Let’s Talk about Diseases That Are Spread by Mosquitos

Have you heard people in the news talk about Dengue, Chikungunya and Zika? These are diseases that can be spread by the bite of an infected mosquito.

Some areas in Central and South America, the Caribbean, and Mexico are having more and more cases of these diseases. Since there are many people in the U.S. who travel to these areas and there are people from these areas that travel to the U.S., we may see more cases of Dengue, Chikungunya and Zika in our communities.

So, it is important for you to know about these diseases, how you can get infected, the symptoms and how to protect yourself, your family and even your community from them.

The Aedes aegypti mosquito can spread Dengue, Chikungunya, Zika, and other viruses.

First, know that if you are a person who normally spends time outdoors like agricultural workers, landscapers, gardeners, painters, roofers, pavers, construction workers, mechanics, etc. you are at higher risk of being bitten by the mosquitoes that can carry these diseases. These mosquitos are found mostly in the areas of the U.S. that are shaded in the map shown on this page. They mostly bite at daytime, but can also bite at night. So be extra careful!
Now, let’s see how mosquitoes usually infect people with Dengue, Chikungunya, Zika and other viruses like Yellow Fever and West Nile virus:

**How Mosquitoes Spread Diseases**

- **A mosquito bites a person who is sick with the virus.**
- **The mosquito then gets infected with the virus.**
- **The infected mosquito bites a family member or a neighbor and infects them as well.**
- **Other mosquitoes bite infected people and now there are more mosquitoes infected.**
- **Infected mosquitoes can then bite more healthy people and spread the virus in your community, causing an outbreak.**

Currently, nobody knows how many infected mosquitoes are in the United States that could spread these viruses, but it is important or you to know that many areas in the country have the type of mosquito that can become infected with Dengue, Chikungunya, and Zika. For your safety, be aware of these diseases and learn more about them.
You just learned that Dengue and Chikungunya are two of the viruses that people get through mosquito bites. The Dengue and Chikungunya virus cannot spread from person to person. There is no vaccine to prevent infection and no medicine to treat it. But how do you know if you have Dengue or Chikungunya? Let’s learn about the signs and symptoms of these diseases.

**Signs and Symptoms of Dengue**

The most common symptoms of Dengue are fever and one or more of the following symptoms:

- headache
- eye pain
- muscle, joint, or bone pain
- rash
- nausea and vomiting
- bleeding of the nose or gum
- small red spots under the skin, or bruising for no reason.

In some cases, Dengue can make the person very sick. After 3-7 days of having symptoms, **if you have any of the following warning signs, go to the clinic or an emergency room:**

- very strong stomach pain or vomiting
- bleeding from the nose or gums
- vomiting blood or blood in the stool
- feeling drowsy
- having pale, cold, or clammy skin
- breathing with difficulty.
**WARNING:**

It is possible to confuse the symptoms of Dengue with other illnesses that cause fever and symptoms that are like the flu. DO NOT take aspirin or ibuprofen if you have these symptoms.

**Signs and Symptoms of Chikungunya**

The most common symptoms of Chikungunya are:
- fever
- strong joint pain that may last for a month in some people
- headache
- muscle pain
- swelling of the joints
- rash.

You may start having these symptoms between 3 to 7 days after being bitten by an infected mosquito. Most people with Chikungunya will feel better within a week.

**If You Think You Have Dengue or Chikungunya**

If you think you have Dengue or Chikungunya, visit your doctor. He or she may order some tests to see if you have any of those viruses.

Since there is no medicine to treat Dengue or Chikungunya, your doctor will help you treat the symptoms. You can also get lots of rest and drink plenty of liquids.
About the Zika Virus

NC. – Doctor Randal from the Department of Health has confirmed another case of Zika virus in North Carolina. Rosana Osorio, who is three months pregnant, recently traveled to the Caribbean and got infected with Zika. Doctor Randal said they have Rosana under care. They do not know yet if the virus will infect the fetus or if the baby will have birth defects from the infection.

Zika outbreaks are happening in many countries, and now there are some cases of the illness here in the United States. Some people think that Zika has only affected the southern states of the U.S., but now there are also cases of Zika in other states like California and New York. Whether Zika reaches your community or not, it is important for your safety to know the basics of this disease.

How Zika Spreads

Zika is mainly spread through the bite of an infected mosquito, but can also spread by pregnancy, by having sex, and possibly by blood transfusion.

Through pregnancy:

If a pregnant woman is infected with the Zika virus, she could pass the virus to her unborn child. If that happens, the baby could be at high risk of:

- Developing microcephaly. This means the baby is born with a brain smaller than normal.
- Having problems hearing or seeing, and
- Not having normal growth.

Through sex:

A man infected with Zika, can pass the virus through his semen to his sex partners. For this reason, he should use condoms every time he has vaginal, anal or oral sex and avoid sex with pregnant women.

If a pregnant woman thinks her partner may have or had Zika and had sex without a condom, she should talk about this with her doctor.
**Health Tips**

**Through blood:**

Although it is not confirmed, there is a possibility that Zika virus can be spread through blood transfusions. This may happen because many people infected with Zika virus don’t have any symptoms and blood donors may not know they have been infected.

**Zika Symptoms**

Many people infected with Zika won’t have symptoms, or will only have mild symptoms.

The most common symptoms are:
- fever
- rash
- red eyes
- joint or muscle pain and
- headache

These symptoms can last up to a week. Normally, people don’t get sick enough to go to the hospital.

**If You Think You Have Zika**

You should know that there is no vaccine to prevent Zika and no medicine to treat it. If you think you have Zika, visit your doctor. Your doctor most likely will ask you to get some tests and may treat the symptoms. You should also rest a lot and drink plenty of liquids.
Do Your Part and Help Control Mosquitos that Spread Diseases

Dengue, Chikungunya and Zika may one day affect your community. Health authorities are working really hard to find a vaccine for these three diseases. Meanwhile, it is important for you to help control mosquitos in your area and protect yourself, your family and your community from mosquito bites. Here are some tips.

1 **Remove standing water in and around your home:**
   - At least once a week, empty and scrub, turn over, cover, or throw out items that hold water, like tires, buckets, toys, flowerpots, birdbaths, or trash cans.
   - Tightly cover water storage containers.
   - For containers without lids, use wire mesh to cover opening.

2 **If you have a septic tank, follow these steps:**
   - Repair cracks or gaps.
   - Cover open vents or plumbing pipes. Use wire mesh with holes smaller than an adult mosquito.

3 **Keep mosquitoes out of your home:**
   - Use screens on windows and doors.
   - Repair holes in screens.
   - Use air conditioning or a fan if you have one.
Prevent mosquito bites:

- Wear long-sleeved shirts and long pants.
- Treat clothing with permethrin. Permethrin is a chemical that is used to repel and kill ticks, mosquitoes, mites and other insects.
- Use a repellent. When using repellent:
  - Always follow the instructions on the label.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen first.

If you have a baby:

- Cover the crib, stroller, and baby carrier with mosquito netting.
- Dress your child in clothing that covers arms and legs.
- Do not use insect repellent on babies younger than 2 months of age.
- Do not apply insect repellent onto a child’s hands, eyes, mouth, and cut or irritated skin.

How to apply repellent to a child:

- Spray insect repellent onto your hands and then apply to a child’s face.
- Do not use products containing oil of lemon eucalyptus (OLE) or para-menthanediol (PMD) on children under 3 years of age.

It is everyone’s responsibility to prevent the spread of diseases by mosquitoes. Learn more about these diseases by visiting the links below. Share this information with your family, friends and co-workers.