How can I prevent mosquito-borne diseases?

1. Protect Against Mosquito Bites
   - Use EPA-registered insect repellent with DEET, picaridin, IR3535, oil of lemon eucalyptus (para-menthane-diol) or 2-undecanone. Always follow the product label instructions.
   - Do not use insect repellent on children younger than 2 months. Do not use products with oil of lemon eucalyptus (para-menthane-diol) on children younger than 3 years.
   - Wear long-sleeved shirts and long pants. Cover crib, stroller and baby carrier with mosquito netting.

2. Avoid Mosquito Bites After Travel
   - Avoid mosquito bites for 3 weeks after travel. This helps to reduce the spread of new diseases to local New Jersey mosquitoes which may then infect other people.

3. Mosquito-Proof Your Home and Yard
   - Empty or change outdoor standing water weekly to stop mosquito breeding.
   - Use window and door screens. Repair holes in screens to keep mosquitoes outside and use air conditioning when possible.

Where can I find more information about mosquito-borne diseases?

New Jersey Department of Health Communicable Disease Service:
www.state.nj.us/health/cd

New Jersey Department of Environmental Protection Office of Mosquito Control Coordination:
www.nj.gov/dep/mosquito

Centers for Disease Control and Prevention Division of Vector-Borne Diseases:
www.cdc.gov/ncezid/dvbd/index.html

Environmental Protection Agency Insect Repellents:
www.epa.gov/insect-repellents
What are mosquito-borne diseases?

Mosquito-borne diseases are illnesses that are spread to humans by the bite of an infected mosquito. In New Jersey, the most common mosquito-borne diseases people can get from local mosquitoes are:

- West Nile virus
- Eastern equine encephalitis

In other areas, mosquito-borne diseases include:

- Chikungunya
- Dengue
- Jamestown Canyon virus
- La Crosse encephalitis
- Malaria
- St. Louis encephalitis
- Yellow Fever
- Zika

How do mosquito-borne diseases spread?

Mosquitoes become infected when they feed on birds or mammals carrying the disease. Infected mosquitoes can then spread the disease to people and other animals such as horses.

Rarely, some mosquito-borne diseases can be spread through blood transfusion, organ transplantation, unprotected sex, breastfeeding and pregnancy.

What are the symptoms of mosquito-borne diseases?

Most people infected with a mosquito-borne illness do not show any symptoms. Depending on the disease, if symptoms do appear, they may be mild. However, symptoms can sometimes be severe and result in death. Symptoms of a mosquito-borne disease typically appear 2-14 days after exposure.

### Mild Illness

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Joint pain</td>
</tr>
<tr>
<td>Chills</td>
<td>Body aches</td>
</tr>
<tr>
<td>Headache</td>
<td>Rash</td>
</tr>
</tbody>
</table>

### Severe Illness

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>High fever</td>
<td>Paralysis</td>
</tr>
<tr>
<td>Stiff neck</td>
<td>Coma</td>
</tr>
<tr>
<td>Seizures</td>
<td>Heavy bleeding</td>
</tr>
<tr>
<td>Confusion</td>
<td>Brain swelling</td>
</tr>
</tbody>
</table>

Who is at risk for mosquito-borne diseases?

Anyone can get a mosquito-borne illness, but people who spend more time outside have a higher risk of becoming infected. Older adults and people with weak immune systems may develop more severe illness.

How are mosquito-borne diseases diagnosed?

Visit a healthcare provider if you develop any symptoms of a mosquito-borne illness. Make sure to mention recent travel and outdoor activities. A healthcare provider can order blood tests to look for infection based on your symptoms and exposure.

What is the treatment for mosquito-borne diseases?

There are no vaccines or specific treatments for most mosquito-borne diseases. Mild cases usually improve on their own. In severe cases, patients may need to be hospitalized. If you think you or a family member may have a mosquito-borne disease, call or visit a healthcare provider.