



**Australian Government**  
**Department of Agriculture,**  
**Fisheries and Forestry**

# Exotic Animal Disease Newsletter

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## FOOT and MOUTH DISEASE

FAO has urged heightened international surveillance against foot-and-mouth disease (FMD) following three recent incursions in Japan and South Korea.

“We are worried because the rigorous biosecurity measures in place in the two countries were overwhelmed, pointing to a recent, large-scale weight of infection in source areas, very probably in the Far East,” said FAO’s Chief Veterinary Officer Juan Lubroth. “In the past nine years, incursions into officially FMD-free countries, as were Japan and the Republic of Korea, have been extremely rare so to have three such events in four months is a serious cause for concern,” he noted. “We also have

to ask ourselves if we aren’t facing a possible replay of the disastrous 2001 FMD transcontinental epidemic which spread to South Africa, the United Kingdom and Europe after earlier incursions in Japan and South Korea,” Lubroth added.

The 2001 FMD outbreak caused eight billion pounds (more than \$12 billion) of losses to agriculture, livestock trade and tourism in the UK alone.

In April Japanese veterinary authorities confirmed an outbreak of type “O” FMD virus, currently more common in Asian countries where FMD is endemic. The Republic of Korea was hit by the rarer type “A” FMD in January and then suffered type “O” infection in April.

As at 25 May Japan had reported >200 outbreaks (most within 20 km of the initial case). More than 300,000 pigs and cattle are to be culled and vaccine

will be used to slow the spread. Korea had reported 11 outbreaks and culled more than 49 000 head.

The means of introduction of the virus have not been identified, but experts say it is possible the infection occurred through food waste, with pigs eating infected meat scraps. Understanding how biosecurity breaches occurred is important to prevent similar events.

Typing by the world reference laboratory indicates the South Korean and Japanese strains are closely related to the Hong Kong strain, which may be regarded as representing the serotype O virus circulating in China since early 2010.

[http://www.wrlfmd.org/fmd\\_genotyping/2010/WRLFMD-2010-0000H%20%20South%20Korea%202010.pdf](http://www.wrlfmd.org/fmd_genotyping/2010/WRLFMD-2010-0000H%20%20South%20Korea%202010.pdf)

Outbreaks of serotype O virus have been reported in 7 provinces of China since February 2010 and more recently in Mongolia.

### Heightened surveillance

“Under the circumstances we consider that **all countries are at risk** and a review of preventive measures and response capacity would be welcome,” Lubroth said. Strengthened biosecurity would include a re-examination of possible routes of entry and measures to reinforce controls, together with **heightened awareness of FMD by all parties to assist earlier reporting.**”



Map showing FMD outbreaks from OIE WAHID source as at 3 May 2010

## Q Fever (*Coxiella burnetii*) in the Netherlands

Between 1997 and 2006 there were 93 human cases of Q Fever reported in the Netherlands. A total of 177 human cases were reported in 2007, rising to 958 cases in 2008 and to 2357 cases in 2009. About 20% of human cases required hospitalization.

There appeared to be a connection between the human cases and outbreaks on intensive sheep and goat dairy farms.

In 2008 hygiene measures were introduced which included an obligation to notify multiple cases of abortion on farms, visitors not to enter sheds and manure not to be removed from sheds until after 3 months of composting. Voluntary vaccination of herds was offered.

In 2009 measures were strengthened by compulsory vaccination of at risk farms and a mandatory hygiene protocol.

Authorities reported in the summer of 2009 that a PCR test on milk gave a good indication of infected herds and flocks; 70% of milking goat herds remained free of infection; intra-farm prevalence was lower than expected, indicating Q fever did not spread quickly within a farm and infected animals shed large quantities of the organism at birth without abortion. Environmental conditions suited persistence of the organism.

[http://ec.europa.eu/food/committtees/regulatory/scfcah/animal\\_health/presentations\\_en.htm#16102009](http://ec.europa.eu/food/committtees/regulatory/scfcah/animal_health/presentations_en.htm#16102009) (Nov 2009 presentations)

In 2010 a decision was taken to compulsorily test all milking herds/flocks and to cull all infected herds/flocks to break the infection cycle. By May 2010, 88 infected herds/flocks were detected. 62 500 animals were culled with 23 million Euros paid in compensation, 11 million Euros to cover

application of control measures and 8 million Euros for the monitoring program. All sheep and goat flocks must be vaccinated by 1 June 2010.

Retrospective analysis has found humans living within 2 km of an infected farm had a higher risk of Q fever than those living 5 km away (relative risk 31.1, at 95% confidence level).

Similar outbreaks on a much smaller scale have been reported in Australia in communities near abattoirs, where infected feral goats have been gathered. The human vaccine used in Australia is not registered in Europe.

## Rift Valley Fever in South Africa

From March until May 2010 there was an extensive outbreak of Rift Valley Fever in South Africa affecting livestock predominantly in the Free State, Eastern Cape, Northern Cape, Gauteng and North West provinces. It caused abortion and death of young goats, sheep and cattle. An animal vaccination program was implemented.

This followed extensive heavy rainfall which allowed build up of vectors (mosquitoes).

More than 186 confirmed human cases were reported resulting in 18

deaths. The majority reported a self limiting febrile disease and myalgia. Those that died presented with multiple organ failure, profound thrombocytopenia and bleeding. The majority of affected people, such as farmers, veterinarians and slaughtermen, had contact with infected animals.

## Rabies

Since November 2008, 57 people have died of rabies in Bali. The outbreak continues and supplies of vaccine are reported to be limited. If visiting Bali avoid contact with all animals.

<http://www.smarttraveller.gov.au/zw-cqi/view/Advice/Indonesia>

### QUESTIONS

**Do you have clients with small numbers of livestock close to a city?**

**Are you and your clients aware of the likely clinical signs of FMD? (AHA recently released a DVD on recognizing FMD) Do you know how to report a suspected case of an emergency animal disease? Do you know where to find assistance?**

**If you answer no to any of the last three questions then it may be a good time to make contact with your nearest government veterinary officer or visit the AHA website!**

## REMEMBER

**New diseases do occur. You may be looking at the first case. EXOTIC DISEASE WATCH HOTLINE 1800 675 888**

Further information on these diseases can be obtained from the AUSVETPLAN 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.

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