



Detection of Vector Borne Diseases and Major Outbreak of Diseases that are Transmitted by Vectors

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DESCRIPTION

Prevention of vector borne diseases

Vector-borne diseases can be avoided by doing the following:

- Vaccines against disease-causing viruses should be developed.
- DEET or Permethrin insect repellents can be applied to the skin and clothing, respectively.
- Tick checks should be performed following contact with dogs, cats, cattle, or mice.
- To keep mosquitoes at bay, sleep with a mosquito net.
- After a long outdoor visit, wash and dry your clothes.
- Remove any leaf litter and woodpiles from the area.
- Allow no stagnant water to accumulate in the surrounding area.
- To control pest-caused infections, use disinfectants.

Some of the Vector Borne Diseases that are transmitted by vectors include

Chikungunya

Symptoms: The majority of people infected with the Chikungunya virus will experience some symptoms. Symptoms usually appear 3-7 days after being bitten by an infected mosquito. The most common symptoms are fever and joint pain. Other signs and symptoms may include a headache, muscle pain, joint swelling, or a rash. Chikungunya death is uncommon. The vast majority of patients recover within a week. However, joint pain can be severe and incapacitating, and it can last for months. Newborns infected around the time of birth, older adults (65 years), and people with medical conditions such as high blood pressure, diabetes, or heart disease are all at risk for more severe disease. After being infected, a person is likely to be immune to future infections.

Treatment: There is currently no vaccine or medicine to prevent or treat chikungunya. Avoid mosquito bites for the first week after contracting chikungunya. Chikungunya virus can be found in the blood during the first week of illness. Through mosquito

bites, the virus can be transmitted from an infected person to a mosquito. A virus-infected mosquito can then spread the virus to others.

Zika virus

- The Zika virus disease is caused by a virus that is primarily transmitted by Aedes mosquitoes, which bite during the day.
- Fever, rash, conjunctivitis, muscle and joint pain, malaise, or headaches are common symptoms. Symptoms usually last 2-7 days. The vast majority of people infected with the Zika virus do not exhibit any symptoms.
- Congenital Zika syndrome is caused by Zika virus infection during pregnancy, which can result in infants being born with microcephaly and other congenital malformations. Infection with the Zika virus is also linked to pregnancy complications such as preterm birth and miscarriage.
- In adults and children, Zika virus infection is associated with an increased risk of neurologic complications such as Guillain-Barre syndrome, neuropathy, and myelitis.

Yellow fever

Yellow fever is a viral infection that usually lasts only a few days. Symptoms in most cases include fever, chills, loss of appetite, nausea, muscle pains (especially in the back), and headaches. Symptoms usually improve in five days. Within a day of improving, the fever returns, abdominal pain occurs, and liver damage begins to cause yellow skin in about 15% of people. If this happens, the chances of bleeding and kidney problems increase. The yellow fever virus causes the disease, which is spread by the bite of an infected mosquito. It only infects humans, other primates, and various types of mosquitoes. It is primarily spread in cities by Aedes aegypti, a species of mosquito found throughout the tropics and subtropics.

West Nile disease

West Nile fever is a zoonotic infection (an animal disease affecting humans). West Nile Virus (WNV) causes the disease,

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which is a flavivirus related to the viruses that cause St. Louis encephalitis, Japanese encephalitis, and yellow fever. The West Nile Virus is primarily transmitted to humans through mosquito bites. WNV is maintained in nature through transmission between birds and mosquitoes, as birds are the virus's natural

host. Humans, horses, and other mammals are susceptible to infection. West Nile fever can cause severe neurological illness and death in humans, but approximately 80% of those infected show no symptoms.