Protect yourself from mosquito-borne diseases

They may be tiny, but mosquitoes pack a dangerous punch. Worldwide, mosquitoes and the diseases they spread are among the most destructive forces impacting people’s health.

The threat of mosquito-borne illnesses in the United States is far less than in some other warmer parts of the world. However, recent years have seen a growth and resurgence of some mosquito-borne diseases in U.S. communities. Luckily, with a few precautions, you can fight the bite!

What’s the threat?

In the United States, there are a few mosquito-borne diseases that you should know about.

- **West Nile virus**: West Nile virus was first discovered in the United States in 1999 and has since spread throughout the country. Mosquitoes catch the virus after biting infected birds and then pass on the virus to humans. The risk of catching the virus is highest during warmer seasons, such as summer and fall. Many people bitten by a mosquito carrying West Nile virus may not experience any symptoms at all. However, people with weakened immune systems, pregnant women, very young and older people are at higher risk of developing a severe and dangerous form of West Nile virus.

- **Dengue**: This illness is one of the fastest growing mosquito-borne diseases in the world. The dengue virus is spread when a mosquito bites an infected person and then passes the virus on to a healthy person. While dengue rarely happens in the continental United States, cases do occur in border communities such as in south Texas, and when travelers bring the virus back with them into the country. Dengue is caused by one of four viruses transmitted by a mosquito bite. One form of the disease known as dengue fever is not deadly. But the more serious dengue hemorrhagic fever, which happens when a person who has already been infected by one type of dengue virus is infected with another type of dengue virus, can be deadly.

- **Eastern equine encephalitis virus**: Eastern equine encephalitis virus is also spread when a mosquito bites an infected bird and then bites a human. Very few people in the United States contract the virus, with most cases happening in the Atlantic and Gulf Coast.
regions and from late spring through early fall. Some people bitten by an infected mosquito develop mild or no symptoms at all. In very rare cases, the virus can cause swelling and inflammation of the brain, which can be deadly.

The virus frequently infects horses, hence the word “equine” in its name. However, the virus can’t be passed directly from horses to people. Other similar mosquito-borne diseases that occur in the United States are western equine encephalitis, St. Louis encephalitis and La Crosse encephalitis.

### Protect yourself

The best way to protect yourself from mosquito-borne disease is to take precautions against mosquito bites.

- Use insect repellent when outdoors. Make sure the repellent contains the chemical DEET. Before you start applying, read the product instructions carefully. Put repellent on exposed skin and clothing, but not on skin underneath your clothing. To protect your face from bites, put some repellent on your hands and then apply to your face. Wash your hands afterward. Keep mosquito repellent away from the eyes and mouth.

- When possible, wear clothing that fully covers your arms, legs and feet. Wearing light-colored clothing is even better, as mosquitoes are attracted to dark and bright colors.

- Avoid using fragrances or scented lotions that may attract mosquitoes.

- Avoid outdoor activities during peak mosquito hours from dusk until dawn.

- Install screens on the windows in your home and repair screens with rips or tears.

- Mosquitoes lay their eggs in water, so regularly get rid of any standing water around your home, such as water that has collected in flower pots, trash cans, rain gutters or swimming pool covers.

### Safe travels

Before traveling out of the country, do your research and take the same precautions against mosquito bites that you would at home. In some tropical countries, your chance of being infected with a mosquito-borne disease is much higher and the diseases can be more dangerous to your health.

Depending on the country you are visiting, you might want to make sure mosquito netting is hung around your bed. In the case of malaria, a mosquito-borne disease that is rare in the United States but is still common in much of the world, there are preventive drugs you can begin taking before you travel. Consult your doctor to choose the best course of action for you and your loved ones.