

# Japanese Encephalitis vaccine recommendations Information for NSW Primary Care Providers (GPs, Pharmacists and Aboriginal Medical Services)

Please distribute this information to all staff



## Key points:

1. Japanese encephalitis virus (JEV) vaccine eligibility criteria have been expanded. Offer vaccination to eligible patients (see below)
2. Be alert to the symptoms of mosquito borne diseases, such as JEV and Murray Valley Encephalitis Virus (MVEV), and consider testing where clinically appropriate.
3. Advise patients on the importance of regular and routine mosquito bite prevention to avoid mosquito-borne disease.

## Eligibility criteria for NSW Government funded Japanese encephalitis virus vaccination

People aged 2 months or older who live or routinely work in any of the high-risk Local Government Areas (LGAs)\*  
**AND**

1. Regularly spend time outdoors placing them at risk of mosquito bites, **OR**
2. Are experiencing homelessness **OR**
3. Are living in conditions with limited mosquito protection (e.g. tents, caravans, dwellings with no insect screens) **OR**
4. Are engaging in outdoor flood recovery (clean-up) efforts, including repeated professional or volunteer deployments

*\*High-risk LGAs include: Albury, Balranald, Berrigan, Bland, Bogan, Bourke, Brewarrina, Broken Hill, Carrathool, Central Darling, Cobar, Coolamon, Coonamble, Dubbo Regional, Edward River, Federation, Forbes, Gilgandra, Goulburn Mulwaree, Greater Hume, Griffith, Hay, Junee, Lachlan, Leeton, Lockhart, Moree Plains, Murray River, Murrumbidgee, Narrabri, Narrandera, Narromine, Temora, Parkes, Unincorporated Far West Area, Wagga Wagga, Walgett, Warren, Warrumbungle, Weddin, Wentworth*

In addition, the Communicable Disease Network of Australia criteria relating to occupational exposure remain in effect. For full vaccination criteria visit: [JEV Vaccination](#)

JEV Vaccine doses can be ordered through the State Vaccine Centre: [NSW Toll Healthcare](#)

## Clinical suspicion for mosquito borne viruses should be high this season

There have been 3 confirmed cases of JEV in humans notified in Australia this mosquito season, of which 1 was acquired in NSW. Healthcare providers should be alert to the risk of JEV, particularly in regional NSW. There have also been multiple detections of MVEV and other viruses in mosquitoes in parts of NSW, as well as further detections in other states and territories. Details on the NSW detections are available in the weekly [NSW Arbovirus Surveillance and Mosquito Monitoring Program report](#).

### Symptoms of encephalitic mosquito-borne diseases

Less than 1% of people infected with JEV or MVE experience clinical disease, with an average incubation period of 5-15 days for JEV, and 7-12 days for MVE. Most people experience mild symptoms including fever, headache, myalgia, rash and diarrhoea. Severe disease is associated with acute encephalitis/ meningoencephalitis. Neurological sequelae include focal deficits such as paresis, cranial nerve pathology and movement disorders. Seizures are common, particularly in children. Patients presenting with severe / potential encephalitic illness should be referred to hospital / emergency department for further investigation. There is currently no specific treatment for JE or MVE.

### Testing

A clinically compatible case with a concern for acute JE or MVE requires a blood and urine test as well as CSF sampling, where appropriate, for further investigation.

- Blood: 1) Serum – (2-5 mL from children, 5-8 mL from adults) for acute and convalescent (3-4 weeks post onset) testing for Flavivirus, JEV and MVEV IgM, IgG and Total Antibody (Ab), AND 2) Whole blood (EDTA tube) for JEV PCR (+/- viral culture) on an acute sample
- Urine (2-5 mL in sterile urine jar) for JEV PCR and viral culture

For testing of hospitalised patients, please refer to [NSW Safety Alert Broadcast SA:008/22](#) (Japanese Encephalitis Virus – Update for Clinicians),

## Mosquito bite prevention information and resources

The best prevention for mosquito borne diseases is to prevent mosquito bites. Healthcare providers are urged to remind patients to protect themselves by following the advice on clothing, repellent use and environment controls in the NSW Health mosquito bite prevention website: [Mosquito-borne disease resources](#)