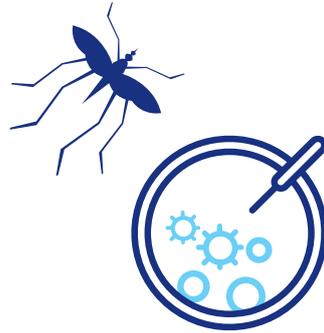




Who

Travelers who return from geographical regions in which West Nile fever is endemic or in which transmission is frequently described, or people who reside in these areas are at risk. Advancing age is the most important risk factor for more severe disease, particularly encephalitis.



What

Nearly all West Nile virus infections are due to bites of female mosquitoes, mainly of the *Culex* species. These mosquitoes are most active between dusk and sunset and inject virus-laden saliva into the host during feeding. Birds are primary hosts, but humans and vertebrates may serve as incidental victims. Less often, humans are infected after contact with blood or tissues of infected animals.

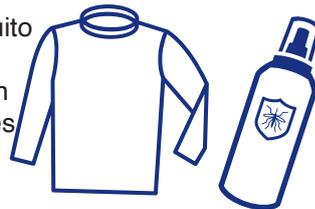
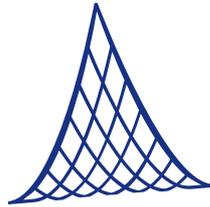


Where and when

West Nile fever has an extensive distribution throughout Africa, the Middle East, parts of Europe and the former Soviet Union, South Asia, Australia, and North America. Transmission is mainly between June and November, related to the activity of the mosquitoes.

Prevention

Human vaccines are unlikely to be available shortly, although there are some potential candidate vaccines. Prevention of infection mainly includes protection against mosquito bites and mosquito control programs. It is important to drain standing water where mosquitoes are likely to breed.



Treatment

Treatment of West Nile virus infection is primarily supportive, no effective therapy is available.

Symptoms

The typical incubation period for infection ranges from 2-14 days. Clinical symptoms are seen in only about 20-40% of infected patients. The illness is characterized by an abrupt onset of fever, headache, malaise, back pain, muscle aches, anorexia, and sometimes a skin rash.



In case of infection

Identification of antiviral antibodies in blood or brain fluid forms the cornerstone of the diagnosis. The virus can be detected directly early in the disease course. Less than 0.5% of patients develop neuro-invasive disease, of which 10% is lethal. After the acute infection, symptoms as fatigue, memory impairment, headache, and balance problems may last for even up to years.