

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, May 31, 2024



WEEKLY UPDATE

Humans

No human infections have been reported in 2024.

Dead Birds

A total of 2 West Nile virus (WNV) positive dead birds were reported from 1 county: Santa Clara (2). In 2024, 17 WNV positive dead birds have been reported from 5 counties. At this time last year, 14 WNV positive dead birds had been reported from 5 counties.

Mosquito Pools

West Nile virus

A total of 13 new WNV positive mosquito pools were reported from 3 counties: Fresno (1), Riverside (11), and Stanislaus (1). **This is the first detection of WNV activity in Stanislaus County this year.** In 2024, 25 WNV positive mosquito pools have been reported from 6 counties. At this time last year, 5 WNV positive mosquito pools had been reported from 4 counties.

St. Louis encephalitis virus

No new St. Louis encephalitis virus (SLEV) positive mosquito pools were reported this week. In 2024, 1 SLEV positive mosquito pool has been reported from 1 county. At this time last year, 1 SLEV positive mosquito pool had been reported from 1 county.

Sentinel Chickens

No seroconversions have been reported in 2024.

2023 & 2024 YTD West Nile Virus Comparisons		
	2023	2024
Total No. Dead Bird Reports	1,828	1,869
No. Positive Counties	7	9
No. Human Cases	0	0
No. Positive Dead Birds / No. Tested	14 / 300	17 / 369
No. Positive Mosquito Pools / No. Tested	5 / 7,415	25 / 7,024
No. Seroconversions / No. Tested	0 / 585	0 / 563

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, May 31, 2024

YTD WNV Activity by Element and County, 2024					
County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda			5	1	
Contra Costa			1		
Fresno				2	
Los Angeles				1	
Riverside				18	
San Diego			2		
San Mateo			4		
Santa Clara			5	2	
Stanislaus				1	
Totals			17	25	

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	2 / 54					
	YTD	17 / 369					
Chicken Sera	Week	0 / 229	0 / 229	0 / 229			
	YTD	0 / 563	0 / 563	0 / 563			
Mosquito Pools	Week	13 / 969	0 / 969	0 / 969	0 / 1	0 / 1	0 / 1
	YTD	25 / 7,024	1 / 6,925	0 / 6,925	0 / 96	0 / 96	0 / 96

POSITIVES

Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Santa Clara	Santa Clara Co VCD	Santa Clara	95051	Unknown - Crow or Raven	5/20/2024	WNV
Santa Clara	Santa Clara Co VCD	San Jose	95118	American Crow	5/28/2024	WNV

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, May 31, 2024

Mosquito Pools

County	Site	Pool No	Species	City	Pool Size	Trap	Collected	Virus
Fresno	CNSL 8041	419	Cx quinquefasciatus	Fresno	50	GRVD	5/24/2024	WNV
Riverside	COAV 13	2707	Cx tarsalis	Thermal	50	CO2	5/29/2024	WNV
Riverside	COAV 131	2660	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 131	2661	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 132	2703	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 2	2672	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 2	2673	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 33	2592	Cx tarsalis	Thermal	50	CO2	5/29/2024	WNV
Riverside	COAV 35	2535	Cx tarsalis	Mecca	43	CO2	5/29/2024	WNV
Riverside	COAV 5	2650	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 5	2651	Cx quinquefasciatus	Oasis	50	CO2	5/29/2024	WNV
Riverside	COAV 610	2615	Cx tarsalis	Oasis	50	CO2	5/29/2024	WNV
Stanislaus	EAST 1088	24002	Cx pipiens	Modesto	18	GRVD	5/22/2024	WNV

California Arbovirus Surveillance Bulletin #8

Week 22 Friday, May 31, 2024

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