

West Nile Virus

West Nile Virus (WNV) is an illness caused by a virus transmitted to human populations by the bite of an infected mosquito. The mosquito becomes infected when it bites a bird that is infected with the virus. WNV was first found in Ohio in birds in 2001 followed by the first Ohio human cases in 2002. For more information about WNV, please contact the Delaware General Health District.

Transmission

WNV transmission does not occur from casual person to person contact. Most cases of WNV are transmitted through the bite of a mosquito. The most common mosquito associated with WNV is the Culex species. The Culex mosquito is the most common mosquito found in traps in both Delaware County and Ohio. Mosquitoes contract the virus from feeding on infected birds. Rarely, WNV is spread through blood transfusion, organ transplant, breastfeeding and during pregnancy.

Symptoms

Symptoms typically occur 3-14 days after a person is exposed. Although 80 percent of people will show no symptoms, typical symptoms of WNV include fever, headache, body aches, nausea, vomiting, swollen lymph glands and rash lasting a few days. Less than 1 percent of those infected may develop severe illness.

Treatment

Currently, there is no specific treatment for WNV. Supportive treatment may be available for those developing more severe symptoms.

La Crosse Encephalitis

La Crosse Encephalitis (LAC) is a rare illness caused by a virus transmitted to human populations by the bite of a mosquito. All ages can be affected but typically children are most at risk. LAC is in a group of illnesses that can cause severe complications including death. For more information about LAC, please contact the Delaware General Health District.

Transmission

LAC transmission does not occur from person to person. Most cases of LAC are transmitted through the bite of a mosquito. The most common mosquito associated with LAC is Aedes Triseriatus or the "Treehole Mosquito." Aedes Triseriatus is the fourth most common mosquito found in traps in Delaware County and the seventh most common found in traps throughout Ohio. Mosquitoes contract the virus from infected reservoirs such as squirrels and pass the virus on to offspring.

Symptoms

Symptoms typically occur 5-15 days after a person is exposed. Typical symptoms of LAC include vomiting, nausea, headache, fever and fatigue. In cases where the disease is more serious seizures, coma, paralysis and brain damage can occur with a mortality rate of less than 1 percent.

Treatment

Currently there are no vaccines or antibiotics that are effective against LAC. One of the most important measures one can take to prevent the transmission of LAC is effective control of the surrounding environment.

St. Louis Encephalitis

St. Louis Encephalitis (SLEV) is an illness caused by a virus transmitted to human populations by the bite of an infected mosquito. All ages can be affected but typically elderly are most at risk. For more information about SLEV, please contact the Delaware General Health District.

Transmission

St. Louis Encephalitis is transmitted through the bite of an infected mosquito. The most common mosquito associated with St. Louis Encephalitis is the Culex species. The Culex mosquito is the most common mosquito found in traps in both Delaware County and Ohio. Mosquitoes contract the virus from infected birds and then transmit the virus to humans during feeding.

Symptoms

Many people infected with St. Louis Encephalitis will show no symptoms. For those who do show symptoms, they will typically occur 5-15 days after a person is exposed. Typical symptoms of St. Louis Encephalitis include headache and fever. More severe symptoms include headache, high fever, neck stiffness, stupor, disorientations, coma, tremors, occasional convulsions and spastic paralysis.

Treatment

Currently there are no vaccines or antiviral treatment for St. Louis Encephalitis. Treatment is typically systematic and supportive.

Prevention

The most effective way to prevent mosquito-borne disease is environmental control. This includes:

- eliminating breeding sites for mosquitoes
- larviciding
- surveillance
- fogging
- personal protection

Home owners can help in this effort by emptying containers that will hold water; this is the most effective form of prevention.

Mosquitoes are most active in the early evening hours, so avoiding these times is ideal. If you must go out, protect yourself against bites by wearing light-colored long-sleeved clothing and mosquito repellent containing DEET or Picaridin.

Anyone who has a large body of water on their property can utilize additional efforts to reduce the mosquito population. Larvicide is available at local hardware stores that can be placed in large bodies of water that is privately owned.

Additionally, installing an aerator in an aesthetic pond is an effective way at reducing mosquito populations.



Health District Efforts

Delaware General Health District staff regularly trap and test mosquito populations for the prevalence of mosquito-borne disease within the district. In addition, mapping is conducted of areas where citizens report dead crows and blue jays.

When a mosquito-borne human disease is detected either through surveillance or a human disease case is confirmed, DGHD staff conduct fogging and larviciding operations to kill mosquito populations within the affected area. This is conducted and supervised by staff certified as pesticide applicators by the Ohio Department of Agriculture.

For more information contact the Delaware General Health District

P.O. Box 570

1-3 W. Winter Street
Delaware, OH 43015

740-368-1700

Or visit our website
www.delawarehealth.org



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Mosquito-borne Disease



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Delaware General Health District

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