

TerranearPMC Safety Share

Week of August 27, 2012 – West Nile Virus

Dallas planes took to the skies this past week to spray insecticides to combat the worst West Nile virus outbreak the United States has seen in quite some time. As of Thursday, August, 23, the Centers for Disease Control (CDC) has reported 1,118 cases spread across 47 states, with 41 deaths. Only 29 cases were reported a month ago. Seventy-five percent of the cases have been reported from five states: Texas, Mississippi, Louisiana, Oklahoma and Illinois. Texas appears to be the hardest hit, with 586 reported cases and a death toll of 21 as of Wednesday. Dallas County was hit hardest, for a total of 270 cases and 11 deaths.

As Texas bears the brunt of this disease, it has launched an aerial assault against mosquitoes. Overnight, planes carrying pesticides took to the skies dousing more than 63,000 acres of land in Dallas and Houston to battle the disease. However, there are a number of objections from environmental groups which claim that the chemicals being used to eradicate the disease-carrying mosquitoes are very toxic to young children, infants and babies. The CDC and health officials in Texas insist the worries about the spray are overblown and pale in comparison to the devastating effects of the disease.

West Nile virus (WNV) is a serious illness. It is known as a seasonal epidemic in North America that flares up in the summer and continues into the fall. Most often, WNV is spread by the bite of an infected mosquito. Mosquitoes become infected when they feed on infected birds. Infected mosquitoes can then spread WNV to humans and other animals when they bite.

According to the CDC, more than 30,000 people in the U.S. have reported getting sick with the West Nile Virus since its first appearance in the Western hemisphere in 1999. It was during this time when encephalitis reported in humans, dogs, cats, and horses in Queens, New York City.

The good news about WNV is that about 80 percent of people who are infected won't show any symptoms at all. Up to 20 percent, however, may develop a fever, headache, body aches, vomiting, swollen lymph glands or a skin rash. These symptoms may last a few days or a few weeks, even in otherwise healthy people. But about one in 150 people will develop a severe illness, in which they may have a high fever, neck stiffness, convulsions, vision loss, paralysis, coma or other neurological effects that may be permanent. WNV has an incubation period of two to eight days followed by the symptoms listed above.

What's most serious about this outbreak is that this time the majority of reported cases are neuroinvasive, meaning they can lead to meningitis or encephalitis. People go from being healthy to having a brain infection that can cause paralysis and death. Such cases have been increasingly seen in adults over 50, and such brain-swelling complications can be fatal. Like many other infectious diseases, children, the elderly or people with weakened immune systems - such as those with HIV or cancer - may face a greater risk.

Experts observing this epidemic outbreak are saying that this current episode is being driven by unseasonably warm humid weather week after week across the country, followed by spouts of rain that leads to standing water. (BTW and FYI; an epidemic is when the number of people in a specific single

location have contracted a disease that is greater than what is expected, whereas a pandemic occurs when an epidemic extends beyond a single location into multiple regions)

While the controversy looms over whether aerial spraying is healthy for certain segments of the population, we, as individuals have the ability to exercise our own precautions to protect ourselves from WNV. The easiest and best way to avoid the virus is to prevent getting a mosquito bite in the first place. Apply insect repellent that contains an EPA-registered active ingredient, such as DEET, to skin or clothing before you head out doors. The prime times to get bit are dusk and dawn, and people are not exercising the concern about their bug bite risk when they are outdoors, or camping or at the beach.

The CDC advocates that people should not spray repellents under clothing, over open cuts, wounds or irritated skin, nor near the eyes, mouth or directly on the face. Other repellents containing Picaridin may be used, and for those concerned with chemicals, there is oil of lemon or eucalyptus. However, the protection afforded from natural products, typically, won't last as long. Health officials also recommend draining standing water, where mosquitoes breed.

After returning indoors, wash the skin with soap and water, this is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, treated clothing should be washed before it is used again. People who have an allergic reaction to the repellent should see a doctor.

WNV is found in both temperate and tropical regions, having been first identified in the West Nile sub-region in the East African nation of Uganda in 1937. Since its discovery, it been posited as one of the possible causes of Alexander the Great's early death based on reports of avian deaths that occurred during this period. While this disease mainly infects birds, it also infects humans, horses, dogs, cats, bats, chipmunks, skunks, squirrels, domestic rabbits, crocodiles, alligators. In 2007 there was a fatal case recorded in a killer whale in Texas and hence, broadened the known host range of WNV to include cetaceans.

In a very small number of cases, WNV also has been spread through blood transfusions, organ transplants, breastfeeding and even during pregnancy from mother to baby. WNV is not spread through casual contact such as touching or kissing a person with the virus.

The more time you're outdoors, the more time you could be bitten by an infected mosquito. Pay attention to avoiding mosquito bites if you spend a lot of time outside, either working or playing.

The risk that WNV may present to a fetus or an infant infected through breast milk is still being evaluated. So if you have concerns for yourself or a friend that is pregnant, consulting with a health care professional is the best course of action.

If you find a dead bird, don't handle the body with your bare hands! Contact your local health department for instructions on reporting and disposing of the body. They may tell you to dispose of the bird after they log your report.

If it weren't for baseball, many kids wouldn't know what a millionaire looked like. - Phyllis Diller (July 17, 1917 ó August 20, 2012)