

# West Nile Virus & St. Louis Encephalitis End of Year Report, 2021

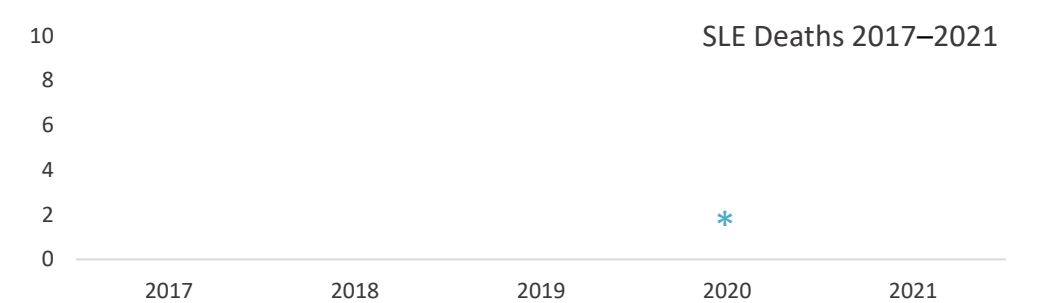
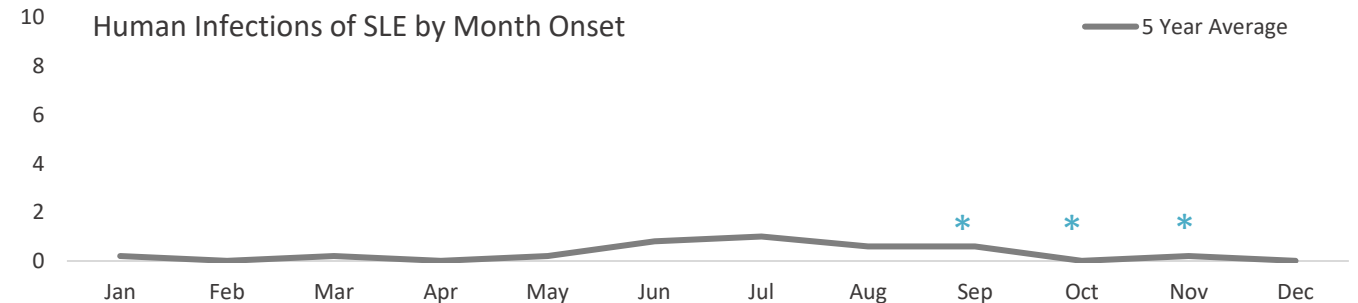
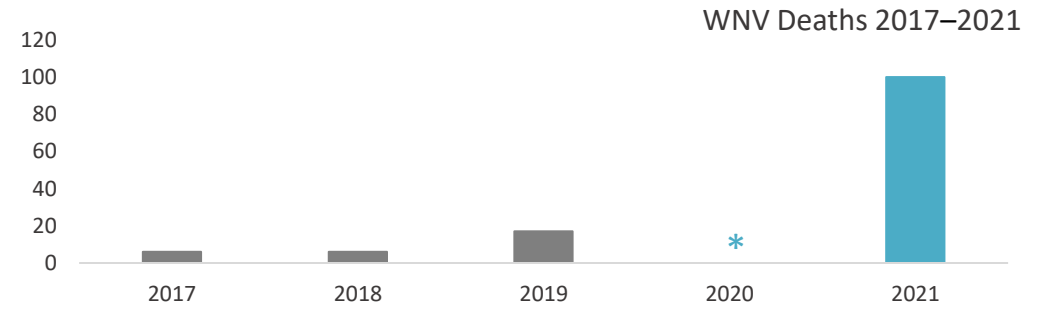
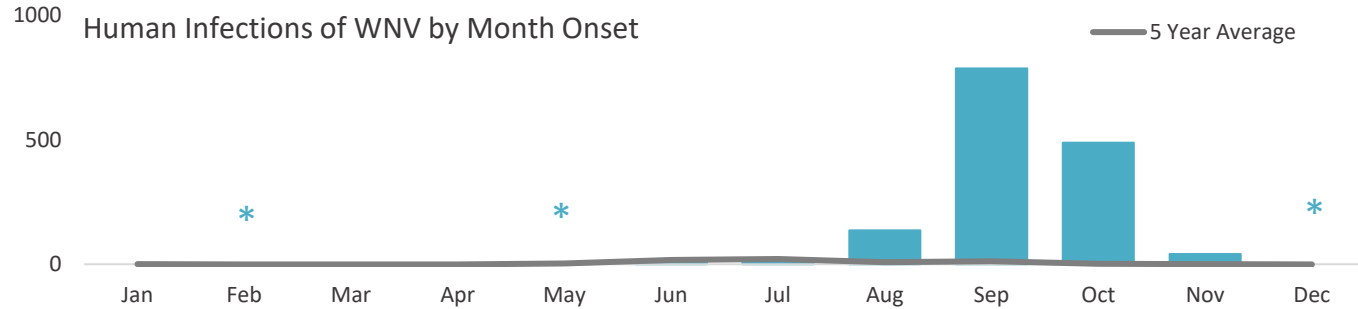
West Nile virus (WNV) arrived in Arizona in 2003 and is now endemic in Maricopa County. St. Louis encephalitis virus (SLE) is a rare mosquito-borne disease in Maricopa County. Maricopa County Department of Public Health Office of Epidemiology and Data Services collaborates with the Maricopa County Department of Environmental Services Office of Vector Control to identify and monitor areas of WNV and SLE activity. This report describes trends in human infections during 2021. Maricopa County saw more WNV cases in 2021 than any year since the virus first arrived in Arizona. **Numbers included in this report are preliminary.**

Year Total*	Non-neuroinvasive	Neuroinvasive	Hospitalized	Deaths				Sex at Birth M/F	Median Age (Min, Max)	Race/Ethnicity
WNV 1484**	526 Fever	618 Encephalitis 320 Meningitis 18 Other Neuro	924 Neuroinvasive 91 Non-neuroinvasive	100				845/639	66 (2, 97)	1089 White, Non-Hispanic 76 Hispanic or Latino 23 Other, Non-Hispanic 16 Black, Non-Hispanic 13 Asian/Pacific Island 266 Unknown
				Neuroinvasive 100	Median Age† (Min, Max) 79 (32, 95)	Sex at Birth M/F 70/30	Race/Ethnicity 84 White, Non-Hispanic 5 Hispanic or Latino 11 Other/Unknown			
SLE 8	<5	<5	<5 Neuroinvasive <5 Non-neuroinvasive	0				8/0	75 (60, 88)	<5 White, Non-Hispanic <5 Asian/Pacific Island <5 Black, Non-Hispanic <5 Hispanic or Latino <5 Unknown

\*Cases are counted in the year in which they are reported to Public Health. One case in the year total had illness onset in 2020.

\*\*WNV viremic donors who did not become symptomatic (n=79) and those who did not have fever or neurological illness (n=79) are not included in year total.

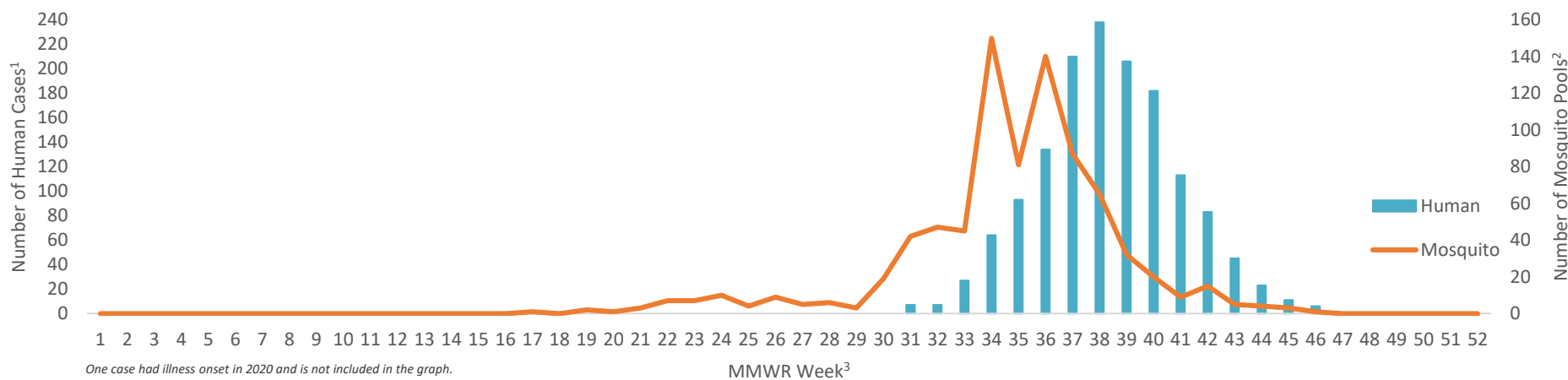
†The difference in the mean age of WNV survivors (62 yrs) vs deaths (77 yrs) was statistically significant ( $\alpha=0.05$ ).



\*Data are suppressed to prevent identification of cases due to small number (<5) of cases in each figure

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Human Infections of WNV<sup>1,3,\*</sup> and WNV Positive Mosquito Pools by MMWR Week



Human Infections of SLE<sup>1,3,\*</sup> and SLE Positive Mosquito Pools by MMWR Week



<sup>1</sup> A human case is an individual infected with WNV or SLE and with a clinically compatible illness

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

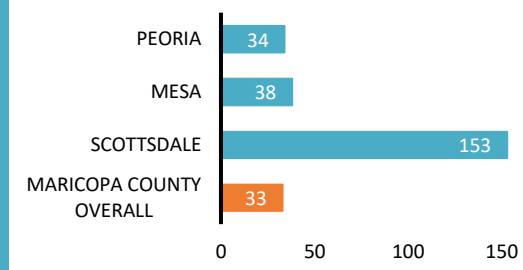
<sup>3</sup> Human data are based on date of symptom onset, mosquito data are based on date of mosquito collection

\*Data are suppressed to prevent identification of cases due to small number (< 5) of cases in each figure



Rates of Human Illness per  
100,000 Population  
Maricopa County Overall Rate  
and Cities<sup>§</sup> with Highest Rates

## WNV



SLE Maricopa County Overall  
0.2<sup>‡</sup>

<sup>‡</sup>Due to the low number of cases in 2021, rates of human SLE illness by cities was not done.

<sup>§</sup> Rates for cities with ≥ 100,000 populations shown