



West Nile virus activity continued to remain 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.

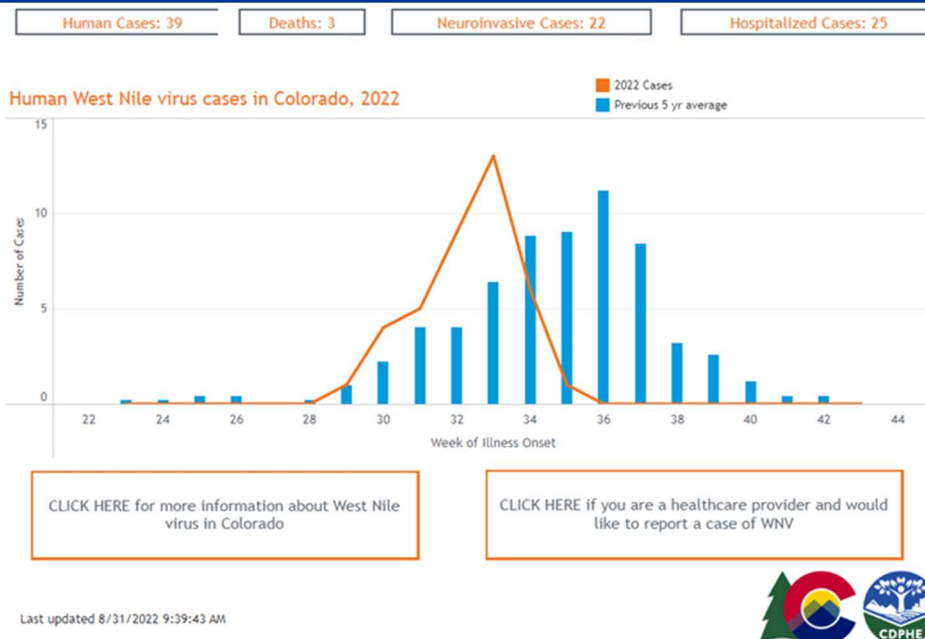
7000 North Broadway
Suite 108 Denver, CO
80221
303-428-5908

Wear Your Repellent!

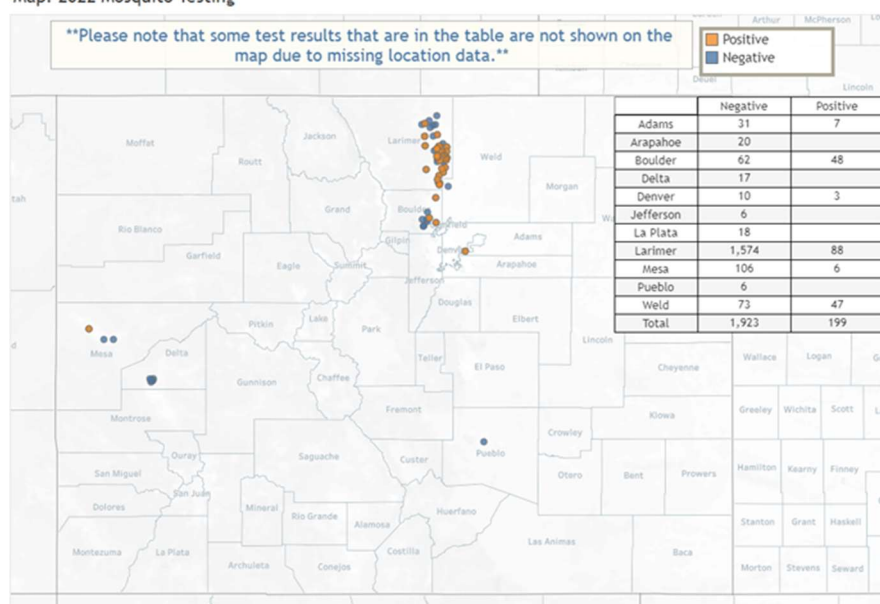
Use approved mosquito repellents containing DEET, picaridin or oil of lemon eucalyptus.

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.



Map: 2022 Mosquito Testing



In August 2022 Boulder County Public Health (BCPH) reports that 69 mosquito pools were submitted to Colorado Department of Public Health and Environment (CDPHE) for WNV testing and 31* mosquito pool samples tested positive as of August 29th. 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. * Week 35 results still pending.

By comparison, in August 2021, CDPHE tested a total of 72 mosquito samples with 32 testing positive for West Nile virus.

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 3,614 mosquitoes trapped, 56.0% were *Culex* in the City. By comparison at the end of August 2021, a total of 3,787 mosquitoes were trapped in the City of Louisville and 52.7% were *Culex* spp.

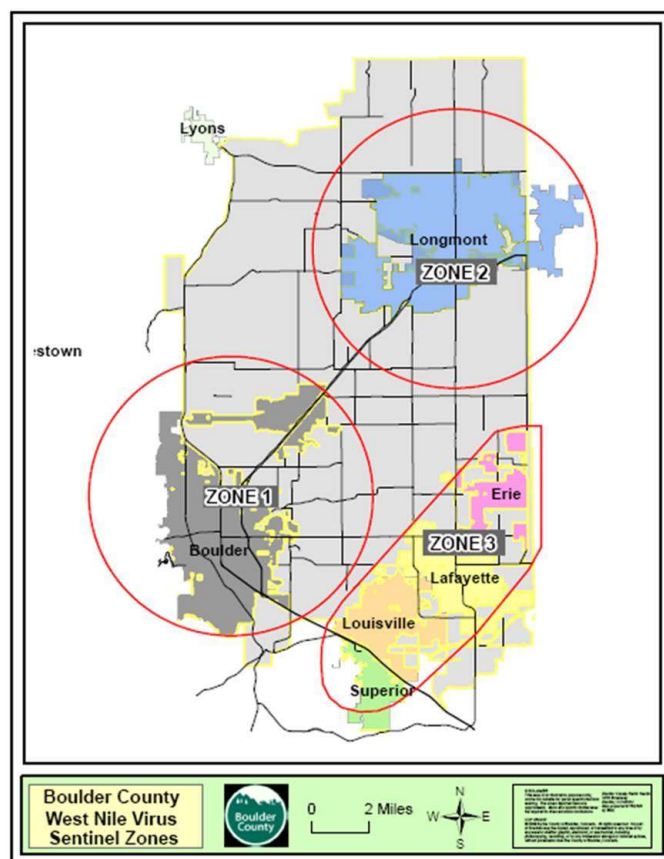
The Vector Index calculations for all three Boulder County Sentinel Zones were unprecedented, ranging from a low of 0.47 to 2.85 indicating a very high risk of viral transmission to humans in August.

Boulder County Vector Index 2022 ¹			
	Sentinel Zone 1 ²	Sentinel Zone 2 ³	Sentinel Zone 3 ⁴
Season Week	Vector Index	Vector Index	Vector Index
Week 26 (June 26-July 2)	0.00	0.00	0.00
Week 27 (July 3-9)	0.93	0.49	0.30
Week 28 (July 10-16)	1.22	0.00	1.95
Week 29 (July 17-23)	2.79	0.97	3.52
Week 30 (July 24 -July 30)	0.86	0.20	1.41
Week 31 (July 31 - August 6)	2.44	2.16	2.22
Week 32 (August 7-13)	0.55	0.47	1.17
Week 33 (August 14-20)	0.67	0.89	1.30
Week 34 (August 21-27)	2.85	1.05	0.00*
Week 35 (Aug 28 - Sept 3)	pending	pending	pending

1. Reported by BCPH as of August 29th, 2022

* no mosquito pools tested positive

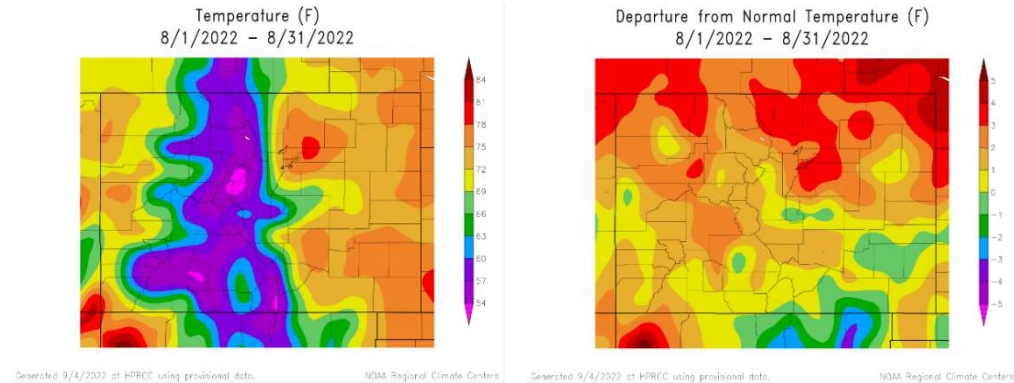
2. Boulder County; 3. Longmont; 4. Erie, Lafayette, Louisville, Superior



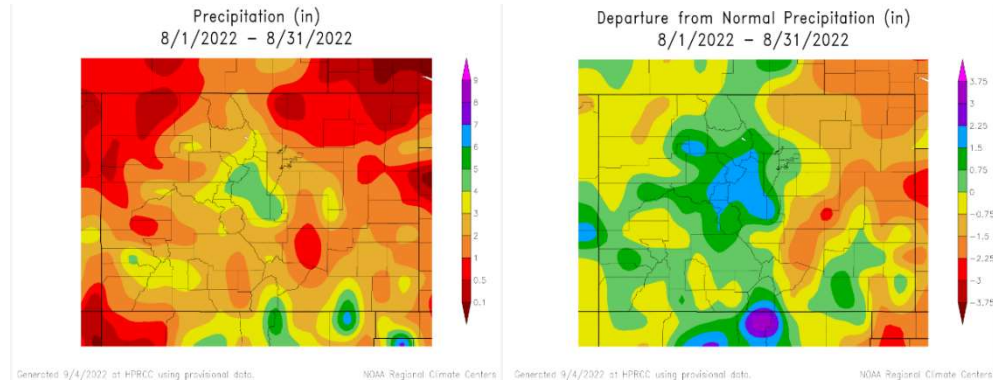
Weather

The High Plains Regional Climate Center recorded 72.7° F for the average temperature in Boulder County compared to the historical average of 71.2° F, a +1.5° F departure from normal. The average high temperature was 87.2° F and a daily high of 95° F was recorded on August 4th.

Boulder County saw 13 days at 90° F or above in August compared to 16 days in 2021, 22 days in 2020 and 17 days in 2019. A late monsoon season kept temperatures near normal (86.0) or lower for part of the month.



The High Plains Regional Climate Center recorded 1.42 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. Again, a late monsoon season produced heavy thunderstorms and brought almost an average amount of precipitation to the County.



With higher than normal temperatures and low precipitation and the beginning of the month, many larval sites started to dry up while stagnant and flood water irrigated sites became the main source of larval breeding habitats. However, late monsoon precipitation mid-month, re-energized dry breeding and standing water sites throughout the County creating a late hatch of nuisance mosquitoes and sustaining *Culex spp.* mosquitoes population numbers.

Larval Control Operations

VDCI field technicians performed 34 site inspections as part of the inspection and larviciding program in the City of Louisville. Of the 34 sites inspected, 23 (67.6%) were wet and 15 (44.1%) sites were producing mosquito larvae. 0.8 acres were treated with larvicides in August 2022.

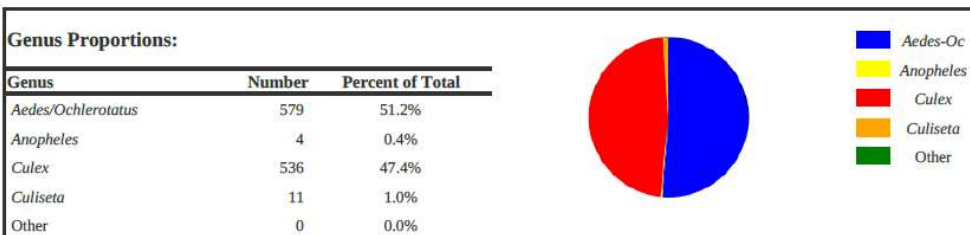
In August 2021, VDCI field technicians performed 96 site inspections in the City of Louisville. Of the 96 sites inspected, 60 (62.5%) were wet and 19 (19.8%) sites were producing mosquito larvae. A half an acre (0.5) was treated with larvicides.

Adult Mosquito Population Surveillance

There were 12 light traps set in City of Louisville during August 2022 that collected a total of 1,130 mosquitoes. Of these, there were 579 (51.2%) *Aedes* spp., 4 (0.4%) *Anopheles* spp., 536 (47.4%) *Culex* spp. and 11 (1.0%) *Culiseta* spp. mosquitoes collected. On average there were 94.2 mosquitoes per trap night and 44.7 *Culex* mosquitoes per trap night.

15 mosquito surveillance traps set in August 2021, in the City of Louisville, 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.

2022 City of Louisville Trap Composite Data



Adult Mosquito Control Operations

During the month of August 2022, 28.0 gallons of Wisdom TC mosquito adulticide barrier were applied via daytime backpack to two adult control locations on August 4th and 18th.

In August 2022, 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.

Public Relations

VDCI received three (3) phone calls from City of Louisville residents in August 2022 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.