



Tarrant County Public Health

West Nile Virus Update



TCPH West Nile Virus (WNV) Activity Report
 MMWR Week 30 (July 20 - July 26, 2014)
 Report Date: July 31, 2014

- 158 mosquito pools submitted during MMWR Week 30; Four pools with collection dates during Week 30 tested positive for WNV – Bedford (3), Colleyville (1); Three pools with collection dates during Week 31* tested positive for WNV – Euless (3); All pools tested negative for SLEV
- 2,135 mosquito pools submitted in 2014; All pools have tested negative for SLEV; Eighteen pools have tested positive for WNV:
 - Bedford (8)
 - Benbrook (1)
 - Colleyville (5)
 - Euless (4)*
- No human WNV cases have been reported to date in Tarrant County for 2014
- More information can be found at: [Take Control, Stop West Nile Virus](#)

*Positive pools collected in week 31 are not included in the provided tables/graphs because they fall outside the weeks covered in this report

Table 1. WNV activity summary, Tarrant County, Weeks 26-30, 2014

Week	Jun 22 - Jun 28	Jun 29 - Jul 5	Jul 6 - Jul 12	Jul 13 - Jul 19	Jul 20 - Jul 26	YTD
MMWR Week	26	27	28	29	30	
Total traps placed in Tarrant County	145	191	183	177	190	2,478
Average number of female <i>Culex</i> species per trap	38.2	27.7	95.0	87.5	73.8	32.7
Number of mosquito pools tested ¹	104	156	186	185	158	2,135
Number of positive mosquito pools ²	1	2	3	3	5	18
Confirmed WNV human cases (WNF; WNND) ³	0;0	0;0	0;0	0;0	0;0	0;0
Presumptive WNV viremic blood donors	0	0	0	0	0	0
WNV infection rate per 1,000 <i>Cx. quinquefasciatus</i> ⁴	0.47	0.59	0.57	0.53	0.83	
Weekly vector index ⁵	0.016	0.016	0.054	0.045	0.061	

¹ Based on lab testing date

² Based on mosquito collection date

³ Based on onset of illness date for cases reported to Tarrant County Public Health; WNF=West Nile Fever; WNND = West Nile Neuroinvasive Disease

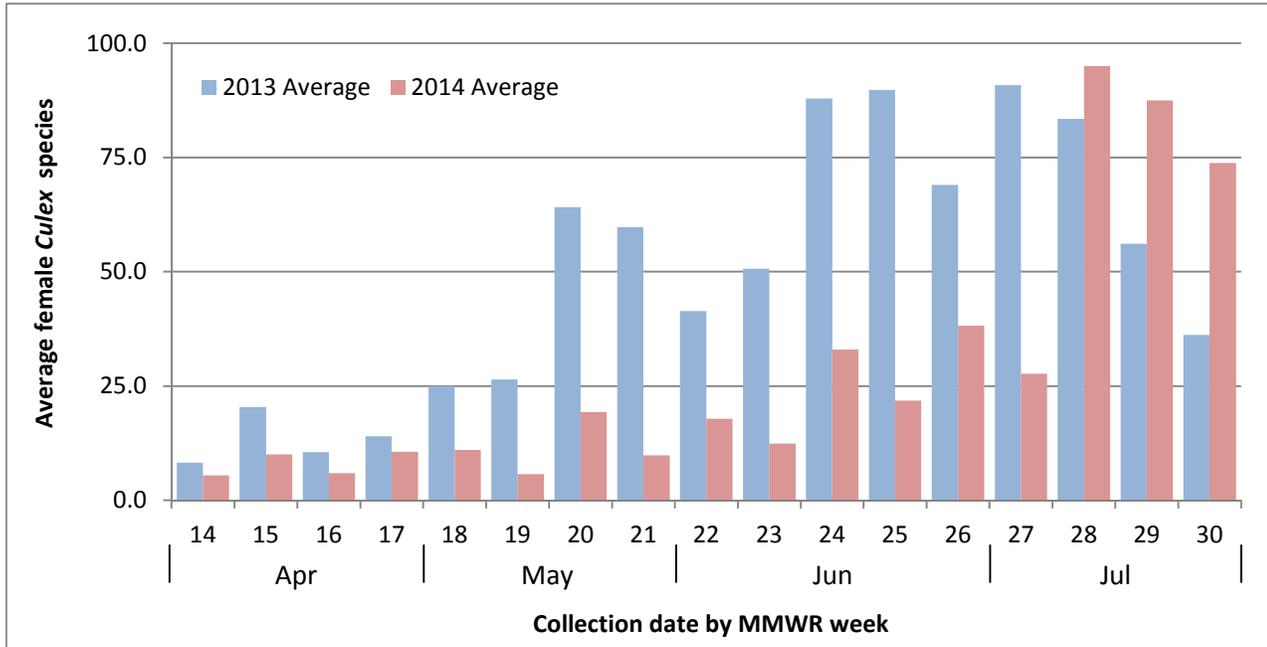
⁴ Calculated using a Maximum Likelihood Estimation (MLE). Biggerstaff, Brad J. PooledInfRate, Version 4.0: a Microsoft® Office Excel® Add-In to compute prevalence estimates from pooled samples. Centers for Disease Control and Prevention, Fort Collins, CO, U.S.A., 2009

⁵ Vector Index is a measure of infectivity accounting for vector species composition, vector species population density, and proportion of vector population infected with WNV

Data subject to change due to on-going case investigations, mosquito collection, and testing

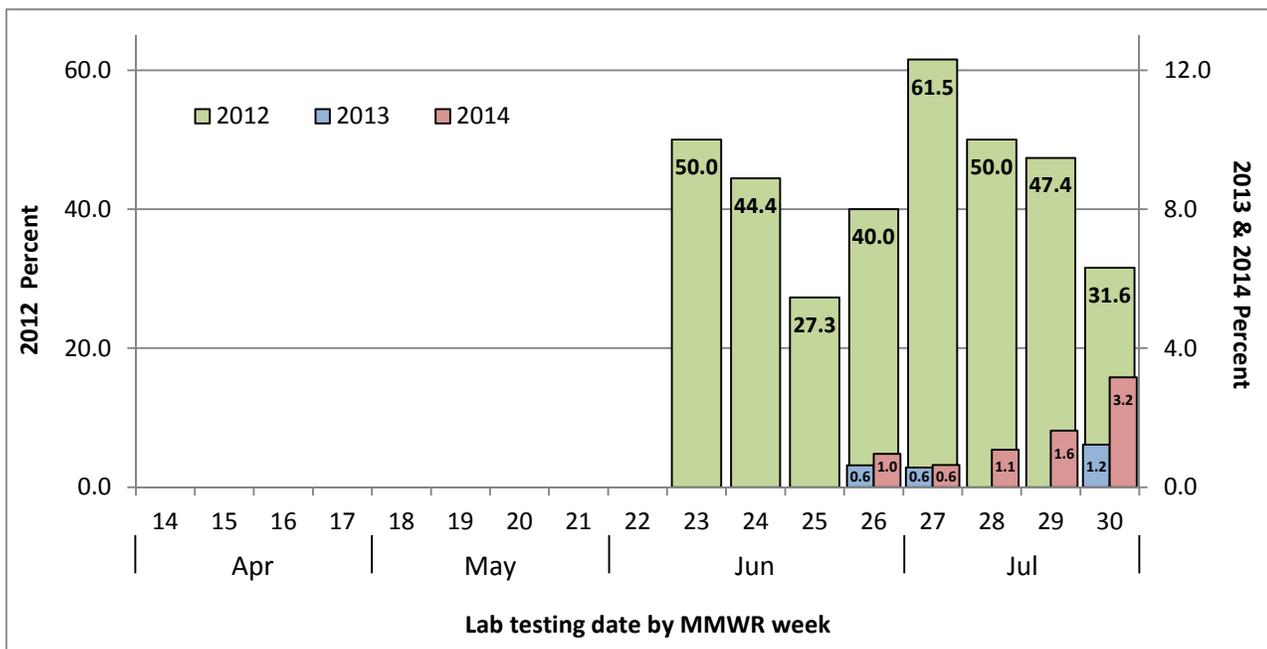
Data source: Tarrant County Public Health

Figure 1. Average number of female *Culex* species per trap, Tarrant County, Weeks 14-30, 2014



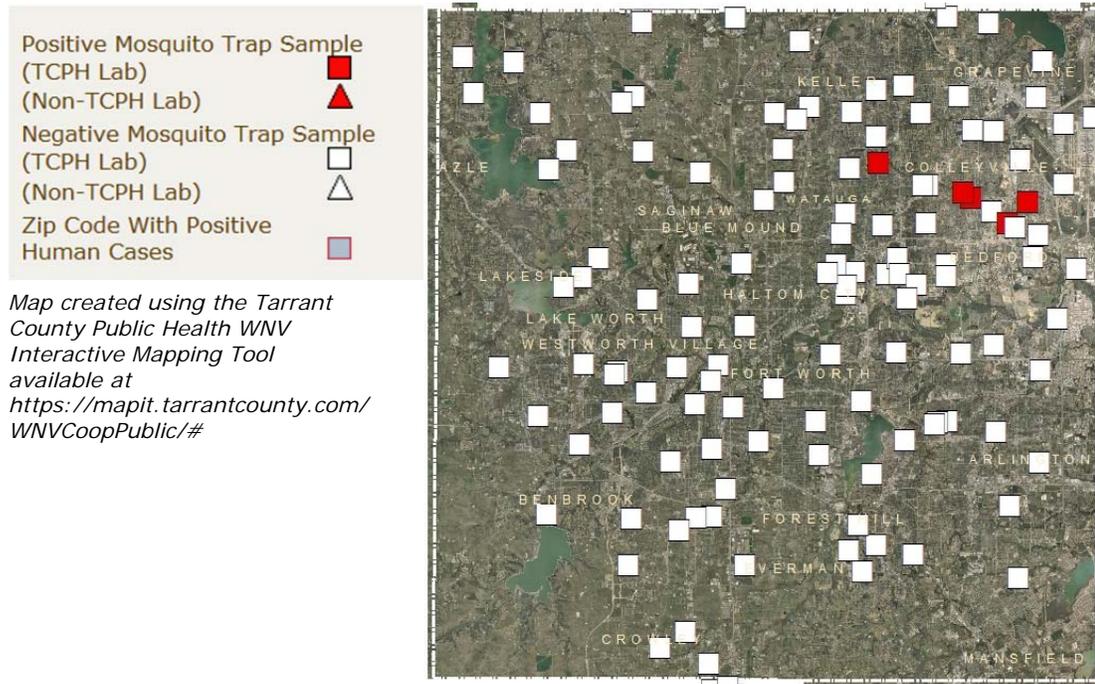
Data source: Tarrant County Public Health

Figure 2. Percentage of submitted mosquito pools that tested positive for WNV, Tarrant County, Weeks 14-30, 2012-2014



Data source: Tarrant County Public Health

Figure 3. Mosquito trap results and human WNV cases, Tarrant County, Week 30, 2014



State-wide WNV activity reported on July 30, 2014

- A total of 462 mosquito pools have tested positive for WNV in the following Texas counties:
 - Dallas (13)
 - Harris (363)
 - Montgomery (74)
 - Tarrant (12)
- Nine human WNV cases have been reported in the following Texas counties:
 - Brazoria (1 WNF; 0 WNND)
 - Dallas (2 WNF; 0 WNND)
 - Ellis (1 WNF; 0 WNND)
 - Galveston (0 WNF; 1 WNND)
 - Liberty (0 WNF; 1 WNND)
 - Montgomery (0 WNF; 1 WNND)
 - Parker (1 WNF; 0 WNND)
 - Travis (1 WNF; 0 WNND)

WNF = West Nile Fever
WNND – West Nile Neuroinvasive Disease
Data source: Texas Department of State Health Services