

September 16, 2016



SOUTHERN NEVADA HEALTH DISTRICT WEEKLY ARBOVIRUS UPDATE

Clark County, NV. – In an effort to keep Clark County residents and visitors safe and aware about the status of the arboviruses currently affecting the area, the Southern Nevada Health District (SNHD) will issue an arboviruses update weekly.

The Southern Nevada Health District conducts routine surveillance for arboviruses in mosquitoes and Arboviral disease in humans. SNHD's Vector Control program monitors the local mosquito population for arboviruses such as West Nile Virus (WNV), St. Louis Encephalitis Virus (SLEV), and Western Equine Encephalitis Virus (WEEV). In addition to monitoring mosquitoes for arboviruses, they also provide information on the type of mosquitoes present in the area. This information is important, especially when faced with emerging diseases like Zika because at this time, the primary vectors for Zika virus, the *Aedes aegypti* and *Aedes albopictus* have not been detected in Clark County.

Arboviral diseases in humans are reportable to SNHD's Office of Epidemiology and Disease Surveillance (OEDS). Currently, WNV and SLE are the only locally acquired arboviral diseases that we've seen. The OEDS investigates travel associated cases of Dengue, Chikungunya, and starting this year Zika virus.

ZIKA VIRUS UPDATE

SNHD has tested 115 people for the Zika virus.

| Infection Type | Infection Count |
|---------------------------------------|-----------------|
| Travel-Related Infections of Zika | 11 |
| Non-Travel Related Infections of Zika | 0 |

CDC recommends that women who are pregnant or thinking of becoming pregnant postpone travel to areas with widespread Zika infection. If you are pregnant and must travel or if you live or work in the impacted area, protect yourself from mosquito bites by wearing insect repellent, long pants and long sleeved shirts, and limiting your time outdoors.

According to CDC guidance, providers should consider testing all pregnant women with a history of travel to a Zika affected area for the virus. CDC recommends that a pregnant woman with a history of Zika virus and her provider should consider additional ultrasounds.

Pregnant women can contact SNHD for Zika risk assessment, testing hours and information. A Zika risk assessment will be conducted by OEDS staff and blood and/or urine samples may be collected and sent to labs for testing. It may take one to two weeks to receive results. For resources and information on Zika virus, click [here](#).

LOCAL SURVEILLANCE

This year, the Vector Control program has seen a major shift in the viruses being isolated from mosquitoes. In previous years, the most prolific virus has been WNV; however, the majority of positive mosquitoes collected in 2016 have been SLEV positive. In light of what is occurring in the local vector population, the OEDS has taken the additional step of sending all WNV positive samples from humans (N=5) to the CDC for confirmation testing to determine if they are indeed WNV or if they could be SLEV. The two viruses are similar and can cross react during testing so additional testing by the CDC is the only way to differentiate between the viruses.

ACTIVE INVESTIGATIONS

The OEDS is currently conducting one active investigation. Confirmatory results are pending from the CDC. The CDC is confirming the results using Plaque Reduction Neutralization Test (PRNT).

| Reported Cases | Date of Onset | Commercial Lab Positive | Type of Disease | PRNT Results |
|----------------|---------------|------------------------------|-------------------|----------------------------|
| 1 | 6/24/16 | WNV IgM - CSF | Neuroinvasive | WNV- Neg SLEV- Neg |
| 2 | 6/24/16 | WNV IgM - serum | Neuroinvasive | WNV-Neg SLEV-Pos |
| 3 | 7/9/16 | WNV IgM - CSF | Neuroinvasive | WNV-Pos SLEV-Neg |
| 4 | 7/25/16 | WNV IgM - serum | Non-neuroinvasive | WNV-Neg SLEV-Pos |
| 5 | 7/27/16 | WNV IgM – CSF (equivocal) | Neuroinvasive | Pending |

MOSQUITO SAMPLING 2016

| Total Mosquitoes Submitted | Total Pools Submitted | Total SLEV + Pooled Submissions | Total SLEV + Mosquitoes in Pooled Samples | Zip Codes identified with SLEV |
|----------------------------|-----------------------|----------------------------------------|--------------------------------------------------|---------------------------------------|
| 35,274 | 1,352 | 178 | 5,582 | 32 |

| Total Mosquitoes Submitted | Total Pools Submitted | Total WNV + Pooled Submissions | Total WNV + Mosquitoes in Pooled Samples | Zip Codes identified with WNV |
|----------------------------|-----------------------|---------------------------------------|-------------------------------------------------|--------------------------------------|
| 35,274 | 1,352 | 8 | 54 | 3 |

| Total Mosquitoes Submitted | Total Pools Submitted | Total SLEV & WNV + Pooled Submissions | Total SLEV & WNV + Mosquitoes in Pooled Samples | Zip Codes identified with SLEV & WNV |
|----------------------------|-----------------------|--------------------------------------------------|------------------------------------------------------------|-------------------------------------------------|
| 35,274 | 1,352 | 2 | 73 | 1 |

SNHD urges residents to drain standing water weekly, no matter how seemingly small. Residents and visitors should use repellents when enjoying the outdoors.