



Purpose

The purpose of this safety bulletin is to inform people about the risks, symptoms, transmission, and recommendations for managing the risk of Japanese Encephalitis Virus (JEV).

Key Messages

- Japanese encephalitis virus (JEV) is a rare but potentially serious infection of the brain caused by a virus spread to humans through mosquito bites.
- JEV has been detected in pigs in Victoria, New South Wales and Queensland.
- There are several current and recent cases of encephalitis in Victoria that are under investigation and are strongly suspected to be caused by JEV.
- Most JEV infections are asymptomatic, however those with severe infection (less than one per cent) may experience headache, vomiting, disorientation, seizures, coma, and more rarely, permanent neurological complications or death.
- Anyone experiencing these symptoms, particularly if they've visited the Murray River area between Mildura and Wodonga near the border of Victoria and New South Wales or been in contact with pigs, should seek urgent medical attention.
- Avoid mosquito bites by using mosquito repellent containing picaridin or DEET on all exposed skin. Wear long, loose fitting clothing when outside, and ensure accommodation, including tents, are properly fitted with mosquito nettings or screens.

Risk

There may be an increased risk of transmission near the border of Victoria and New South Wales, where both JEV infections in pigs have been identified and where the human suspected cases had spent time prior to becoming unwell.

Anyone is potentially at risk of being bitten by mosquitoes and while most bites will only cause minor swelling and irritation, an infected mosquito can transmit potentially serious diseases. This risk may be increased particularly near the Murray River and its surrounds, from Mildura to Wodonga, where increased mosquito numbers have been detected recently. People with increased exposure to mosquitoes may be at a higher risk of infection, particularly people camping, or working or spending time outdoors in these regions.

Employees and students who work with or are in contact with pigs may also be at increased risk of infection.

Symptoms and transmission

JEV is transmitted to humans through the bite of an infected mosquito. There is no evidence of transmission from person to person, or from pigs to humans.

More than 90 per cent of JEV infections are asymptomatic. Less than 1 per cent of people infected with JEV develop clinical disease.

Encephalitis is the most serious clinical consequence of JEV infection. Illness usually begins with sudden onset of fever, headache and vomiting. Mental status changes, focal neurological deficits, generalised weakness, movement disorders, loss of coordination and coma may develop over the next few days. The encephalitis cannot be distinguished clinically from other central nervous system infections. The incubation period is usually 6-16 days.

Recommendations

Employees and Students who reside in or are planning to visit the Murray River area should be aware of the risk of JEV and should take steps to significantly limit their exposure to mosquitoes. There are simple steps to protect themselves and their families against mosquito-borne diseases:

- Wear long, loose fitting clothes outdoors.
- Use effective mosquito repellents containing picaridin or DEET on all exposed skin.
- Try to limit outdoor activity if lots of mosquitoes are about.
- Use 'knockdown' fly sprays and plug-in repellent devices indoors.
- Sleep under mosquito nets treated with insecticides if you don't have flywire screens on windows on your home or are sleeping in an untreated tent or out in the open.
- Mosquito coils can be effective in small outdoor areas where you gather to sit or eat.

Employees / students are encouraged to seek medical advice on the vaccination program and if they have any concerns.

Further information

This information and further information can be obtained from the [Vic Health website](#).