

# ArboAZ

## Arizona Mosquito Activity January 1–December 31, 2015



*Culex spp*

*Aedes aegypti*

This update is to provide information about vector mosquitoes and mosquito-borne diseases in Arizona. All data is collected by local partners and submitted to ADHS. Trap locations are mapped by GPS coordinates.

Data is reported by mosquito pools. When mosquitoes are collected from a surveillance trap they are divided by species, with one pool counted per species. (Example: if one trap collects 10 mosquitoes, with 3 *Aedes vexans* and 7 *Culex quinquefasciatus*, this would be reported as 2 mosquito pools).

Please contact the Vector-borne and Zoonotic Disease Program at [vbzd@azdhs.gov](mailto:vbzd@azdhs.gov) with any questions or comments.

**Table 1: Total Mosquito Pool Data Submitted to ADHS**

	Number of Mosquito Pools	Mosquito Pools Tested (%)	Pools Positive for any Arbovirus (%)
<b>Total</b>	52,775	20,622 (39.1%)	201 (1.0%)*

\*Percent positive out of the total number of pools tested

**Figure 1** indicates all locations reporting mosquito surveillance.

**Table 2: West Nile virus (WNV) & St. Louis encephalitis virus (SLEV) mosquito profile**

	West Nile Virus Test Results		St. Louis Encephalitis Virus Test Results	
	Number of Positive Pools (%)	Number of Pools Tested	Number of Positive Pools (%)	Number of Pools Tested
<b>Total Pools</b>	<b>116 (1.1%)</b>	<b>10,519</b>	<b>85 (1.9%)</b>	<b>4,399</b>
<i>Culex quinquefasciatus</i>	77 (1.0%)	7,914	70 (1.9%)	3,692
<i>Culex erythrothorax</i>	2 (1.0%)	201	0 (0.0%)	0
<i>Culex tarsalis</i>	33 (1.5%)	2,192	14 (1.9%)	706
Species not otherwise specified	4 (2.8%)	144	1 (100%)	1
<b>Counties and tribes reporting positive mosquitoes</b>	Maricopa, Pinal, Fort McDowell Yavapai Nation, Yavapai, Yuma, San Carlos Apache		Maricopa, Santa Cruz and Yuma	

Figure 2 shows positive WNV mosquito pool locations

Figure 3 shows positive SLEV mosquito pool locations

**Table 3: Dengue and chikungunya mosquito profile**

	Dengue Virus Test Results		Chikungunya Virus Test Results	
	Number of Positive Pools (%)	Number of Pools Tested	Number of Positive Pools (%)	Number of Pools Tested
<b>Total Pools</b>	<b>0 (0%)</b>	<b>4</b>	<b>0 (0%)</b>	<b>5,652</b>
<i>Aedes aegypti</i>	0 (0%)	0	0 (0%)	5,647
<i>Aedes albopictus</i>	0 (0%)	0	0 (0%)	0
<b>Counties and tribes reporting positive mosquitoes</b>	None		None	

**Table 4: *Aedes aegypti* and *Aedes albopictus* vector profile**

	<i>Aedes aegypti</i>	<i>Aedes albopictus</i>
<b>Total identified pools in Arizona, by species</b>	9,405	0
<b>Counties and tribes reporting pools, by species</b>	Cochise, Fort McDowell Yavapai Nation, San Carlos, Maricopa, Pima, Pinal, Santa Cruz, Yavapai, Yuma	None

Figure 4 and Figure 5 shows all trap locations where *Aedes aegypti* have been reported.

### Human Arboviral Disease Case Counts

For human WNV cases see [WNV stats](#)

For human SLE cases see [SLE stats](#)

For human dengue cases see [Dengue stats](#)

For human chikungunya cases see [CHK stats](#)

**Figure 2** includes West Nile human disease case counts, by county

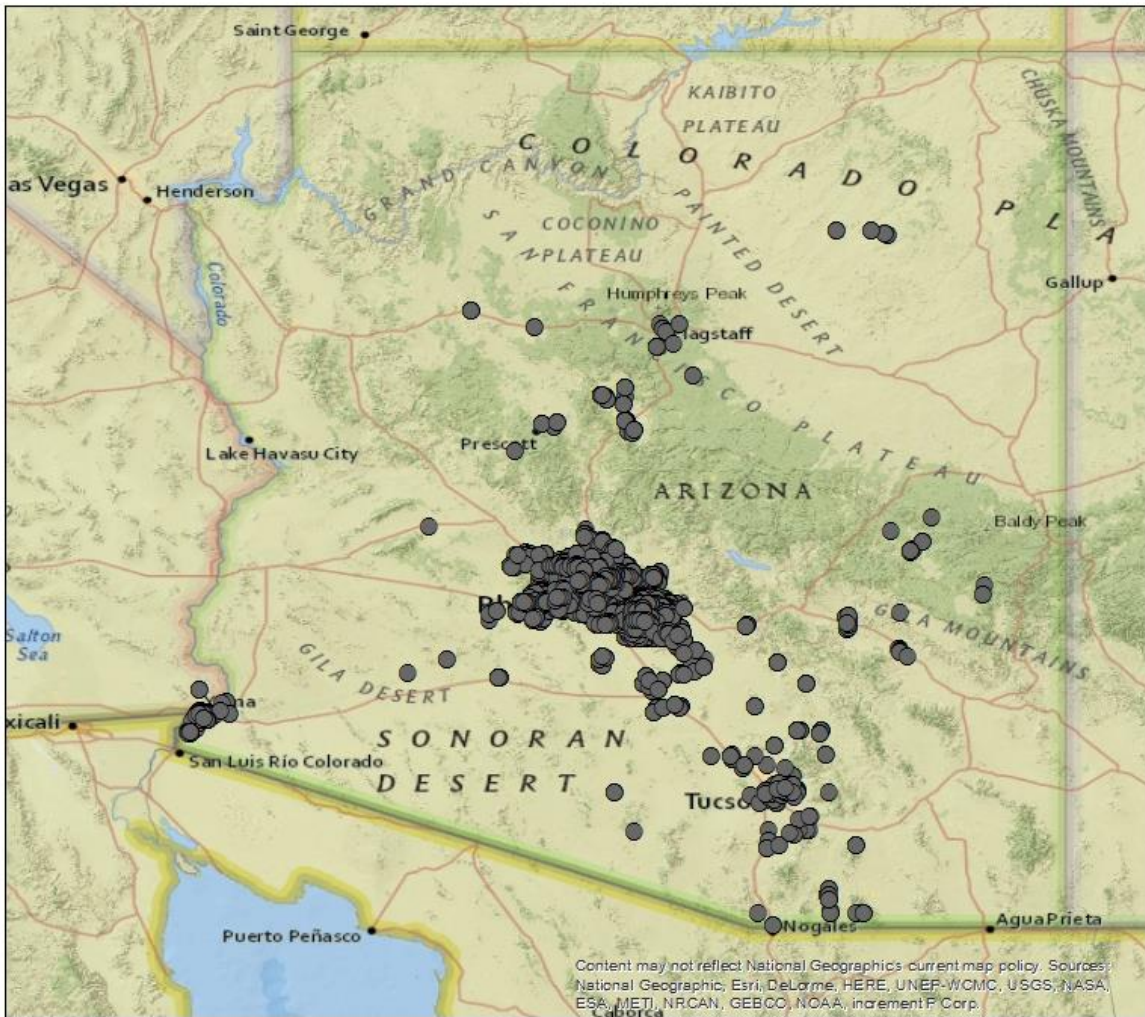
**Figure 3** includes St. Louis encephalitis human disease case counts, by county

**Figure 4** includes dengue human disease case counts, by county

**Figure 5** includes chikungunya human disease case counts, by county

Figure 1

Location of all  
Mosquito Surveillance Pools (n= 52,775 )  
Jan 1 – Dec 31 2015



- All mosquito surveillance traps



0 20 40 80 120 160 Miles

Figure 2

Positive WNV Pools (n= 116) &  
Human WNV Rates. by County  
Jan 1 – Dec 31 2015

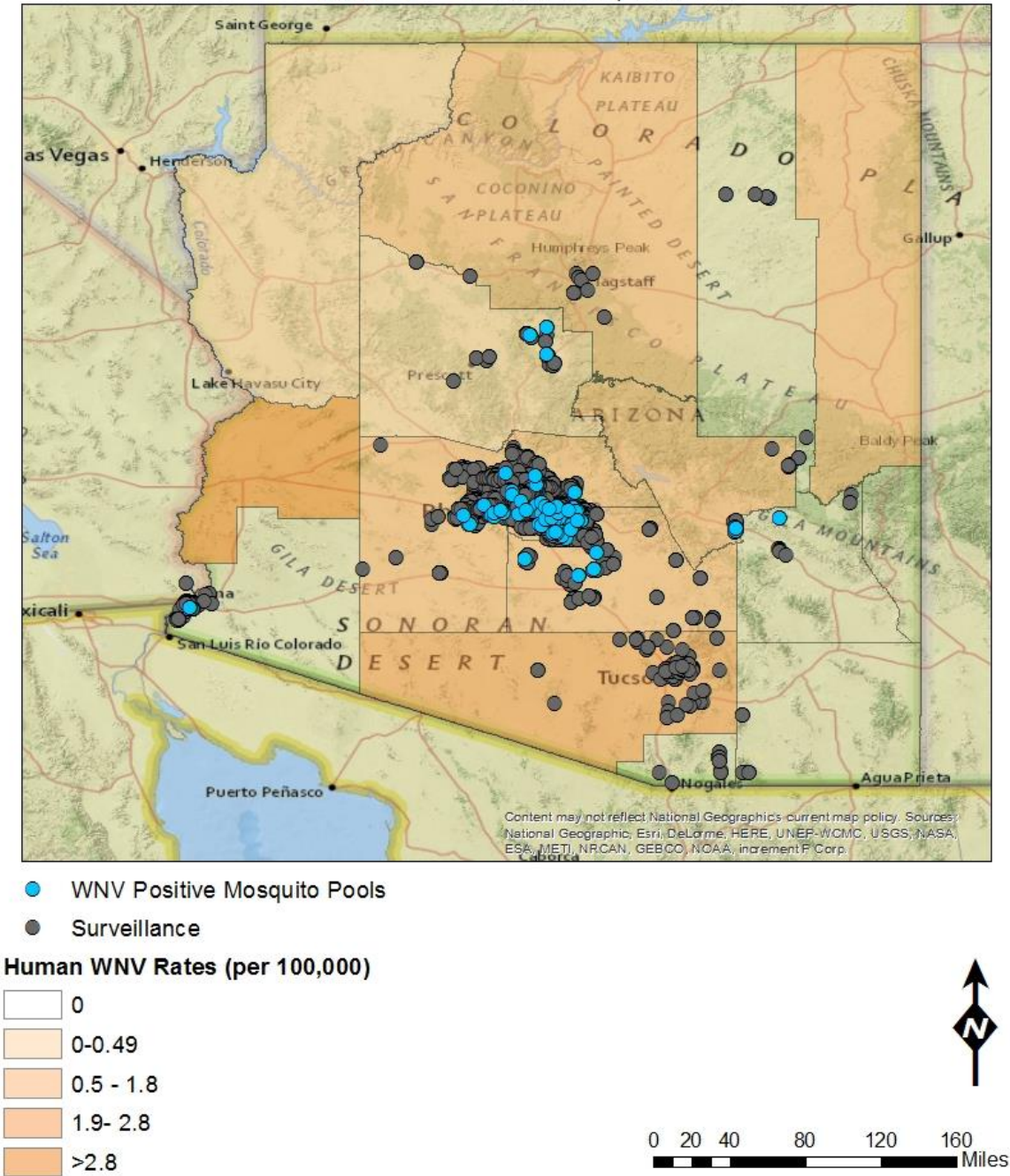
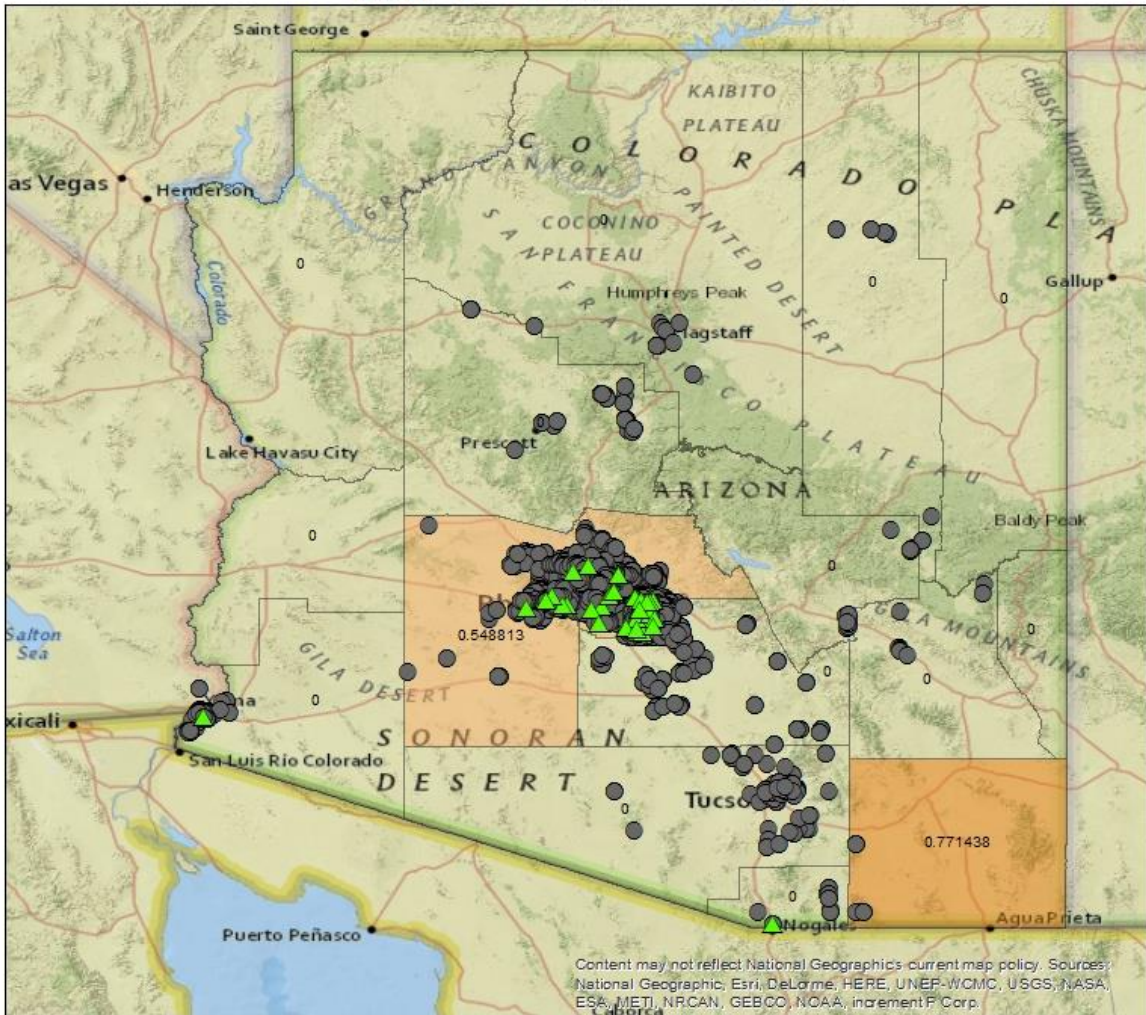


Figure 3

### Positive SLE Pools (n= 85) & Human SLE Rates, by County Jan 1 – Dec 31 2015



▲ SLE Positive Mosquito Pools

● Surveillance

#### Human SLE Rates (per 100,000)

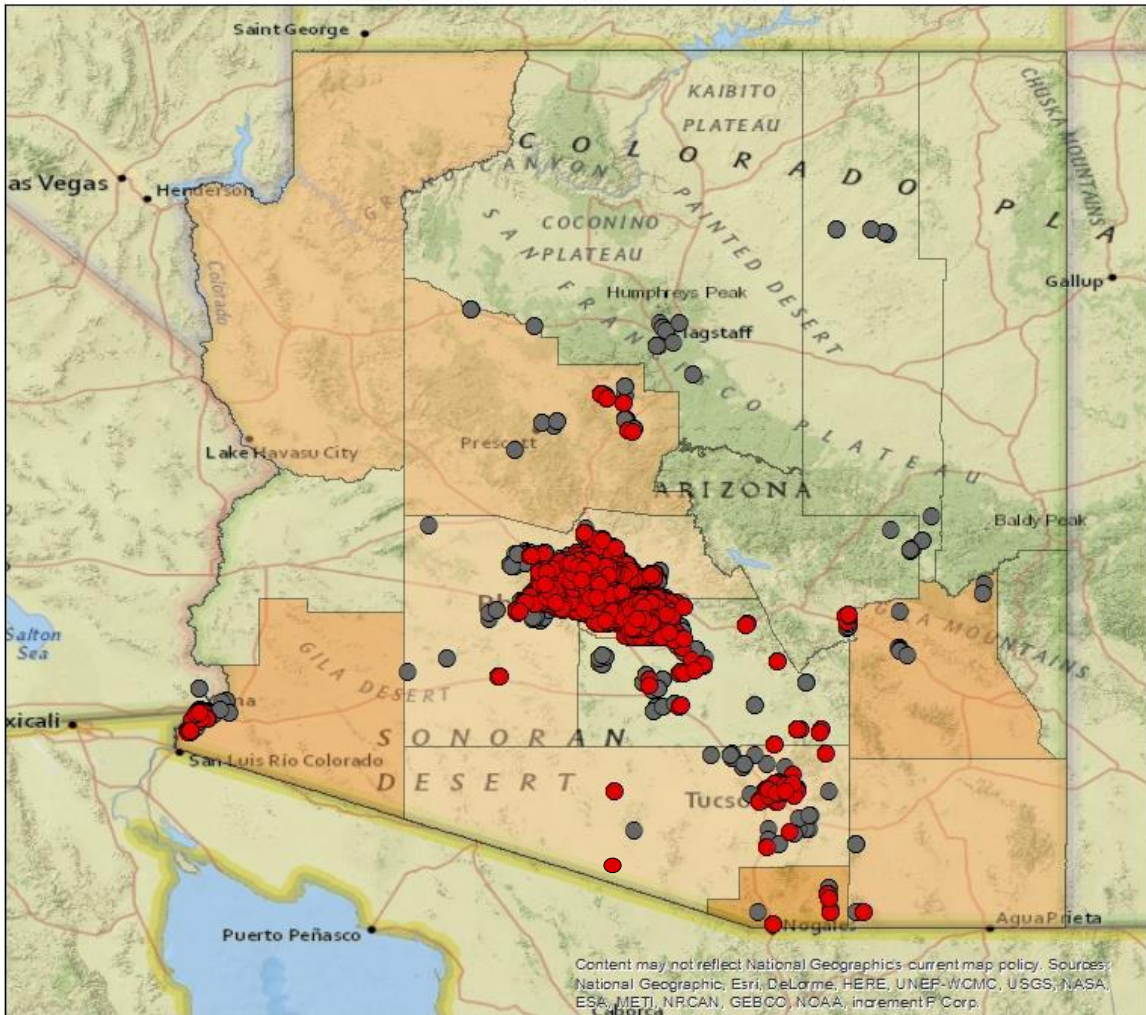
- 0
- 0-0.5
- >0.5



0 20 40 80 120 160 Miles

Figure 4

## Aedes aegypti Pools (n= 9,405) & Imported Human Dengue Rates, by County Jan 1 – Dec 31 2015



- Aedes aegypti Pools
- Surveillance

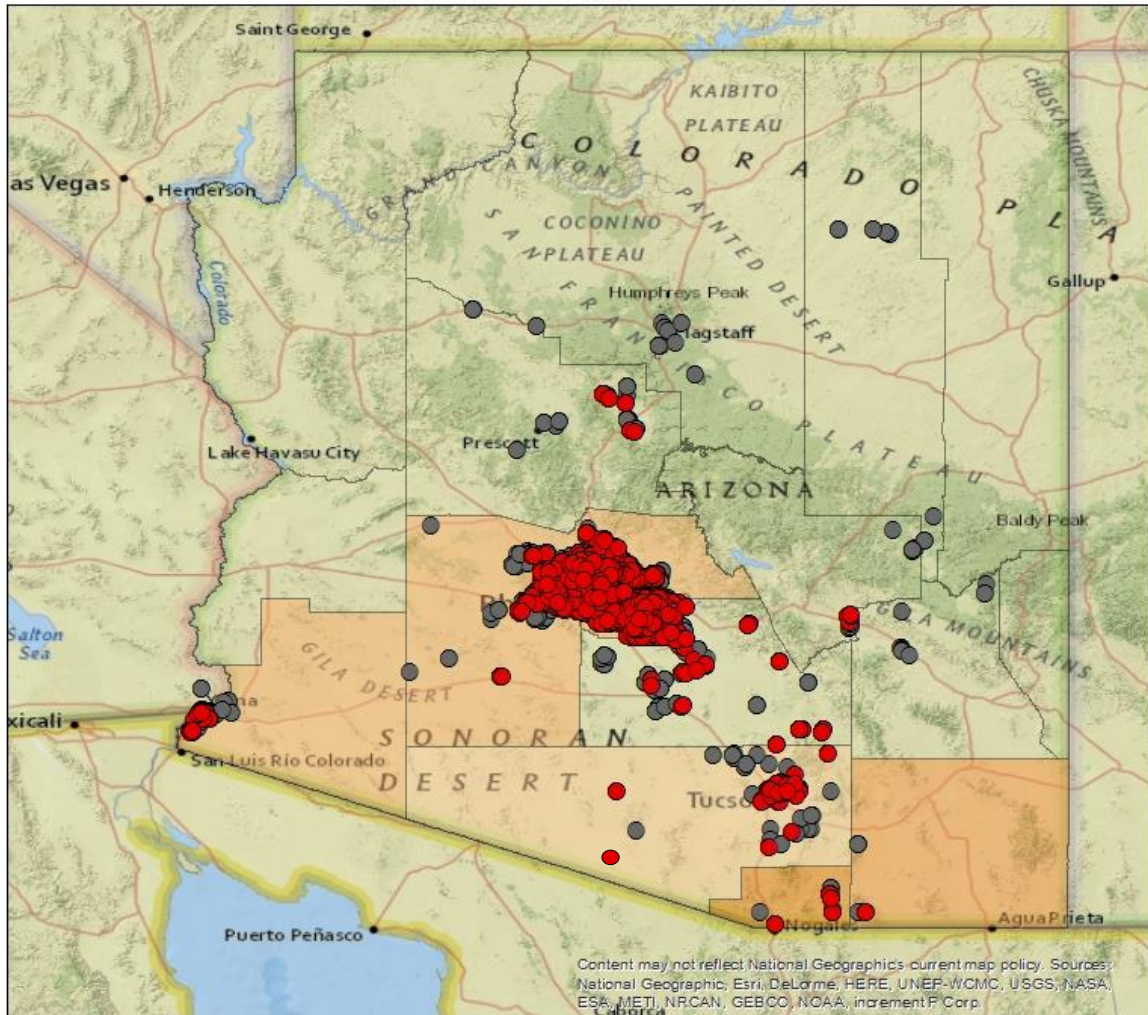
**Human Dengue Rates (per 100,000)**

- 0
- 0 - 0.29
- 0.30 - 0.77
- 0.78 - 2.6
- >2.6



Figure 5

## Aedes aegypti Pools (n= 9,405) & Imported Human Chikungunya Rates, by County Jan 1 – Dec 31 2015



- Aedes aegypti Pools
- Surveillance

**Human Chikungunya Rates (per 100,000)**

- 0
- 0-0.39
- 0.40-0.47
- 0.48-0.77
- >0.77

