N1 on a farm with geese and ducks. The outbreak was detected through routine surveillance. Control measures included depopulation, quarantine, movement controls, zoning, and disinfection. The affected farm is located on the island of Funen. The last reported occurrence of LPAI in Denmark was in 2006.

Source:

Haiti, H5N2

On June 13 Haitian animal health officials reported to the OIE three outbreaks of LPAI H5N2 affecting backyard poultry, including poultry for consumption and fighting cocks. This is the first reported occurrence of LPAI in Haiti. Animal health officials suspect the cause of the outbreak is illegal movement of animals across the border with the Dominican Republic (DR). The DR reported outbreaks of LPAI H5N2 to the OIE beginning in December 2007, with the latest follow-up report submitted March 07, 2008.

Source:

Highly Pathogenic Avian Influenza (HPAI), Global

United Kingdom (U.K.), HPAI H7N7

On June 5 British animal health officials reported to the OIE an outbreak of HPAI H7N7 on a farm in central England. The affected layer flock of 25,000 birds experienced a mortality rate of 40%. Preliminary analysis indicates that this H7N7 strain is likely to be related to viruses which have occasionally been detected in domestic poultry and wild birds elsewhere in Europe. Control measures included depopulation, quarantine, movement controls, zoning and disinfection of affected premises.

Sources:

Second Quarter 2008 Summary, HPAI H5N1

Outbreaks of HPAI H5N1 occurred during the second quarter of 2008 in 10 countries, with 8 of the 10 countries located in Asia. Outside of Asia, outbreaks occurred in Egypt and Russia. In two locations, Hong Kong (in live bird markets) and South Korea (primarily on farms), outbreaks recurred in commercial poultry after significant time periods of freedom from disease. In Japan HPAI H5N1 was found only in wild swans, with no spread to commercial poultry. Testing of wild birds in the United States has not revealed any cases of HPAI H5N1. Human cases of HPAI H5N1 during the second quarter of 2008 occurred in Egypt and Indonesia. Bangladesh confirmed in May 2008 that its first human case of HPAI H5N1 had occurred in January 2008.


The following are country-specific HPAI H5N1 outbreak summaries for April through June 2008:
Africa

Egypt: HPAI H5N1 remains endemic in Egypt. Egypt last submitted a follow-up report on HPAI H5N1 to the OIE in February 2008; however, according to FAO AIDE News Situation Updates 53 and 54, outbreaks occurred in April and May, 2008. In May 2008 there were three outbreaks in backyard poultry and five outbreaks in live bird markets. In May 2008 five outbreaks occurred that affected various species (chickens, geese, ducks) and production systems (backyard, broilers, breeders and layers). Three human cases of HPAI H5N1 occurred in April 2008, with two of the cases being fatal.

Asia

Bangladesh: According to the most recent OIE follow-up report submitted by Bangladesh on June 11, 2008, the number of outbreaks dropped substantially in May and early June. During April 2008 Bangladesh reported eight outbreaks in three provinces, all on commercial farms. In May 2008 only one outbreak was reported, also on a commercial farm. The first human case of H5N1 in Bangladesh was confirmed in May 2008; however, the case actually occurred in January 2008 in a 16-month old boy who subsequently recovered.

China: On June 20, 2008 China reported an outbreak of HPAI H5N1 among ducks on a farm in the southern province of Guangdong, which borders Hong Kong.

China (Hong Kong SAR): Hong Kong officials reported on June 9, 2008 that HPAI H5N1 had been found in a live bird market. Five positive fecal samples from three stalls at the market were obtained during routine surveillance on June 3. There were no unusual deaths among poultry in the market. The chickens in the affected stalls originated from both local and mainland China farms (chickens imported from mainland China must come from registered farms with health certificates). Trace-back investigations to the three local farms and the six mainland China farms revealed no abnormalities. Control measures included closing the affected market and culling 2,700 chickens in the market. Surveillance at other markets was increased and HPAI H5N1 cases were found in three additional market locations on June 11. Imports of chickens from mainland China and trading from local chicken farms were suspended. The outbreak occurred on the eve of the Tuen Ng Festival, after chicken import quotas had increased prior to the festival.

India: During April 2008 Indian officials reported to the OIE the spread of HPAI H5N1 to the state of Tripura, east of Bangladesh, with three outbreaks in backyard poultry. In May 2008 two outbreaks were reported in the state of West Bengal just west of Bangladesh. These outbreaks were also in backyard poultry. Bangladesh has been affected with H5N1 since March 2007.

Indonesia: Indonesia continues to have a high number of HPAI H5N1 outbreaks in the endemic areas of Java, Sumatra, Bali, and South Sulawesi with sporadic outbreaks in other areas. One human case was reported in April 2008 and two human cases occurred in May 2008.

Japan: During April and May 2008, Japanese officials found a total of eight wild swans infected with HPAI H5N1 in three provinces. These were Japan's first reported HPAI H5N1 cases in migratory waterfowl and also were the first reports of the disease in Japan since March 2007. Researchers in South Korea identified a closely matching H5N1 virus in chickens, suggesting a possible epidemiologic link between migratory waterfowl and the recent H5N1 poultry outbreaks in South Korea (see below). It is unknown whether the virus may have moved from poultry to migratory birds or vice-versa.

Pakistan: After reporting no HPAI H5N1 outbreaks in April and May 2008, Pakistani officials reported to the OIE an outbreak which began on June 17, 2008 in a commercial broiler flock in the North-West Frontier Province. The North-West Frontier Province experienced outbreaks in 2007 and in January, February, and March 2008.

South Korea: After being free of HPAI H5N1 since March 2007, South Korea experienced its worst epidemic of HPAI H5N1 to date in April and May 2008. More than 30 outbreaks occurred in six of Korea’s nine provinces and affected mostly commercial poultry. More than 660,000 chickens and ducks have been culled. Researchers report that strains of HPAI H5N1 found in 2008 in commercial poultry in South Korea and in wild swans in Japan are 99.7% identical.

Vietnam: Outbreaks of HPAI H5N1 continue to occur regularly in Vietnam, primarily in unvaccinated duck production systems, with six outbreaks reported in both April and May 2008.

Europe

Russia: In April 2008 Russian officials reported to the OIE an outbreak of HPAI H5N1 in backyard poultry in Primorskiy Kray in eastern Russia. The outbreak is far from the locations of the most recent outbreaks (2007) in western Russia. The source of the outbreak is thought to be hunted wild birds which were brought onto the affected premises.

Sources:
1. FAO AIDE News Situation Updates 53 and 54.
Porcine Brucellosis in Swine, Ukraine

In June 2008 Ukraine reported Brucella suis in swine to the OIE for the first time since 2005. The outbreak involved one farm in southwestern Ukraine and is under control following stamping-out measures. The origin of the outbreak is unknown.

Source:

Swine Vesicular Disease (SVD), Italy

Swine vesicular disease was first identified in Italy in 1966. It is now considered endemic in southern Italy, but the rest of Europe remains free of the disease with only occasional outbreaks occurring outside Italian borders. The last European outbreak to occur outside Italy was in June 2007 in Portugal. In June of 2008 the European Commission announced that the northern Italian province of Forli’/Cesena (Figure 3) had lost its SVD-free status due to recent outbreaks of the disease.

Sources:

Porcine Reproductive and Respiratory Syndrome (PRRS)/High Fever Disease Update, China

In the first quarter of 2008, a team from the United States worked with Chinese scientists to investigate a syndrome called “high fever disease.” A co-infection theory was tested, and results indicated that PRRS and porcine circovirus type 2b (PCV2b) were the most common co-infection among the sampled pigs. In June the Ministry of Agriculture in China announced that between January and May 2008, 22 provinces in China reported a total of 45,658 cases of highly pathogenic PRRS, 18,597 (40%) of which were fatal. The report added that 5,778 pigs have been culled.

Sources:

Aquaculture/Aquatic Species

Infectious Myonecrosis in Shrimp, Brazil

Brazil reported infectious myonecrosis (IMN) in shrimp to the OIE in June. IMN is a viral disease of shrimp that has only recently been described. It was first identified in shrimp in Brazil in 2004, but is thought to have existed in Brazil since 2002. IMN became an OIE-notifiable disease in 2008. The June outbreak in Brazil was in a larval production facility and no clinical signs were seen.

Sources:

Koi Herpesvirus in Carp, Canada

A fish die-off in several Ontario lakes in the summer of 2007 has recently been attributed to koi herpesvirus (KHV). It was originally believed that columnaris, a fatal disease in fish caused by Flavobacterium columnare, had killed tens of thousands of fish in the die-off. This is the first time KHV has been detected in Ontario. KHV affects carp, goldfish and koi in moderate water temperatures.

Source:

Perkinsus olseni in Giant Clams, Florida

A University of Florida researcher discovered Perkinsus olseni, an OIE-reportable parasite of mollusks, in giant clams imported from Vietnam for a research project. P. olseni is not found in the United States and no commercial or wild U.S. clams were exposed to the virus. A different Perkinsus species, P. marinus, is present in wild clams on the Atlantic coast of the United States.

Source:
Wildlife

Wildebeest-Associated Malignant Catarrhal Fever in Cattle, Texas

See MCF summary in the Ruminant section of this report.

Chronic Wasting Disease in Elk, Canada

In May Canadian wildlife officials reported the first cases of chronic wasting disease (CWD) in free-ranging elk in Saskatchewan. CWD has previously been reported in farmed deer and elk and in wild deer in the province. Two dead female elk were found in April, west of Nipawin in Saskatchewan’s east-central region. Canada’s first cases of CWD were traced to a western Saskatchewan farm that imported elk from South Dakota in the 1980s.

Source:

Highly Pathogenic Avian Influenza (H5N1) in Swans, Japan

See H5N1 in Japan summary in the HPAI H5N1 section of this report.

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