

Yellow Fever History Overview



Yellow fever, an acute infectious disease, is one of the great epidemic diseases of the tropical world, though it sometimes has occurred in temperate zones as well. The disease infects humans, all species of monkeys, and certain other small mammals. The virus is transmitted from animals to humans and among humans by several species of mosquitoes. Yellow fever appears with a sudden onset of fever, chills, headache, backache, nausea, and vomiting. The skin and eyes may appear yellow—a condition known as jaundice and a sign that gives rise to the disease's popular name. There is no specific treatment for those with yellow fever beyond good nursing and supportive care. However, yellow fever is an outstanding example of a completely preventable disease. People can be rendered immune to the virus through vaccination, and outbreaks can be contained by eliminating or controlling mosquito populations. A technique called dry culture is used for controlling mosquito populations by draining swampy or marshy fields such as rice paddies where mosquitoes commonly flourish. Thanks to such measures, the great yellow fever epidemics of the late 19th and early 20th centuries are no more, though the disease is still present in tropical Africa and South America, where access to vaccine is sometimes lacking and the virus is held in vast natural reservoir by forest monkeys.

History

Western Africa has long been regarded as the home of yellow fever, although the first recorded outbreaks of the disease were in central and coastal South America after the Spanish conquest in the 16th century. For the next 300 years, yellow fever, given various names such as Yellow Jack and "the saffron scourge," was one of the great plagues of the New World. The tropical and subtropical regions of the Americas were subjected to devastating epidemics, and serious outbreaks occurred as far north as Philadelphia, New York, and Boston but also as far away from the endemic centers as Spain, France, England, and Italy.

Diagnosis, Treatment, and Control

In the early stages of yellow fever, its symptoms are similar to those of other tropical fevers such as malaria, leptospirosis, or dengue. Diagnosis is usually established by blood tests showing the presence of antibodies to the virus and by the patient's history of having been in an area where the disease is endemic. Before the introduction of yellow fever vaccine, the control of *Aedes aegypti* mosquitoes was the only procedure for preventing occurrence of the disease. Immunization is now the most practical and reliable way to prevent yellow fever in people who live in and travel to areas where it is endemic. Still, control of mosquito populations is an essential component of any program designed to prevent the spread of yellow fever, particularly in urban areas. When people must travel or live in regions where the jungle transmission cycle is maintained, individual immunization is necessary. In these regions, human cases will continue as long as there remain unimmunized persons, for there is no known practical way of eliminating the virus of yellow fever from the animal and mosquito populations of the vast tropical forests in South America and Africa.

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Image entitled "The Great Yellow Fever Scourge — Incidents Of Its Horrors In The Most Fatal District Of The Southern States." Retrieved from www.npr.org