

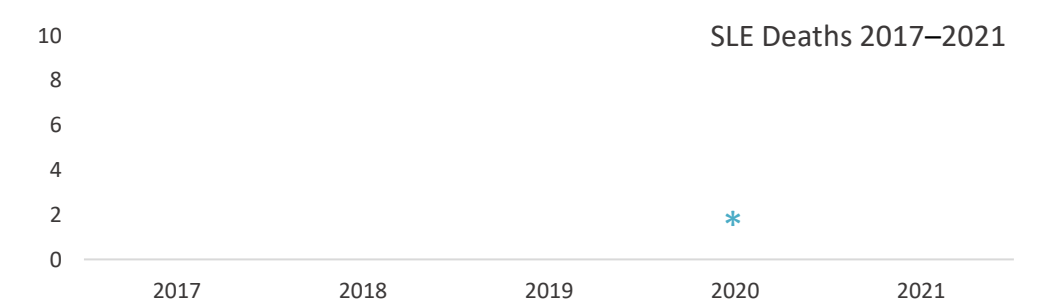
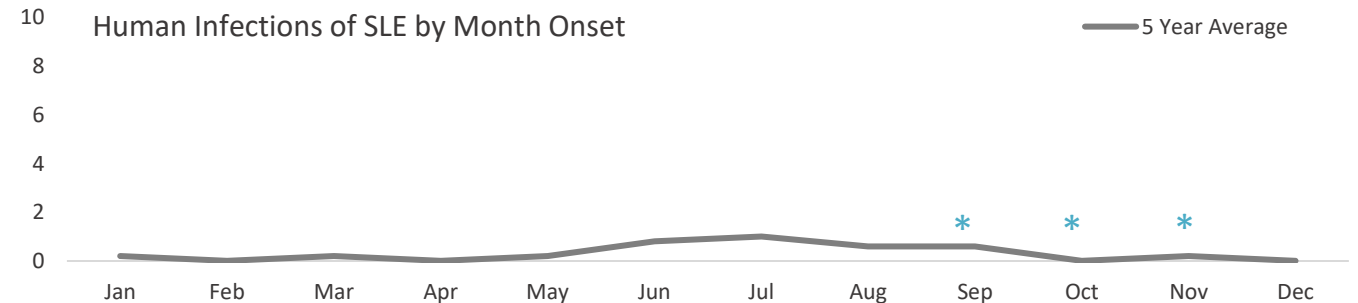
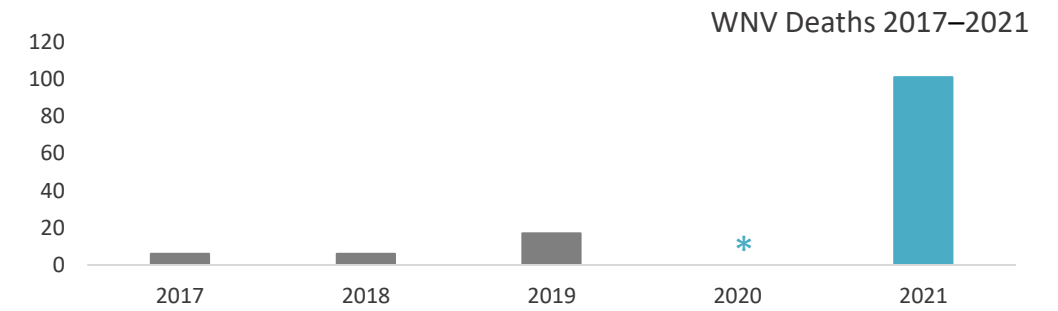
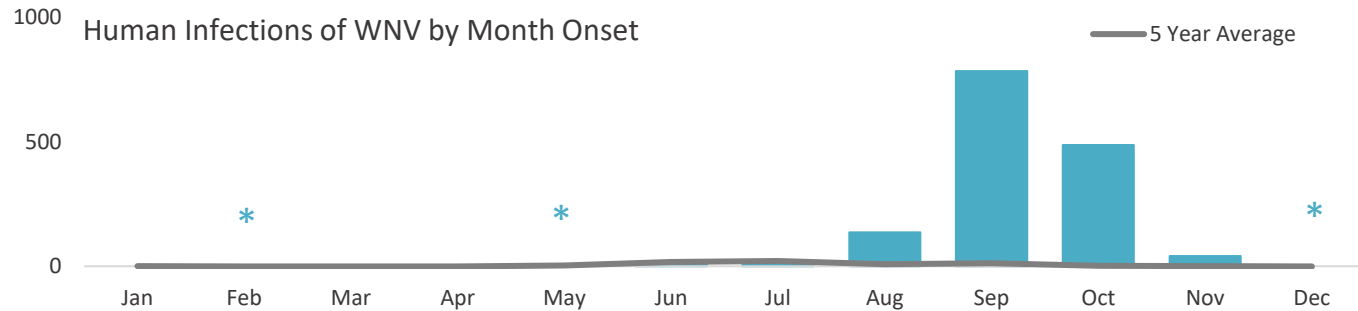
West Nile Virus & St. Louis Encephalitis End of Year Report, 2021

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 Environmental Services Department Vector Control Division 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.

Year Total*	Non-neuroinvasive	Neuroinvasive	Hospitalized	Deaths				Sex at Birth M/F	Median Age (Min, Max)	Race/Ethnicity
WNV 1480**	526 Fever	615 Encephalitis 319 Meningitis 20 Other Neuro	920 Neuroinvasive 91 Non-neuroinvasive	101				842/638	66 (2, 97)	1084 White, Non-Hispanic 77 Hispanic or Latino 23 Other, Non-Hispanic 16 Black, Non-Hispanic 13 Asian/Pacific Island 267 Unknown
				Neuroinvasive 101	Median Age† (Min, Max) 79 (32, 95)	Sex at Birth M/F 70/31	Race/Ethnicity 84 White, Non-Hispanic 5 Hispanic or Latino 12 Other/Unknown			
SLE 11	<5	*	* Neuroinvasive <5 Non-neuroinvasive	0				* /<5	73 (52, 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; 10 cases and one death were reported in 2022 and are not in the year total.

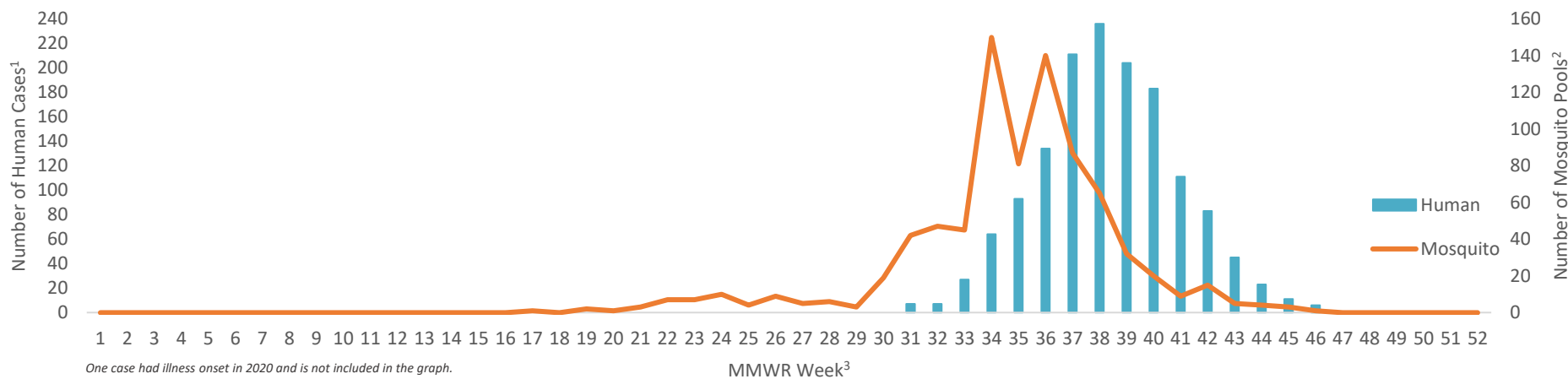
**WNV viremic donors who did not become symptomatic (n=79) and those who did not have fever or neurological illness (n=79) are not included in year total. †The difference in the mean age of WNV survivors (62 yrs) vs deaths (77 yrs) was statistically significant (α=0.05).



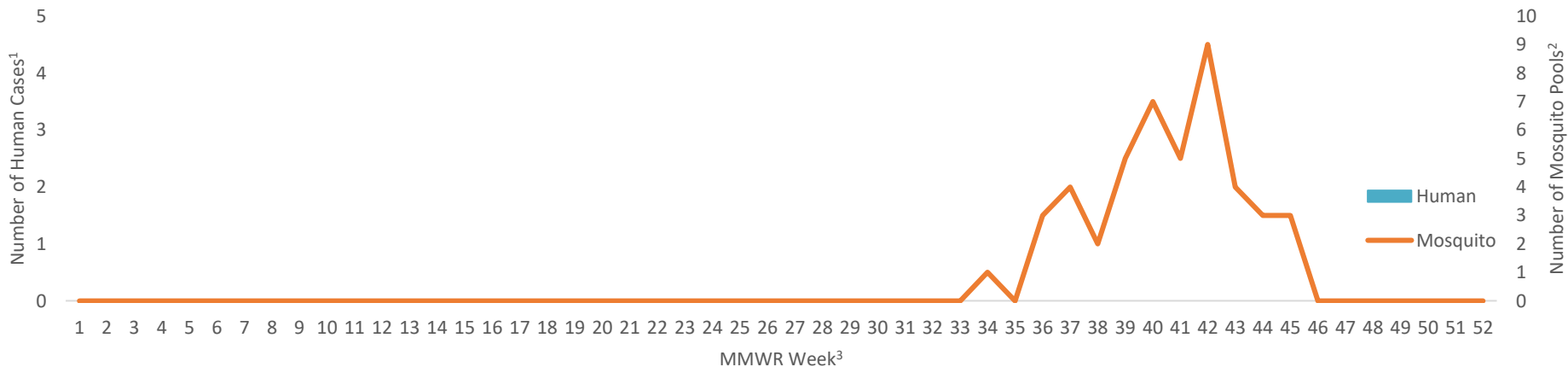
*Data are suppressed to prevent identification of cases due to small number (<5) of cases

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Human Infections of WNV^{1,3,*} and WNV Positive Mosquito Pools by MMWR Week



Human Infections of SLE^{1,3,*} and SLE Positive Mosquito Pools by MMWR Week



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

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

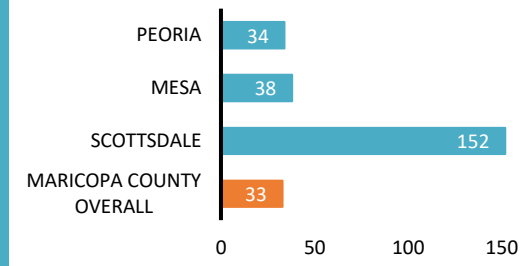
³ Human data are based on date of symptom onset, mosquito data are based on date of mosquito collection

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



Rates of Human Illness per
100,000 Population
Maricopa County Overall Rate
and Cities[§] with Highest Rates

WNV



SLE Maricopa County Overall
0.3[‡]

[‡]Due to the low number of cases in 2021, rates of human SLE illness by cities was not done.

[§] Rates for cities with ≥ 100,000 populations shown