

# Japanese Encephalitis

This is a viral infection of the human brain caused by the Japanese Encephalitis (JE) virus.

Symptoms in humans include:

- > headache
- > fever
- > convulsions
- > coma.

While most people with Japanese Encephalitis infection have no symptoms, the disease can be serious, causing permanent damage to the nervous system or death.

Diagnosis is usually made by a blood test. Other illnesses with similar symptoms may need to be excluded by other tests.

The Japanese Encephalitis virus is spread by particular types of mosquitoes. Although most cases in Australia are diagnosed in people returning from overseas travel, there have been some cases diagnosed in the Torres Strait and in Cape York, Queensland. Pigs are an important host for the virus, where it can multiply to very high levels in their blood. Mosquitoes that feed on infected pigs can become infected with the virus and then transmit it to humans.

## Incubation period

*(time between becoming infected and developing symptoms)*

Usually 5 – 15 days.

## Infectious period

*(time during which an infected person can infect others)*

There is no evidence of person to person spread.

## Treatment

There is no specific treatment for Japanese Encephalitis infection. Treatment involves management of the symptoms.

## Control of spread

Personal protection from mosquito bites in areas where Japanese Encephalitis is known to be present is the key to prevention.

## Control of spread cont.

### Personal Protection

- > Cover up with long, light coloured, loose fitting clothing of sufficient thickness to prevent mosquitoes biting through the fabric.
- > Avoid exposure outdoors when mosquitoes are active. The mosquitoes that carry Japanese Encephalitis usually bite at dawn and dusk.
- > Use an insect repellent containing DEET or Picaridin on exposed skin (the most effective repellents contain 5-20 % di-ethyl-N-toluamide or DEET). Apply in accordance with the manufacturer's instructions. Avoid using on babies and toddlers.
- > Use flyscreens in accommodation and mosquito nets where there are no flyscreens; especially for babies (this is particularly important when camping out, as repellents are only effective for around 4 hours).
- > A vaccine is available that provides protection against Japanese Encephalitis. Three injections are required over a one month period which gives protection for about 3 years. The risk of Japanese Encephalitis to travellers depends on the season of travel, the areas visited, the duration of travel, outdoor activities planned and measures used to avoid mosquito bites. A travel medicine doctor will be able to give advice on vaccination.



**Japanese encephalitis is a notifiable disease**

- > Overseas Travel
- > Avoiding Mosquito Bites

### Useful Website:

- > Fight the Bite  
<http://www.health.sa.gov.au/PEHS/publications/mozzies-fight-bite.htm>