

# West Nile Virus and St. Louis Encephalitis 2017 End of Year Report

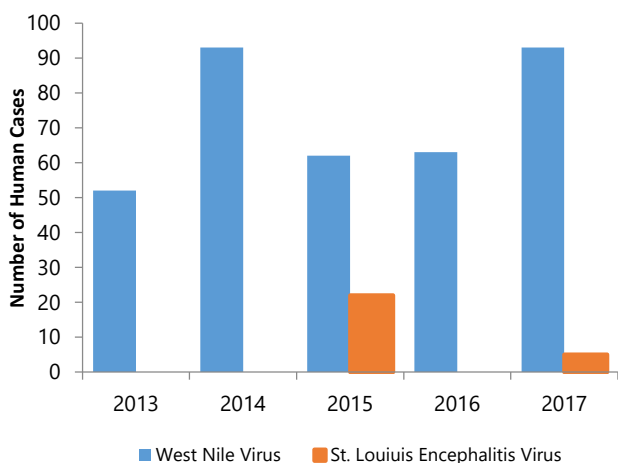
West Nile virus (WNV) arrived in Arizona in 2003 and is now endemic in Maricopa County, and St. Louis encephalitis virus (SLEV) is a rare mosquito-borne disease in Maricopa County. The Maricopa County Department of Public Health (MCDPH) Office of Epidemiology collaborates with the Maricopa County Environmental Services Department (MCESD) Office of Vector Control to identify and monitor areas of WNV and SLE activity. This report describes human infections during 2017.

Please visit <http://www.maricopa.gov/1608/Mosquito-Related-Diseases> for more information about mosquito-related diseases.

	Year Total	Non-neuroinvasive	Neuroinvasive	Hospitalized	Deaths	Gender	Median Age (Min, Max)	Race/Ethnicity
WNV	93*	8 Fever 3 Other Clinical 1 Unknown	43 Encephalitis 31 Meningitis 7 Other	73 Neuroinvasive  2 Non-neuroinvasive	6	53 male 40 female	62 (1, 92)	68 White, Non-Hispanic 1 Black, Non-Hispanic 2 Asian/Pacific Islander 11 Hispanic or Latino 1 Other, Non-Hispanic 10 Unknown
SLEV	5	3 Fever	1 Encephalitis 1 Meningitis	2 Neuroinvasive	0	4 male 1 female	49 (43, 63)	2 White, Non-Hispanic 1 Black, Non-Hispanic 2 Unknown

\*Viremic donors who did not become symptomatic (10) are not included in year total

## Human Cases of WNV and SLEV in Maricopa, 2013-2017

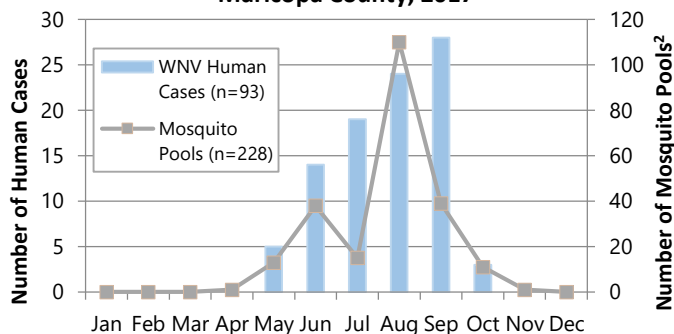


## WNV Mortality Description 2017

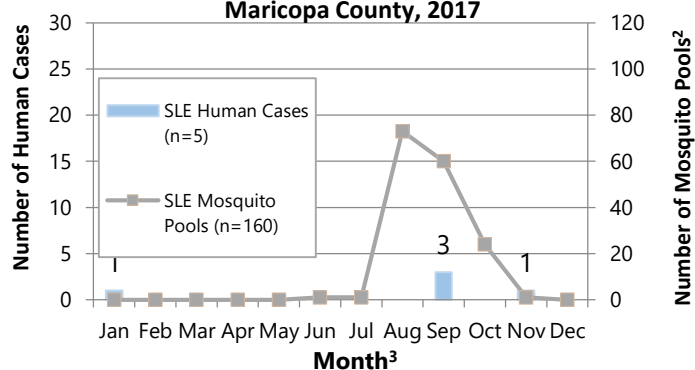
Confirmed Deaths	Clinical Presentation	Median Age (Min, Max)	Gender M/F	Race/Ethnicity
6	4 Encephalitis 2 Meningitis	83 (72, 91)	2/4	5 White, Not Hispanic 1 Hispanic

Mean age of West Nile Virus survivors (57 years) versus deaths (81 years) was statistically significant for 2017 ( $\alpha=0.05$ ).

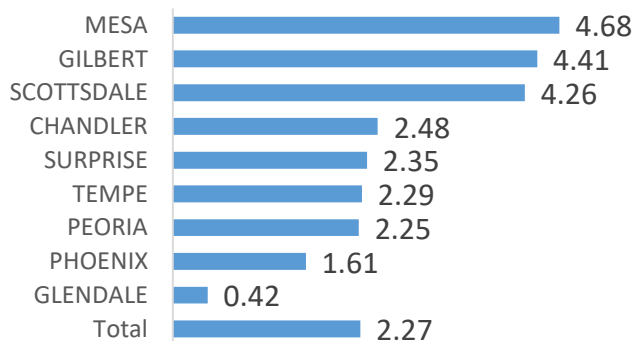
## WNV Cases in Humans and WNV Positive Mosquito Pools in Maricopa County, 2017



## SLEV Cases in Humans and SLEV Positive Mosquito Pools in Maricopa County, 2017



## Rates of Human WNV in Maricopa County By City, 2017



1 Population statistics for each city were obtained from United States Census Bureau 2016 Population Estimates

2 Rate per 100,000 population =  $(N/population) * 100,000$

3 Rates for cities with  $\geq 100,000$  populations shown

\*Total includes cities displayed in figure, as well as other cities and unincorporated areas with populations  $<100,000$

<sup>2</sup> Mosquito pools are a collection of mosquitoes collected by MCDES from a county trap and tested positive for WNV or SLEV

<sup>3</sup> Human cases are based on date of symptom onset, mosquito data are based on date of mosquito collection