



Emergency animal disease alert for veterinarians

Japanese Encephalitis Virus

Outbreaks of Japanese encephalitis virus (JEV) have been reported in piggeries in Queensland, New South Wales, Victoria and South Australia. This is the first time that the virus has been detected in southern Australia.

JE is an acute, mosquito-borne viral disease that can cause reproductive losses and encephalitis in susceptible species. Waterbirds act as natural reservoirs for the virus, and mosquitos can spread the virus to horses, pigs and other animals. JE is a zoonotic disease meaning it can affect people, although severe disease is rare.

Waterbirds and pigs are important amplifying hosts for JE. People and horses are considered 'dead end' hosts - once infected they are not thought to play a role in transmitting the virus.

In animals, signs of disease are most common in pigs and horses. Other animals can be infected but typically do not show signs of illness. These include cattle, sheep, goats, dogs, cats, bats, rodents, reptiles, amphibians, and birds.

Information about this incursion will be updated at outbreak.gov.au.

Reporting requirements

Veterinarians in contact with animals including pigs, horses and donkeys need to be alert to signs of disease. JE is a nationally notifiable disease which means it **must be reported to biosecurity authorities**. To report JE, call the national **Emergency Animal Disease Watch Hotline** on **1800 675 888**. This number will put you in contact with the biosecurity authority in your state or territory.

Pigs

In pigs, the most common clinical signs are mummified and stillborn or weak piglets, some with neurological signs.

Piglets infected after birth can develop encephalitis which presents as paddling or other neurological signs in the first six months of life. In other cases, wasting, depression or hindlimb paralysis may be seen in suckling piglets and weaners.

Adult sows do not typically show overt signs of disease. If boars are present on farm, they may experience infertility and oedematous, and congested testicles.



Preventative measures

People working or otherwise in contact with pigs, including those who may have a small herd or pet, should take steps to control mosquitoes, and continue to use effective biosecurity measures.

Pig producers should refer to the **National Pork Biosecurity Manual** which provides in-depth detail on biosecurity practices and management in piggeries, at farmbiosecurity.com.au/porkbiosecuritymanual.

Horses

Many cases in horses are subclinical. Most clinically affected horses show only mild signs of disease. These can include pyrexia, jaundice, lethargy, anorexia and neurological signs, which can vary in severity. Neurological signs can include incoordination, difficulty swallowing, impaired vision, and rarely the horse becomes over excited.

In some cases, more severe encephalitis can occur, resulting in serious and sometimes fatal consequences.

Preventative measures

Rugging and hooding horses with a lightweight summer rug and fly mask can help protect against mosquito bites. Stabling horses between dusk and dawn may also be beneficial as the mosquito that transmits JE feeds at night and is reluctant to enter dwellings. If the horse allows, apply a safe insect repellent.



Human health advice

Most JE infections in people are asymptomatic, however, those with severe infection (which occurs in less than one per cent of cases) may experience neck stiffness, coma, and more rarely, permanent neurological complications or death. Encephalitis is the most serious clinical consequence of infection. Illness usually begins with symptoms such as sudden onset of fever, headache and vomiting.

People should also try to prevent mosquito bites by using a mosquito repellent containing picaridin, DEET or oil of lemon eucalyptus on all exposed skin and reapply every few hours; wear long, light coloured and loose-fitting clothes; and covered footwear.

Government response

The Australian, state and territory governments are working with the pig and horse industries through the Consultative Committee on Emergency Animal Diseases in response to this outbreak. We are also working closely with human health authorities.

The response strategy for this disease is outlined in the **Japanese encephalitis AUSVETPLAN**.

We encourage you to download the field guide below which is also available at outbreak.gov.au. **Emergency animal diseases field guide for Australian veterinarians**.