



2018 Profile of Human West Nile Virus in Dallas County

Dallas County Health and Human Services

Demographic Characteristics of Human WNV Cases, 2018

	WNND		WNF		Total WNV	
	n (%)	Incidence per 100,000	n (%)	Incidence per 100,000	n (%)	Incidence per 100,000
Total	11 (100.0)	0.4	2 (100.0)	0.1	13 (100.0)	0.5
Male	6 (54.5)	0.5	2 (100.0)	0.2	8 (61.5)	0.6
Female	5 (45.5)	0.4	0 (0.0)	0.0	5 (38.5)	0.4
Hispanic	2 (18.2)	0.2	0 (0.0)	0.0	2 (15.4)	0.2
White	8 (72.7)	1.0	2 (100.0)	0.3	10 (76.9)	1.3
Black	1 (9.1)	0.2	0 (0.0)	0.0	1 (7.7)	0.2
Asian	0 (0.0)	0.0	0 (0.0)	0.0	0 (0.0)	0.0
American Indian	0 (0.0)	0.0	0 (0.0)	0.0	0 (0.0)	0.0
Age Group (years)						
0-17	0 (0.0)	0.0	0 (0.0)	0.0	0 (0.0)	0.0
18-24	0 (0.0)	0.0	0 (0.0)	0.0	0 (0.0)	0.0
25-44	1 (9.1)	0.1	1 (50.0)	0.1	2 (15.4)	0.1
45-64	4 (36.4)	0.7	1 (50.0)	0.2	5 (38.5)	0.7
≥65	6 (54.5)	2.1	0 (0.0)	0.0	6 (46.2)	2.1

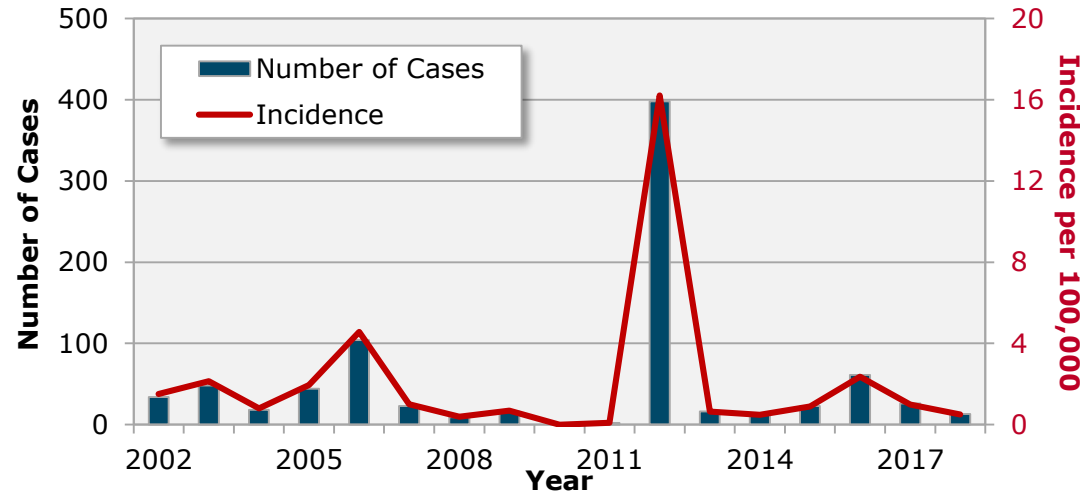
N/A = Not applicable

Clinical Characteristics of Human WNV Cases, 2018

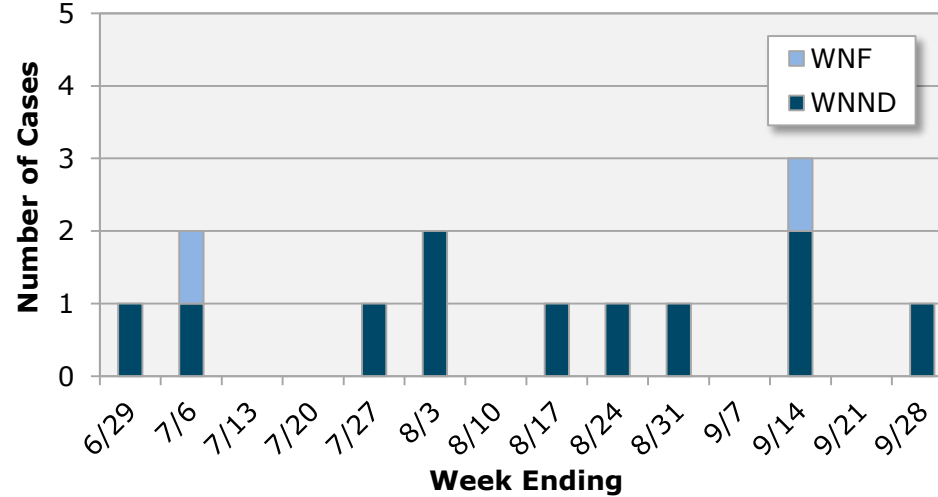
	WNND	WNF	Total WNV
	n (%)	n (%)	n (%)
Clinical Presentation*			
Fever	10 (47.6)	2 (100)	12 (52.2)
Meningitis	2 (9.5)	0 (0.0)	2 (8.7)
Encephalitis	5 (23.8)	0 (0.0)	5 (21.7)
Asymmetric Flaccid Paralysis	3 (14.3)	0 (0.0)	3 (13.0)
Clinical Course			
Hospitalizations	10 (90.9)	1 (50.0)	11 (84.6)
Median Days Hospitalization (range)	8 (4-23)	N/A	7 (3-23)
Admitted to Intensive Care Unit	2 (18.2)	0 (0.0)	2 (15.4)
Mechanical Ventilation or BiPAP	2 (18.2)	0 (0.0)	2 (15.4)
Discharge to LTCF or Rehab Facility	2 (18.2)	0 (0.0)	2 (15.4)
Deaths	1 (9.1)	0 (0.0)	1 (7.7)

Note: The categories are not mutually exclusive.

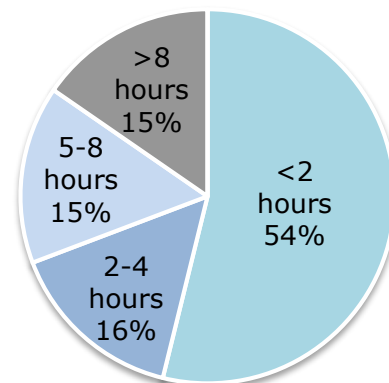
Human WNV Cases and Incidence by Year of Onset, Dallas County, 2002-2018



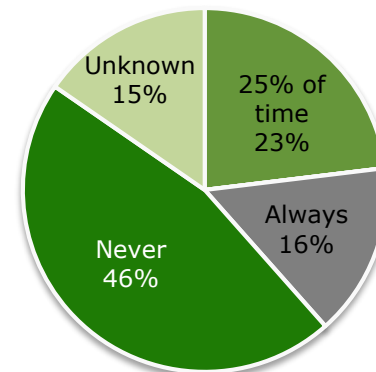
Human WNV Cases by Week of Onset, 2018



Reported Average Daily Time Outdoors (hours), (n=13)



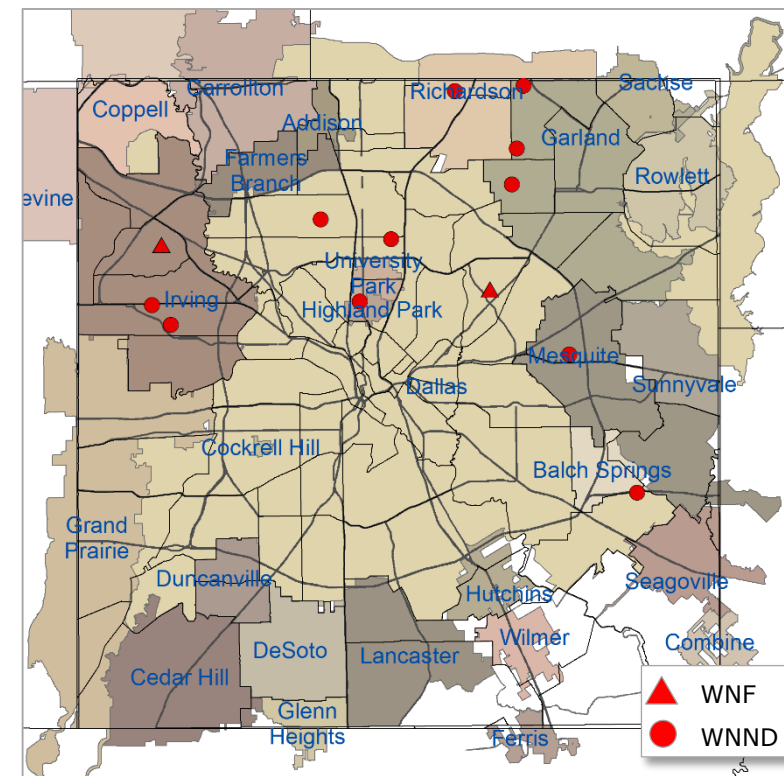
Reported Frequency of Insect Repellent Use, (n=13)



Summary

- In 2018, 13 WNV cases were reported in Dallas County, in comparison to 26 WNV cases in 2017.
- The median age of all WNV cases was 63 years (range: 37-89 years).
- 77% of WNND cases were in adults ≥50 years of age.
- No WNV-positive viremic blood donors were reported among Dallas County residents in 2018.
- One WNV-related death was reported.
- The numbers of human WNV cases reflected the higher WNV infection indices of trapped mosquitos in the area during this year season. {See DCHHS 2018 Arboviral Epidemiology Report at: <https://www.dallascounty.org/departments/dchhs/arbovirus-surveillance-report.php>}

Distribution of Human WNV Cases, 2018



Note: WNND = West Nile neuroinvasive disease; WNF = West Nile fever; LTCF = Long term care facility
Incidence calculated using projected population data for 2018.

Data Sources: Dallas County Department of Health and Human Services, Epidemiology Division; National Electronic Disease Surveillance System (NEDSS); Population data obtained through the Centers for Disease Control and Prevention: WONDER Bridged-Race Population Estimates 1990-2018.