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 2014. Please visit http://www.maricopa.gov/wnv/ for more information about WNV.

### Characteristics of Human WNV Infections: Maricopa County, 2014

<table>
<thead>
<tr>
<th>Year Total*</th>
<th>Non-neuroinvasive†</th>
<th>Neuroinvasive†</th>
<th>Hospitalized</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>93</td>
<td>13</td>
<td>43</td>
<td>70</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>28</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Viremic donors who do not become symptomatic (10) are not included in year total
†Manifestation of disease was not known for 3 cases

### Human Cases of WNV in Maricopa County by Month of Onset, 2010-2014

- **2014** (n=93)
- **2013** (n=52)
- **2012** (n=88)
- **2011** (n=45)
- **2010** (n=115)

### Rates of Human WNV Cases in Maricopa County By City, 2014

- **TOTAL** 1.4
- **Tempe** 0.81
- **Surprise**
- **Scottsdale** 1.65
- **Phoenix** 1.97
- **Peoria** 1.7
- **Mesa** 2.8
- **Glendale** 4.34
- **Gilbert**
- **Chandler**

*Population statistics for each city were obtained from United States Census Bureau 2013 Population Estimates
†Rate per 100,000 population = (N/population) * 100,000
‡Rates for cities with > 100,000 populations shown
§Total includes cities displayed in figure, as well as other cities and unincorporated areas with populations <100,000

### WNV Cases in Humans and WNV Positive Mosquito Pools in Maricopa County by Month, 2014

1 A human case is an individual infected with WNV 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
3 Human data are based on date of symptom onset, mosquito data are based on date of mosquito collection

### WNV Deaths in Maricopa County, 2010-2014

- **2014** 12
- **2013** 6
- **2012** 4
- **2011** 2
- **2010** 12

### WNV Mortality Description 2014

<table>
<thead>
<tr>
<th>Confirmed Deaths</th>
<th>Clinical Presentation</th>
<th>Median Age (Range)</th>
<th>Gender M/F</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Encephalitis</td>
<td>78 (62-93)</td>
<td>7/5</td>
<td>White, Non-Hispanic</td>
</tr>
<tr>
<td>11</td>
<td>Fever</td>
<td></td>
<td></td>
<td>Hispanic or Latino</td>
</tr>
</tbody>
</table>

Mean age of West Nile Virus survivors (54 years) versus deaths (76 years) was statistically significant for 2014 (α=0.05).