



## Summary of Selected Disease Events July-September 2005



### I. OIE Listed Diseases

#### Highly pathogenic avian influenza, subtype H5N1

Outbreaks of highly pathogenic avian influenza, subtype H5N1 (HPAI), continue to occur in domestic poultry in Cambodia, China, Indonesia, Kazakhstan, Russia, Thailand, and Viet Nam. As of September 29, 2005, there were 116 confirmed human cases of HPAI; of these, 60 (52 percent) were fatal. Confirmed cases have occurred in Cambodia (4), Indonesia (4), Thailand (17), and Viet Nam (91). HPAI has been confirmed in wild birds in Mongolia. For an updated map of HPAI outbreaks, see [www.fao.org/ag/againfo/programmes/en/empres/Images/AI\\_1\\_15\\_oct\\_2005.pdf](http://www.fao.org/ag/againfo/programmes/en/empres/Images/AI_1_15_oct_2005.pdf).

#### Russia

As of August 20, a total of 50 HPAI outbreaks in six regions have been confirmed and 118,287 domestic poultry have been destroyed in Novosibirsk, Omsk, Altai, Tyumen, Kurgan and Chelyabinsk regions, following the July 2005 reporting of highly pathogenic avian influenza (HPAI), subtype H5N1, in Novosibirsk region. As of October 4, a provisional diagnosis of HPAI was made in an industrial poultry farm containing approximately 500,000 hens, located in the Kurgan region. Clinical signs in this flock were characteristic of highly pathogenic avian influenza. Control measures include quarantine of affected premises and depopulation.



#### Kazakhstan

HPAI, subtype H5N1 has been confirmed in wild birds and farmed poultry in the Pavlodar region of Kazakhstan; the outbreak was first detected in July 2005. Control measures included depopulation, quarantine and movement controls. As of September 8, 2005, control measures were lifted and no new outbreaks have been reported.

## Indonesia

At Ragunan Zoo in South Jakarta, 19 bird samples out of 27, including pygmy chickens and eagles, were found positive for avian influenza on September 19. The zoo has been closed until October 17 while testing of 2,100 birds in the zoo and disinfection are carried out. Many domestic poultry in Kediri City, East Java Province were reported to have died in early October.

Sources: [www.oie.int/eng/AVIAN\\_INFLUENZA/home.ht](http://www.oie.int/eng/AVIAN_INFLUENZA/home.ht), WHO at [www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/), and FAO at [www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special\\_avian.html](http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special_avian.html).

## Newcastle disease, United Kingdom

An outbreak of Newcastle disease was detected on July 12, 2005 in a flock of 11,000 pheasants on a farm in West Horsley, Surrey. Surveillance found no secondary cases and area restrictions were removed as of August 25, 2005. The outbreak involved a single introduction of disease from France. Clinical signs were first observed in those pens that had been populated with birds from a consignment originating from a premises in the Loire-Atlantique *department*, France. Newcastle disease virus was also detected in the Loire-Atlantique *department* and confirmed to be the same lineage as the United Kingdom isolate. No other birds had been exported to the United Kingdom from this holding.

Source: World Organization for Animal Health (OIE)

## Classical swine fever, South Africa

On July 12, 2005, South Africa reported to the World Organization for Animal Health (OIE) its first occurrence of classical swine fever (CSF) since 1918, following an investigation into the deaths of pigs on two commercial piggeries in Western Cape province.



As of September 12, 2005, twelve new outbreaks involving high mortality in swine were reported to the OIE. Both commercial and noncommercial swine holdings have been affected. Control measures include intensive surveillance, depopulation, premises disinfection, quarantine, and movement control; vaccination is prohibited.

Source: World Organization for Animal Health (OIE)

## Vesicular stomatitis, United States

On April 27, 2005, the National Veterinary Services Laboratories (NVSL) in Ames, IA, confirmed the finding of vesicular stomatitis (VS) in horses at one premises in Grant County, New Mexico. The isolate was vesicular stomatitis virus - New Jersey. This was the first confirmed case of vesicular stomatitis in the United States in 2005. Prior to the positive cases identified in April 2005, the last case of vesicular stomatitis in the United States was confirmed in the State of Colorado in December 2004.

Since April, VS has occurred in livestock in Arizona, Colorado, Utah, Wyoming, Montana, and most recently in Idaho. On September 26, 2005, vesicular stomatitis New Jersey (VS-NJ) virus was confirmed in horses on a premises in Bear Lake County, Idaho. These are the first confirmed cases of vesicular stomatitis in the State of Idaho in 2005. Idaho had no cases of vesicular stomatitis in 2004. The premises is located in the southeastern corner of Idaho, approximately 75 miles from the nearest known vesicular stomatitis positive premises. The affected horses had not been off the premises in the last 2-3 months.

The cumulative number of quarantined premises and affected cattle and horses as of September 26, 2005 is listed below.

Cumulative number of premises and animals since April 27, 2005:	AZ	CO	MT	NM	TX	UT	WY	Total
Total premises under quarantine	27	79	42	23	1	99	98	369
Total premises released from quarantine	27	63	7	15	1	82	5	200
Total positive equine species	30	74	107	27	2	112	150	502
Positive bovine species	0	31	31	3	0	51	24	140

For more information, please see [aphis.usda.gov/vs/ceah/ncahs/nsu/surveillance/vsv/vsv.htm](http://aphis.usda.gov/vs/ceah/ncahs/nsu/surveillance/vsv/vsv.htm).

Source: USDA, APHIS, VS

## Bluetongue disease, Spain

From July through September 2005, a total of 59 bluetongue (BT) outbreaks have been reported in Andalusia, northern Spain. In 2004, the index case originated in Cadiz, the southernmost province of Spain, where 141 outbreaks were reported; no outbreaks have been reported in Cadiz during the current epidemic. The current outbreaks have occurred primarily in cattle. A map of the affected area is available online at [www.grid.unep.ch/product/map/images/basin\\_tagusb.gif](http://www.grid.unep.ch/product/map/images/basin_tagusb.gif).

Control measures implemented include ruminant movement restrictions and control of arthropods; vaccination for bluetongue is prohibited in Spain.

*Source: World Organization for Animal Health (OIE), ProMED*

## II. Other Significant Disease Events

### Bovine tuberculosis, United States

Bovine tuberculosis has been reported in a cattle herd in Minnesota, near the border with Canada. This is the first occurrence of tuberculosis in Minnesota since 1971. The infection was detected when a federal inspector monitoring the slaughter of a 5-year-old cow in February detected suspicious internal lesions. The animal was traced back to a herd in Roseau County in northern Minnesota. The USDA bought a sample of the herd for further testing and found 18 additional cases. The herd was declared infected and was destroyed. Tuberculosis eradication programs have been in place in Minnesota since 1917.

*Source: ProMed*

### Canine influenza virus, United States

Influenza virus has been identified in dogs in several eastern states. Three influenza viruses isolated from racing greyhounds experiencing a severe outbreak were closely related to subtype H3N8 equine influenza. H3N8 equine influenza has been documented in horses for several decades, but no human cases have ever been attributed to this virus subtype. Hemagglutination inhibition testing performed at Cornell University College of Veterinary Medicine Animal Health Diagnostic Center on dogs not affiliated with greyhound racetracks has found 165 (23 percent) positives of 701 samples tested. These samples came from 38 states; of these, positive samples were found in 14 states. The majority of positive samples were from Florida and New York (including New York City).

*Source: Centers for Disease Control and Prevention, Cornell University College of Veterinary Medicine Animal Health Diagnostic Center, [www.diaglab.vet.cornell.edu/issues/civ-stat.asp](http://www.diaglab.vet.cornell.edu/issues/civ-stat.asp)*

### Chronic wasting disease, United States

**West Virginia:** The West Virginia Division of Natural Resources (DNR) announced that four free-ranging white-tailed deer collected from Hampshire County were confirmed to be positive for chronic wasting disease (CWD). Three (2 percent) of 121 samples were collected from deer through CWD surveillance efforts in Hampshire County as of September 14, 2005. A fourth deer was tested and found positive after being killed by a motor vehicle collision. Surveillance efforts are being intensified to accurately determine the prevalence and distribution of CWD in the affected region of West Virginia.

**Colorado:** In Colorado, the Colorado Division of Wildlife confirmed that a bull moose killed by an archer in Jackson County has tested positive for CWD. This is the first time CWD has been found in a wild moose, though moose have been infected experimentally. CWD had previously been found only in the wild in deer and elk. CWD testing for moose was made mandatory in Colorado in 2003. Since 2002, 288 moose have been

tested and the disease was not detected. Nearly 13,000 deer and elk were submitted for CWD testing between August 2004 and April 2005. Of those animals, 175 tested positive for CWD. Because of their solitary social habits, CWD is expected to be rare in moose.

Sources: West Virginia Division of Natural Resources, [www.wvdnr.gov/2005news/05news195.shtm](http://www.wvdnr.gov/2005news/05news195.shtm); Colorado Department of Natural Resources, [dnr.state.co.us/news/press.asp?pressid=3645](http://dnr.state.co.us/news/press.asp?pressid=3645)

### Chronic wasting disease, Canada

Chronic wasting disease (CWD) has been identified for the first time in a wild deer in Alberta. Before this case, there have been three cases of CWD found in game-farmed animals in Alberta.

Surveillance for chronic wasting disease in wild deer and elk in Alberta has been ongoing for almost 10 years. About 6000 wild deer and elk from Alberta have been tested for the disease and were negative. CWD is known to occur in Saskatchewan, where 68 cases of CWD have been found in wild deer and a significant number of elk found on game farms.

Source: Government of Alberta, [www.gov.ab.ca](http://www.gov.ab.ca)

### West Nile virus disease, United States

Forty states have reported 1,804 cases of human WNV illness as of September 27, 2005. By comparison, in 2004, a total of 1,784 WNV cases had been reported as of September 28, 2004. In 2005, a total of 935 (56%) of the 1,669 cases for which such data were available occurred in males; the median age of patients was 50 years (range: 3 months--98 years). Date of illness onset ranged from January 2 to September 22; a total of 52 cases were fatal. There have been a total of 321 presumptive West Nile viremic blood donors during 2005.

In addition, 3,470 dead corvids and 739 other dead birds with WNV infection have been reported from 42 states. WNV infections have been reported in horses from 30 states; four dogs from Idaho, Minnesota, and Nebraska; and four squirrels from Arizona.

Source: Centers for Disease Control and Prevention

### Eastern equine encephalomyelitis, United States

A total of 235 cases of eastern equine encephalomyelitis (EEE) in horses were reported to the Centers for Disease Control and Prevention (CDC) by 14 states during January to September 2005. Of the 235 cases, Florida had the highest state total with 145 (62 percent) cases. States reporting equine EEE cases in 2005 include Alabama, Florida, Georgia, Massachusetts, Mississippi, North Carolina, New Hampshire, New Jersey, Nevada, New York, Rhode Island, South Carolina, Tennessee, and Virginia. A total of 732 and 139 equine EEE cases were reported in 2003 and 2004, respectively. In the US,

equine epizootics occur commonly in the summer and fall in eastern coastal states, along the Gulf Coast and in Midwestern states.

Human fatalities due to EEE have occurred in Alabama, Florida, and Massachusetts during 2005. In Florida, five cases of EEE have been confirmed; three of these cases have been fatal. The onset dates range from early June to mid August. In Massachusetts, infection with EEE virus has been confirmed in four residents of Plymouth County; two cases were fatal. In Alabama, two human cases of EEE have been reported; one case was fatal.

*Source: Centers for Disease Control and Prevention*

### White spot disease, Iran

An outbreak of white spot disease (WSD) in white prawn (*Penaeus indicus*) was reported in a coastal area of the Persian Gulf (semi-closed farming) in Haleh, Bushehr Province, southern Iran. WSD was last reported by Iran in 2003, although this is the first occurrence of WSD in Haleh. The outbreak began in June 2005. Affected animals were destroyed and an investigation is underway to determine the source of the outbreak. Control measures underway include quarantine, tracing back, surveillance, premises decontamination, movement controls, and control of vectors and wildlife reservoirs. The US imported frozen shrimp valued at 1.8 million dollars from Iran during January through August 2005 (quantity 375,000 kg), and 2.2 million dollars worth of frozen shrimp from Iran during calendar year 2004 (quantity 426,138 kg).

Source: World Organization for Animal Health (OIE), World Trade Atlas

### Post-weaning multisystemic wasting syndrome, Australia

Investigations of possible post-weaning multisystemic wasting syndrome (PMWS) are ongoing in two Australian piggeries, one in South Australia and one in New South Wales. PMWS has not previously been reported in Australia, although porcine circovirus type 2 is known to occur in Australia. Investigations have revealed no link between the two affected premises. Movement controls have been implemented for the affected herds.

Source: World Organization for Animal Health (OIE)

### Outbreak of *Streptococcus suis* in humans, China

As of August 16, 2005, the Ministry of Health (MOH) of China has reported 215 cases of human disease associated with an outbreak of *Streptococcus suis* that began in July 2005. Of these human cases, 39 have been fatal. No new cases have been reported since August 5. Virtually all cases have occurred in Sichuan Province, where infections with *Streptococcus suis* have been detected in pigs in a concurrent outbreak. The province has one of the largest pig populations in China. International specialists on *Streptococcus suis*, convened by the World Health Organization (WHO) have assessed on the basis of information provided by the MOH, that the outbreak in humans is compatible with *Streptococcus suis*.

The range of clinical presentations included high fever, malaise, nausea, and vomiting, followed by meningitis, subcutaneous hemorrhage, toxic shock, and coma in severe cases. Information reported to WHO suggests that close contact with diseased or dead pigs is the principal source of human infection. Approximately 80 percent of affected persons were male and had killed sick pigs or processed and sold pig meat. There was no evidence of human-to-human transmission.

Source: Centers for Disease Control and Prevention

## Koi herpesvirus, Singapore

In late September 2005, a trial batch of 30 fish imported from a new source in Malaysia were identified as having koi herpesvirus. The affected fish were isolated, and a follow-up investigation was conducted at the affected importer premises. All koi carp at the importer's premises were sampled for laboratory testing. The results of the PCR testing were negative. Quarantine on the movement of koi carp was imposed on the affected importer. Traceback investigations of all imported fish from Malaysia after August 2005 were negative. Singapore remains free from koi herpesvirus infection.

*Source: World Organization for Animal Health (OIE)*

This summary was produced in October 2005 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.