

## California Arbovirus Surveillance Bulletin #8

Week 21 Friday, May 26, 2017



### Weekly Update

#### **Humans**

No new cases were reported this week. To date this year, one human case of West Nile Virus (WNV) illness has been reported from Kings County.

#### **Dead Birds**

A total of four dead birds were reported this week from Los Angeles (1) and Sacramento (3) counties. This is the first positive dead bird reported from Los Angeles County this year. To date this year, eight birds from five counties have tested positive for West Nile virus (WNV). At this time last year, 53 WNV positive birds had been reported from 8 counties.

#### **Mosquito Pools**

Four WNV positive mosquito pools were reported this week from the following three counties: Los Angeles (1), San Bernardino (2), and San Diego (1). **This is the first WNV positive mosquito pool reported from San Diego County in 2017.** To date this year, 12 WNV positive mosquito pools have been reported from five counties. At this time last year, 27 WNV positive mosquito pools had been reported from seven counties, and nine SLEV positive mosquitoes pools had been reported from one county.

#### **Sentinel Chickens**

No seroconversions have been reported in 2017.

2016 & 2017 YTD West Nile Virus Comparisons		
	2016	2017
Total # Dead Bird Reports	2,156	1,921
# Positive Counties	11	9
# Human Cases	0	1
# Positive Dead Birds / # Tested	53 / 422	8 / 360
# Positive Mosquito Pools / # Tested	27 / 7,815	12 / 8,582
# Seroconversions / # Tested	0 / 1,235	0 / 1,961

*Website Information:* For updated information on WNV in California, please visit the California WNV website, [www.westnile.ca.gov](http://www.westnile.ca.gov), or the California Vectorborne Disease Surveillance System website, [www.calsurv.org](http://www.calsurv.org). For national information on WNV and other arboviruses, please visit the CDC website, [www.cdc.gov](http://www.cdc.gov), and the USGS website, [www.westnilemaps.usgs.gov](http://www.westnilemaps.usgs.gov)

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YTD WNV Activity by Element and County, 2017				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Kings	1			
Los Angeles		1	2	
Orange		1		
Riverside			1	
Sacramento		4		
San Bernardino			3	
San Diego		1	1	
San Mateo		1		
Tulare			5	
<b>Totals</b>	<b>1</b>	<b>8</b>	<b>12</b>	<b>0</b>

### TESTING SUMMARIES

#### Humans

		WNV	SLE	WEE
Human Cases	Week	0	0	0
	YTD	1	0	0

#### Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	75	4
	YTD	360	8

#### Chickens

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	371	0	0	0
	YTD	1,961	0	0	0

#### Mosquitoes

		Positive / Total Tested					
		WNV	SLEV	WEEV	CHIK	DENV	ZIKA
Mosquito Pools	Week	4 / 1,580	0 / 1,189	0 / 1,089	0 / 42	0 / 42	0 / 42
	YTD	12 / 8,582	0 / 8,008	0 / 7,329	0 / 254	0 / 254	0 / 254

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### New Positives

#### Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Los Angeles	San Gabriel Valley MVCD	Temple City	91780	American Crow	5/25/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Galt	95632	Western Scrub-Jay	5/22/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95826	American Crow	5/23/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95829	Black Phoebe	5/25/2017	WNV

#### Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Los Angeles	SGVA952	129	Cx. quinquefasciatus	San Dimas	50	GRVD	5/16/2017	WNV
San Bernardino	WVAL2024	870	Cx. quinquefasciatus	Chino Hills	17	GRVD	5/24/2017	WNV
San Bernardino	WVAL9003	840	Cx. quinquefasciatus	Upland	25	GRVD	5/23/2017	WNV
San Diego	SAND0081	1100	Cx. tarsalis	Chula Vista	10	CO2	3/22/2017	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 or confirmation.

#### Dead Birds

Oral swab samples from corvids are collected onto RNA preservation cards and tested by the UC Davis Center for Vectorborne Diseases (CVEC) for West Nile virus by the singleplex RT-PCR Taqman assay and confirmed with a second primer set. Some local agencies test birds using the RAMP© test or conduct RT-PCR on tissue samples.

#### Sentinel Chickens:

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

#### Mosquito Pools:

Mosquito pools are submitted to CVEC and screened for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a Taqman multiplex RT-PCR. CVEC no longer performs confirmatory testing on PCR-positive pools of *Cx. tarsalis* and *Cx. quinquefasciatus* but will continue to confirm multiplex PCR-positive results for other mosquito species using singleplex RT-PCR.

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