

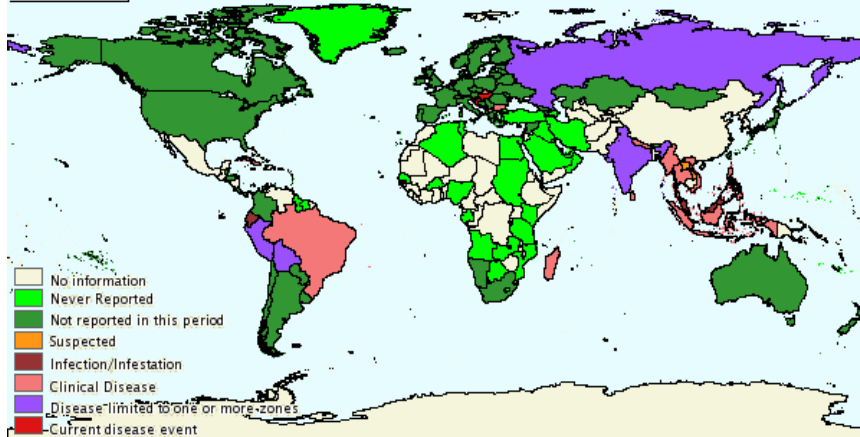


EXOTIC ANIMAL DISEASE NEWSLETTER

Classical swine fever

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WAHID OIE © 2009



Map showing distribution of CSF from OIE WAHID December 2008

Classical Swine Fever (CSF) occurs in South America, Asia (including Indonesia) and certain European countries. Information on current country status can be obtained from the OIE World Animal Health Information Database (WAHID) at <http://www.oie.int/wahis/public.php?page=home>. The last time CSF occurred in Australia was in 1962. Outbreaks have recently been reported in Bulgaria (in wild species), Israel and Lithuania.

Classical swine fever virus is a highly contagious Pestivirus which only infects swine, and is antigenically related to border disease virus and bovine viral diarrhoea virus. Pig to pig transmission is most common but CSF can also be spread by aerosol, swill feeding and mechanically by insects and fomites. Swill feeding of peri-urban pigs is a likely method of re-introduction of this virus to Australia and hence CSF may first be encountered by a veterinary practitioner servicing these areas. Strains vary greatly in their virulence. The last outbreak in Australia was caused by a mild strain that was detected only by a reported increase in fevered carcasses at slaughter.

Clinically fever is the predominant sign. Affected pigs will huddle, there may be reddening of the skin, conjunctivitis, vomiting and diarrhoea. Skin haemorrhages and cyanosis are seen later in the course of the disease. Pigs have a gaunt, tucked up appearance. There can be foetal mummification, abortions and still births. On post mortem the predominant lesion is haemorrhage in skin, serous and mucous membranes, kidneys, lungs, and lymph nodes. Infarcts in the spleen and encephalitis are common findings.

Israel had been free from CSF since 1948. The Israeli outbreak occurred in February 2009 at Beit Dagan near the border with Lebanon. The source was not determined but may have been from wild boars crossing the border (Lebanon has not recently reported the presence of CSF but wild boars cross the border and were reported near the farm) or due to contact with infected fomites or feed. It was eradicated by a combination of modified stamping out, quarantine and regional vaccination.

Lithuania reported an outbreak of CSF in July 2009 in breeding pigs on a farm owned by a Danish company in the north-east.

The Lithuanian farm was depopulated one year previously. Pigs had been imported in February 2009 from Danish SPF herds. In early June the mortality rate increased (25%) with CNS signs, anorexia and fever reported. Samples were forwarded to Denmark for testing and pigs were medicated. Lithuanian authorities were not informed.

In late June the CVO Denmark advised the CVO Lithuania that CSF had been diagnosed. The affected pigs were culled and rendered. Lithuania imposed a standstill on pigs owned by the same company in other locations. They tested negative. Wild boars and small backyard holdings in the area tested negative. The EU restricted the movement of pigs from Lithuania except direct for slaughter.

Biosecurity deficiencies on the outbreak farm were noted and CSF could have been introduced by "human activities" in May 2009. The genotype was not identical to any previously sequenced virus.

EASTERN EQUINE ENCEPHALITIS

Recent reports from the USA indicate that following a very wet season on the east coast which resulted in large mosquito populations, EEE is being reported from new areas such as Maine, northern Virginia and into New Hampshire. Significant numbers of horse deaths are reported since vaccination is not routinely practised there, as in more southern and coastal areas.

Further information on these diseases can be obtained from the AUSVET-PLAN website at: <http://www.animalhealthaustralia.com.au>
While you are there check out the latest edition of Animal Health Surveillance Quarterly for information on diseases in livestock in Australia.

For further information contact Dr. Richard Rubira, Animal Health Programs, Biosecurity Services Group,
Department of Agriculture, Fisheries and Forestry, Canberra
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BIOSECURITY- protect your clients, their animals, your staff and your family

Workplace Health and Safety Queensland have issued a safety alert on Hendra virus for veterinarians. It provides 6 points to follow to prevent human infection:

(http://www.deir.qld.gov.au/workplace/publications/alerts/hendra_virus/index.htm)

- Develop a plan for responding to a suspect case
- Ensure appropriate infection control practices are used in routine situations
- Ensure high standards of hygiene at all times
- Ensure early diagnostic consideration of Hendra virus
- Provide and use appropriate personal protective equipment (provide training in its use to staff & clients)
- Consider carrying a dedicated field kit for such situations.

The Queensland Primary Industries and Fisheries website is regularly updated with current information and fact sheets at: http://dpi.qld.gov.au/cps/rde/dpi/hs.xsl/27_2900_ENA_HTML.htm

VECTORS

Australia's National Arbovirus monitoring Program (NAMP) regularly traps insect species across Australia to monitor for vector distribution and incursions of new species. Two species not previously reported in Australia were recently trapped in the Northern Territory (*Culicoides flavipunctatus* and *C. paipifer*). Also *C. orientalis* was collected on Boigu Island in the Torres Strait. These species need to be assessed for their vector potential and potential distribution.

UPDATES**TICK BORNE DISEASES**

In Issue 1 of Vol. 2 of this newsletter we commented on tick borne diseases in dogs in USA. Recent reports from Eastern Europe, the Middle East, Asia and the USA indicate that tick borne zoonoses are being diagnosed with increased frequency over wider areas. Examples include tick borne encephalitis virus in Scandinavia; anaplasmosis, Lyme disease and ehrlichiosis in the USA and Crimean-Congo haemorrhagic fever in Europe and the Middle East.

DUTCH Q FEVER OUTBREAK

In Issue 1 of Vol. 3 of this newsletter we reported on the current outbreak of Q fever in the Netherlands which is affecting many people (1429 in the first 6 months of 2009) and resulted in 5 deaths. The Dutch are working on a new bulk milk test to identify infected flocks/herds with a view to compulsory vaccination of stock on those premises. 190,000 vaccine doses have been distributed in 2009. To date the disease has only been reported in dairy goats and dairy sheep.

RIFT VALLEY FEVER

Heavy flooding in West Africa has resulted in alerts being issued for potential outbreaks of RVF in coming months.

PESTE DES PETITS RUMINANTS

In Issue 1 of Vol. 3 of this newsletter we reported on PPR in Africa. Recently livestock authorities in Pakistan have been alarmed at the apparent increasing prevalence of PPR, resulting in significant losses in rural areas. Increased resources have been allocated to monitoring outbreaks and the development of ring vaccination campaigns to attempt to restrict further spread.

SIMIAN MALARIA

New species of Plasmodium reported.

P. gaboni has been reported in chimpanzees in Gabon. It is closely related to the human parasite *P. falciparum* and may in the past have been misclassified as such.

P. knowlesi was previously thought to only infect macaques in Asia. Recent work in Malaysia has shown two thirds of human infections in Sarawak were due to *P. knowlesi*. The main concern is this species replicates very quickly, resulting in rapid progression of human cases if not treated early.

STOP PRESS

Recent work published in Nature indicates that transmissible spongiform encephalopathies such as CWD, and possibly scrapie, may be spread through the faeces of infected animals, which are not yet showing clinical signs. <http://www.nature.com/nature/journal/vaop/ncurrent/full/nature08289.html>

EBOLA

In 2005 Ebola virus was discovered in fruit bats in the Democratic Republic of Congo (DRC). Recent reports indicate that the 2007 outbreak of Ebola in the DRC was initiated by a man who purchased bats at a market and whose family and contacts then became infected.

NEW DISEASES***Bordetella hinzii***

B. hinzii was previously believed to be non-pathogenic in poultry. Recent work in the USA has shown that some strains of *B. hinzii* can cause respiratory disease in turkeys but not in chickens.

Lujo virus

In 2008 5 cases (4 of them fatal) of an undiagnosed haemorrhagic fever were reported in South Africa. The infection originated in Zambia. The causative organism has been classified as Lujo virus, a member of the Arenaviridae. The source of the virus is yet to be determined.

Staff at AAHL and Berrimah Veterinary Laboratory in NT recently reported the discovery of two new arboviruses; **Middle Point virus** found in cattle and **Stretch Lagoon virus** was isolated from mosquitoes. Neither virus has been associated with disease in livestock to date.

REMEMBER

New diseases do occur. You may be looking at the first case.

EXOTIC DISEASE WATCH HOTLINE

1800 675 888