

# Tarrant County Public Health

## Weekly Arbovirus Surveillance Report: MMWR Week Apr 27-May 3, 2025



### Week 18 Summary

- 55 mosquito pools\* have been tested in NTRL from week 18
  - Year-to-date NTRL has tested a total of 97 mosquito pools
- 1 mosquito pools tested positive for WNV this week:  
Fort Worth\* (1)
- Average number of mosquitoes/trap include:
  - *Culex spp*: 41.5
  - *Aedes aegypti* and 3.0
  - *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 1 positives in 2025

Fort Worth\* (1)

\* May include data from outside Tarrant County

**Table 1. MLE<sup>(1)</sup> and VI<sup>(2)</sup> for County Quadrants, Weeks 17 and 18**

	County Quadrant	# Gravid traps	Ave F <i>Culex</i> spp	Positive pools	MLE (Lower-Upper Limit)	VI
Week 17	Northeast	0	0.0	0.0	0.00 (0.00-0.00)	0.000
	Northwest	0	0.0	0.0	0.00 (0.00-0.00)	0.000
	Southeast	1	1.0	0.0	0.00 (0.00-793.45)	0.000
	Southwest	0	0.0	0.0	0.00 (0.00-0.00)	0.000
Week 18	Northeast	27	63.1	0.0	0.00 (0.00-5.50)	0.000
	Northwest	4	14.3	0.0	0.00 (0.00-72.09)	0.000
	Southeast	25	38.4	1.0	2.35 (0.14-11.74)	0.071
	Southwest	10	39.2	0.0	0.00 (0.00-10.41)	0.000

Data source: Tarrant County Public Health

1. MLE= Maximum Likelihood Estimate 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). 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

## Cumulative Data for the Tarrant County Region, Weeks 15-18

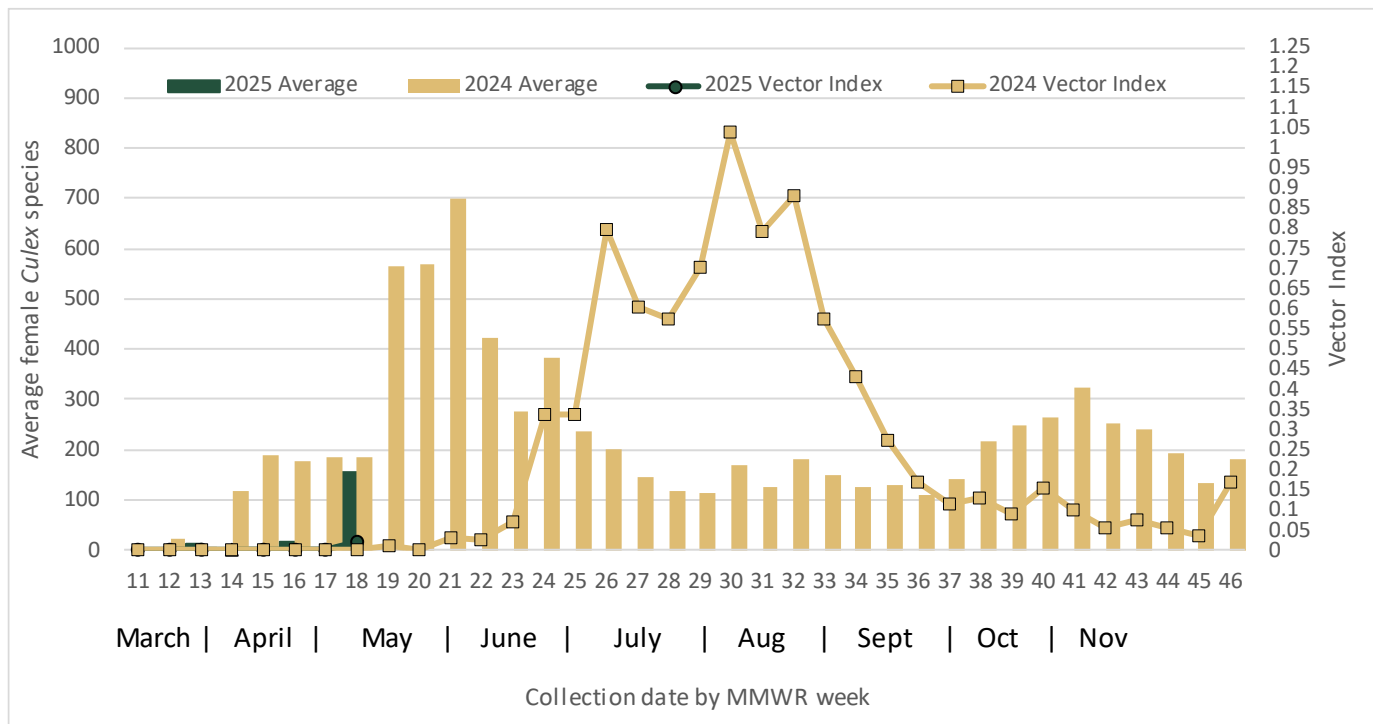
Week	Apr 6- Apr 12	Apr 13- Apr 19	Apr 20- Apr 26	Apr 27- May 3	YTD
MMWR Week	15	16	17	18	
Total number of gravid traps set in Tarrant Region	2	15	7	80	155
Average number of <i>Culex spp</i> per gravid trap	1.0	4.9	2.7	41.5	24.0
Number of mosquito pools tested <sup>1</sup> (NTRL; non-NTRL)	0;0	7;2	0;6	55;15	97;23
Number of positive mosquito pools (NTRL; non-NTRL) <sup>1</sup>	0;0	0;0	0;0	1;0	1;0
WNV infection rate per 1,000 <i>Culex spp</i> <sup>2</sup>	0.00	0.00	0.00	0.72	
Weekly vector index <sup>3</sup>	0.000	0.000	0.000	0.020	
Total BG Sentinel traps set in Tarrant Region	0	1	1	18	20
Average number of female <i>Aedes aegypti</i> and <i>Aedes albopictus</i> per BG trap	0.0	2.0	4.0	3.0	3.0

<sup>1</sup> Based on mosquito collection date; NTRL = North Texas Regional Laboratory

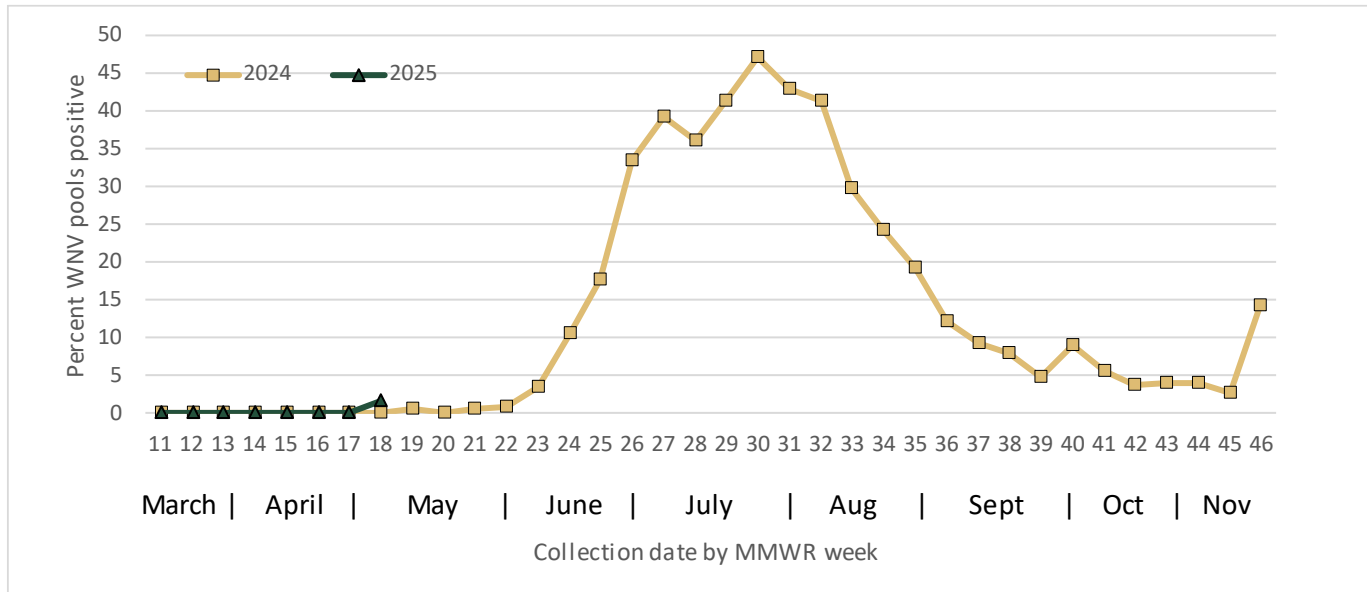
<sup>2</sup> Calculated using a Maximum Likelihood Estimation (MLE). Biggerstaff, Brad J. PooledInfRate, Version 4.0: a Microsoft® Office Excel® Add-In to compute prevalence estimates from pooled samples. Centers for Disease Control and Prevention, Fort Collins, CO, U.S.A., 2009 *Culex spp* includes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

<sup>3</sup> 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**



**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 6, 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	0	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	0	0	0	0	0
<b>All Texas Counties</b>	<b>0</b>	<b>0</b>		<b>0</b>		<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*All reported CHIKV, DENV, & Zika human cases are travel-related  
WNV– West Nile virus; WNVF– 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:**

Department of State Health Services:

- [Arbovirus Activity Reports](#)
- [Texas Zika](#)

Tarrant County educational videos and documents:

- [Eliminating Mosquito Breeding Sites](#)
- [Barrier Treatments for Mosquitoes](#)
- [Mosquitoes Love Water](#)
- [Mosquito Prevention Tool Kit](#)

Tarrant County web pages:

- [Be Mosquito Free](#)
- [Zika](#)
- [Vector Control](#)
- [WNV Interactive Mapping Tool](#)

Environmental Protection Agency:

- [Insect Repellent Information](#)

Center for Disease Control and Prevention:

- [Zika Travel Information](#)