



CITY OF LOUISVILLE

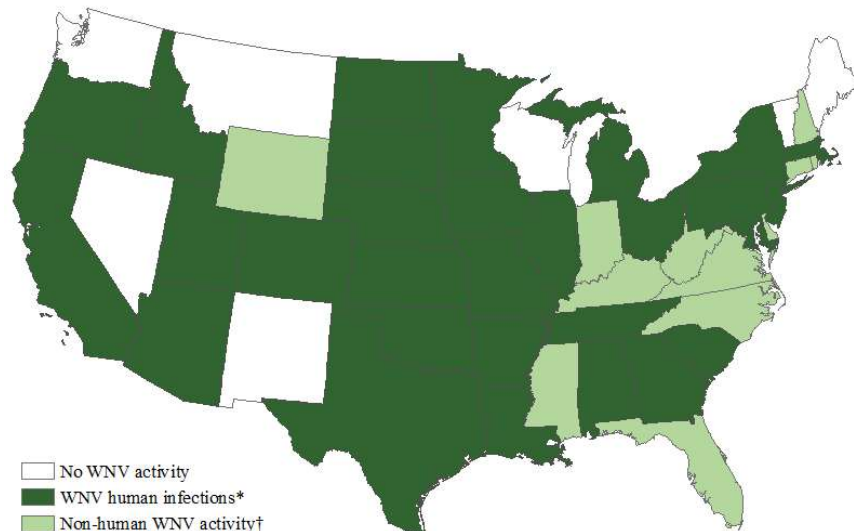
AUGUST 2021 MONTHLY REPORT

SEPTEMBER 8TH, 2021

West Nile Virus Risk

The Centers for Disease Control and Prevention (CDC) currently reports 210 human West Nile virus infections, compared to 63 in 2020, in 29 states and 9 deaths. Of these, 136 (64.8%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 74 (35.2%) were classified as non-neuroinvasive disease. Non-human West Nile virus activity (mosquitoes, birds or sentinel animals) has been reported in 38 states.

West Nile Virus Activity by State – United States, 2021 (as of September 7, 2021)



*WNV human disease cases or presumptive viremic blood donors. Presumptive viremic blood donors have a positive screening test which has not necessarily been confirmed.

†WNV veterinary disease cases, or infections in mosquitoes, birds, or sentinel animals.

As of September 7th, The Colorado Department of Public Health & Environment (CDPHE) reports there have been West Nile virus positive mosquitoes identified in the Colorado counties of Adams (11), Arapahoe (2), Boulder (37), Delta (4), Denver (2), Larimer (118), Mesa (1), Pueblo (3), and Weld (68). 38 human cases of West Nile virus infection have been reported by CDPHE. Adams, Arapahoe, Boulder, Delta, Denver, Douglas Jefferson, Larimer, Montrose and Weld report human case counts from 1 per 1000 persons to 8 per 1000 persons across Colorado. No deaths have been reported in Colorado.

West Nile virus activity remains very high in the County, compared to last year, and we will continue to see disease risk into the fall months, as most West Nile virus human cases are identified in August and September - normal peak months. VDCI encourages continued personal protective measures including draining water from your property, avoiding the outdoors at dawn and dusk, defending yourself by wearing repellent and dressing appropriately until a killing hard frost occurs.

Contact VDCI:

Boulder County
Operations Manager

Mel Kyer

Phone
303-466-1892

E-Mail:
mkyer@vdcil.net

Website:

www.vdcil.net/colorado

Main Office:

General E-Mail:
info@vdcil.net
Toll Free:
(877) 276-4306

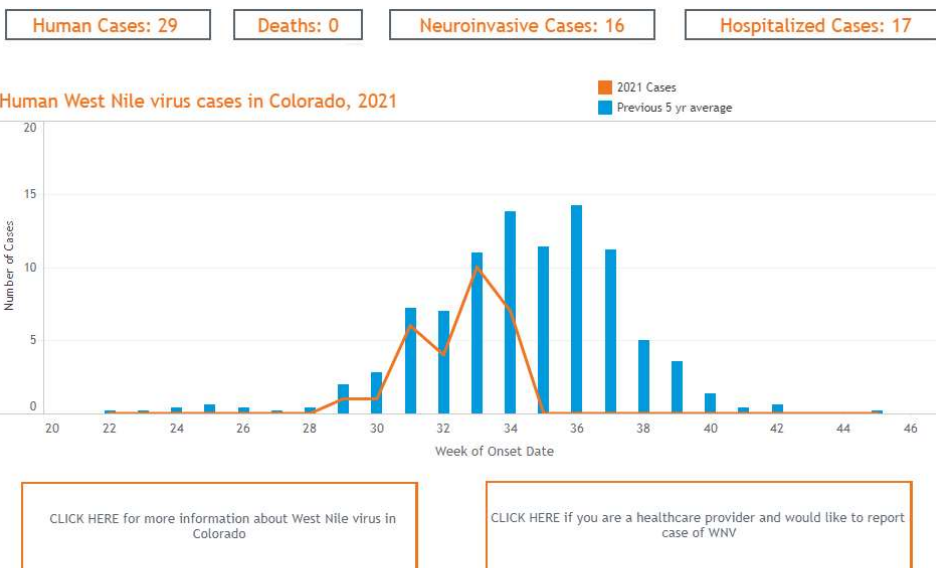
7000 North Broadway
Suite 108 Denver, CO
80221
303-428-5908

Wear Your Repellent!

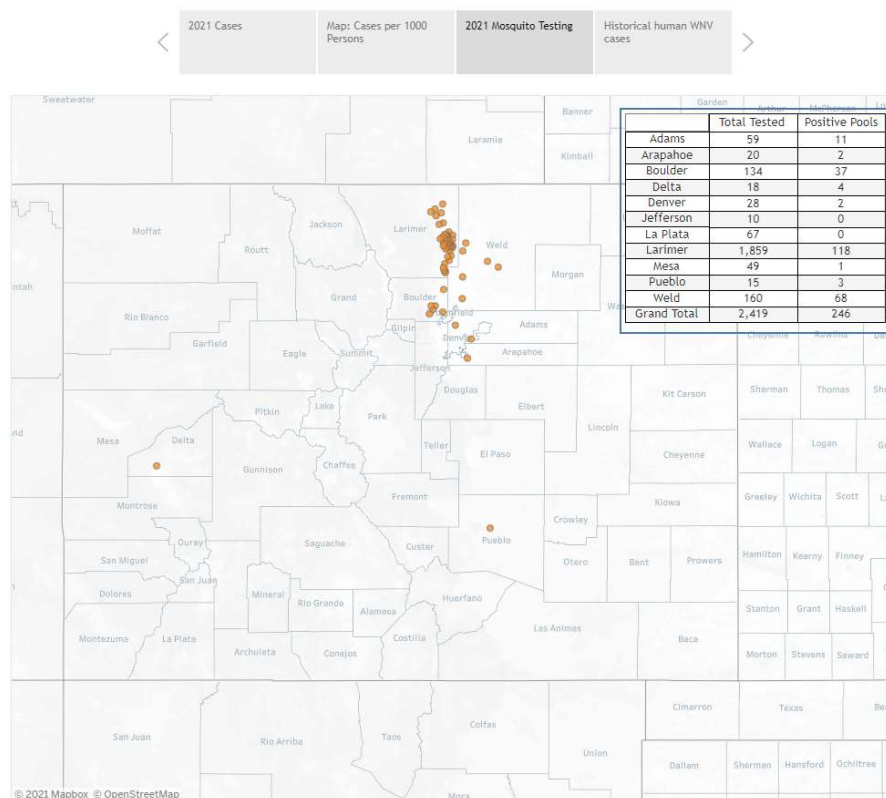
Use approved mosquito repellents containing DEET, picaridin or oil of lemon eucalyptus.

DEET products generally provide the longest protection. The other repellents work but must be applied more frequently.

Follow the product label for correct use. Products with 10 percent or less DEET are recommended for children.



Data Current Through: 8/31/2021
Website Last Updated: 9/1/2021



In August 2021 Boulder County Public Health (BCPH) reports that 76 mosquito pools were submitted to Colorado Department of Public Health and Environment (CDPHE) for WNV testing and 25 mosquito pool samples tested positive. All three (3) sentinel zones have tested positive in August with unprecedented high Vector Index (VI) calculations, far surpassing the 0.75 threshold for risk human transmission risk.

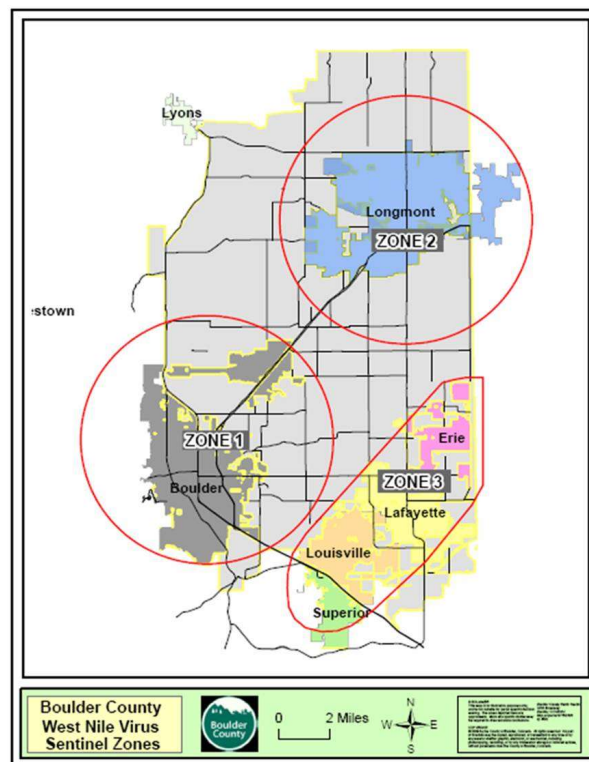
By comparison, in August 20, CDPHE tested a total of 47 mosquito samples with only five (5) testing positive for West Nile virus. No pools from the City of Boulder/Boulder County zone, three (3) mosquito pools from City of Longmont zone and two (2) pools from the Erie, Lafayette, Louisville, and Superior zone.

The Vector Index calculations for all three Boulder County Sentinel Zones were unprecedented, ranging from 0.37 – 2.56, indicating a very high risk of viral transmission to humans in August.

	Sentinel Zone 1 ²	Sentinel Zone 2 ³	Sentinel Zone 3 ⁴
Season Week	Vector Index	Vector Index	Vector Index
Week 24 (June 7-13)	----	----	----
Week 24 (June 13-19)	----	----	----
Week 25 (June 20-26)	----	----	----
Week 26 (June 27-July 3)	0.00	0.00	0.00
Week 27 (July 4-10)	0.00	0.00	0.00
Week 28 (July 11-17)	0.00	0.00	0.00
Week 29 (July 18-24)	0.95	5.03	0.00
Week 30 (July 25 -July 31)	0.76	1.86	0.49
Week 31 (August 1-7)	1.53	2.56	0.37
Week 32 (August 8-14)	0.39	1.35	2.03
Week 33 (August 15-21)	0.00	0.59	0.59
Week 34 (August 22-28)	1.54	1.09	0.53
Week 35 (Aug 29 - Sept 4)	pending	pending	pending
Week 36 (Sept 5 - 11)	----	----	----
Week 37 (Sept 13 - 19)	----	----	----

1. Reported by BCPH as of September 8, 2021

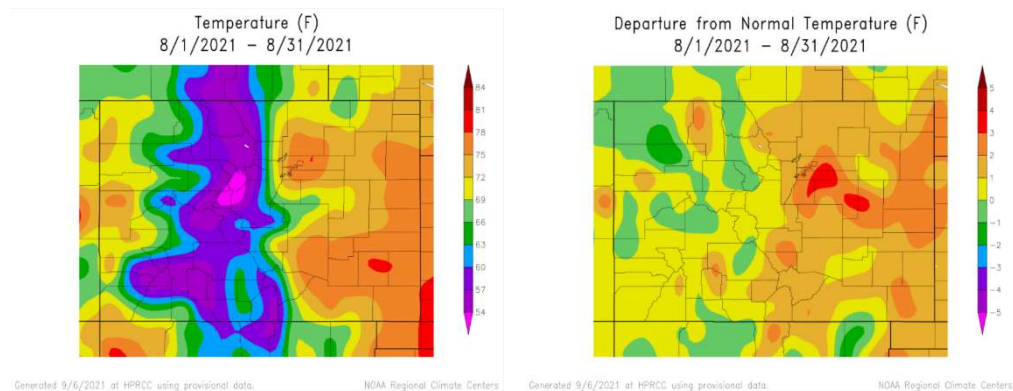
2. Boulder County; 3. Longmont; 4. Erie, Lafayette, Louisville, Superior



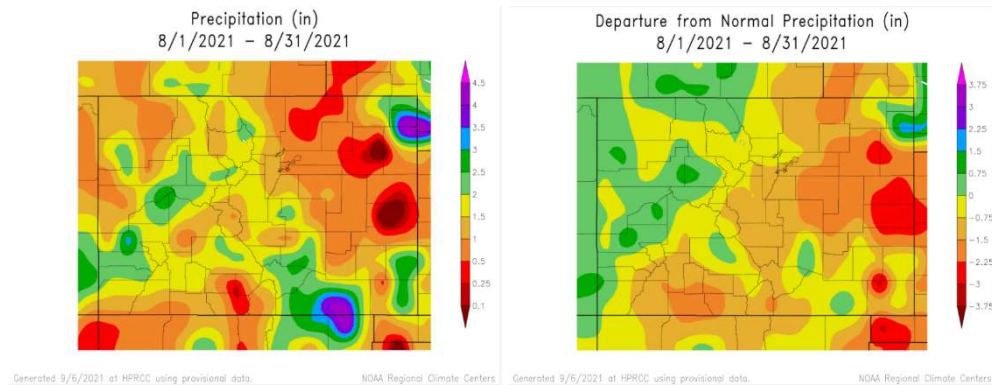
Weather

The High Plains Regional Climate Center recorded 72.1° F for the average temperature in Boulder County compared to the historical average of 71.2° F, a +0.9° F departure from normal. The average high temperature was 88° F and a daily high of 95° F was recorded on August 17th.

Boulder County saw 16 days at 90° F or above in August compared to 22 days in 2020, 17 days in 2019 and 10 days in 2018.



The High Plains Regional Climate Center recorded 0.66 inches of precipitation in Boulder County compared to the historical average of 1.52 inches of precipitation for the month of August, while a normal year should be 1.68" of precipitation.



With higher than normal temperatures and low precipitation, many larval sites started to dry up while stagnant and flood water irrigated sites became the main source of larval breeding habitats throughout most of the County in August.

Larval Control Operations

VDCI field technicians performed 96 site inspections as part of the inspection and larviciding program in the City of Louisville. Of the 96 sites inspected, 60 (62.5%) were wet and 19 (19.8%) sites were producing mosquito larvae. A half an acre (0.5) was treated with larvicides in August 2021.

In August 2020, VDCI field technicians performed 74 site inspections in the City of Louisville. Of the 74 sites inspected, 28 (37.8%) were wet and 4 (5.4%) sites were producing mosquito larvae. 1,040 sq. ft. (0.02 acres) were treated with larvicides.

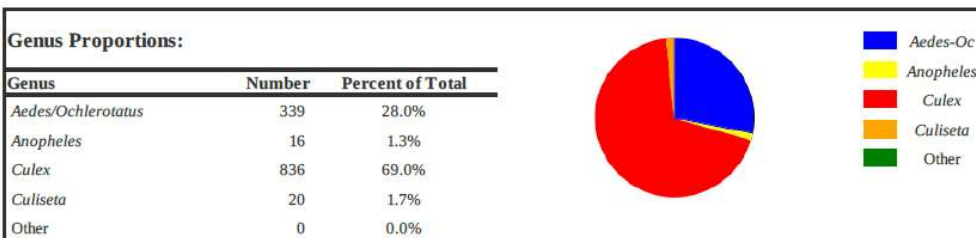
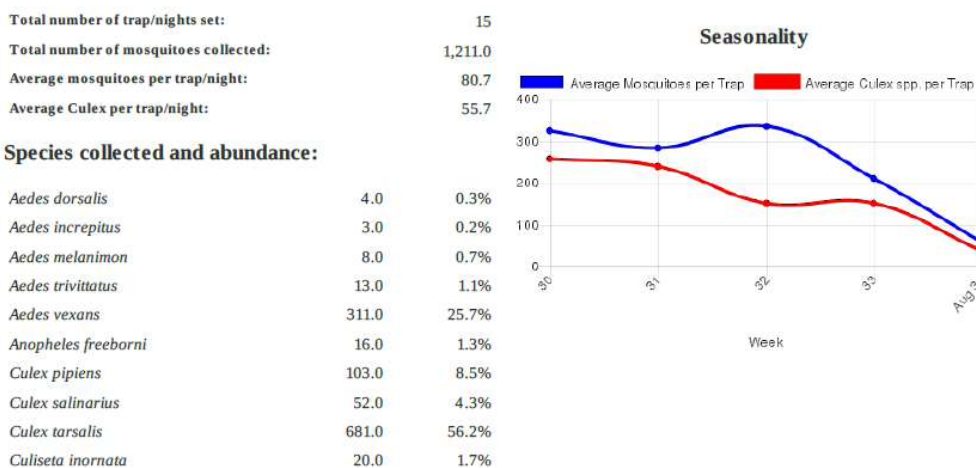
Adult Mosquito Population Surveillance

There were 15 light traps set in City of Louisville during August 2021 that collected a total of 1,211 mosquitoes. Of these, there were 339 (28.0%) *Aedes* spp., 16 (1.3%) *Anopheles* spp., 836 (69.0%) *Culex* spp. and 20 (1.7%) *Culiseta* spp. mosquitoes collected. On average there were 80.7 mosquitoes per trap night and 55.7 *Culex* mosquitoes per trap night.

15 mosquito surveillance traps set in August 2020, in the City of Louisville, collected a total of 750 mosquitoes. Of these, there were 200 (26.7%) *Aedes* spp., 7 (0.9%) *Anopheles* spp., 536 (71.5%) *Culex* spp. and 7 (0.9%) *Culiseta* spp. mosquitoes collected. On average there were 50.0 mosquitoes collected per trap night and 35.7 *Culex* mosquitoes per trap night.

Adult mosquito abundance in the City of Louisville has exhibited higher than average nuisance mosquito numbers and higher than average *Culex* spp. numbers this season. By the end of August, of the 3,787 mosquitoes trapped, 52.7% were *Culex* in the City. By comparison at the end of August 2020, a total of 4,832 mosquitoes were trapped in the City of Louisville and 29.2% were *Culex* spp.

2021 City of Louisville Trap Composite Data



Adult Mosquito Control Operations

In August 2021, 52.0 gallons of Wisdom TC mosquito adulticide barrier was applied via daytime backpack to two adult control locations on August 5th, 12th, 19th and 27th.

No adult control operations occurred in the City of Louisville during the month of August 2020.

Public Relations

VDCI received zero phone calls from City of Louisville residents in August 2021 for either standing water or mosquito annoyance. VDCI received no submissions from residents requesting to be placed on VDCI's notification and shut off list. No callers requested additional information.