



CITY OF LOVELAND JULY 2019 MONTHLY REPORT

AUGUST 5TH, 2019

West Nile Virus Risk

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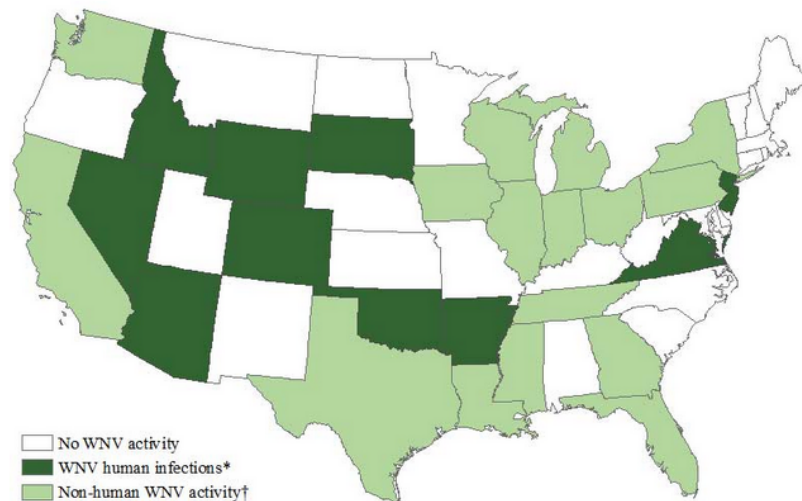
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Both the Colorado Department of Public Health & Environment (CDPHE) and Colorado State University began testing mosquito samples in Disease Week 24 (June 14th). As of August 1st there have been West Nile virus positive mosquitoes in the Colorado counties of Larimer, Pueblo, and Weld.

The Centers for Disease Control and Prevention currently reports human West Nile virus infections in sixteen states. Non-human West Nile virus activity (mosquitoes, birds or sentinel animals) has been reported in thirty-four states. While West Nile virus activity remains relatively low, we are likely to see increased disease risk as the summer progresses and encourage personal protective measures including draining water from your property, avoiding the outdoors at dawn and dusk, defending yourself by wearing repellent and dressing appropriately.

West Nile Virus Activity by State 2019

West Nile Virus Activity by State – United States, 2019 (as of July 23, 2019)



In July 2019 Colorado State University (CSU) tested a total of 500 mosquito samples containing 14,155 mosquitoes. These samples consisted of 12,890 *Cx. tarsalis* and 1,265 *Cx. pipiens* collected from the Fort Collins, Loveland and Berthoud areas. A total of 6 samples tested positive for West Nile Virus, with 4 samples from Fort Collins and 2 from Loveland

By comparison, in July 2018 Colorado State University (CSU) tested a total of 512 mosquito samples with 16 testing positive for West Nile Virus. 12 mosquito pools came from Fort Collins, 2 from Berthoud, and 2 from Loveland.

Wear Your Repellent!

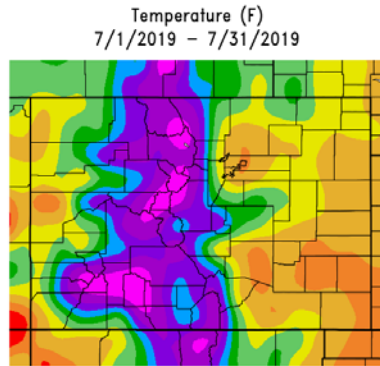
Use approved mosquito repellents containing DEET, picaridin or oil of lemon eucalyptus.

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.

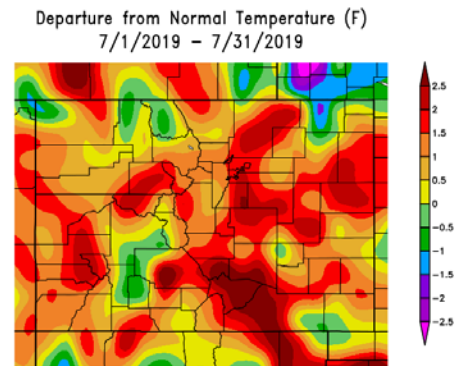
Weather

The average temperature in Larimer County was 77 °F, with the average minimum temperature at 62 °F and the average max temperature at 91 °F during the month of July. A monthly high of 102 °F was seen on July 19th. With temperatures above average, larval production kept at a fairly rapid pace during the month of July.



Generated 8/4/2019 at HPRCC using provisional data.

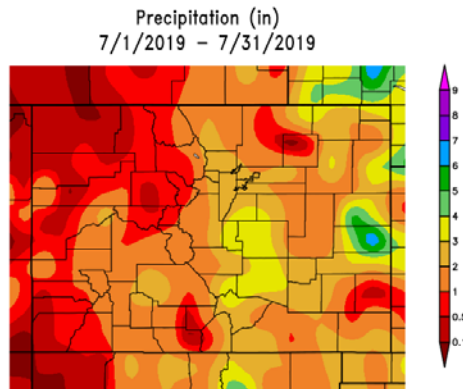
NOAA Regional Climate Centers



Generated 8/4/2019 at HPRCC using provisional data.

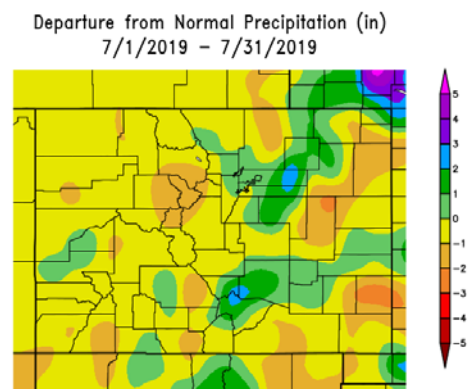
NOAA Regional Climate Centers

Precipitation in Larimer County during July 2019 was about average, however after the wet months of May and June, stagnant water and mosquito breeding habitats were still abundant in Northern Colorado.



Generated 8/4/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers



Generated 8/4/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

Larval Control Operations

VDCI field technicians performed 1,505 site inspections in the month of July 2019 as part of the inspection and larviciding program for the City of Loveland. Of the 1,505 inspections, 1,300 sites were wet (86.4% of the total inspected sites) and 799 sites were producing larvae (61.5% of the wet sites). Of the 777.8 acres treated in July 2019, 4,226.3 lbs. of VectoBac (*Bti*), 34.3 lbs of Altosid P35 (methoprone) and 7.9 gallons of mosquito larviciding oil (BVA) were applied.

Mosquito Population Surveillance

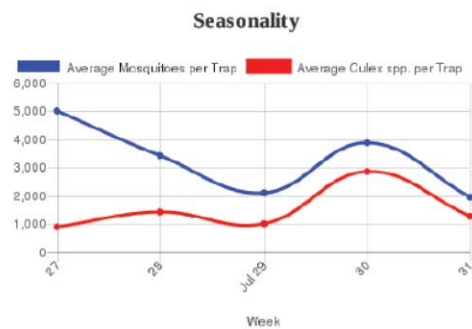
There were 189 light traps set in the City of Loveland during July 2019. Mosquito surveillance traps set during July 2019 in Loveland collected a total of 16,397 mosquitoes. Of these there were 8,384 (51.1%) *Aedes spp.*, 429 (2.6%) *Culiseta spp.*, 92 (<1%) *Anopheles spp.*, and 7,464 (45.5%) *Culex spp.* mosquitoes collected. There was an average of 86.8 mosquitoes collected per trap night and 39.5 *Culex spp.* mosquitoes per trap night during July 2019 in the City of Loveland.

2019 Loveland Trap Composite Data

Total number of trap/nights set:	189
Total number of mosquitoes collected:	16,397.0
Average mosquitoes per trap/night:	86.8
Average Culex per trap/night:	39.5

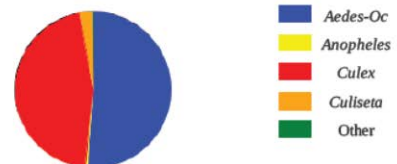
Species collected and abundance:

<i>Aedes dorsalis</i>	229.0	1.4%
<i>Aedes increpitus</i>	47.0	0.3%
<i>Aedes melanimon</i>	39.0	0.2%
<i>Aedes spp.</i>	1.0	0.0%
<i>Aedes trivittatus</i>	11.0	0.1%
<i>Aedes vexans</i>	8,057.0	49.1%
<i>Anopheles earlei</i>	4.0	0.0%
<i>Anopheles freeborni</i>	60.0	0.4%
<i>Anopheles spp.</i>	28.0	0.2%
<i>Coquillettidia perturbans</i>	28.0	0.2%
<i>Culex pipiens</i>	546.0	3.3%
<i>Culex spp.</i>	1.0	0.0%
<i>Culex tarsalis</i>	6,917.0	42.2%
<i>Culiseta inornata</i>	429.0	2.6%



Genus Proportions:

Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	8,384	51.1%
<i>Anopheles</i>	92	0.6%
<i>Culex</i>	7,464	45.5%
<i>Culiseta</i>	429	2.6%
Other	28	0.2%



Adult Mosquito Control Operations

During the month of July 2019, 405.72 miles of roads within city limits were sprayed via ground based vehicles with Ultra Low Volume (ULV) AquaKontrol mosquito adulticides to reduce adult mosquito populations. Truck based ULV applications were performed to suppress mosquito abundance detected in surveillance traps which surpassed the disease threshold of 50 *Culex* mosquitoes, or the nuisance threshold of 100 floodwater mosquitoes.

application_date	zone	spray_miles	spray_acres	ounces_sprayed
7/1/2019	LV-08	6	218.16	284.94
7/1/2019	LV-33	9.33	339.24	444.95
7/1/2019	LV-14E	5.14	186.89	244.87
7/3/2019	LV-23	8.41	305.79	399.83
7/4/2019	LV-28	2.8	101.81	136.65
7/4/2019	LV-26	7.68	279.24	367.79
7/8/2019	LV-33	10.13	368.33	483.79
7/8/2019	LV-08	6.3	229.07	299.62
7/8/2019	LV-14E	5.58	202.89	267.12
7/8/2019	LV-31	7.93	288.33	376.59
7/8/2019	LV-34	11.31	411.23	547.04
7/8/2019	LV-04	7.46	271.25	354.54
7/9/2019	LV-25	5.96	216.71	283.71
7/9/2019	LV-16	4.7	170.89	222.8
7/10/2019	LV-26	8.63	313.79	413.41
7/10/2019	LV-29E	3.88	141.08	187.88
7/10/2019	LV-28	2.98	108.35	140.84
7/10/2019	LV-30	5.19	188.71	245.47
7/11/2019	LV-24N	8.31	302.15	405.47
7/12/2019	LV-06	8.4	305.42	398.71
7/15/2019	LV-08	6.37	231.61	303.57
7/15/2019	LV-14E	4.77	173.44	228.2
7/15/2019	LV-13S	5.16	187.62	244.99
7/15/2019	LV-31	7.5	272.7	358.14
7/17/2019	LV-30	5.53	201.07	261.88
7/17/2019	LV-26	8.75	318.15	416.31
7/17/2019	LV-16	5.09	185.07	241.57
7/17/2019	LV-24N	8.12	295.24	394.68
7/17/2019	LV-28	3.26	118.53	159.28
7/22/2019	LV-34	9.16	333.06	437.51
7/22/2019	LV-08	6.02	218.89	287.19
7/22/2019	LV-33	13.2	479.95	631.6
7/23/2019	LV-36	8.04	292.33	285.94
7/23/2019	LV-01	5.27	191.62	188.83

7/24/2019	LV-26	8.87	322.51	316.89
7/24/2019	LV-28	3.26	118.53	116.19
7/24/2019	LV-22	1.84	66.9	64.85
7/24/2019	LV-16	5	181.8	178.79
7/24/2019	LV-19N	5.86	213.07	209.08
7/25/2019	LV-03	5.01	182.16	179.09
7/25/2019	LV-06	9.53	346.51	340.48
7/29/2019	LV-26	9.02	327.97	324.13
7/29/2019	LV-14E	5.4	196.34	191.62
7/29/2019	LV-33	13.2	479.95	631
7/29/2019	LV-31	7.5	272.7	358
7/29/2019	LV-08	6	218.16	285
7/29/2019	LV-19N	6.04	219.61	213.98
7/30/2019	LV-14W	4.25	154.53	148.96
7/30/2019	LV-18N	5.7	207.25	203.6
7/30/2019	LV-16	4.08	148.35	145.63
7/30/2019	LV-36	8.36	303.97	298.79
7/30/2019	LV-20	9.17	333.42	325.3
7/30/2019	LV-26	8.91	323.97	321.07
7/30/2019	LV-13N	4.76	173.07	171.47
7/30/2019	LV-19N	6.77	246.16	242.86
7/30/2019	LV-22	1.94	70.54	69.42
7/31/2019	LV-24N	8.88	322.88	320.8
7/31/2019	LV-29W	4.43	161.07	158.56
7/31/2019	LV-30	5.87	213.43	209.01
7/31/2019	LV-29E	3.71	134.9	133.81
7/31/2019	LV-23	10	363.6	356.68
Totals		405.72	14751.96	17460.77

Public Relations

VDCI received 33 phone calls from City of Loveland residents in June 2019. VDCI received 3 calls from residents reporting new larval mosquito sites in their area. VDCI inspected all of the reported sites and added new areas if found producing mosquito larvae. VDCI received 15 mosquito annoyance calls from residents of the City of Loveland. VDCI received 2 calls from residents requesting information about the City of Loveland mosquito control program and how decisions are made about adulticiding. VDCI provided the relevant information and directed them to our website for further information about the products used. VDCI received 13 phone calls from residents requesting that their information be added or changed in VDCI's spray notification list so they could be notified of spraying in their area.