



# CITY OF FORT COLLINS JUNE 2019 MONTHLY REPORT

JULY 8<sup>TH</sup>, 2019

## West Nile Virus Risk

### Contact VDCI:

**Northern  
Colorado**

**Operations  
Manager**

**Broox Boze, Ph.D.**

**Phone**

**(970)278-9977**

**E-Mail:**

bboze@vdc.net

**Website:**

www.vdc.net

**Main Office:**

General E-Mail:  
info@vdc.net

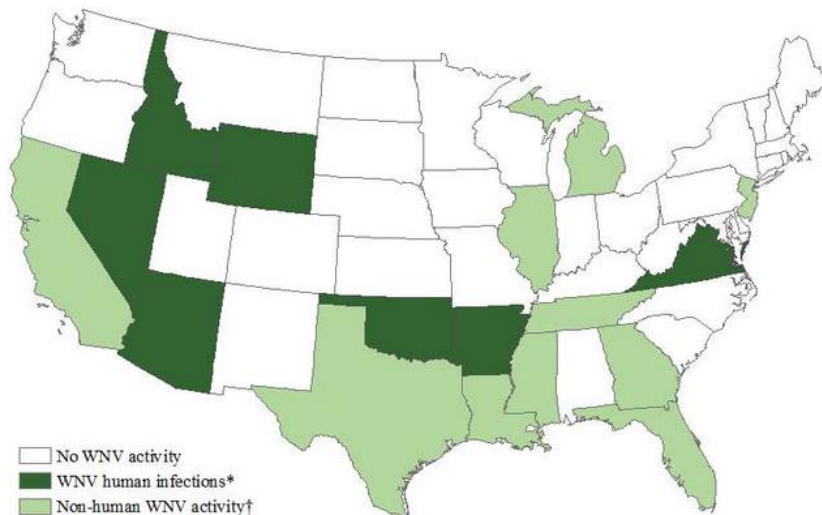
Toll Free:  
(877) 276-4306

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

Both the Colorado Department of Public Health & Environment (CDPHE) and Colorado State University began testing mosquito samples in Disease Week 24 (June 14<sup>th</sup>). As of July 1<sup>st</sup> there have been no reports of West Nile virus positive mosquitoes in the state of Colorado.

The Centers for Disease Control and Prevention currently reports human West Nile virus infections in seven states. Non-human West Nile virus activity (mosquitoes, birds or sentinel animals) has been reported in sixteen states. While West Nile virus activity remains relatively low, and we have not documented viral activity in Northern Colorado, 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 – United States, 2019 (as of June 25, 2019)



In June 2019 Colorado State University (CSU) tested a total of 62 mosquito samples containing 375 mosquitoes. These samples consisted of 328 *Cx. tarsalis* and 47 *Cx. Papiens* collected from the Fort Collins, Loveland and Berthoud areas.

By comparison, in June 2018 Colorado State University (CSU) tested a total of 227 mosquito samples containing 3,073 mosquitoes. These samples consisted of 2,508 *Cx. tarsalis* and 565 *Cx. Papiens* collected from the Fort Collins, Loveland and Berthoud areas.

# Weather

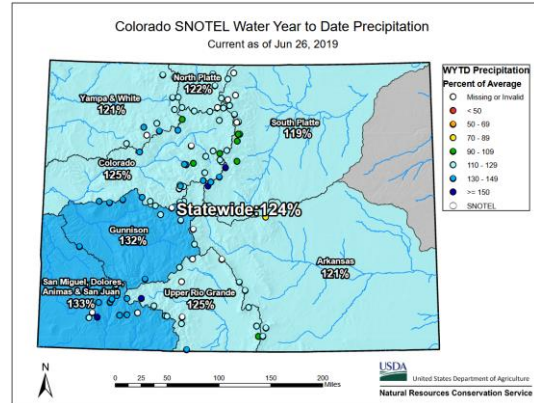
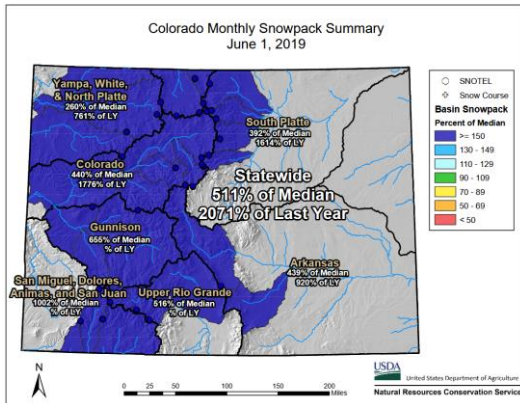
**Wear Your Repellent!**

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

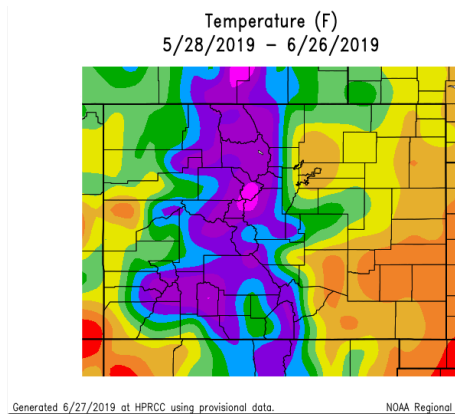
DEET products generally provide the longest protection. The other repellents work but must be applied more frequently.

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

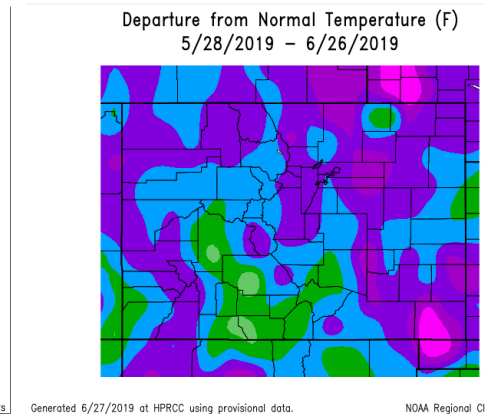
VDCI began field inspections throughout Northern Colorado in May although rain and cooler temperatures persisted late into the spring. Snowpack levels were far above average across most of the state and as of June 1<sup>st</sup> Colorado was 511% of the median for normal snowpack, with much of the snow still not melted as of July 1<sup>st</sup>. As of June 1<sup>st</sup> monthly precipitation in every major water shed was 124% above normal with the South Platte River reaching 119% of its monthly average. *Culex* obtained from larval sites has remained low as a percentage of all mosquitoes collected. In the early season months VDCI field technicians have focused larval site inspections on larger water bodies and mandatory sites known to produce larvae early season.



According to the High Plains Regional Climate Center the average temperature in Larimer County was 64 °F during the month of June. With temperatures lower on average throughout most of the county we did observe lower than average trap counts and larvae samples.



Generated 6/27/2019 at HPRCC using provisional data. NOAA Regional Climate Centers



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## Larval Control Operations

VDCI field technicians performed 2,047 site inspections as part of the inspection and larviciding program in June 2019. Of the 2,047 inspections, 1671 sites were wet (81.6%) and 751 sites were producing mosquito larvae (44.9% of the wet sites). Of the 595 acres treated in June 2019, 2928 lbs. of VectoBac (*Bti*), and 18.6 gallons of BVA mosquito larviciding oil were applied.

VDCI field technicians performed 2,573 site inspections as part of the inspection and larviciding program in June 2018. Of the 2,573 inspections, 2,068 sites were wet (80%) and 1,294 sites were producing mosquito larvae (56% of the wet sites). Of the 812.9 acres treated in June 2018, 4,351 lbs. of VectoBac (*Bti*), and 113.9 gallons of BVA mosquito larviciding oil were applied.



VDCI's backyard technician performed 92 site inspections as a part of the Fort Collins backyard program in June 2019. Permanent sites that could not be manually drained were treated with long term larvicide products including Altosid pellets, briquettes, and VectoLex WSP (*Bsph*).

During June 2019, VDCI technicians performed site inspections at approximately 469 storm drains as part of the City of Fort Collins Urban larviciding program to control larval mosquito populations in storm drains and catch basins. Drains that were wet or had the potential to hold water were treated with long term larvicide products including Altosid pellets, briquettes, and VectoLex WSP (*Bsph*).

## Mosquito Population Surveillance

There were 217 light traps set in Fort Collins the month of June 2019. Of the 217 light traps set; a total of 6,842 mosquitoes were collected. There were 6,256 (91.4%) *Aedes spp.*, 155 (2.3%) *Culiseta spp.*, 429 (6.3%) *Culex spp.*, and 2 (<1%) other mosquitoes collected. There was an average of 31.5 mosquitoes per trap night and 2 *Culex spp.* mosquitoes per trap night collected in Fort Collins during June 2019.

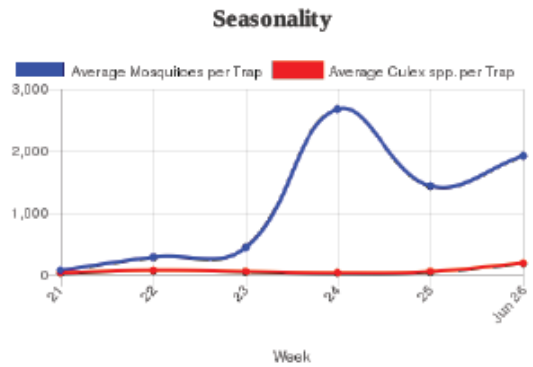
There were 210 light traps set in Fort Collins the month of June 2018. Of the 210 light traps set; a total of 26,330 mosquitoes were collected. There were 23,101 (87%) *Aedes spp.*, 241 (<1%) *Culiseta spp.*, 2,802 (10.6%) *Culex spp.*, and 182 (1%) other mosquitoes collected. There was an average of 125 mosquitoes per trap night and 13 *Culex spp.* mosquitoes per trap night collected in Fort Collins during June 2018.

## 2019 Fort Collins Trap Composite Data

|  |         |
|--|---------|
| <b>Total number of trap/nights set:</b>      | 217     |
| <b>Total number of mosquitoes collected:</b> | 6,842.0 |
| <b>Average mosquitoes per trap/night:</b>    | 31.5    |
| <b>Average Culex per trap/night:</b>         | 2.0     |

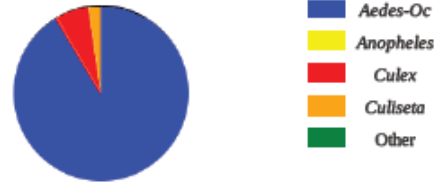
### Species collected and abundance:

|                            |         |       |
|----------------------------|---------|-------|
| <i>Aedes dorsalis</i>      | 911.0   | 13.3% |
| <i>Aedes increpitus</i>    | 1,288.0 | 18.8% |
| <i>Aedes melanimon</i>     | 45.0    | 0.7%  |
| <i>Aedes vexans</i>        | 4,012.0 | 58.6% |
| <i>Anopheles freeborni</i> | 2.0     | 0.0%  |
| <i>Culex pipiens</i>       | 95.0    | 1.4%  |
| <i>Culex tarsalis</i>      | 334.0   | 4.9%  |
| <i>Culiseta inornata</i>   | 155.0   | 2.3%  |



### Genus Proportions:

| Genus                     | Number | Percent of Total |
|---------------------------|--------|------------------|
| <i>Aedes/Ochlerotatus</i> | 6,256  | 91.4%            |
| <i>Anopheles</i>          | 2      | 0.0%             |
| <i>Culex</i>              | 429    | 6.3%             |
| <i>Culiseta</i>           | 155    | 2.3%             |
| Other                     | 0      | 0.0%             |



## Adult Mosquito Control Operations

There have been no adult mosquito control operations performed by the City of Fort Collins to date.

VDCI has been privately contracted to perform adult mosquito control for Greenstone HOA, Willow Springs HOA, and Lindenwood HOA during the 2019 season. A total of 8.1 road miles within these neighborhoods were sprayed via ground-based vehicles with Ultra Low Volume (ULV) AquaKontrol mosquito adulticides to reduce adult mosquito populations on the dates listed below.

| Application date | zone                                | Spray miles | Spray acres   | Ounces sprayed |
|------------------|-------------------------------------|-------------|---------------|----------------|
| 6/11/2019        | LHOA - Greenstone HOA<br>Spray Zone | 2.81        | 102.17        | 133.46         |
| 6/25/2019        | LHOA - Greenstone HOA<br>Spray Zone | 2.71        | 98.54         | 131.53         |
| 6/26/2019        | LHOA - Willow Springs Spray<br>Zone | 2.58        | 93.81         | 122.07         |
| <b>Totals</b>    |                                     | <b>8.1</b>  | <b>294.52</b> | <b>387.06</b>  |

## **Public Relations**

VDCI received 6 phone calls from the residents of Fort Collins during the month of June 2019. There was 1 new larval mosquito production site reported. This site was inspected and treated due to larval production or potential larval production. VDCI received 3 calls from residents reporting mosquito annoyance problems, technicians were dispatched to check out the complaint areas. There were 2 residents requesting to be added to the call notification program and they were directed to the City of Fort Collins website ([www.fcgov.com/westnile](http://www.fcgov.com/westnile)). There was one business opt out call and inspection in the month of June 2019.