

Summary of Monitoring and Control for the Mosquito Program for the Week ending July 31, 2015

West Nile Virus (WNV) in and Around Boulder County

Mosquito activity was below normal in Boulder County and in the city this week. Last year, 2014, the city also had lower mosquito numbers than previous years. The percentage of *Culex* mosquitoes is higher than normal, but the actual numbers are low due to lower overall mosquito activity. Boulder County is divided into three WNV monitoring zones. Results for the city are still pending, but the other two zones - one that covers the Longmont region and the other that includes Superior, Louisville and Lafayette - had positive mosquito samples this week. The risk of transmission to humans is still considered relatively low.

Mosquito samples have also tested positive from Alamosa, Denver, Larimer, Pueblo, Weld, Jefferson, and Mesa Counties. No new human cases have been reported in Colorado in recent weeks. One case has been confirmed so far this season. At this point last season, four cases had been confirmed. The number of cases fluctuates each year and is influenced by many factors, making it impossible to predict how many people will become ill each year.

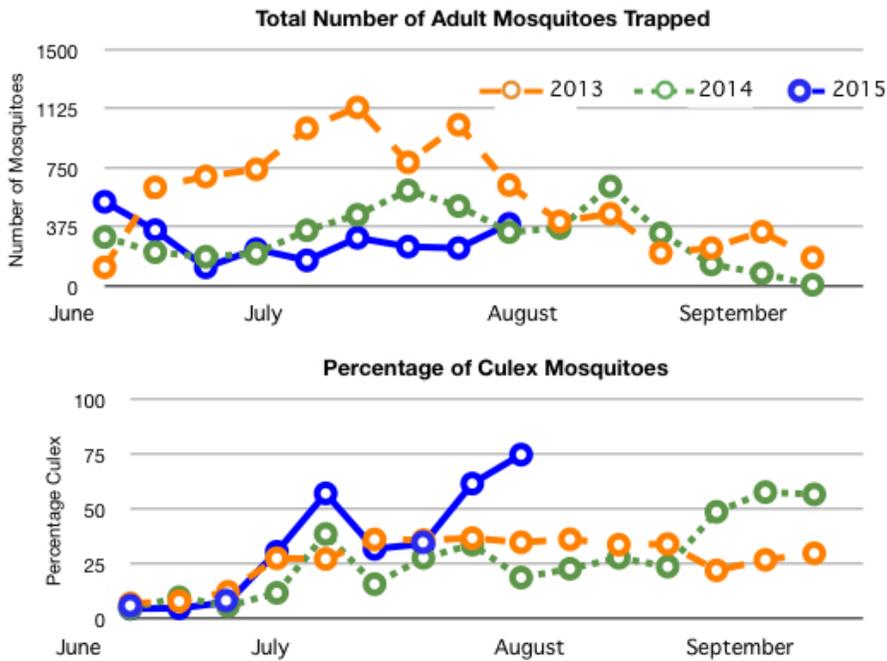
Culex mosquitoes readily breed in urban environments in small amounts of water. To reduce the number of mosquitoes and the risk of WNV transmission to people, it is important for residents to inspect their properties and drain any standing water. Due to the increasing infection rate in WNV mosquitoes, individuals should consistently take preventive measures to avoid mosquito bites. More information is available about prevention of WNV at the [Fight the Bite website](#).

Adult Mosquito Trap Numbers

Adult mosquitoes are monitored from a grid of 16 traps located throughout the city. The mosquitoes are sorted and identified to species. *Culex* species from designated sentinel traps are sent to the Colorado Department of Public Health and Environment to be tested for the presence of WNV. The following table shows the results from surveillance traps.

| Date | Total Mosquitoes | Number of <i>Culex</i> Mosquitoes | Percent <i>Culex</i> Mosquitoes | WNV Testing Results |
|---------|------------------|-----------------------------------|---------------------------------|---------------------|
| June 2 | 541 | 26 | 4.8% | Not yet testing |
| June 9 | 361 | 20 | 5.5% | Negative |
| June 16 | 125 | 14 | 7.8% | Negative |
| June 23 | 240 | 74 | 30.8% | Negative |
| June 30 | 169 | 97 | 57.4% | Negative |
| July 7 | 312 | 100 | 32.1% | Negative |
| July 14 | 256 | 88 | 34.4% | Positive |
| July 21 | 247 | 153 | 61.9% | Negative |
| July 28 | 401 | 301 | 75.1% | Results pending |

Weekly mosquito trap results will be charted throughout the season and the results from the previous two years will be included for comparison.



Nuisance Mosquito Program

Nuisance mosquito abundance and species composition can be compiled from 12 of the 16 WNV surveillance traps (four traps are specific for *Culex* mosquitoes), providing information about nuisance mosquito activity throughout the city. Two additional traps are placed in areas with high nuisance mosquito activity. These are located at the East Boulder Recreation Center and the Thorne Institute at the east side of Sombrero Marsh. “Floating” traps may also be set up to monitor areas of high mosquito activity. One is currently installed at the Greenbelt Meadows neighborhood.

The table below shows the adult nuisance mosquito counts in the three traps that are used for additional monitoring of nuisance mosquitoes, as well as the top five nuisance mosquito counts in WNV surveillance traps throughout the city.

| Trap location | Number of Nuisance Mosquitoes (Number of <i>Culex</i>) |
|--------------------|---|
| Greenbelt Meadows* | 104 (14)* |
| Thorne Institute* | 45 (17)* |
| Rolling Rock Ranch | 22 (4) |

| Trap location | Number of Nuisance Mosquitoes (Number of <i>Culex</i>) |
|--------------------------------|--|
| 23 rd & Meadow | 17 (35) |
| Tom Watson Park | 15 (57) |
| Sawhill Ponds | 14 (60) |
| Stazio Ball Fields | 12 (15) |
| East Boulder Community Center* | 1 (13)* |

* Trap is from nuisance mosquito control program

Mosquito Larval Control Treatments

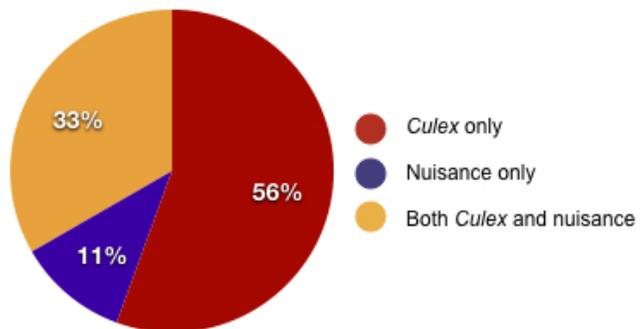
A total of 248 site inspections occurred and 9 were treated.

Sites treated with *Culex*-only larvae: 5

Sites treated with nuisance-only larvae: 1

Sites treated with both *Culex* with nuisance larvae: 3

Percentage of sites treated for *Culex* and nuisance mosquitoes



If you have any questions, please contact Rella Abernathy at 303-441-1901.