

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, June 2, 2023



WEEKLY UPDATE

Humans

No human infections have been reported in 2023.

Dead Birds

A total of 4 new West Nile virus (WNV) positive dead birds were reported this week from 2 counties: Alameda (2) and Los Angeles (2). **These are the first WNV positive dead birds reported from Los Angeles County this year.** In 2023, 14 WNV positive dead birds have been reported in 5 counties. At this time last year, 5 WNV positive dead birds had been reported from 3 counties.

Mosquito Pools

West Nile virus

A total of 2 WNV positive mosquito pools were reported this week from 2 counties: Kern (1) and Los Angeles (1). **This is the first detection of WNV activity in Kern County this year.** In 2023, 5 WNV positive mosquito pools have been reported from 4 counties. At this time last year, 16 WNV positive mosquito pools had been reported from 5 counties.

St. Louis encephalitis virus

A single St. Louis encephalitis virus (SLEV) positive mosquito pool was reported this week from Kern County. **This is the first detection of SLEV activity in Kern County this year.** In 2023, 1 SLEV positive mosquito pool from 1 county has been reported: Kern (1). At this time last year, 0 SLEV positive pools had been reported.

Sentinel Chickens

No seroconversions have been reported in 2023.

2022 & 2023 YTD West Nile Virus Comparisons		
	2022	2023
Total No. Dead Bird Reports	1,783	1,828
No. Positive Counties	8	7
No. Human Cases	0	0
No. Positive Dead Birds / No. Tested	5 / 360	14 / 300
No. Positive Mosquito Pools / No. Tested	16 / 6,317	5 / 7,415
No. Seroconversions / No. Tested	0 / 699	0 / 585

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, June 2, 2023

YTD WNV Activity by Element and County, 2023					
County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda			2	1	
Kern				1	
Los Angeles			2	2	
Riverside			1		
Sacramento			2		
Santa Clara			7		
Tulare				1	
Totals			14	5	

TESTING SUMMARIES

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

		Positive / Total Tested					
		WNV	SLEV	WEEV	CHIK	DENV	ZIKA
Dead Birds	Week	4 / 29					
	YTD	14 / 300					
Chicken Sera	Week	0 / 145	0 / 145	0 / 145			
	YTD	0 / 585	0 / 585	0 / 585			
Mosquito Pools	Week	2 / 1,354	1 / 1,354	0 / 1,354	0 / 47	0 / 47	0 / 47
	YTD	5 / 7,496	1 / 7,495	0 / 7,495	0 / 98	0 / 98	0 / 98

NEW POSITIVES

Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Alameda	Alameda Co MAD	Pleasanton	94566	American Crow	5/25/2023	WNV
Alameda	Alameda Co MAD	Pleasanton	94566	American Crow	5/25/2023	WNV
Los Angeles	San Gabriel Valley MVCD	Covina	91723	American Crow	5/25/2023	WNV
Los Angeles	San Gabriel Valley MVCD	Covina	91722	Unknown - songbird	5/30/2023	WNV

Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap	Collected	Virus
Kern	KERN 1002	390	Cx. quinquefasciatus	Bakersfield	42	GRVD	5/26/2023	SLEV
Kern	KERN 111	333	Cx. tarsalis	Arvin	50	CO2	5/23/2023	WNV
Los Angeles	GRLA 2936	5156	Cx. quinquefasciatus	Burbank	50	GRVD	5/24/2023	WNV

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, June 2, 2023

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.

Website Information: For updated information on WNV in California, please visit the California WNV website, <https://westnile.ca.gov>, or the California Vector-Borne Disease Surveillance System website, <https://maps.vectorsurv.org>.

Prepared by the Vector-Borne Disease Section (Infectious Diseases Branch), California Department of Public Health, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Hannah Romo: Hannah.romo@cdph.ca.gov