

## Who

Travelers to endemic regions of South America and sub-Saharan Africa are at risk for acquisition of infection. Fewer cases occur in South America than in Africa. The disease often occurs in epidemics. Yellow fever affects all ages, but disease severity and lethality is highest in older adults.



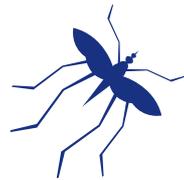
## What

Yellow fever is a mosquito-borne viral disease with a high mortality rate. The primary transmission cycle is the jungle cycle, which involves monkeys and daytime biting jungle mosquitoes.



## Where and when

Persons entering forested areas are at risk of infection. However, when these patients return to their cities they may be bitten by common domestic mosquitoes. These mosquitoes can transmit the virus subsequently to other humans (urban yellow fever). For sub-Saharan Africa, the virus circulates via mosquitoes in the savanna close to human settlements in the rainy season.



## Prevention

Apart from protection against mosquito bites, a live-attenuated vaccine is available for the prevention of yellow fever. Due to an increased risk of serious side-effects, the vaccine is contraindicated in individuals with a disturbed immune system and in very young infants. Many other relative contra-indications exist, so please consult your travel doctor for optimal advice!



## Treatment

The treatment of yellow fever mainly consists of supportive care; there is no specific antiviral therapy available. Ribavirin has some activity against yellow fever virus but only at concentrations which may not be clinically achievable. Other antiviral therapies are at a very early stage of development for use.

## Symptoms

The onset of illness appears abruptly 3-6 days after the bite of an infected mosquito. The clinical spectrum includes subclinical infection in the majority of cases. Otherwise, a nonspecific febrile illness without jaundice may occur, or a life-threatening disease with fever, liver and renal failure, shock, and bleeding. Approximately 20-50% of patients who enter the last category die from the disease.



## In case of infection

The diagnosis is mainly made by directly detecting the virus in blood or urine early in the disease course, or demonstrating antibodies in the blood in a later stage.

Management of patients may be improved by modern intensive care, but this is often not available in remote areas where yellow fever often occurs.