

California Arbovirus Surveillance Bulletin #6

Week 22 Friday, June 4, 2021



Weekly Update

Humans

No human infections have been reported in 2021.

Dead Birds

A total of two West Nile virus (WNV) positive dead birds were reported this week from Los Angeles (1) and Sacramento (1) counties. **This is the first detection of WNV activity in Los Angeles County this year.** In 2021, six WNV positive dead birds have been reported from three counties. At this time last year, six WNV positive dead birds had been reported from three counties.

Mosquito Pools

A total of three WNV positive mosquito pools were reported this week from Kern (1) and Sacramento (2) counties; **this is the first detection of WNV activity in Kern County, and these are the first WNV positive mosquitoes detected in Sacramento County this year.** In 2021, three WNV positive mosquito pools have been reported from two counties. At this time last year, four WNV positive mosquito pools had been reported from three counties.

Sentinel Chickens

No seroconversions have been reported in 2021.

YTD WNV Activity by Element and County, 2021

County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Kern			1	
Los Angeles		1		
Sacramento		4	2	
San Joaquin		1		
Totals	0	6	3	0

Website Information: For updated information on WNV in California, please visit the California WNV website, www.westnile.ca.gov, or the California Vectorborne Disease Surveillance System website, www.maps.calsurv.org. For national information on WNV and other arboviruses, please visit the CDC websites: www.cdc.gov and www.cdc.gov/arbonet/maps/ADB_Diseases_Map/index.html

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2020 & 2021 YTD West Nile Virus Comparisons		
	2020	2021
Total # Dead Bird Reports	1,531	2,157
# Positive Counties	6	4
# Human Cases	0	0
# Positive Dead Birds / # Tested	6 / 313	6 / 560
# Positive Mosquito Pools / # Tested	4 / 5,557	3 / 6,553
# Seroconversions / # Tested	0 / 819	0 / 1,125

TESTING SUMMARIES

Humans

		WNV	SLEV	WEEV
Human Cases	Week	0	0	0
	YTD	0	0	0

Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	85	2
	YTD	560	6

Sentinel Chickens

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	281	0	0	0
	YTD	1,125	0	0	0

Mosquitoes

		Positive / Total Tested					
		WNV	SLEV	WEEV	CHIK	DENV	ZIKA
Mosquito Pools	Week	3 / 1,027	0 / 996	0 / 996	0 / 0	0 / 0	0 / 0
	YTD	3 / 6,553	0 / 5,872	0 / 5,650	0 / 4	0 / 4	0 / 4

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NEW POSITIVES

Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Los Angeles	San Gabriel Valley MVCD	South Pasadena	91030	American Crow	5/20/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Orangevale	95662	California Scrub-Jay	6/1/2021	WNV

Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Kern	KERN3009	49	Cx. tarsalis	Bakersfield	20	BGSENT	5/19/21	WNV
Sacramento	SAYO388559	535	Cx. pipiens	Galt	7	CO2	5/28/21	WNV
Sacramento	SAYO388559	536	Cx. tarsalis	Galt	7	CO2	5/28/21	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.