



Japanese encephalitis

What is Japanese encephalitis?

Japanese encephalitis is a rare but serious illness caused by the Japanese encephalitis virus. It is spread to humans by infected mosquitoes.

What are the symptoms of Japanese encephalitis?

Most people who get Japanese encephalitis do not have any symptoms. If you get symptoms, they can appear 5 to 15 days after getting bitten by infected mosquitoes.

Some people may get symptoms such as:

- fever
- headache
- vomiting

People with a severe infection (1 in every 250 people) may get symptoms such as:

- neck stiffness
- disorientation
- tremors
- coma
- seizures
- paralysis

If you get these symptoms, contact a doctor right away, or Health Direct on 1800 022 222 or in an emergency call Triple Zero (000) or visit your nearest emergency department.

Among those who get a serious illness, some may have lifelong neurological complications or even death.

If you are bitten by mosquitoes, monitor for symptoms and seek medical attention. For more information on taking care of bites, refer to [Mosquitoes are a health hazard](#).

How is the Japanese encephalitis virus spread?

It is spread when a mosquito bites an animal (such as pigs or waterbirds) that has the Japanese encephalitis virus and then this mosquito bites a human.

Humans are not able to give Japanese encephalitis virus to other humans. Humans cannot get Japanese encephalitis virus by touching an infected animal or eating animal products.

Who has a higher chance of getting the Japanese encephalitis virus?

Those who are more likely to get Japanese encephalitis virus are:

- people who work or do outside activities (e.g., camping, fishing, hiking, gardening) in high-risk areas.
- people working at and, or living close to piggeries (if infected by a mosquito, pigs can get high levels of virus, and infect more mosquitoes if bitten)

How do you know if you have Japanese encephalitis?

If you have the symptoms listed above a doctor may run a test to detect a virus or measure levels of antibodies to Japanese encephalitis in samples of blood or spinal fluid.

How is Japanese encephalitis treated?

There is no specific treatment for Japanese encephalitis. Patients with symptoms often need hospital support and sometimes intensive care.

How do I avoid the Japanese encephalitis virus?

The best way to avoid Japanese encephalitis is to not get bitten by mosquitoes. Mosquitoes may carry other viruses that cause disease in humans such as Ross River, Barmah Forest and, rarely, the virus that causes Murray Valley encephalitis and Kunjin, so it is important to protect yourself against all mosquitoes.

To prevent mosquito bites, take these steps:

- Wear light-coloured, long-sleeved shirts, long trousers and enclosed shoes. Mosquitoes can bite through tight clothing.
- Apply mosquito repellent containing picaridin, DEET or oil of lemon eucalyptus, evenly to all areas of exposed skin. Natural or homemade repellents provide limited protection. Read the instructions to find out how often you should reapply repellent. Always apply sunscreen first and then apply repellent.
- Take special care during peak mosquito biting hours. Some species of mosquitoes will bite all throughout the day.
- Remove stagnant water around the home as they can become mosquito breeding sites.
- Use mosquito nets, and screen windows and doors.
- Take extra precautions when travelling in areas with a higher risk of mosquito-borne diseases.

In addition to the general protection measures above, when travelling overseas to areas known to have Japanese encephalitis virus, you should also:

- Stay and sleep in screened or air-conditioned rooms.
- Use a mosquito bed net if the sleeping area is exposed to the outdoors. Effective nets are treated with a pyrethroid insecticide, such as permethrin. Pre-treated bed nets can be purchased before travelling, or nets can be treated after purchase.
- Avoid known areas of high mosquito-borne disease transmission or outbreaks.

Japanese encephalitis vaccination

The Japanese encephalitis vaccine is safe and effective. People aged 2 months and older can get the vaccine. Vaccination against Japanese encephalitis is recommended for those at the highest risk of getting Japanese Encephalitis.

Learn more about who can get a [free vaccine](#).

Vaccine is also recommended to some people [travelling to high-risk countries](#).

If you think you might be able to get the vaccine, talk to your local doctor.