

## California Arbovirus Surveillance Bulletin #4

Week 17 Friday, April 27, 2018



### Weekly Update

#### **Humans**

No human infections have been reported in 2018. At this time last year, 1 human case of West Nile virus (WNV) illness had been reported from Kings County.

#### **Dead Birds**

No positive dead birds were reported this week. In 2018, a total of 4 WNV positive dead birds have been reported from 2 counties. At this time last year, 3 WNV positive dead birds had been reported from 3 counties.

#### **Mosquito Pools**

One WNV positive mosquito pool was reported this week from San Bernardino County. **This is the first detection of WNV in San Bernardino County this year.** To date this year, 1 WNV positive mosquito pool has been reported from 1 county. As of this date in 2017, no WNV positive mosquito pools had been reported.

#### **Sentinel Chickens**

No seroconversions have been reported in 2018.

## California Arbovirus Surveillance Bulletin #4

Week 17 Friday, April 27, 2018

YTD WNV Activity by Element and County, 2018				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
San Bernardino			1	
San Mateo		2		
Santa Clara		2		
<b>Totals</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>

2017 & 2018 YTD West Nile Virus Comparisons		
	2017	2018
Total # Dead Bird Reports	1,007	788
# Positive Counties	4	3
# Human Cases	1	0
# Positive Dead Birds / # Tested	3 / 116	4 / 142
# Positive Mosquito Pools / # Tested	0 / 3,983	1 / 1,825
# Seroconversions / # Tested	0 / 304	0 / 572

### TESTING SUMMARIES

#### Humans

		WNV	SLE	WEE
Human Cases	Week	0	0	0
	YTD	0	0	0

#### Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	19	0
	YTD	142	4

#### Chickens

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	356	0	0	0
	YTD	572	0	0	0

#### Mosquitoes

		Positive / Total Tested					
Mosquito Pools	Week	WNV	SLEV	WEEV	CHIK	DENV	ZIKA
		1 / 319	0 / 319	0 / 319	0 / 1	0 / 1	0 / 1
		YTD	1 / 1,825	0 / 1,825	0 / 1,825	0 / 35	0 / 35

## California Arbovirus Surveillance Bulletin #4

Week 17 Friday, April 27, 2018

### New Positives

#### Mosquitoes

County	Site Code	Pool #	Species	City	# In Pool	Trap Type	Collected	Virus
San Bernardino	WVAL2024	193	<i>Cx. quinquefasciatus</i>	Chino Hills	50	GRVD	4/25/2018	WNV

### TEST PROTOCOLS

#### **Humans:**

Specimens are tested by local laboratories with an IgM or IgG immunofluorescent assay (IFA) and/or an IgM enzyme immunoassay (EIA). Specimens with inconclusive results are forwarded to the California Department of Public Health Viral and Rickettsial Disease Laboratory (VRDL) for further testing with a plaque reduction neutralization test (PRNT).

---

#### **Dead Birds**

Oral swab samples collected from bird carcasses are tested at the UC Davis Arbovirus Research and Training laboratory (DART) or at a local agency for West Nile virus by RT-qPCR.

---

#### **Sentinel Chickens:**

Dried blood spot samples from sentinel chickens are tested at the California Department of Public Health Vector-Borne Disease Laboratory for IgG antibodies to West Nile, St. Louis encephalitis, and western equine encephalomyelitis viruses by an EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

---

#### **Mosquito Pools:**

Mosquito pools are tested at DART or at a local agency for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a multiplex RT-qPCR. Invasive *Aedes* mosquitoes (*Ae. aegypti* and *Ae. albopictus*) are also tested at DART for chikungunya, dengue, and Zika viral RNA by a separate RT-qPCR.

---