PUBLIC HEALTH ADVISORY:
West Nile Virus

September 5, 2012
From Columbus Public Health and
Franklin County Public Health

What you need to know

As of August 31, 2012, Ohio has 52 human cases of West Nile virus (WNV) and one death. In Columbus & Franklin County, four cases with two hospitalizations and no deaths have been reported. These were the first reported cases this year since 2006.

As of August 28, 2012, 48 states have reported WNV infections in people, birds, or mosquitoes. A total of 1,590 cases of WNV disease in people, including 65 deaths, have been reported to CDC. Of these, 889 (56%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 701 (44%) were classified as non-neuroinvasive disease.

The 1,590 cases reported thus far in 2012 is the highest number of WNV disease cases reported to CDC through the last week in August since West Nile virus was first detected in the United States in 1999.

Most often, WNV is spread by the bite of an infected mosquito. 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.

What to watch for

**WNV Non-Neuroinvasive Disease**
- Incubation period of 2-14 days
- Non-specific febrile illness
- Usually resolves within a week
- Some symptoms may persist for weeks or months
- Overall case fatality <1%

**WNV Neuroinvasive Disease**
- Meningitis, encephalitis, and acute flaccid paralysis (AFP)
- Most cases require hospitalization
- Many patients with encephalitis or AFP have sequelae
- 50-75% need assisted living or rehabilitation
- Morbidity and mortality higher in elderly
- Overall case fatality 10%

What you can do

**Laboratory Testing**
- Test for WNV in patients you suspect.
- Positive IgM in serum or cerebrospinal fluid (CSF) provides presumptive diagnosis of recent WNV infection. Positive IgG indicates past WNV infection.
- Specimens collected < 7 days after illness onset may lack detectable IgM. A convalescent specimen should be collected to verify diagnosis. IgM can be positive as early as 3 days after symptom onset and can remain elevated for weeks and months later.

Who is at risk

People over 50 years of age and those with certain medical conditions, such as cancer, diabetes, hypertension, kidney disease, solid-organ transplants and alcohol dependence, are at greater risk for neuroinvasive disease if they are infected with WNV.

To learn more

CDC West Nile Virus ~ Information & Guidance for Clinicians

CDC West Nile Virus
- WNV molecular testing is not routinely recommended because viral RNA may already be absent at time of symptom onset. Such testing may be useful for diagnosis in immunocompromised patients.

**Report**
- WNV is reportable to your local health department within one day of diagnosis or positive laboratory result.
- Please visit [www.idrsinfo.org](http://www.idrsinfo.org) for details on reporting.

**Educate**
- Eliminate standing water and empty water-holding containers from your property.
- Empty rain barrels every four to six days or use Mosquito Dunk, available at most hardware stores and safe for plants, pets and people.
- Use insect repellent containing DEET or another EPA-registered active ingredient.
- Stay indoors when possible during dawn and dusk. If you must be outside, wear long sleeves and pants when outside.
- There is no WNV vaccine licensed for use in humans.