

03SEP2024

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	12
WNV-neuroinvasive	0	0	0	2	13

WNV Activity

Currently, ACDC has zero active WNV investigations. In 2024, ACDC has completed forty WNV investigations. So far this year, there have been thirteen hospitalizations and zero deaths.

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 2,498 traps throughout Clark County and submitted 2,733 sample pools*, representing 42,544 mosquitoes, to the Southern Nevada Public Health Lab (SNPHL) for arboviral analysis. Of these sample pools submitted, 387 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
42,544	2,733	387	12,003	14.2	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
42,544	2,733	21	583	0.8	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
42,544	2,733	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](#).

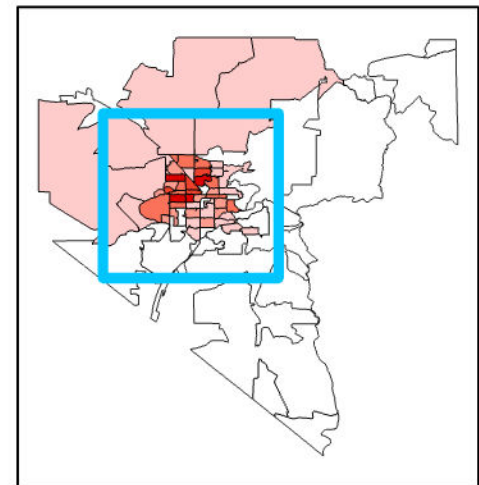
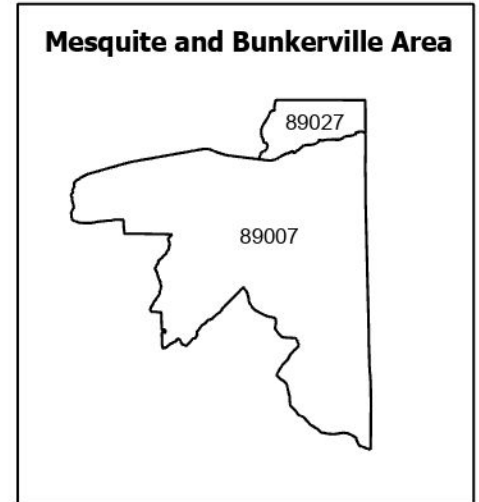
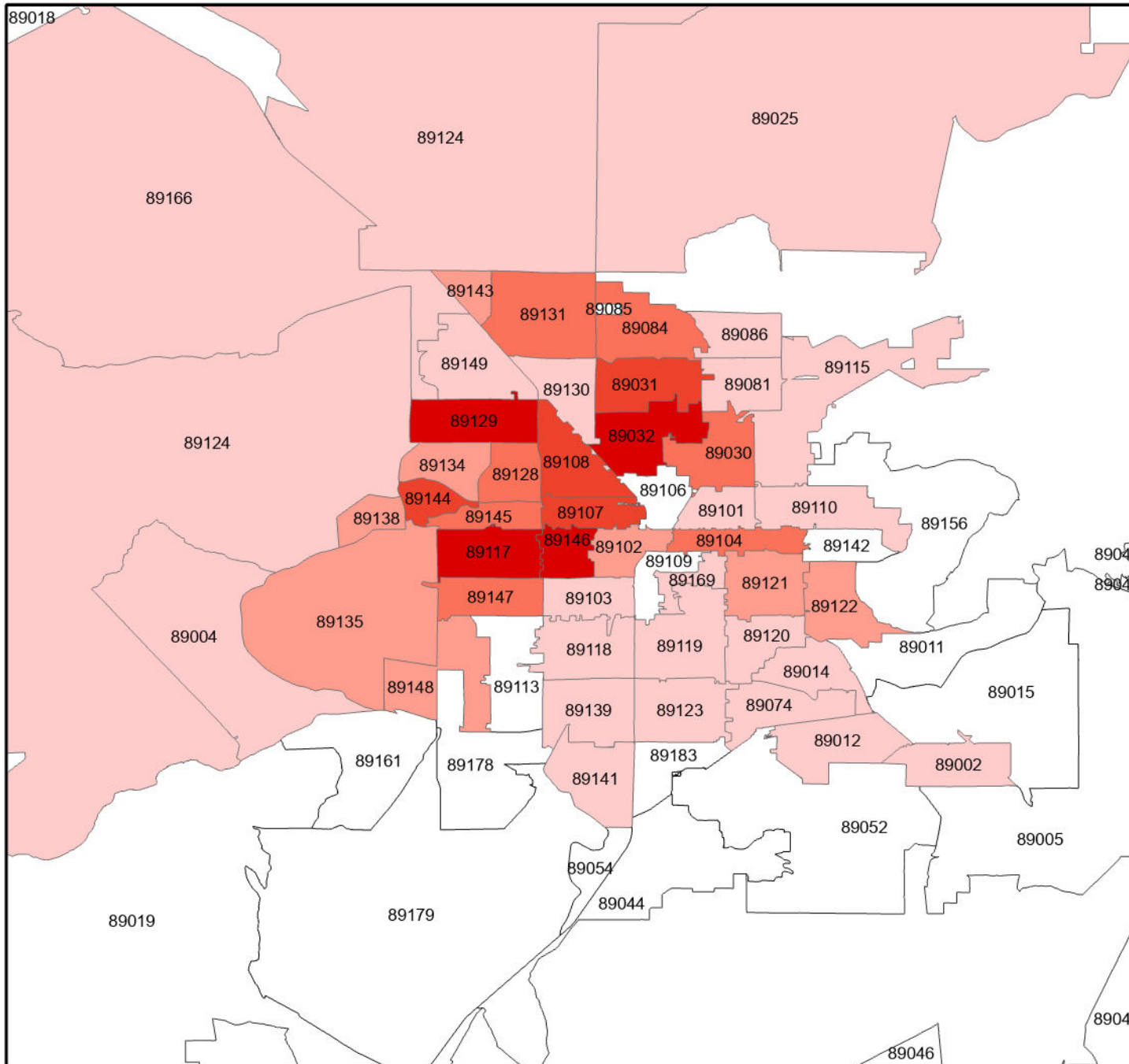
Prepared by:

Matthew Kappel, MPH, Senior Epidemiologist

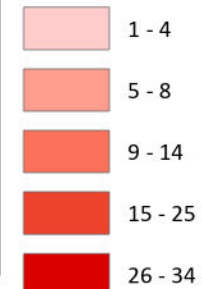
Vivek Raman, MPH, REHS, Environmental Health Supervisor

**Data is considered preliminary and subject to change. Cases are counted based on CDC case definitions.

West Nile Virus Activity, Clark County, NV

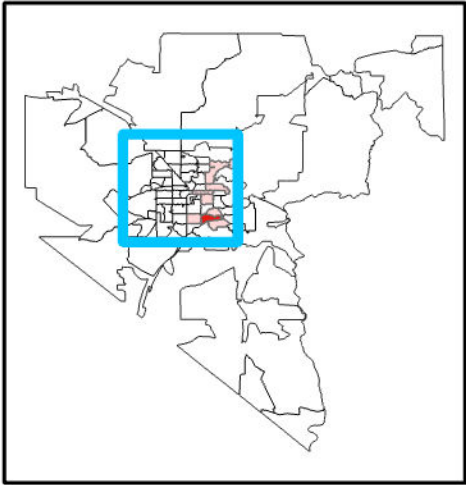
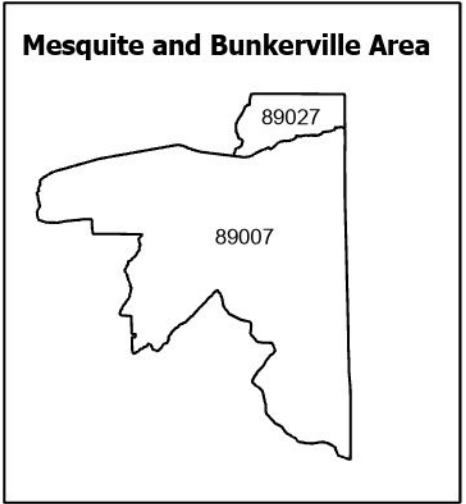
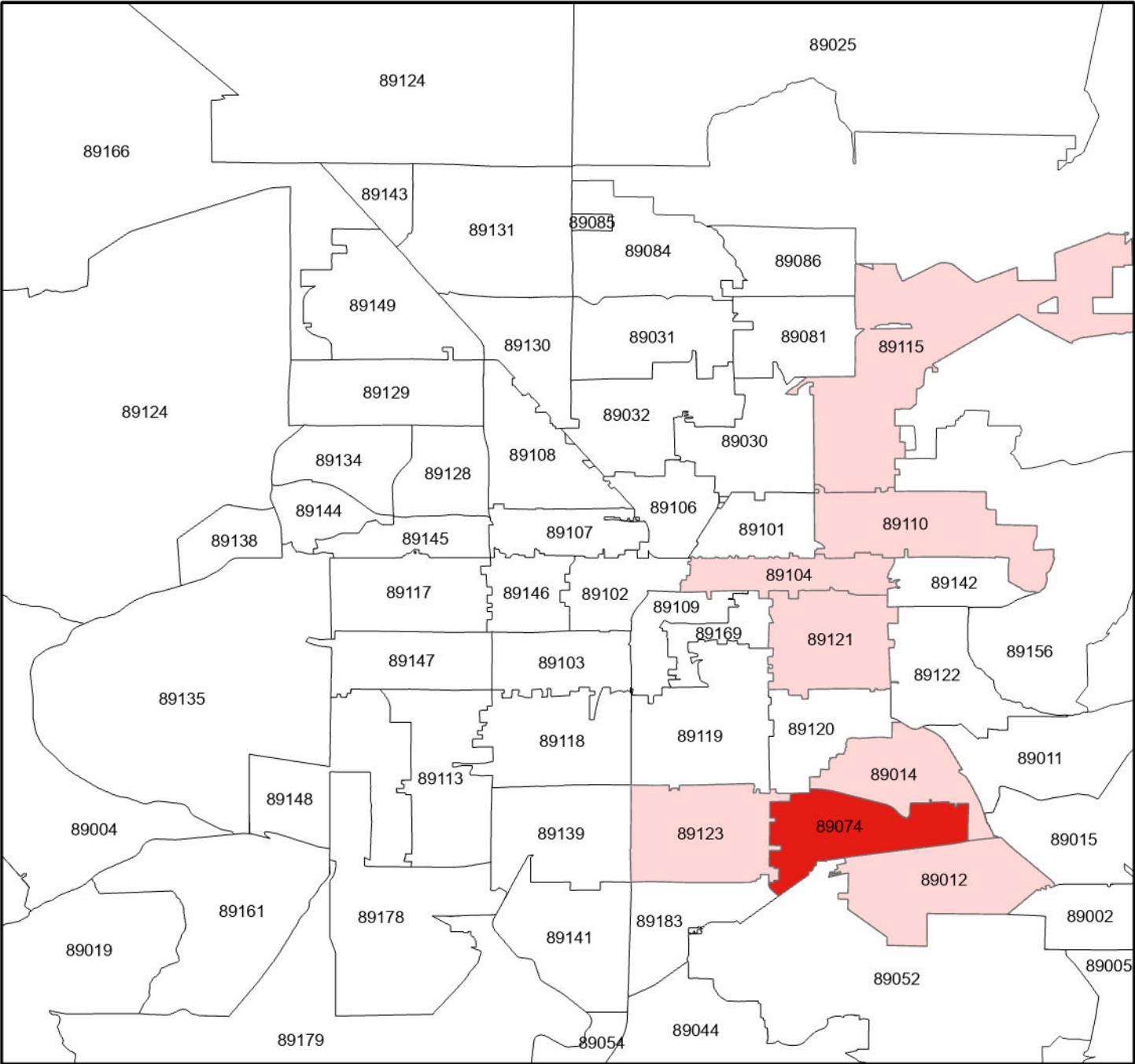


Number of Positive Mosquito Testing Pools



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 September 3, 2024.

St. Louis Encephalitis Virus Activity, Clark County, NV



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 September 3, 2024