

Japanese Encephalitis

Description:

Japanese encephalitis (JE) is a serious infection of the brain caused by a virus that can be spread by some (but not all) types of mosquitoes. JE occurs in many parts of Asia, and has recently occurred in Papua New Guinea. It has also occurred in north Queensland. Since 1995, four people in the Torres Strait and one person in Cape York have had JE. The type of mosquitoes that are able to spread JE breed extensively early in the wet season, and it is possible that the prevailing northwest winds and tropical storms may have blown infected mosquitoes into the Torres Strait.

Symptoms:

The vast majority of people infected with JE virus have no symptoms, while a small proportion may have very severe symptoms such as headache, high fever, convulsions and coma. Of these severe cases, approximately one third die and one third are left with permanent disabilities.

Transmission

The JE virus can only be spread by the bite of an infected mosquito. Mosquitoes become infected soon after they bite infected pigs. After a person is bitten by an infected mosquito, it usually takes five to 15 days for the first symptoms to appear.

Treatment:

There is no specific treatment. Treatment usually involves management of the symptoms.

Prevention:

While travelling in Asia and Papua New Guinea, particularly during the monsoonal wet season, avoid exposure to mosquitoes during hours of biting (eg. dusk until dawn) and use repellents. In particular:

- Wear loose-fitting light-coloured clothing with long sleeves, long trousers and socks especially at dusk and in the first few hours after sunset.
- Use insect repellent containing diethyltoluamide (DEET) or picaridin when outdoors. Lotions and gels are more effective and longer lasting than sprays.
- Use mosquito-proof tents when camping.
- Use mosquito nets when sleeping unless accommodation is air conditioned or has mosquito screens on doors and windows.

There is also a vaccine for protection against JE. The current JE vaccine requires two injections, given 28 days apart; it is currently only available for people 18 years or older. The vaccine can be given in pregnancy, if necessary. Headaches and muscle aches are the most common side effects following JE vaccination, occurring in up to 20% of people. They usually occur within the first three days after vaccination, are usually mild, and disappear within a few days. The JE vaccine is recommended for:

- Some travellers to Asia and Papua New Guinea depending on where they are going, for how long and at what time of year.
- All adult residents of certain outer islands in the Torres Strait.

Help and Assistance

For further information please contact your local doctor, community health centre or nearest public health unit.

References

Australian Government Department of Health and Ageing. 2008. The Australian Immunisation Handbook, 9th edition. Canberra: Australian Government. [MIMS Online](http://www.health.qld.gov.au). Accessed 02/03/10.

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