

# Yellow Fever

## Transmission of Yellow Fever Virus

Yellow fever virus is an RNA virus that belongs to the genus *Flavivirus*. It is related to West Nile, St. Louis encephalitis, and Japanese encephalitis viruses. Yellow fever virus is transmitted to people primarily through the bite of infected *Aedes* or *Haemagogus* species mosquitoes. Mosquitoes acquire the virus by feeding on infected primates (human or non-human) and then can transmit the virus to other primates (human or non-human). People infected with yellow fever virus are infectious to mosquitoes (referred to as being “viremic”) shortly before the onset of fever and up to 5 days after onset.

Yellow fever virus has three transmission cycles: jungle (sylvatic), intermediate (savannah), and urban.

- The jungle (sylvatic) cycle involves transmission of the virus between non-human primates (e.g., monkeys) and mosquito species found in the forest canopy. The virus is transmitted by mosquitoes from monkeys to humans when humans are visiting or working in the jungle.
- In Africa, an intermediate (savannah) cycle exists that involves transmission of virus from mosquitoes to humans living or working in jungle border areas. In this cycle, the virus can be transmitted from monkey to human or from human to human via mosquitoes.
- The urban cycle involves transmission of the virus between humans and urban mosquitoes, primarily *Aedes aegypti*. The virus is usually brought to the urban setting by a viremic human who was infected in the jungle or savannah.

