

# West Nile Virus

West Nile Virus (WNV) was first discovered in the West Nile District of Uganda in 1937. Sporadic outbreaks have occurred in Africa and the Middle East since that time, but the virus did not reach the United States until 1999.

WNV is primarily spread through the bites of infected mosquitoes. However, only about 1 percent of mosquitoes carry the virus. Birds, especially those in the *corvid* family (crows, jays, and magpies) are the most common carrier animals. While birds may die from WNV, most do not, and instead become carriers. Mosquitoes bite the birds, then carry the infected blood to mammals, including humans.

There is no evidence of spread from the handling of infected birds, or of human-to-human spread. Infection has been found in many mammal species, though horses appear to suffer the most from WNV; about 40% of infected horses die. A vaccine is now available for horses.

Since 1999, the virus has marched rapidly westward across the United States. In 2003, the virus reached birds and mammals in Oregon. Over 600 cases have been reported in the U.S. since 1999.

Most people with WNV will have either no symptoms, or only mild ones. Symptoms begin 3 to 14 days after the bite of an infected mosquito, and may include headache, muscle aches, swollen glands, and possibly a rash on the torso. Only about 20% of infected persons develop a fever.

About 1 in 150 infected persons develop meningoencephalitis, an infection of the brain and the lining of the brain and spinal cord. These persons experience severe headache, high fevers, neck stiffness, disorientation, tremors, and possibly even seizures or coma. These persons may also develop polio-like muscle weakness, or even paralysis. This rare, severe illness caused by WNV almost always occurs in persons older than 50.

Prevention is best. Children and adults should use insect repellent during the late spring and early summer months when outside. The repellent used on children should contain no more than 10% DEET, the main ingredient in most repellents. Avoid applying it to the hands of children, as it will burn and sting the eyes if rubbed in. Spray children's clothing with the repellent as well, as mosquitoes may bite through thin clothing. If you spray the clothing, however, there is no need to spray the skin underneath.

Place mosquito netting over infant carriers and strollers when you are outside with infants. Consider staying inside at dawn and in the evening, the peak mosquito biting hours. Install or repair window screens so mosquitoes cannot get indoors. Avoid creating mosquito habitats by eliminating any standing water from around your home.

Above all else, please keep in mind that while caution is wise, the chance of becoming ill with WNV is very small.

