

12AUG2024

SOUTHERN NEVADA HEALTH DISTRICT WEEKLY ARBOVIRUS UPDATE

Clark County, NV.

In an effort to keep Clark County residents and visitors safe and aware of the arboviruses currently affecting the area, the Southern Nevada Health District (SNHD) is issuing a weekly arbovirus update. SNHD conducts routine surveillance for arboviruses in mosquitoes and arboviral disease in humans. SNHD's Mosquito Surveillance 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, the program also provides information on the type of mosquitoes present in the area.

Arboviral diseases in humans are reportable to SNHD's Office of Acute Communicable Disease Control (ACDC). Currently, WNV and SLEV are the only locally acquired arboviral diseases that have been reported. ACDC sporadically investigates travel-associated cases of dengue, chikungunya, and Zika virus.

West Nile Virus

WNV is a potentially serious but preventable illness most often spread by the bite of an infected mosquito. It is the leading cause of mosquito-borne disease across the United States.

Mosquitoes become infected when they feed on infected birds. WNV can infect humans, birds, mosquitoes, horses, and some other mammals. It is not transmitted from person-to-person.

According to the Centers for Disease Control and Prevention (CDC), about 1 in 5 people who are infected develop a fever and other symptoms. About 1 out of 150 infected people develop serious, sometimes fatal, illness.

The most effective way to prevent arboviral infections, such as WNV, is to prevent mosquito bites and eliminate standing water.

For additional resources and information about WNV and how to prevent infection, go to the CDC's West Nile Virus [website](#).

Reported WNV cases in Clark Co., NV by year

| Infection Type | Year 2020 | Year 2021 | Year 2022 | Year 2023 | Year 2024 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|
| WNV-Non neuroinvasive | 1 | 0 | 0 | 0 | 11 |
| WNV-neuroinvasive | 0 | 0 | 0 | 2 | 11 |

WNV Activity

Currently, ACDC has three active WNV investigations. In 2024, ACDC has completed forty WNV investigations.

SLEV Activity

Currently, ACDC has zero active SLEV investigations. In 2024, ACDC has completed zero SLEV investigations.

WEEV Activity

Currently, ACDC has zero active WEEV investigations. In 2024, ACDC has completed zero WEEV investigations.

Mosquito Surveillance

In 2024, SNHD Environmental Health has set 2,092 traps throughout Clark County and submitted 2,444 sample pools*, representing 38,687 mosquitoes, to the Southern Nevada Public Health Lab (SNPHL) for arboviral analysis. Of these sample pools submitted, 385 tested positive for WNV, and 21 tested positive for SLEV.

Mosquito Sampling 2024

WNV

| Total Mosquitoes Submitted | Total Sample Pools Submitted | Total Sample Pools WNV + | Total Mosquitoes in WNV + Sampled Pools | Percent WNV + Pools | ZIP Codes identified with WNV |
|----------------------------|------------------------------|--------------------------|---|---------------------|-------------------------------|
| 38,687 | 2,444 | 385 | 11,969 | 15.8 | 46 |

SLEV

| Total Mosquitoes Submitted | Total Sample Pools Submitted | Total Sample Pools SLEV + | Total Mosquitoes in SLEV + Sampled Pools | Percent SLEV + Pools | ZIP Codes identified with SLEV |
|----------------------------|------------------------------|---------------------------|--|----------------------|--------------------------------|
| 38,687 | 2,444 | 21 | 583 | 0.9 | 8 |

WEEV

| Total Mosquitoes Submitted | Total Sample Pools Submitted | Total Sample Pools WEEV + | Total Mosquitoes in WEEV + Sampled Pools | Percent WEEV + Pools | ZIP Codes identified with WEEV |
|----------------------------|------------------------------|---------------------------|--|----------------------|--------------------------------|
| 38,687 | 2,444 | 0 | 0 | 0 | 0 |

*A sample pool is defined as a collection of 50 or less female mosquitoes, from the same species and location, combined into a vial for testing.

WNV Positive Mosquito Identified ZIP Codes:

89002, 89004, 89012, 89014, 89025, 89030, 89031, 89032, 89074, 89081, 89084, 89086, 89101, 89102, 89103, 89104, 89107, 89108, 89110, 89115, 89117, 89118, 89119, 89120, 89121, 89122, 89123, 89124, 89128, 89129, 89130, 89131, 89134, 89135, 89138, 89139, 89141, 89143, 89144, 89145, 89146, 89147, 89148, 89149, 89166, 89169

SLEV Positive Mosquito Identified ZIP Codes:

89012, 89014, 89074, 89104, 89110, 89115, 89121, 89123

SNHD urges residents to drain standing water around their homes each week, no matter how small the amount. Residents and visitors should use EPA-registered insect repellents when enjoying the outdoors. Residents are also encouraged to report mosquito activity, especially day-biting mosquitoes, to the Mosquito Surveillance Program at (702) 759-1633.

For a visual representation of SNHD's mosquito surveillance efforts, including information on mosquito types and disease results, please view the interactive mosquito activity map found on SNHD's [website](#).

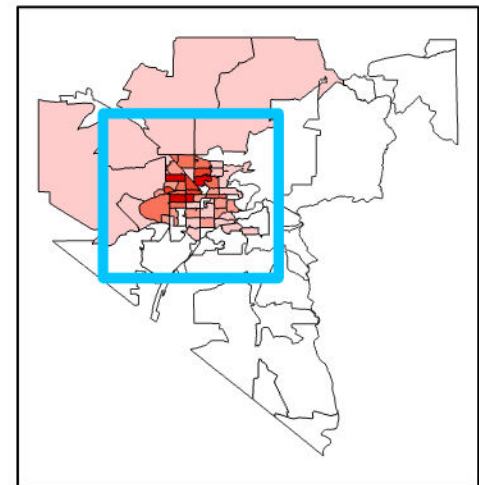
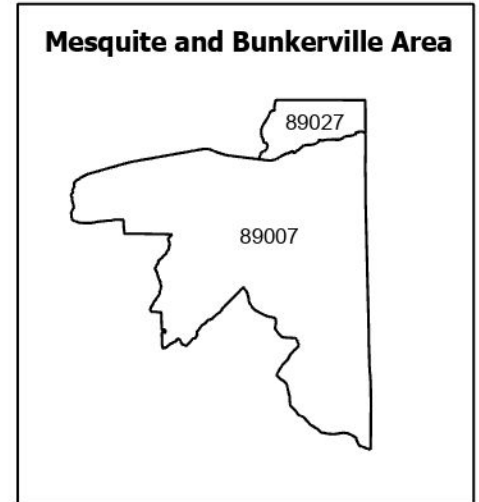
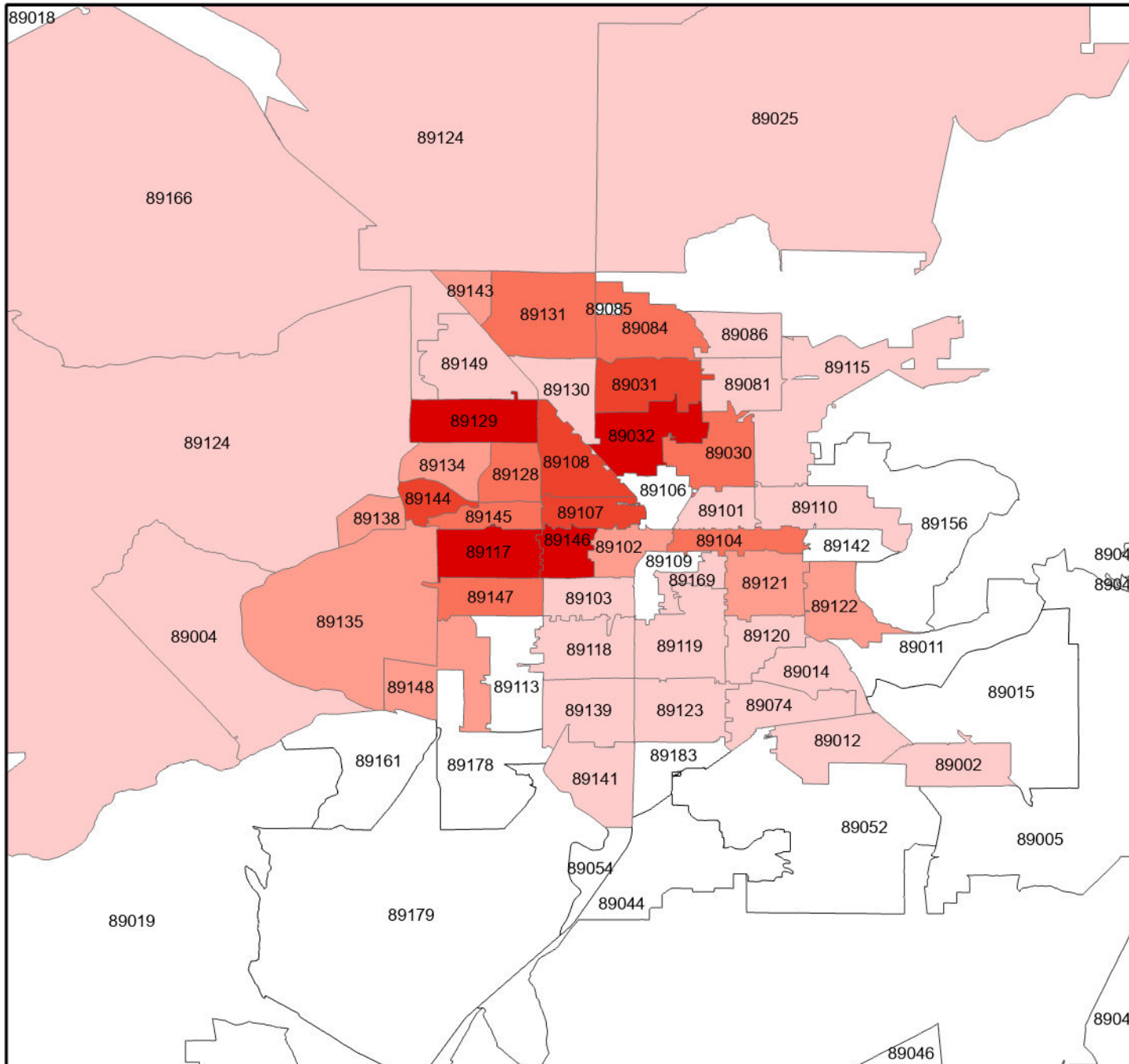
Prepared by:

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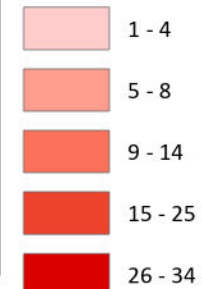
Vivek Raman, MPH, REHS, Environmental Health Supervisor

**The total number of cases in this report is subject to change due to possible delays in reporting and processing. Cases are counted based on CDC case definitions.

West Nile Virus Activity, Clark County, NV



Number of Positive Mosquito Testing Pools



Please note, ZIP codes without color do not indicate the absence of the virus. These areas have had either mosquito submission pools that tested negative or no traps were set at this time. Prepared by the Office of Informatics and Epidemiology on August 12, 2024.

