



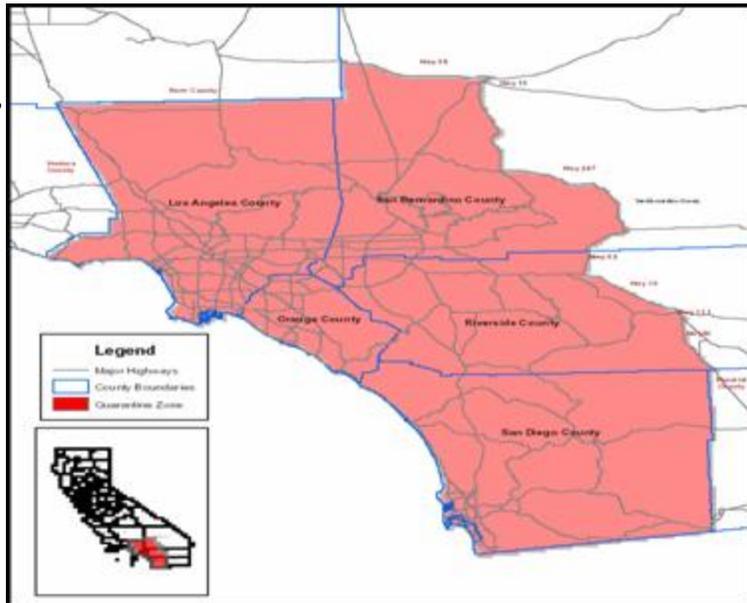
# Summary of Selected Disease Events

October – December, 2002

## I. OIE List A Diseases

### Exotic Newcastle Disease – United States

Exotic Newcastle disease (END) was confirmed on October 1, 2002 by the USDA, NVSL in backyard game fowl flocks in California. As of January 3, 2003, 280 premises had been declared positive and 846 dangerous contacts. On December 27, the first commercial flock, located in Riverside County, was declared positive and as of January 3, there were 3 positive commercial flocks. The infected premises (backyard and commercial) have all been located in Los



Angeles, Riverside, San Bernardino, and San Diego counties. Molecular epidemiology and phylogenetic analysis shows the southern California isolate to be very closely related to the exotic Newcastle disease virus isolated in northern Mexico during their 2000 outbreak.

In response to the outbreak, the California State Veterinarian has imposed a quarantine on the following counties: all of Los Angeles, Orange, and San Diego Counties, and portions of Riverside and San Bernardino Counties. In addition, APHIS has imposed a federal quarantine that regulates the interstate movement of poultry and poultry products from Los Angeles, portions of Riverside, and portions of San Bernardino Counties, and is working on extending the federal quarantine to also include all of Orange and San Diego Counties.

Affected and exposed poultry are being euthanized, with approximately 143,525 birds on 614 premises having been depopulated as of January 3, 2003. The 3 commercial operations affected contain a total of approximately 1.2 million birds. Restricted landfills are being used for disposal after double-bagging the carcasses and disinfecting the bags. Epidemiological investigations are being conducted to identify possible at-risk or contact

flocks and animal health officials are conducting door-to-door surveys to identify fowl and other birds in the affected areas. Commercial poultry producers within the quarantine zone are complying with a mandatory reporting system that identifies clinical signs suggestive of exotic Newcastle disease, such as increased mortality or decreased egg production.

For further information on END go to: [Aphis Hot Issues](#)

Sources: APHIS, VS; California Department of Food and Agriculture; OIE Disease Information Report (Oct 4, 2002 and Jan 3, 2003 Weekly Report); map created by CDF/USDA GIS – B. Quiñonez 12-30-2002

### **Classical Swine Fever - Venezuela**

On October 28, 2002 an outbreak of classical swine fever (CSF) in Tiara Parish, Aragua State (blue square on maps), in north central Venezuela was reported to the OIE. On November 28, an additional outbreak in Aragua State was reported (yellow square on second map).



CSF had not been reported since February 2000 in Venezuela. Venezuela had a vaccination program for CSF up until 2000; however, it is unclear if the vaccination program has been maintained since then. Both of the affected herds in this outbreak were unvaccinated. Control measures for the current outbreak include vaccination of pigs in the area.

Venezuela had less than one percent of world stocks of pigs or production of pig meat in 2001. They are a minimal exporter of live pigs and pig meat. The USDA does not recognize Venezuela as free of CSF; therefore, the US imported no relevant live animals or animal products from Venezuela during the years 2000 – August 2002. For more details, see the CEI Impact Worksheet dated November 4, 2002.



Given the current political situation in Venezuela and the ongoing general strike against President Hugo Chavez, attention to programs such as disease control in livestock by government officials may suffer.

Sources: OIE Disease Information Report (Nov 8 & Dec 6, 2002 Weekly Reports); National Center for Import Export USDA; OIE Handistatus II; UN Food and Agriculture Organization; World Trade Atlas

## II. OIE List B Diseases

### Malignant Catarrhal fever – United States

Three Ankoli cattle in an exotic wildlife theme park in New Jersey were diagnosed by NVSL as having Wildebeest associated malignant catarrhal fever. The Ankoli cattle were pastured with wildebeest and direct contact with fetal fluids from a wildebeest calf was the determined mode of disease transmission. Clinical signs in the Ankoli cattle began in late October and consisted of corneal edema, crusty exudate from the nose and mouth, and death. All three cattle showing clinical signs died. Action plans are currently in development to prevent future exposure of susceptible species to potentially infected wildebeest.

Source: OIE Report, Dec 20, 2002; personal contact New Jersey Area Office

### MSX disease in oysters - Canada

MSX disease, caused by the parasite *Haplosporidium nelsoni*, was found for the first time in oysters in Canadian waters. The disease was first found in the Bras d'Or Lake area of Cape Breton Island, in the province of Nova Scotia. It has since spread to a total of 4 sites on Cape Breton and to 2 sites in Prince Edward Island (PEI). (Infected sites are marked with red dots on map.) The disease was discovered in mid-August, with the diagnosis being confirmed October 18, 2002.



Prevalence rates of 7% to over 48% have been found with mortality rates greater than 80% being reported. The source of infection is unknown.

In response to the outbreak, oysters are being removed from the infected areas. In addition, movements of live oysters into and out of the affected areas has been stopped.

A surveillance program has been implemented to determine the geographical extent of the outbreak.

Source: OIE Report, October 25 & December 27, 2002; ProMED - news reports

## III. Other Significant Disease Events

### West Nile virus – United States

During this quarter, there were several reports of evidence of West Nile virus (WNV) infection in species which had not previously been known to be susceptible to WNV.

**Cattle:** Two cases of bovine sera testing positive for WNV on serum neutralization tests were reported. In both cases the affected animal showed rear limb ataxia, went down, and had no response to supportive treatment. It should be noted that in neither of these cases can it be confirmed that WNV was the causative agent based on a single serum sample being positive for antibody to the WNV. The Centers for Disease Control and Prevention (CDC) is currently in the process of testing paired serum samples from bovine samples that had previously tested positive on a single serum sample. In countries where WNV has been known for many years, disease due to WNV in bovines has not been reported.

**Alligators:** Three farm-raised alligators in Florida tested positive for WNV (PCR on brain and spinal cord tissue and virus isolation from multiple tissues). The only clinical sign reported was sudden death. It is unknown to what degree infection with WNV contributed to the animals' deaths.

**Reindeer:** Brain tissue from reindeer has tested PCR positive for WNV. Clinical signs in the infected reindeer included fever, head tilt, flaccid paralysis of the tongue, and difficulty swallowing. Recumbency and death occurred within 24 hours of the onset of clinical signs.

**Harbor seals:** In October, WNV was isolated from brain tissue of a harbor seal from the New Jersey State Aquarium. The 12 year old seal died after being ill for 10 days (clinical signs were not specified).

*Sources: ProMED – University of Nebraska, Veterinary Diagnostic Center; ProMED – University of FL, College of Veterinary Medicine; ProMED – National Animal Disease Center; ProMED – news reports; NVSL; CDC*

### **West Nile virus - Canada**

The Toronto Zoo in Canada reported a Barbary macaque was euthanized after showing severe neurologic signs, consisting of tremors and paralysis. This appears to be the first case in North America of WNV in a non-human primate. The diagnosis of WNV was based on immunoperoxidase staining of brain tissue, confirmed by PCR of brain and kidney tissue.

*Sources: ProMED – news report; personal contact Toronto Zoo/University of Guelph*

### **Chronic Wasting Disease – United States**

**Illinois:** Chronic wasting disease (CWD) was detected in 4 free-ranging deer in Illinois. The first case was a deer shot in late October in Boone County (originally reported as being from Winnebago County). The additional 3 animals were taken during the fall firearm season in Winnebago, Boone, and McHenry Counties, all of which are adjacent

to the Wisconsin border. Enhanced CWD surveillance and regulations restricting the importation of farmed hunter-harvested deer and elk from out of state have been implemented.

Wyoming: CWD was found for the first time west of the Continental Divide in Wyoming.

*Source: IL Department of Natural Resources; WY Game and Fish News, Nov 15, 2002*

### **Epizootic Hemorrhagic Disease – United States**

Epizootic hemorrhagic disease (EHD) was diagnosed in deer from Pennsylvania for the first time. In October, deer were found dead and sick in Greene and Washington Counties, in the southwest part of Pennsylvania. Test results released in November confirmed EHD as the cause of death. EHD is found in white-tail deer throughout much of the US, including states around Pennsylvania such as Maryland, Ohio, Virginia, and New Jersey. Though test results were inconclusive, EHD was thought to be the cause of death for deer found dead in Adams County (south-central Pennsylvania) in 1996.

*Source: ProMED - Pennsylvania Game Commission*

This report is available on the internet at <http://www.aphis.usda.gov/vs/ceah/cei/> under Impact Worksheets. If you need more information or if you wish to comment on this report, please contact Vicki Bridges at (970) 494-7322 or victoria.e.bridges@aphis.usda.gov.