

# Dallas County Health and Human Services Arbovirus Surveillance Report



Week 24 ending June 19, 2021

- In week 24, two mosquito traps tested positive for West Nile Virus (WNV). To date for 2021, a total of eleven mosquito traps have tested positive for WNV.
- No human WNV cases have yet been reported to date for 2021.
- No chikungunya and Zika cases have been reported year to date in 2021 in Dallas County.
- *Aedes albopictus* and *Aedes aegypti* are currently circulating in the area.

**Table 1.** Mosquito Laboratory and Human Case Surveillance Data for WNV, Dallas County

Week Ending	5/8	5/15	5/22	5/29	6/5	6/12	6/19	YTD
MMWR Week	18	19	20	21	22	23	24*	
Total Traps Placed in Dallas County <sup>a</sup>	247	241	205	242	238	248	231	2,486
Number of Positive Mosquito Traps (PHL; IL) <sup>c</sup>	0;0	0;1	0;0	0;2	0;2	1;3	2;0	3;8
Number of Pools Tested (PHL; IL) <sup>b,c</sup>	135;8	127;4	153;0	180;11	217;18	233;28	291;0	1,552;86
Number of Trap Results Currently Pending	0	0	0	0	0	0	0	
Average Number of <i>Cx. quinquefasciatus</i> per Trap <sup>d</sup>	6.0	6.2	19.5	11.2	49.9	58.5	143.0	28.4
Total Number of <i>Cx. quinquefasciatus</i> Trapped and Tested	1,184	1,322	2,564	2,319	6,586	8,347	11,155	34,762
Number of Positive Mosquito Pools (PHL; IL) <sup>c</sup>	0;0	0;1	0;0	0;2	0;2	1;3	2;0	3;8
WNV Infection Rate per 1,000 <i>Cx. quinquefasciatus</i> <sup>e</sup>	0.00	1.26	0.00	0.86	0.31	0.48	0.18	
Weekly Vector Index (VI) <sup>f</sup>	0.00	0.01	0.00	0.01	0.02	0.03	0.03	
Presumptive WNV Viremic Blood Donors	0	0	0	0	0	0	0	0
WNV Human Cases (WNND; WNF) <sup>g</sup>	0;0	0;0	0;0	0;0	0;0	0;0	0;0	0;0

**Table 2.** Mosquito Laboratory and Human Case Surveillance Data for chikungunya, dengue and Zika virus, Dallas County

Week Ending	5/8	5/15	5/22	5/29	6/5	6/12	6/19	YTD
MMWR Week	18	19	20	21	22	23	24*	
Total Biogents Sentinel-Traps Placed in Dallas County <sup>h</sup>	4	4	0	4	4	4	0	36
Average Number of <i>Aedes</i> per Trap <sup>i</sup>	0	2.5	0	1	3.3	4.3	0	1.7
Chikungunya Human Cases (Confirmed & Probable) <sup>j</sup>	0	0	0	0	0	0	0	0
Dengue Human Cases (Confirmed & Probable) <sup>k</sup>	0	0	0	0	0	0	0	0
Zika Human Cases (Confirmed & Probable) <sup>l</sup>	0	0	0	0	0	0	0	0
Pregnant Women with Possible Zika Infection <sup>m</sup>	0	0	0	0	0	0	0	0

\*Data for most recent 2 weeks are preliminary, and reflect results reported as of 12:30 p.m. June, 21 2021

- All traps deployed in municipalities submitting data to DCHHS since January 1, 2020. Includes traps without mosquitoes, malfunctioning traps and traps with pending results
- Excludes traps without female *Culex quinquefasciatus* identified. Maximum of 50 female *Culex quinquefasciatus* per pool; more than 1 pool may be tested per trap
- PHL = Public health laboratory (DSHS, DCHHS) testing performed by viral culture or CDC RT-PCR protocol; IL = Testing from independent labs by alternate methods
- Average abundance of female *Culex quinquefasciatus* mosquitoes per trap night/week (excludes non-working traps)
- WNV infection rates calculated using a Maximum Likelihood Estimation (MLE). *Biggerstaff BJ. PooledInfRate, version 4.0; Microsoft Excel Add-In; CDC 2007*
- The Vector Index (VI) reflects the MLE adjusted for *Culex quinquefasciatus* abundance.  $VI = \sum_{i=species} \bar{N} i \bar{P} i$ , where  $\bar{N}$  is the average number of *Culex quinquefasciatus* mosquitoes collected per trap night and  $\bar{P}$  is the estimated infection rate
- Human cases by week of report to health department. WNND = West Nile Neuroinvasive Disease; WNF = West Nile Fever
- All Biogents (BG) Sentinel traps deployed in municipalities submitting data to DCHHS since Week 15.
- Average abundance of *Aedes albopictus* and *Aedes aegypti* mosquitoes per night/trap in BG-Traps (excludes non-working traps)
- Human CHKV cases by week of report to health department (AT : Autochthonous case; I : imported)
- Human Dengue cases by week of report to the health department
- Confirmed and probable human Zika cases by week of specimen collection date
- Possible Zika Virus Infection Among Pregnant Women — United States and Territories, May 2016, <http://www.cdc.gov/mmwr/volumes/65/wr/mm6520e1.htm/>