



ALERT FOR INFECTIOUS DISEASE CLINICIANS AND CLINICAL MICROBIOLOGISTS

KEY POINTS

- **Japanese Encephalitis Virus (JEV) has been detected among pigs in commercial piggeries in QLD, VIC and NSW. This is the first time JEV has been detected this far south.**
- **In recent weeks, there has been an increase in human encephalitis cases of unknown aetiology in VIC and SA, with two suspected cases of JEV.**
- **Enhanced mosquito and animal host surveillance in WA is being implemented to determine whether JEV is circulating in WA.**
- **The majority of JEV cases are asymptomatic; less than 1% develop symptoms, of which encephalitis is a recognised clinical presentation.**
- **Clinicians are advised to consider testing for JEV and other arboviruses in patients with unexplained encephalitis, after other common causes (Herpes Simplex Virus, Varicella Zoster Virus and enteroviruses) have been excluded.**
- **Suspected and confirmed cases must be promptly notified.**

Background

- JE is a mosquito-borne flavivirus, which can infect animals (most commonly wading birds, pigs, horses) and humans.
- Less than 1% of people infected with JE experience clinical disease. Symptoms are variable, but typically include fever, anorexia and headache. Vomiting, nausea, diarrhoea, muscle aches and dizziness may also occur. More severe infections may cause neurological dysfunction with photophobia, lethargy, irritability, drowsiness, neck stiffness, confusion, ataxia, aphasia, intention tremor, convulsions, coma and death. Seizures are common in children.

Laboratory testing

Recommended testing for patients with encephalitis without a pathogen diagnosis, especially with compatible MRI or CT findings, in adults and children is as follows:

Blood

- Serum tube – 2mL from children, 8mL from adults for acute and convalescent (3-4 weeks post-onset) serology for flavivirus and JEV
- Whole blood EDTA sample for PCR

CSF (at least 1 mL)

- Flavivirus and JEV PCR
- Flavivirus and JEV serology

Urine (2-5 mL in sterile urine jar)

- Flavivirus and JEV PCR

Notification (urgent)

- Please notify all suspected or confirmed cases immediately to the Communicable Disease Control Directorate (phone 9222 0255 or A/H: 9328 0553).
- For public health advice contact your local public health unit
<http://www.healthywa.wa.gov.au/publichealthunits>