



## Summary of Selected Disease Events

July-September 2004



### I. OIE Listed Diseases

#### Highly pathogenic avian influenza, subtype H5N1, Asia

The ongoing outbreak of highly pathogenic avian influenza (HPAI) subtype H5N1 in Asia is unprecedented in its geographical scope and has been called a 'crisis of global importance'. Eight persons infected with avian influenza, subtype H5N1, were reported by Thailand and Vietnam in August and September and recent outbreaks in birds have been reported by Cambodia, China, Indonesia, Malaysia, Thailand, and Vietnam. The Food and Agriculture Organization report, "Recommendations on the prevention, control and eradication of highly pathogenic avian influenza in Asia," was published in September and can be found at [www.fao.org/ag/againfo/subjects/en/health/diseases-cards/27septrecomm.pdf](http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/27septrecomm.pdf).

**Cambodia :** Three new outbreaks were reported to the World Organization for Animal Health (OIE) during July and September 2004. The new outbreaks involved one farm of 4,500 broilers and two farms with a combined total of 23 native chickens. Cambodia reported 10 outbreaks from January to March 2004, with no outbreaks reported from April to June. Control measures underway include depopulation, quarantine, premises disinfection, and control of animal movement. The last reported occurrence of HPAI in Cambodia was in 1995; Cambodia did not report HPAI to OIE from 1996 to 2003.

**China , People's Republic of:** One outbreak in June involving 8,160 birds was reported from Anhui province. Earlier in 2004, China reported 49 outbreaks of HPAI in 16 mainland provinces, affecting 143,100 poultry; approximately 9 million birds were culled. Ongoing control measures include culling, quarantine, movement control, and vaccination. In July, Chinese researchers reported isolating avian influenza virus from domestic pigs in Shandong province; samples were collected from clinically ill pigs from October 2002 to January 2003. These 10 virus isolates were identified as influenza A, subtype H9N2. One sequenced isolate was similar to chicken and duck influenza viruses recently prevalent in southern China .

**Indonesia :** Indonesia reported three new outbreaks in laying hens and Arabian chickens in August and September in two provinces. Some of these outbreaks occurred in districts that had not reported HPAI since January 2004. A total of 15 provinces are currently affected by HPAI. Control measures implemented include modified depopulation, quarantine, movement controls, and vaccination. Indonesia was substantially impacted by the HPAI epidemic of early 2004, and experienced extensive outbreaks that affected over 20 million birds.

**Japan :** After experiencing five outbreaks of HPAI from January through March 2004, Japan has declared itself free in a July 2004 report to OIE. Control measures included immediate depopulation, premises cleaning and disinfection, movement control, and surveillance. The five outbreaks affected approximately 275,000 birds from primarily commercial layer and broiler facilities. HPAI was previously reported in Japan in 1925.

**Malaysia , Peninsular:** Highly pathogenic avian influenza, subtype H5N1, was reported from Peninsular Malaysia for the first time in August 2004. During August and September, a total of eight additional outbreaks involving 8,300 birds were reported to OIE. Control measures underway include depopulation, movement restrictions on live birds and products and surveillance. HPAI virus isolated from affected Malaysian birds is 97 percent homologous to 2004 HPAI strains from Thailand and Vietnam .

**Republic of Korea:** As of September 21, 2004, the Republic of Korea has formally declared HPAI eradicated, after experiencing the disease in 19 farms from December 2003 through March 2004. Infected premises were depopulated and later restocked with sentinel birds; none of the sentinel animals have tested positive for HPAI through July 2004.

**Thailand :** Thailand continues to have new outbreaks of HPAI, subtype H5N1, in humans and birds. From January to September 2004, 15 human cases of HPAI infection, 10 (67 percent) fatal, have been confirmed in Thailand . This total includes four new human cases that occurred in July and September 2004. Of these four, two confirmed cases and one probable case occurred in persons in one household during September, when two household members were probably infected through close personal contact with the index patient.

A total of 258 new outbreaks involving approximately 247,000 birds, were reported to OIE from July to September 2004. Control measures underway include depopulation, quarantine of affected farms, movement controls, zoning, and screening. Vaccination is prohibited in Thailand .

**Vietnam :** From January through September 2004, 27 human cases of HPAI, 20 (74 percent) of which were fatal, have been reported to the World Health Organization (WHO). Of these 27, four fatal cases have been reported since early August. The outbreak continues in poultry, with 13 new outbreaks involving 43,000 birds reported to OIE during July through September 2004. Control measures underway include control of wildlife reservoirs, quarantine, movement restrictions, and depopulation.

*Note: For additional information on the Asian HPAI outbreak, please see OIE at [www.oie.int/eng/AVIAN\\_INFLUENZA/home.htm](http://www.oie.int/eng/AVIAN_INFLUENZA/home.htm) and WHO at [www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/).*

*Sources: World Health Organization (WHO); Food and Agricultural Organization (FAO); World Organization for Animal Health (OIE); Xu C, Fan W, Wei R, Zhao H. Isolation and identification of swine influenza recombinant A/Swine/Shandong/1/2003(H9N2) virus. Microbes and Infection. 2004;6:919-25.*

## Highly pathogenic avian influenza, subtype H5N2, South Africa

The National Department of Agriculture in South Africa confirmed highly pathogenic avian influenza (HPAI), subtype H5N2, in ostriches on August 6, 2004. This subtype has been detected on a total of five farms with 13,055 birds. Control measures include depopulation of all poultry including ostriches within a five kilometer radius of the infected area, surveillance, movement restrictions for all poultry or their products including eggs, vaccination, and a voluntary halt of poultry and poultry product exports from South Africa .



Source: OIE

## Low pathogenic avian influenza, subtype H7N3, United States

**Texas:** The Texas Animal Health Commission (TAHC) closed its avian influenza incident command center in August 2004. Avian influenza virus was not isolated from birds sampled during a two month surveillance program that was initiated after antibodies to avian influenza, subtype H7N3, were detected in three chicken flocks in May and June 2004. For additional information, please see the Texas Animal Health Commission at [www.tahc.state.tx.us/](http://www.tahc.state.tx.us/) or the Center for Emerging Issues (CEI) at [www.aphis.usda.gov/vs/ceah/cei/worksheets.htm](http://www.aphis.usda.gov/vs/ceah/cei/worksheets.htm).

Source: Texas Animal Health Commission



## Suspected Rift Valley fever, Saudi Arabia

Saudi Arabia reported finding antibodies to Rift Valley fever in blood samples from five sheep in the Jizan region during routine serosurveillance. Clinical signs were not observed in the animals that tested positive. Samples from the sheep were tested using an enzyme-linked immunosorbent assay (ELISA). IgM antibodies to Rift Valley fever were detected in four of the sheep; a fifth sheep had IgG antibodies. For

additional information, please see CEI at

[www.aphis.usda.gov/vs/ceah/cei/worksheets.htm](http://www.aphis.usda.gov/vs/ceah/cei/worksheets.htm)

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*Source: OIE*

## Newcastle disease, Finland, Sweden and Thailand



Newcastle disease in fattening turkeys was reported by **Finland** in July 2004, after being detected during routine surveillance. The outbreak occurred in the Satakunta region. The most likely source of the infection was wild migratory birds.

Tracebacks and trace forwards found no evidence of Newcastle disease in contact flocks.

Control measures included depopulation of the affected flock followed by cleaning and disinfection of the premises and establishment of quarantine and surveillance zones. A total of 24 poultry holdings in the

surrounding area were tested for Newcastle disease, with negative results. In September the quarantine and surveillance requirements were removed. Finland prohibits vaccination for Newcastle disease. For additional information, please see CEI at [www.aphis.usda.gov/vs/ceah/cei/worksheets.htm](http://www.aphis.usda.gov/vs/ceah/cei/worksheets.htm).

In July, **Sweden** reported one outbreak of Newcastle disease involving laying hens on two farms in Östergötland County. A total of 73,400 birds were destroyed. Other control measures implemented included cleaning and disinfection of the affected premises, surveillance and movement restrictions for live poultry and poultry products. Protective and surveillance zones were lifted in early August. The last report of Newcastle disease in Sweden was October 2003. Vaccination for Newcastle disease is prohibited in Sweden

Newcastle disease was reported from one farm in Mukdahan province, **Thailand** in July. A total of 3,200 native chickens and ducks died or were destroyed. Control measures included depopulation, quarantine and movement restrictions. The last report of Newcastle disease in Thailand was in 1996.

*Source: OIE*

## Classical swine fever, Japan, Slovakia and Germany

For a second time in 2004, classical swine fever (CSF) attributable to illegal vaccine has been reported from **Japan**. The first occurrence was in March and the second in July on two separate premises located in close proximity. Epidemiologic investigation revealed that either illegal vaccination or circulation of vaccine virus had occurred. Clinical signs

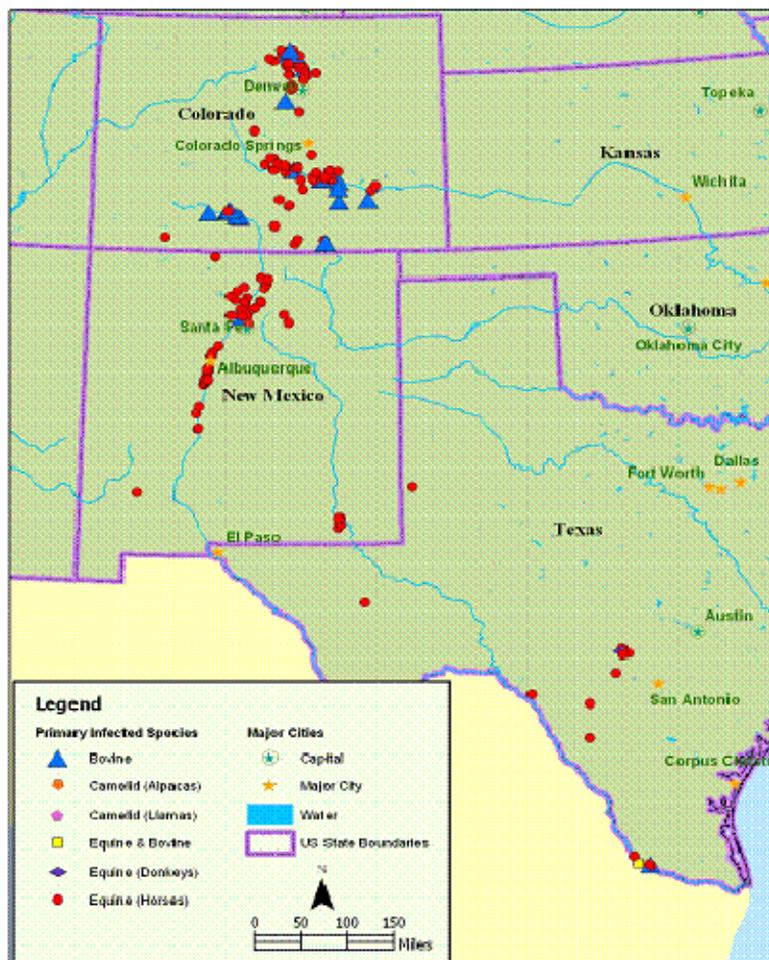
included anorexia and elevated temperature in breeding sows, piglets with diarrhea, and mild depression in finishing hogs. Control measures involved depopulation of pigs on the affected premises and restricted animal movement for farms within a three kilometer radius of the affected premises.

Classical swine fever in domestic pigs was reported on one farm of approximately 300 animals in **Slovakia** in August. The farm is located in an area where the wild boar population is infected with CSF virus. Control measures implemented included restricted movement and slaughter of finishing pigs. The last outbreak of classical swine fever in domestic pigs in Slovakia was reported to the OIE in January 2004.

A single wild boar was positive for CSF in **Germany** and was reported to the OIE in September. Classical swine fever was last reported from Germany in January 2004, also in a wild boar.

Source: OIE

### Vesicular stomatitis, United States



An outbreak of vesicular stomatitis (VS) has been ongoing in Colorado, New Mexico and Texas. The disease was first reported in southern Texas in May, 2004. As of September 16, animals have been diagnosed with vesicular stomatitis on 227 premises; 31 (14 percent) of these premises have been released from quarantine.

Colorado, New Mexico and Texas had 104, 77, and 15 quarantined premises, respectively. A total of 329 animals have tested positive for VS; of these, 290 (88 percent) have been horses and the remaining 39 have been cattle. For additional information, please see the USDA, APHIS Hot Issues website at [www.aphis.usda.gov/lpa/issues/issues.html](http://www.aphis.usda.gov/lpa/issues/issues.html).

Source: USDA, APHIS, VS

### Bluetongue disease, France and Morocco

Bluetongue disease (BT) was reported for the first time by **Morocco** ; the outbreak began in August 2004. Bluetongue virus serotype 4 has been identified as the cause of the outbreak. A total of 28 outbreaks have occurred in four provinces. Clinical disease and mortality were reported in sheep, though cattle and goats are also present in the affected area. Control measures include control of arthropod vectors (*Culicoides* spp.), quarantine, movement restrictions, and screening.

Bluetongue disease due to virus serotype 16 occurred for the first time from Corsica Island ( **France** ) in August. Previous outbreaks due to bluetongue virus serotype 2 were reported from Corsica in 2000-2001 and 2003, as part of the ongoing BT outbreak in the Mediterranean basin that began in 1998. A summary of bluetongue disease in the Mediterranean basin from 1998 through 2004 can be found at [www.aphis.usda.gov/vs/ceah/cei/EmergingDiseaseNotice\\_files/notices.htm](http://www.aphis.usda.gov/vs/ceah/cei/EmergingDiseaseNotice_files/notices.htm)

*Source: OIE*

## **II. Other Significant Disease Events**

### Spring viremia of carp, United States

Spring viremia of carp (SVC) was confirmed in ornamental koi carp in Pike County, Missouri on July 13, 2004. The affected premises has been depopulated and the pond water has been treated and drained according to the action plan developed for this event. The next step is the disinfection of pond bottoms using hydrated lime which will begin when conditions permit. Epidemiologic investigations are ongoing; one premises that had contact with the index farm has been identified to date.

*Source: USDA, APHIS, VS*

### Eastern equine encephalomyelitis, United States

The number of equine and human cases of eastern equine encephalomyelitis (EEE) has decreased in 2004, after the 2003 outbreak in both horses and humans. A total of 66 cases of EEE in horses have been reported to CDC for January to September 2004. Of the 66 cases, Florida had the highest state total with 26 cases. In 2003, 732 cases of equine EEE infection were reported to CDC. Of these, 87 percent of cases were reported by seven southeastern states, including Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina. In the US, equine epizootics occur commonly in the summer and fall in eastern coastal states, along the Gulf Coast and in Midwestern states.

Three human infections with EEE virus, two of which were fatal, have been reported in Massachusetts in August and September 2004. In 2003, 15 human EEE virus infections were reported to CDC, the largest number ever reported in one year. Between 1964-2003, an average of five human EEE virus infections were reported to CDC annually (median, 4; range 0 to 15).

*Source: CDC*

### Scrapie, Slovenia

A case of scrapie was diagnosed in July in a ewe from a farm with 18 sheep. Scrapie has never been reported before in Slovenia.

*Source: OIE*

This summary was produced in October 2004 by the Center for Emerging Issues, a part of USDA's Veterinary Services. This and other reports are available on the internet at: [www.aphis.usda.gov/vs/ceah/cei/index.htm](http://www.aphis.usda.gov/vs/ceah/cei/index.htm). Comments or questions concerning this edition may be addressed to Kathy Orloski at [kathy.a.orloski@aphis.usda.gov](mailto:kathy.a.orloski@aphis.usda.gov) or 970-494-7221.