West Nile Virus & St. Louis Encephalitis End of Year Report, 2020

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 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 2020. Maricopa County saw the least WNV cases this year since the virus first arrived in Arizona. Some data has been suppressed to protect confidentiality.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Non-neuroinvasive</th>
<th>Neuroinvasive</th>
<th>Hospitalized</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>WNV</td>
<td>3</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5*</td>
</tr>
<tr>
<td>SLE</td>
<td>6</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5*</td>
</tr>
</tbody>
</table>

No viremic blood donors who did not develop symptoms were identified for either WNV or SLE.

*The difference in the mean age of WNV survivors vs deaths was not statistically significant (α=0.05).

‡The difference in the mean age of SLE survivors vs deaths was not statistically significant (α=0.05).

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

Human Infections of WNV by Month Onset

Human Infections of SLE by Month Onset

WNV Deaths 2016–2020

SLE Deaths 2016–2020
Human Infections of WNV\(^1,3,7\) and WNV Positive Mosquito Pools by MMWR Week

Human Infections of SLE\(^1,3,7\) and SLE Positive Mosquito Pools by MMWR Week

**Due to the low number of cases in 2020, rates of human WNV and SLE illness by cities is not shown.**

**WNV**

- **MARICOPA COUNTY OVERALL**
  - 0.07

**SLE**

- **MARICOPA COUNTY OVERALL**
  - 0.1

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

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**Rates of Human Illness per 100,000 Population**

Maricopa County Overall Rate and Cities with Highest Rates