



2016 Profile of Human West Nile Virus in Dallas County

Dallas County Health and Human Services

Demographic Characteristics of Human WNV Cases, 2016

xxxxx	WNND		WNF		Total WNV	
	n (%)	Incidence per 100,000	n (%)	Incidence per 100,000	n (%)	Incidence per 100,000
Total	40 (100.0)	1.55	21 (100.0)	0.82	61 (100.0)	2.37
Male	25 (62.5)	1.97	11 (52.4)	0.87	36 (59.0)	2.84
Female	15 (37.5)	1.15	10 (47.6)	0.76	25 (41.0)	1.91
Hispanic	5 (12.5)	0.49	0	N/A	5 (8.2)	0.49
White	32 (80.0)	4.08	20 (95.2)	2.55	52 (85.2)	6.62
Black	3 (7.5)	0.51	1 (4.8)	0.17	4 (6.6)	0.68
Asian	0	N/A	0	N/A	0	N/A
American Indian	0	N/A	0	N/A	0	N/A
Age Group (years)						
0-17	0	N/A	0	N/A	0	N/A
18-24	0	N/A	1 (4.8)	0.40	1 (1.6)	0.40
25-44	4 (10.0)	0.52	5 (23.8)	0.65	9 (14.8)	1.17
45-64	23 (57.5)	3.80	8 (38.1)	1.32	31 (50.8)	5.12
≥65	13 (32.5)	4.99	7 (33.3)	2.69	20 (32.8)	7.68

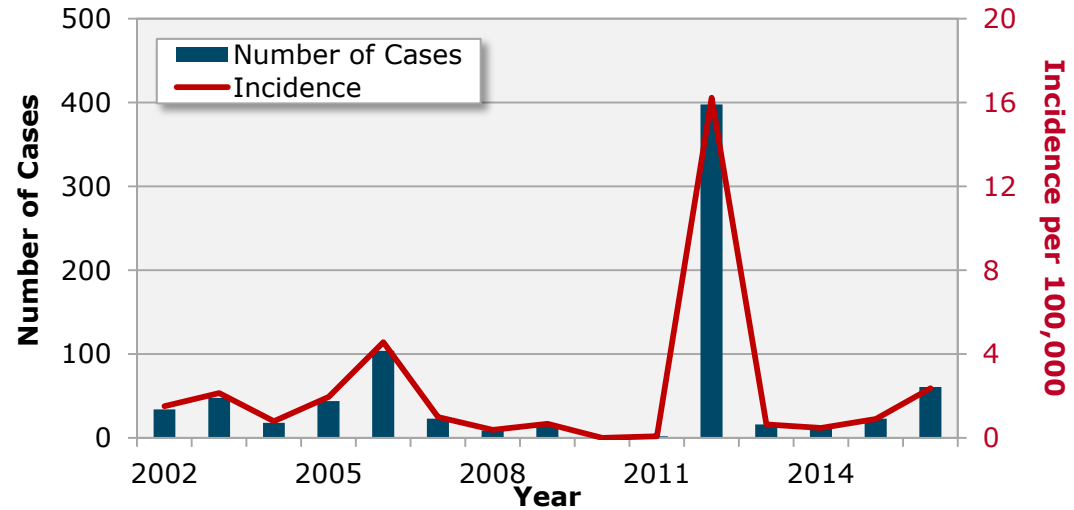
N/A = Not applicable

Clinical Characteristics of Human WNV Cases, 2016

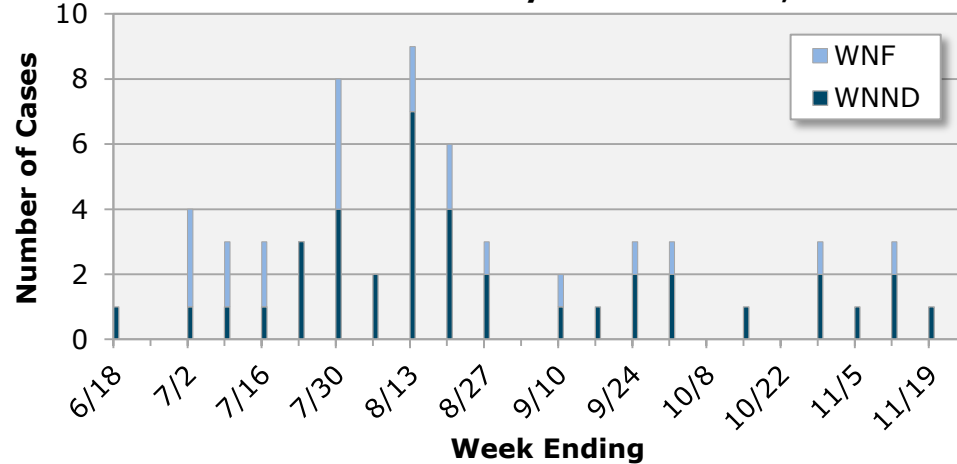
xxxxxxxxxxxxxxxxxxxxxxxx	WNND	WNF	Total WNV
	n (%)	n (%)	n (%)
Clinical Presentation			
Fever	38 (95.0)	20 (95.0)	58 (95.0)
Meningitis	9 (22.5)	0	9 (14.8)
Encephalitis	31 (77.5)	0	31 (50.8)
Asymmetric Flaccid Paralysis	0	0	0
Clinical Course			
Hospitalizations	39 (97.5)	2 (9.5)	41 (67.2)
Median Days Hospitalization (range)	11 (2-97)	3.5 (3-4)	11 (2-97)
Admitted to Intensive Care Unit	11 (27.5)	0	11 (18.0)
Mechanical Ventilation or BiPAP	10 (25.0)	0	10 (16.4)
Discharge to LTCF or Rehab Facility	2 (5.0)	0	2 (3.3)
Deaths	3 (7.5)	0	3 (4.9)

Note: The categories are not mutually exclusive.

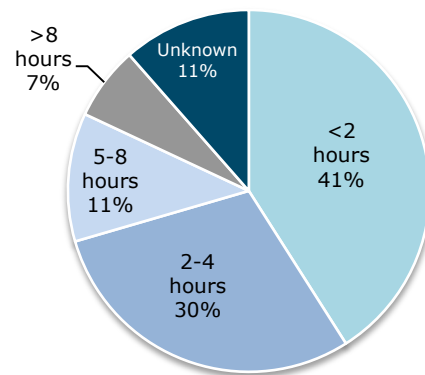
Human WNV Cases and Incidence by Year of Onset, Dallas County, 2002-2016



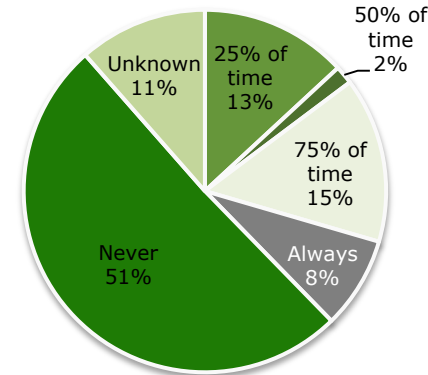
Human WNV Cases by Week of Onset, 2016



Reported Average Daily Time Outdoors (hours), (n=61)



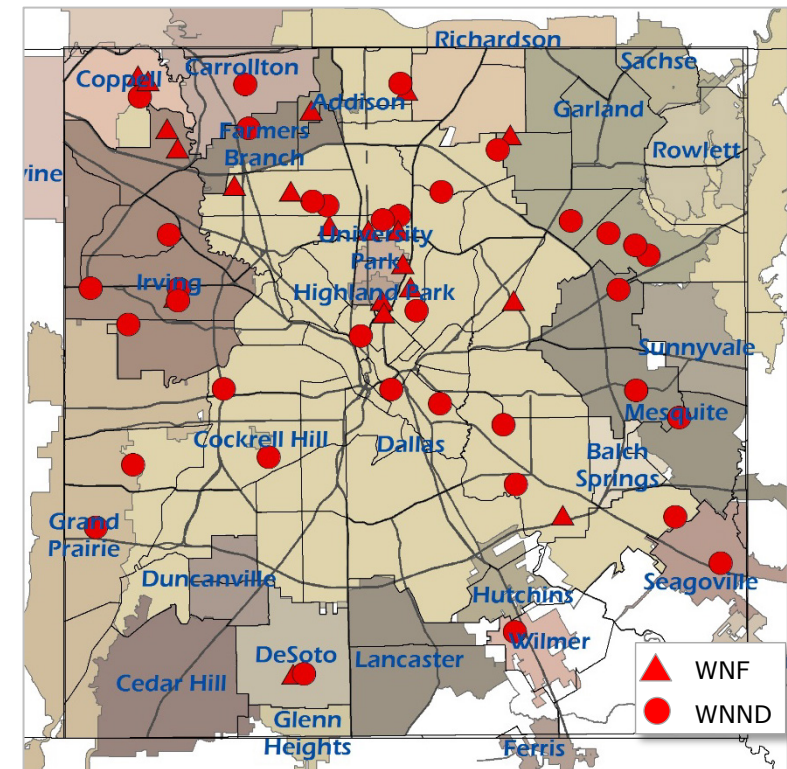
Reported Frequency of Insect Repellent Use, (n=61)



Summary

- In 2016, 61 WNV cases were reported in Dallas County, in comparison to 23 WNV cases in 2015.
- The median age of all WNV cases was 59 years (range: 20-90 years).
- 83% of WNND cases were in adults ≥50 years of age.
- Two WNV-positive viremic blood donors were reported among Dallas County residents in 2016.
- 3 WNV-related deaths were reported.
- The numbers of human WNV cases reflected the higher WNV infection indices of trapped mosquitos in the area during this 2016 season. {See DCHHS 2016 Arboviral Epidemiology Report.}

Distribution of Human WNV Cases, 2016



Note: WNND = West Nile neuroinvasive disease; WNF = West Nile fever; LTCF = Long term care facility
Incidence calculated using projected population data for 2016.

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 1990-2016.