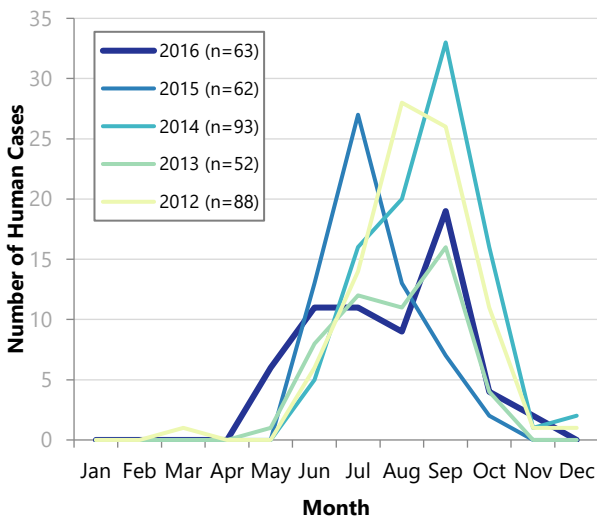


West Nile Virus End of Year Report, 2016

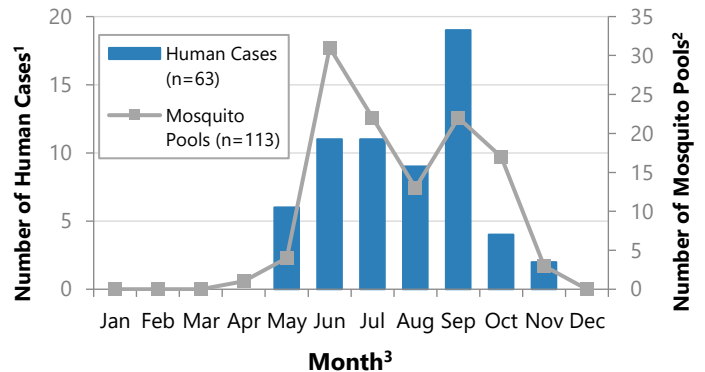
West Nile virus (WNV) arrived in Arizona in 2003 and is now endemic in Maricopa County. The Maricopa County Department of Public Health (MCDPH) Office of Epidemiology collaborates with the Maricopa County Department of Environmental Services (MCDES) Office of Vector Control to identify and monitor areas of WNV activity. This report describes trends in human infections during 2016. Please visit <http://www.maricopa.gov/wnv/> for more information about WNV.

| Characteristics of Human WNV Infections: Maricopa County, 2016 | | | | | | | |
|--|--------------------|---|---|--------|--------------|--------------------|---|
| Year Total* | Non-neuroinvasive† | Neuroinvasive | Hospitalized | Deaths | Demographics | | |
| | | | | | Gender M/F | Median Age (Range) | Race/Ethnicity |
| 63 | 17 Fever | 22 Encephalitis 23 Meningitis 1 Other | 45 Neuroinvasive 3 Non-neuroinvasive | 5 | 37/26 | 50 (4-93) | 41 White, Non-Hispanic 2 Black, Non-Hispanic 1 Asian/Pacific Islander 6 Hispanic or Latino 1 Native American 1 Other, Non-Hispanic 11 Unknown |
| *Viremic donors who do not become symptomatic (3) are not included in year total | | | | | | | |

Human Cases of WNV in Maricopa County by Month of Onset, 2012-2016

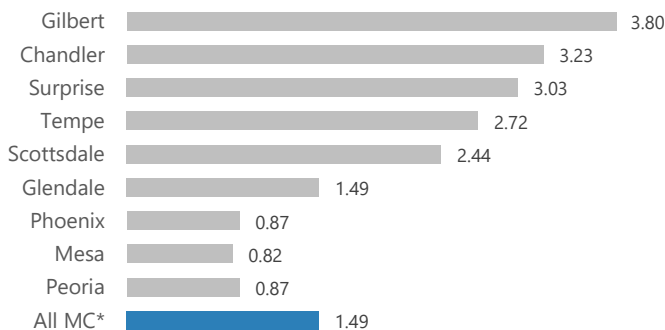


WNV Cases in Humans and WNV Positive Mosquito Pools in Maricopa County by Month, 2016



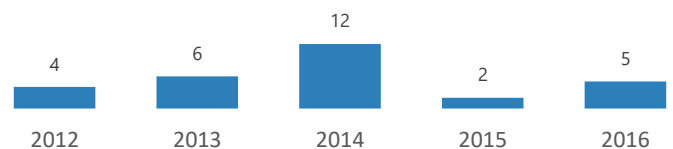
¹A human case is an individual infected with WNV and with a clinically compatible illness
²Mosquito pools are a collection of mosquitoes collected by MCDES from a county trap and tested positive for WNV
³Human data are based on date of symptom onset, mosquito data are based on date of mosquito collection

Rates of Human WNV Cases in Maricopa County (MC) By City, 2016



¹Population statistics for each city were obtained from United States Census Bureau 2016 Population Estimates
²Rate per 100,000 population = (N/population) * 100,000
³Rates for cities with $\geq 100,000$ populations shown
 *All MC includes cities displayed in figure, as well as other cities and unincorporated areas with populations < 100,000

WNV Deaths in Maricopa County 2012-2016



WNV Mortality Description 2016

| Confirmed Deaths | Clinical Presentation | Median Age (Range) | Gender M/F | Race/Ethnicity |
|------------------|--------------------------------|--------------------|------------|------------------------------------|
| 5 | 4 Encephalitis 1 Meningitis | 77 (48-93) | 1/4 | 4 White, Not Hispanic 1 Unknown |

Mean age of West Nile Virus survivors (48 years) versus deaths (75 years) was statistically significant for 2016 ($\alpha=0.05$).