

# Yellow Fever

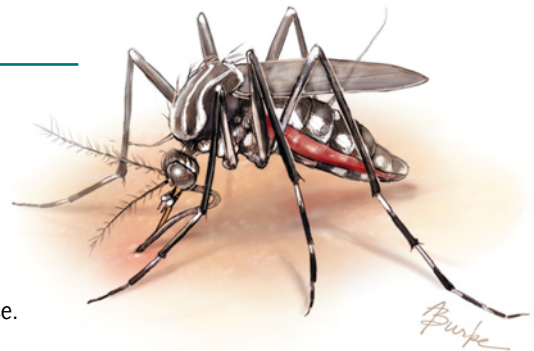
**Y**ellow fever occurs in tropical South America and Africa and among travelers to those areas. It is caused by a virus transmitted to humans by the bite of an infected mosquito. This virus can cause significant illness that may progress to major organ damage, particularly of the liver. It may cause **hepatitis**, an **inflammation** (cellular damage) of the liver. Hepatitis can cause **jaundice**, a yellow discoloration of the eyes and skin that led to the name “yellow fever.” This liver damage can also lead to disruption of the normal clotting of blood, resulting in bleeding. The bleeding can manifest as the so-called black vomit of yellow fever. A vaccination against this infection is required for those who travel to **endemic** areas (geographic regions where exposure is possible), such as central Brazil and Peru in South America and Ghana and Liberia in West Africa. Most people can receive this vaccination from their local department of health or from a travel medicine clinic as long as there are no medical reasons not to receive the vaccine. The August 27, 2008, issue of *JAMA* includes a Commentary on a classic 1901 *JAMA* article by Walter Reed, one of the pioneers in research on the cause of yellow fever.

## SYMPTOMS

Symptoms usually occur 2 to 3 days after being bitten by an infected mosquito and may include

- Body aches
- Chills
- Fever
- Severe headache
- Weakness

These symptoms may also be caused by a number of other disorders, so it is important to consult a physician if someone thinks he or she may have the disease.



## DIAGNOSIS

Initially, a presumptive diagnosis can be made based on symptoms and recent travel to an area where yellow fever is endemic. The diagnosis is confirmed by a blood test for the virus early in the disease or by a later increase of **antibodies** to yellow fever in the blood. Antibodies are proteins that are part of the immune system and act to eliminate specific foreign substances in the body.

## TREATMENT

There are no specific treatments for yellow fever. A medication like acetaminophen (paracetamol) may be used to treat the fever and body aches.

## PREVENTION

When traveling to endemic areas, take precautions by using an insect repellent that contains DEET (diethyltoluamide) and wearing clothing that covers the arms and legs. A vaccination is required for adults and children older than 9 months when traveling to areas where yellow fever can occur. This vaccine is relatively safe and very effective. The vaccine gives immunity that may last a lifetime. However, for travel to endemic regions, a repeat vaccination is required every 10 years. The vaccine is not recommended for individuals with impaired immune system function or pregnant or breastfeeding women.

Source: Centers for Disease Control and Prevention

## FOR MORE INFORMATION

Centers for Disease Control and Prevention  
www.cdc.gov

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