

Tarrant County Public Health

Weekly Arbovirus Surveillance Report: MMWR Week May 11-May 17, 2025



Week 20 Summary

- 137 mosquito pools* have been tested in NTRL from week 20
 - Year-to-date NTRL has tested a total of 355 mosquito pools
- 1 mosquito pools tested positive for WNV this week:
Euless (1)

- Average number of mosquitoes/trap include:

- *Culex spp*: 75.5
- *Aedes aegypti* and 3.3
- *Aedes albopictus*:

NTRL– North Texas Regional Lab

WNV= West Nile virus; CHIKV= chikungunya virus; DENV= dengue virus; SLEV St. Louis encephalitis virus * May include data from outside Tarrant County

Cumulative Positive WNV Pools per Municipality

There have been a total of 3 positives in 2025

Euless (1) Fort Worth* (1) Lake Worth (1)

* May include data from outside Tarrant County

Table 1. MLE⁽¹⁾ and VI⁽²⁾ for County Quadrants, Weeks 19 and 20

	County Quadrant	# Gravid traps	Ave F <i>Culex</i> spp	Positive pools	MLE (Lower-Upper Limit)	VI
Week 19	Northeast	49	37.4	0.0	0.00 (0.00-7.17)	0.000
	Northwest	19	24.6	1.0	5.74 (0.33-39.20)	0.084
	Southeast	33	67.8	0.0	0.00 (0.00-7.65)	0.000
	Southwest	20	29.3	0.0	0.00 (0.00-15.72)	0.000
Week 20	Northeast	50	71.4	1.0	0.62 (0.04-3.01)	0.037
	Northwest	26	71.7	0.0	0.00 (0.00-4.14)	0.000
	Southeast	35	98.5	0.0	0.00 (0.00-3.20)	0.000
	Southwest	22	68.6	0.0	0.00 (0.00-4.64)	0.000

Data source: Tarrant County Public Health

1. MLE= Maximum Likelihood or the estimate of the mosquito infection rate per mosquito species. 2. VI= Vector Index which is a measure of infectivity accounting for vector species composition, vector species population density, and proportion of vector population infected with WNV

Averages, MLE, and limits will be given for species with identified infection rates only and only for the latest two week. MLE, Lower and Upper Limits are based on a 95% confidence interval. All data in this table is based on collection date.

Calculated using a Maximum Likelihood Estimation (MLE). Biggstaff, Brad J. PooledInfRate, Version 4.0: a Microsoft® Office Excel® Add-In to compute prevalence estimates from pooled samples. Centers for Disease Control and Prevention, Fort Collins, CO, U.S.A., 2009

Cumulative Data for the Tarrant County Region, Weeks 17-20

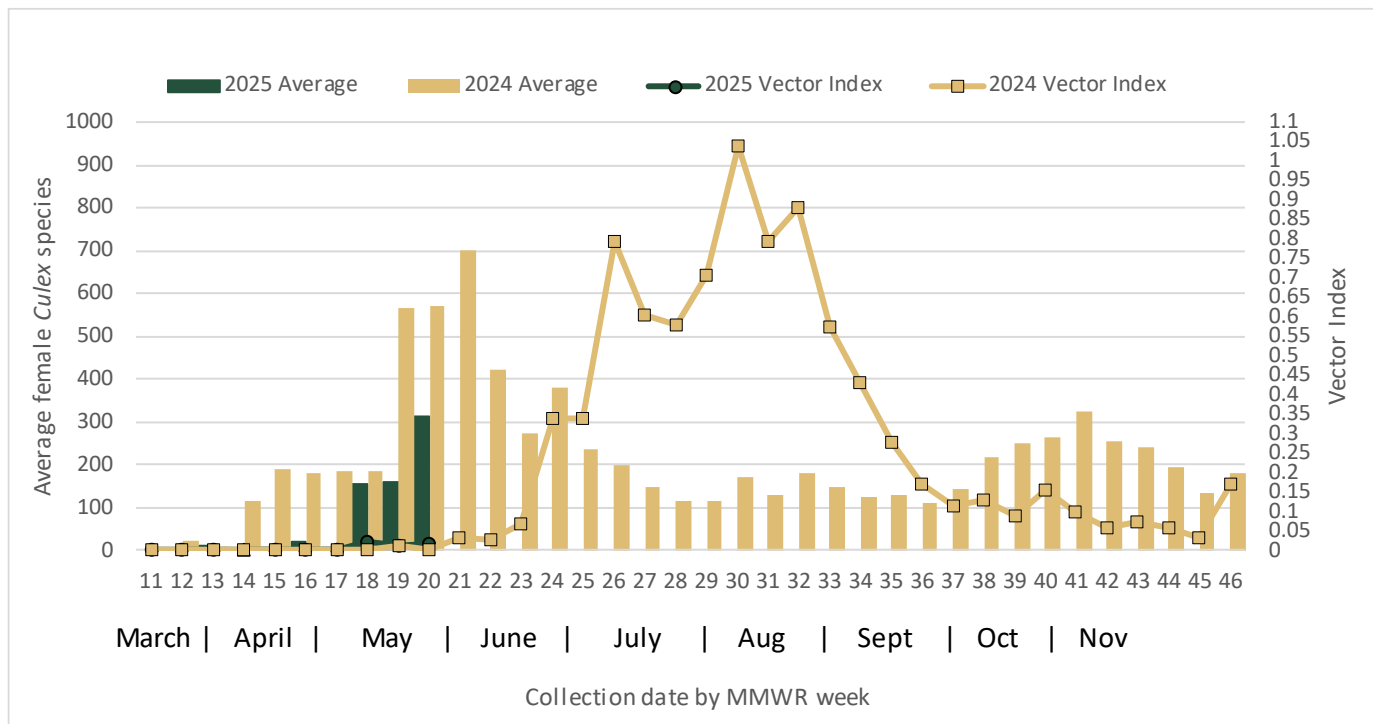
Week	Apr 20- Apr 26	Apr 27- May 3	May 4- May 10	May 11- May 17	YTD
MMWR Week	17	18	19	20	
Total number of gravid traps set in Tarrant Region	7	80	141	158	454
Average number of <i>Culex spp</i> per gravid trap	2.7	41.5	39.2	75.5	46.6
Number of mosquito pools tested ¹ (NTRL; non-NTRL)	0;6	55;15	121;36	137;13	355;72
Number of positive mosquito pools (NTRL; non-NTRL) ¹	0;0	1;0	1;0	1;0	3;0
WNV infection rate per 1,000 <i>Culex spp</i> ²	0.00	0.72	0.47	0.23	
Weekly vector index ³	0.000	0.020	0.013	0.015	
Total BG Sentinel traps set in Tarrant Region	1	18	18	22	60
Average number of female <i>Aedes aegypti</i> and <i>Aedes albopictus</i> per BG trap	4.0	3.0	4.0	3.3	3.4

¹ Based on mosquito collection date; NTRL = North Texas Regional Laboratory

² Calculated using a Maximum Likelihood Estimation (MLE). Biggerstaff, Brad J. PooledInfRate, Version 4.0: a Microsoft® Office Excel® Add-In to compute prevalence estimates from pooled samples. Centers for Disease Control and Prevention, Fort Collins, CO, U.S.A., 2009 *Culex spp.* includes pools of both *Cx restuans* and *Cx quinquefasciatus*. These MLEs are calculated separately, per species and added together as per instructions by CDC.

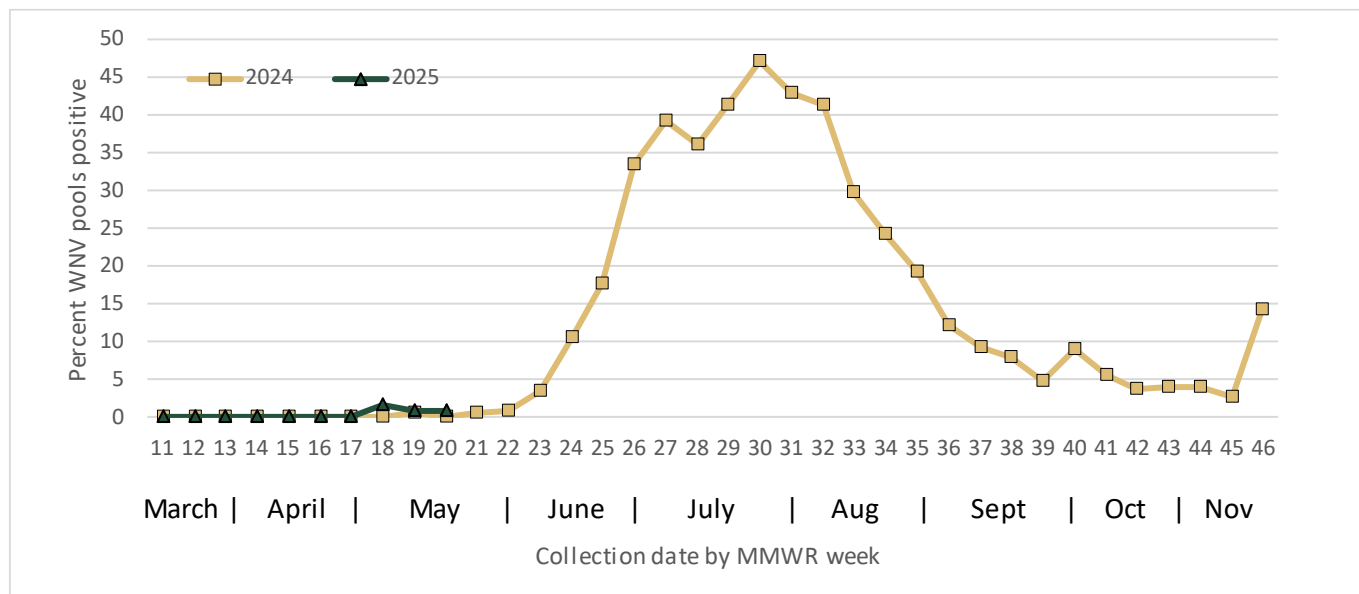
³ Vector Index is a measure of infectivity accounting for vector species composition, vector species population density, and proportion of vector population infected with WNV
Note: Infection rate and vector index calculations now includes pools from outside laboratories; Data subject to change due to on-going case investigations, mosquito collection, and testing. Data source: Tarrant County Public Health

Figure 1. Average Number of Female *Culex* Species Per Trap and Vector Index by Collection Date, Tarrant County, 2024-2025



Data Source: Tarrant County Public Health

Figure 2. Percentage of Mosquito Pools Positive for WNV by Collection Date, Tarrant County, 2024-2025



Data Source: Tarrant County Public Health

Table 3. North Texas Arbovirus Activity as Reported by Texas DSHS on May 20, 2025

North Texas Counties	WNV				CHIKV		DENV		SLEV		Zika	
	Positive Mosquito Pools	Human cases			Positive Mosquito Pools	Human Cases	Positive Mosquito Pools	Human Cases	Positive Mosquito Pools	Human Cases	Positive Mosquito Pools	Human Cases
Collin	0	0	WNVF;	0	WNND	0	0	0	0	0	0	0
Dallas	0	0	WNVF;	0	WNND	0	0	0	1	0	0	0
Denton	0	0	WNVF;	0	WNND	0	0	0	0	0	0	0
Johnson	0	0	WNVF;	0	WNND	0	0	0	0	0	0	0
Non-Tarrant North Texas	0	0		0		0	0	1	0	0	0	0
All Texas Counties	3	0		0		0	0	9	0	0	0	0

*All reported CHIKV, DENV, & Zika human cases are travel-related

WNV– West Nile virus; WNF– West Nile fever; WNND– West Nile neuroinvasive disease; CHIKV– Chikungunya virus; DENV– Dengue virus; SLEV– St. Louis encephalitis virus

For Additional Information Please Visit The Links Below:

Tarrant County Public Health:

- [Vector Control](#)
- [Be Mosquito Free](#)
- [WNV Interactive Mapping Tool](#)
- [Eliminating Mosquito Breeding Sites](#)
- [Mosquitoes Love Water](#)

Environmental Protection Agency:

- [Insect Repellent Information](#)

Texas Department of State Health Services:

- [DSHS Mosquito-Borne Diseases](#)
- [DSHS West Nile virus](#)
- [DSHS Dengue](#)
- [Arbovirus Activity Reports](#)

Center for Disease Control and Prevention:

- [CDC West Nile virus](#)
- [CDC Dengue](#)