

## **Dengue Fever**

Dengue fever is caused by a virus transmitted by day biting culex mosquitoes. This disease has not yet come to Nepal in a big way but causes fevers in large number of persons in South and South East Asia. The culex mosquitoes carrying dengue are mostly confined to urban areas where they breed in the relatively clean water found in storage jars, discarded tires and tin cans. Because the mosquitoes bite during the day (especially late afternoon) as well as the night it makes it hard to avoid exposure. Once bitten by an infective mosquito a person will become sick within two to eight days.

The disease is characterized by sudden onset of high fever, frontal headache, backache, joint and muscle pains. The severity of the joint pains has led it to be named “break bone fever”. It is often accompanied by a rash that looks like a red flush on the chest and abdomen. Fever returns to normal within a week, but may leave a person feeling tired and slightly depressed for a few weeks afterwards.

The risk of catching dengue can be reduced by covering up exposed areas where practical, and by the use of insect repellent DEET in 30% strength. Pregnant women should use DEET sparingly. Staying inside screened/air conditioned accommodation is an effective way to avoid being bitten by mosquitoes. At present there is no vaccine against dengue fever. Any traveler arriving from an area where dengue is a problem and who develops a sudden fever and headache within a few days of arrival, should suspect dengue fever. However, because dengue often exists in countries where other fever causing illnesses are present (malaria, typhoid), it is important to rule out other illnesses. No specific treatment is available and spontaneous recovery is the rule.

There are regular dengue epidemics in India, Sri Lanka, Thailand, Malaysia, Singapore, and Indonesia that are popular travel destinations. Nepal has so far only had few cases of dengue reported from the Terai. In SE Asia, dengue is transmitted all year round, particularly during the summer wet months and post- monsoon. In India, dengue fever shows a marked seasonal pattern, with most travelers becoming exposed during late September and October after the seasonal rains have stopped.

### **Dengue Haemorrhagic Fever (DHF) and Dengue Shock Syndrome (DSS)**

These are complications of dengue fever that are mostly confined to the people that live in an area where dengue fever is a problem, causing death mainly to indigenous population. Travelers are at lower risk from these complications, as it generally requires a repeat exposure to a different serotype of dengue to produce such a complication. However, with the increasing incidence of dengue worldwide due to urbanization and failure of mosquito eradication campaigns, it is likely that these complications may become more common in the increasing number of travelers to these countries. DHF and DSS as the names suggest, are characterized by bleeding complications and shock during an episode of dengue fever and require immediate hospitalization and treatment.