SORRENTO TRAVEL CLINIC FACT SHEET

JAPANESE ENCEPHALITIS

Japanese encephalitis (JE) is a mosquito borne viral disease prevalent in rural areas of Asia and Indonesia. In temperate zones of China, Japan, Korea and eastern Russia the carriers are present in greatest numbers from June through September and are inactive during winter months. Elsewhere, seasonal patterns of disease are more extended or vary with the rainy season and irrigation practices so although a general seasonal trend for a particular geographic area can be given the risks in sub-tropical and tropical zones are unpredictable.

HOW THE DISEASE IS TRANSMITTED

JE virus is transmitted by the bites of the Culex genus of mosquitoes which tend to feed outdoors at dusk and during evening hours until dawn. Larvae are found in flooded rice fields, marshes, and small stable collections of water around cultivated fields. Swine and certain species of wild birds actually amplify the virus in their bloodstreams when bitten so areas where these creatures are prevalent are areas of high risk. Habitats supporting the transmission cycle of JE virus are principally in rural, agricultural locations

THE DISEASE

Most infections produce no symptoms at all and result in natural immunity. However, in a few patients the viruses enter the nervous system causing encephalitis (brain fever) characterised by fever and confused consciousness (delirium or stupor) and among these patients there is a 30% risk of dying; in those who survive about half will be left with some form of brain damage or paralysis. Children are at greatest risk.

PREVENTION and CURE

The risk to short-term (less than 30 days) travellers and persons who confine their travel to urban centers is very low. Expatriates and travellers living for prolonged periods in rural areas are at greatest risk. Travellers are advised to stay in screened or airconditioned rooms, to use bednets when such quarters are unavailable, to use insecticidal space sprays as necessary, and mosquito repellents and protective clothing to avoid mosquito bites.

VACCINATION

An effective inactivated vaccine is administered as an intramuscular injection in 2 doses at a 4-week interval. It is registered in Australia only for adults and adolescents over the age of 17 but safety studies in children are ongoing. For high risk situations parents may request the vaccine for children on an individual personal responsibility basis. The duration of protection is as yet undetermined but a booster at 3 years is currently recommended.