



CITY OF LOUISVILLE

JULY 2021 MONTHLY REPORT

AUGUST 16TH, 2021

West Nile Virus Risk

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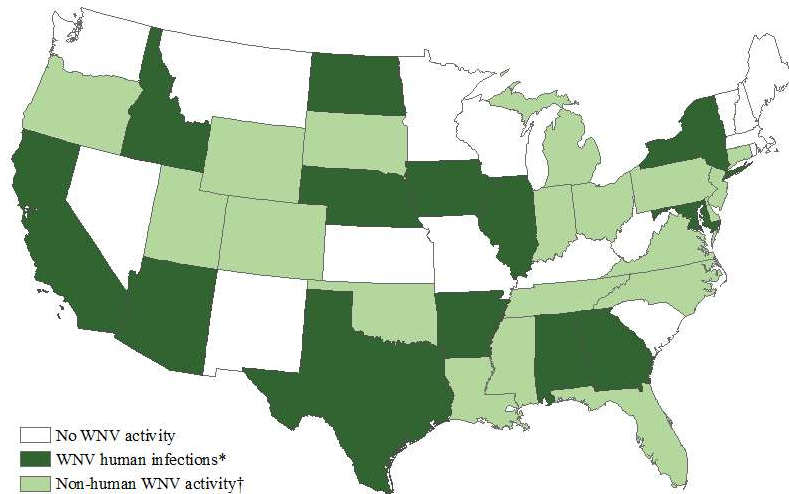
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The Colorado Department of Public Health & Environment (CDPHE) began testing mosquito samples in Disease Week 24 (June 7th). As of August 13th, CDPHE reports there have been West Nile virus positive mosquitoes in the Colorado counties of Adams, Boulder, Denver, Larimer, and Weld and two (2) human WNV cases one each in Delta and Larimer counties.

As of August 10th, the Centers for Disease Control and Prevention (CDC) currently reports 40 human West Nile virus infections in 13 states and 3 deaths. Non-human West Nile virus activity (mosquitoes, birds or sentinel animals) has been reported in 29 states. West Nile virus activity remains high and we will continue to see disease risk as the summer continues. Encourage personal protective measures including draining water from properties, avoiding the outdoors at dawn and dusk and defend yourself by wearing repellent and dressing appropriately.

West Nile Virus Activity by State – United States, 2021 (as of August 10, 2021)



□ No WNV activity
■ WNV human infections*
■ Non-human WNV activity†

*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.

Boulder County Public Health (BCPH) began West Nile virus mosquito pool testing in Week 26, June 28th, 2021. In July 2021 Boulder County Public Health reports that 62 mosquito pools were submitted to Colorado Department of Public Health and Environment (CDPHE) for WNV testing in July. Seven (7) *Culex tarsalis* samples tested positive for West Nile virus on July 19th and 26th (Week 29 and 30). Week 30 is typically a peak month for *Culex spp.* mosquitoes in Boulder County.

In comparison, CDPHE tested a total of 63 mosquito samples for Boulder County Public Health and all samples tested negative for West Nile virus in July 2020.

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.

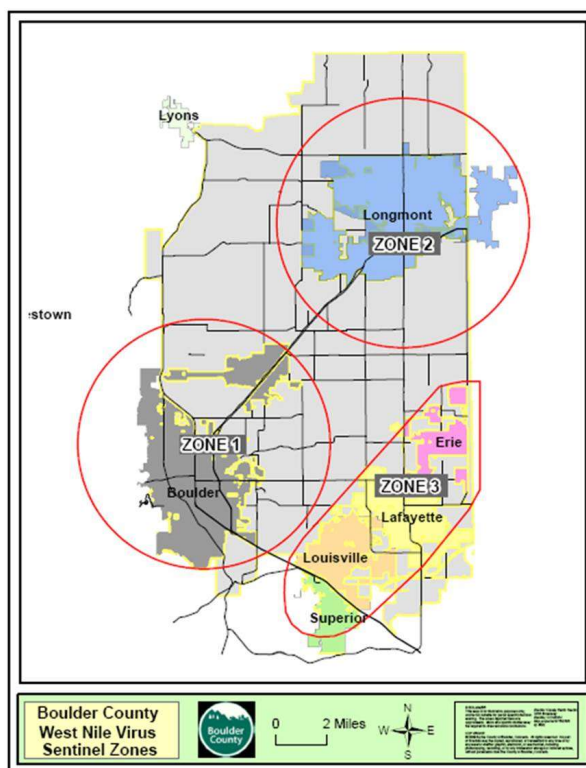
Adult mosquito abundance in Boulder County has exhibited higher than average nuisance mosquito numbers and higher than average *Culex* numbers. By the end of July, of the 2,625 mosquitoes trapped, 44.4% were *Culex* in the City of Louisville. By comparison at the end of July 2020, a total of 4,115 mosquitoes were trapped in City of Louisville and 21.6% were *Culex* spp.

The Vector Index for all Boulder County Zones have exceeded the threshold in 2 out of 3 zones for the the last 2 weeks in July and the 1st week in August, indicating a high risk of viral transmission to humans in July. This number is expected to stay high as conditions continue to remain warm and unconventionally humid with variable irrigation and monsoon thunderstorms sustaining standing water locations.

Boulder County Vector Index 2021 ¹			
	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

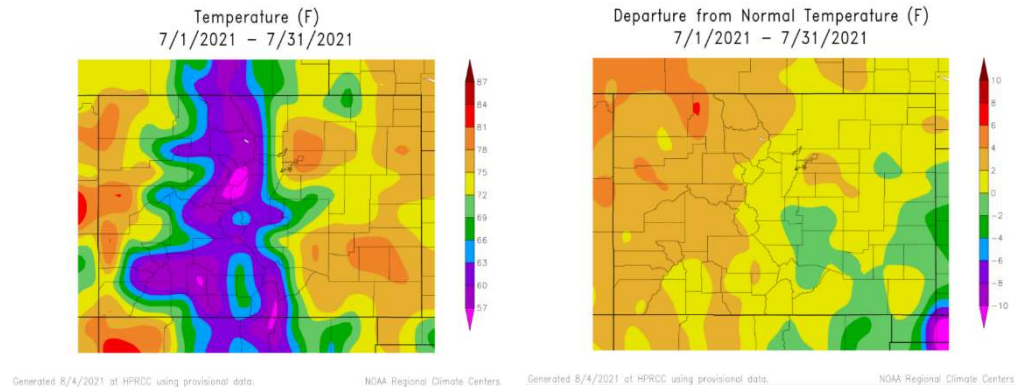
1. Reported by BCPH as of August 16, 2021

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

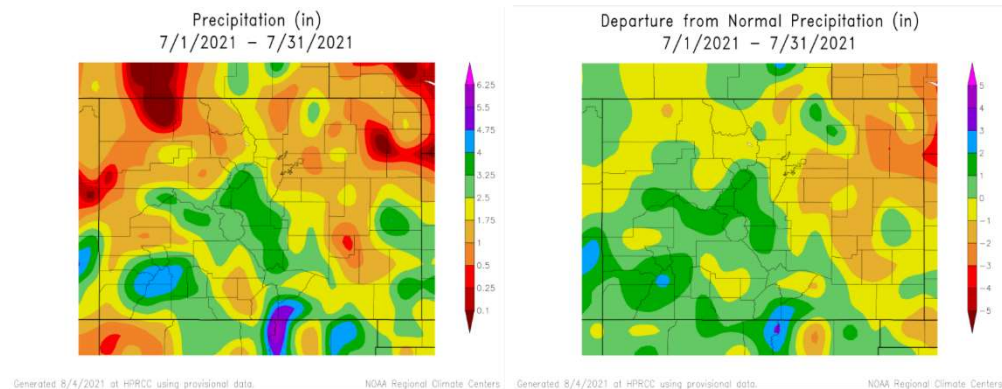


Weather

The High Plains Regional Climate Center recorded 72.9° F for the average temperature in Boulder County compared to the historical average of 72.5° F, with an average maximum temperature of 88.2° F for July 2021. A monthly maximum temperature of 98° F was recorded on July 8th.



The High Plains Regional Climate Center recorded 3.20 inches of precipitation in Boulder County compared to the historical average of 1.80 inches of precipitation for the month of July. A daily maximum of 1.36 inches was recorded on July 1st. In comparison, July 2020 only received 0.34 total inches of rain.



With average temperatures and higher than average precipitation, many temporary standing water larval sites are dry or drying up in July while other sites became the main source of larval breeding habitat via over irrigation in residential neighborhoods and flood water irrigation in rural areas of the County.

Larval Control Operations

VDCI field technicians performed 104 site inspections as part of the inspection and larviciding program in the City of Louisville. Of the 104 sites inspected, 74 were wet (71.2%) and 27 (26.0%) sites were producing mosquito larvae. 1.9 acres were treated with larvicides.

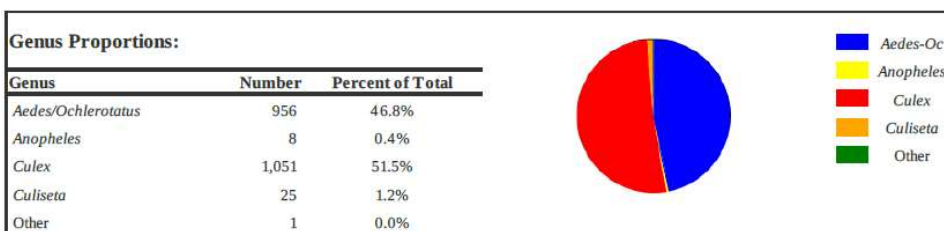
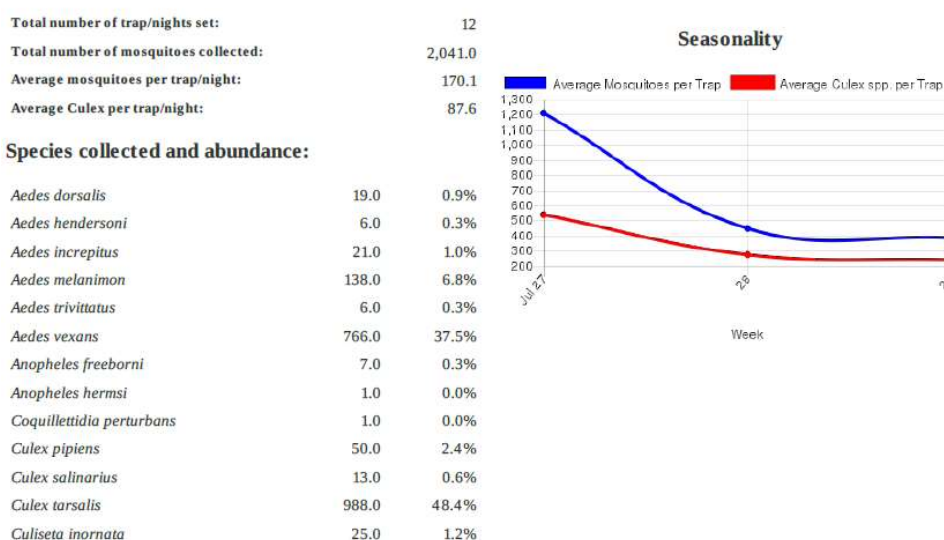
In July 2020, VDCI field technicians performed 99 site inspections in the City of Louisville. Of the 99 inspections, 43 (43.4%) sites were wet and 9 (9.1%) sites were producing mosquito larvae. 0.2 acres were treated with larvicides.

Adult Mosquito Population Surveillance

There were 12 light traps set in City of Louisville during July 2021 that collected a total of 2,041 mosquitoes. Of these, there were 956 (46.8%) *Aedes* spp., 8 (0.4%) *Anopheles* spp., 1 (0.0%) *Coquillettidia* spp., 1,051 (51.5%) *Culex* spp. and 25 (1.2%) *Culiseta* spp. mosquitoes collected. On average 170.1 mosquitoes per trap night and 87.6 *Culex* mosquitoes per trap night.

12 mosquito surveillance traps set in July 2020, in the City of Louisville, collected a total of 1,080 mosquitoes. Of these there were 359 (33.2%) *Aedes* spp., 2 (0.2%) *Anopheles* spp., 1 (0.1%) *Coquillettidia* spp., 713 (66.0%) *Culex* spp. and 5 (0.5%) *Culiseta* spp. mosquitoes collected. On average there were 90 mosquitoes per trap night and 59.4 *Culex* mosquitoes per trap night.

2021 City of Louisville Trap Composite Data



Adult Mosquito Control Operations

During the month of July 2021, 84.0 gallons of Wisdom TC mosquito adulticide barrier were applied via daytime backpack to 3 adult control locations on July 8th, 15th, 22nd and July 29th.

In July 2020, 54.0 gallons of Talstar Pro mosquito adulticide barrier was applied via daytime backpack 2 adult control locations on July 2nd and July 16th.

Public Relations

VDCI received 2 phone calls from Louisville residents in July 2021. There was one mosquito annoyance call and one report of standing water which was inspected for potential larval production habitat and treated as necessary.