

# Japanese Encephalitis

## What is Japanese Encephalitis?

Japanese Encephalitis (JE) is a viral infection spread by night time biting culex mosquitoes and occurs in many parts of Asia and Oceania. It is typically a disease found in rural areas especially where pig farming and rice growing occur together. Occasionally it can also occur in urban areas.

The majority of people infected develop mild symptoms (consisting of a flu-like illness) or no symptoms at all. It is rare in travellers.

Around 1 in every 250 people infected with JE develop more serious symptoms of brain infection (encephalitis). Encephalitis is fatal in one third of cases, another third survive with paralysis or other forms of brain damage, and the remaining third recover without further problems.

There is no specific treatment.

**Young children, people over 55 years and pregnant women have a higher risk of developing serious illness if infected.**

## Disease risks:

In countries where Japanese encephalitis occurs, most culex mosquitoes will not be infected with the virus. The risk to most travellers to Asia is considered to be low, especially for short-term travellers visiting urban areas. The overall incidence of JE among travellers to Asia is estimated to be less than one case per 1 million travellers.

Effective mosquito bite avoidance particularly during dusk till dawn hours can reduce the risk of acquiring this disease, including:

- sleeping in rooms with close-fitting gauze over the windows and doors
- sleeping under a mosquito net that's been impregnated with insecticide
- covering up with long-sleeved tops, trousers and socks
- applying a good-quality insect repellent to exposed areas of skin.

## Vaccine recommendations:

Consider the vaccine if you will be:

- Travelling for long periods usually 30 days or more especially in rural endemic areas during the transmission season for that country
- Living long term with prolonged stays in urban settings
- Travelling for less than one month in rural endemic areas, but your planned activities or an outbreak of Japanese encephalitis in the area, put you at particular risk

Your travel health advisor will advise you if vaccination is recommended for your trip.

**Ixiaro vaccine Schedule** (For those aged 2 months or older): 2 doses: Day 0 & 28. A rapid schedule may be offered to those aged between 18-65 years of 2 doses: Days 0 & 7 and can be given off licence for other age groups.

A first booster (3<sup>rd</sup> dose) should be considered if still at risk after 12-24 months (or 12 months if > 65).

A second booster (4<sup>th</sup> dose) is advised for those aged 18-65 years at 10 years after the first booster. No data available on boosters for younger or older age groups.

**Side effects of Ixiaro include:** headache, muscle aches and flu like symptoms.

For further information see:

<https://travelhealthpro.org.uk/disease/98/japanese-encephalitis>

<https://www.nhs.uk/conditions/japanese-encephalitis/>