



A CUP OF HEALTH WITH CDC

Beware: It's Mosquito Season

West Nile Virus and Other Arboviral Diseases – United States, 2012

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[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the *MMWR*, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

West Nile virus and other arboviruses are transmitted primarily through the bite of an infected mosquito or tick. These viruses cause thousands of people to get sick each summer. In 2012, there was a substantial increase in the number of West Nile virus cases reported in the U.S.

Jennifer Lehman is a researcher with CDC's National Center for Emerging and Zoonotic Infectious Diseases. She's joining us today by phone to discuss ways to avoid West Nile virus. Welcome to the show, Jennifer.

[Ms. Lehman] Thank you for having me.

[Dr. Gaynes] Jennifer, let's start with what are arboviruses?

[Ms. Lehman] Arboviruses are viruses that are spread by ticks and mosquitoes and can cause illness in a substantial number of people each year. West Nile virus is the most common arbovirus in the U.S. Some examples of other arboviruses include La Crosse, Powassan, and Eastern equine encephalitis viruses.

[Dr. Gaynes] How many cases of West Nile virus occur each year?

[Ms. Lehman] Several thousands of cases occur each year. In 2012, about 5600 cases were reported, and it ranked as the second highest year for recorded numbers of disease cases since it was first detected in 1999.

[Dr. Gaynes] Jennifer, are cases more common in any particular region at any particular time of year?

[Ms. Lehman] People who get infected with arboviruses in the U.S. usually get sick during the summer months when ticks and mosquitoes are most active. West Nile can be found through most of the U.S., while other arboviruses are more regional. For example, La Crosse virus is found in the upper Midwest and along the Appalachian mountains.

[Dr. Gaynes] What factors might result in more cases or outbreaks?

[Ms. Lehman] The reported numbers of arboviral disease cases can vary from year-to-year. It's not clear why there was more West Nile activity last year than in recent years. The weather, number of birds that maintain the virus, numbers of mosquitoes that can spread the virus, and human behavior are all factors that can influence when and where outbreaks can occur. Because of this, it is difficult to predict how many cases of disease might occur in the future and in what areas.

[Dr. Gaynes] What are the symptoms of arboviruses?

[Ms. Lehman] So, most people who are infected with an arbovirus will be asymptomatic, which means they will not show symptoms at all. For the people who do get sick, most will have a fever and may also have a headache, rash, or body aches. These symptoms can last a few days to several weeks. There will be a small number of people that will develop severe disease. These symptoms can include high fever, stiff neck, and even a coma. Unfortunately, there are no specific treatments for diseases caused by arboviruses. Therefore, it is important to avoid insect bites and to prevent arboviral diseases.

[Dr. Gaynes] Well Jennifer, what *can* people do to decrease their risk of getting an arbovirus?

[Ms. Lehman] When going outside during the warmer months, it's important to use insect repellent. To prevent bites from both ticks and mosquitoes, you should look for products containing DEET to use on exposed skin. Products with the ingredient of permethrin can also be used on clothing. Insect bites can be avoided by wearing protective clothing, such as long sleeves and pants. You can also remove standing water from your yard and mow your lawn frequently. This will also reduce the number of ticks and mosquitoes near your home.

[Dr. Gaynes] Jennifer, where can listeners get more information about West Nile virus?

[Ms. Lehman] Listeners can visit cdc.gov/westnile. And in addition, you can also go to your local health department. They can be a resource for more information on preventing bug bites and diseases transmitted by insects.

[Dr. Gaynes] Thanks, Jennifer. I've been talking today with CDC's Jennifer Lehman about ways to avoid getting West Nile virus.

Remember, you can reduce your chances of becoming infected with West Nile virus and other arboviruses by using insect repellent and wearing long pants and long sleeves. In addition, secure windows and doors to keep mosquitoes out and empty standing water from outdoor containers where mosquitoes are most likely to breed.

Until next time, be well. This is Dr. Robert Gaynes for *A Cup of Health with CDC*.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.