

## Dengue

### Definition:

Dengue is a disease caused by any one of four closely related dengue viruses. They are transmitted to humans by the bite of an infected mosquito. Dengue is classified into several subtypes including: dengue, dengue-like illness, and severe dengue.

### Signs and symptoms:

The principal symptoms of dengue fever are high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain, rash, and mild bleeding. Dengue hemorrhagic fever is characterized by a fever that lasts from 2 to 7 days with general signs and symptoms consistent with dengue fever. When the fever declines, symptoms including persistent vomiting, severe abdominal pain, and difficulty breathing may develop.

### Transmission:

Dengue is transmitted through the bite of an infected *Aedes* mosquito. There is no direct human to human transmission.

### Diagnosis:

Dengue can be diagnosed by a healthcare provider through clinical evaluation and laboratory testing

### Role of the School Nurse:

#### Prevention

- Make efforts to reduce human exposure to mosquitoes particularly when traveling to endemic areas, including:
  - Draining artificial sources of standing water
  - Covering exposed skin
  - Using EPA approved repellents
  - Avoiding being outdoors during the hours when mosquitoes are most active; this may include rescheduling sporting practices/games and other outdoor events
- School nurse should encourage the use of EPA approved repellents when outside (following local policy guidelines).
  - School nurses can apply repellent with parental permission (see <http://www.maine.gov/agriculture/pesticides/schoolipm/what/whats-new.htm>)

#### Treatment Recommendations

- If symptoms are noted, the child should be referred to his or her primary care provider for evaluation.
- There is no specific treatment for dengue infections. Persons who think they have dengue should use pain relievers with acetaminophen and avoid those containing aspirin.

#### Exclusions

- There is no need to exclude students from school for dengue.
- Educational modifications may be warranted in children with a positive diagnosis.

#### Reporting Requirements



- Dengue is reportable within 48 hours of recognition or strong suspicion of illness.

**Resources:**

- Maine CDC Dengue website: <http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/dengue/index.shtml>
- Federal CDC Dengue website: [www.cdc.gov/dengue](http://www.cdc.gov/dengue)
- Federal CDC Yellow Book: Infectious Diseases Related to Travel: Dengue  
<http://wwwnc.cdc.gov/travel/yellowbook/2016/infectious-diseases-related-to-travel/dengue>
- Federal CDC Travelers' Health website: <http://wwwnc.cdc.gov/travel>
- Insect Repellent Finder (including time of protection)  
<http://cfpub.epa.gov/oppref/insect/index.cfm#searchform>