Western Equine Encephalitis

**What is western equine encephalitis (WEE)?**

WEE is a potentially serious viral disease that primarily affects birds, mosquitoes, humans and horses.

**Who gets WEE?**

Anyone living in an area where virus activity has been identified is at potential risk of infection.

**Is WEE in Clark County?**

As of August 2013, the health district’s Vector Control program has identified the virus in a mosquito pool (2013) and in three birds (2003). No human cases have been reported in Clark County.

**How does WEE spread?**

WEE is most often spread by the bite of an infected mosquito. Mosquitoes (WEE carriers) become infected when they feed on infected birds (WEE reservoirs). Infected mosquitoes can then transmit WEE to humans and other animals when they bite. WEE is not spread from person-to-person.

**What are the symptoms of WEE?**

Most people who are infected with WEE have very mild illness or might never become sick. Mild infections are characterized by fever and headache, without other apparent symptoms.

The symptoms of severe disease can include:

- headache
- high fever
- neck stiffness
- confusion

The symptoms of severe disease can include:

- coma
- shaking
- seizures and/or paralysis

The risk of severe disease increases in older people.

**How soon do infected people get sick?**

People typically develop symptoms between five and 15 days after they are bitten by infected mosquitoes.

**How is WEE diagnosed in humans?**

WEE is diagnosed by laboratory confirmation that the virus is present in a person’s blood sample.

**How is WEE infection in humans treated?**

There is no specific treatment for WEE infection. Cases with milder symptoms resolve on their own. In more severe cases, people usually need to go to the hospital where they can receive supportive treatment.

**How can WEE infection in humans be prevented?**

The easiest and best way to avoid WEE is to prevent mosquito bites:

- When outdoors, follow the directions for using an insect repellent registered by the Environmental Protection Agency (EPA), such as those containing:
  - DEET (N, N-diethyl-meta-toluamide)
  - Oil of lemon eucalyptus
  - Picaridin
  - Permethrin

(continued)
• Wear pants and long-sleeved shirts when outdoors.
• Avoid spending time outside when mosquitoes are most active, notably at dusk (the first two hours after sunset) and dawn.
• Eliminate areas of standing water, including bird baths and un-maintained swimming pools, which support mosquito breeding.
• Make sure doors and windows have tight-fitting screens without tears or holes.

There is a vaccine to prevent infection in horses, but not for humans. Fortunately, the disease is rare in humans.

How is WEE being addressed in Clark County?
The health district’s Environmental Health Division, in collaboration with the Nevada Division of Public and Behavioral Health, conducts surveillance to monitor mosquitoes for WEE.

Where can I get more information?
Contact your doctor or the Southern Nevada Health District’s Office of Epidemiology at (702) 759-1300. You may also visit the CDC’s website at http://www.cdc.gov/ncidod/dvbid/arbor/weefact.htm.