California Arbovirus Surveillance Bulletin #7

Week 23 Friday, June 11, 2021



Weekly Update

Humans

No human infections have been reported in 2021.

Dead Birds

A total of five West Nile virus (WNV) positive dead birds were reported this week from Sacramento (3) and Tulare (2) counties. **These are the first WNV positive dead birds from Tulare County this year.** In 2021, 11 WNV positive dead birds have been reported from 4 counties. At this time last year, eight WNV positive dead birds had been reported from four counties.

Mosquito Pools

A total of 15 WNV positive mosquito pools were reported this week from Sacramento (4), Stanislaus (1), Tulare (9), and Yolo (1) counties. **This is the first detection of WNV activity in Stanislaus, Tulare, and Yolo counties this year.** In 2021,18 WNV positive mosquito pools have been reported from 5 counties. At this time last year, 29 WNV positive mosquito pools had been reported from 7 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		7	6					
San Joaquin		1						
Stanislaus			1					
Tulare		2	9					
Yolo			1					
Totals	0	11	18	0				

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

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2020 & 2021 YTD West Nile Virus Comparisons							
	2020	2021					
Total # Dead Bird Reports	1,699	2,319					
# Positive Counties	10	7					
# Human Cases	0	0					
# Positive Dead Birds / # Tested	8 / 366	11 / 607					
# Positive Mosquito Pools / # Tested	29 / 7,269	18 / 7,630					
# Seroconversions / # Tested	0 / 969	0 / 1,332					

TESTING SUMMARIES

Humans

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

Dead Birds

		Number Tested	WNV Positive
Dead	Week	47	5
Birds	YTD	607	11

Sentinel Chickens

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	207	0	0	0
Chicken Sera	YTD	1,332	0	0	0

Mosquitoes

		Positive / Total Tested							
		WNV	SLEV	WEEV	СНІК	DENV	ZIKA		
Mosquito Pools	Week	15 / 1,077	0 / 1,077	0 / 983	0 / 1	0 / 1	0/1		
	YTD	18 / 7,630	0 / 6,949	0 / 6,633	0/5	0 / 5	0/5		

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NEW POSITIVES

Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Sacramento	Sacramento-Yolo MVCD	Citrus Heights	95610	Yellow-billed Magpie	6/7/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Galt	95632	California Scrub-Jay	6/8/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Galt	95632	California Scrub-Jay	6/8/2021	WNV
Tulare	Delta VCD	Visalia	93277	California Scrub-Jay	6/5/2021	WNV
Tulare	Delta VCD	Visalia	93277	California Scrub-Jay	6/9/2021	WNV

Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Sacramento	SAYO44351	694	Cx. pipiens	Sacramento	1	CO2	6/4/21	WNV
Sacramento	SAYO44351	730	Cx. pipiens	Galt	18	CO2	6/4/21	WNV
Sacramento	SAYO44351	732	Cx. pipiens	Galt	4	GRVD	6/4/21	WNV
Sacramento	SAYO44351	777	Cx. pipiens	Galt	10	CO2	6/4/21	WNV
Stanislaus	EAST44349	21044	Cx. pipiens	Modesto	50	GRVD	6/2/21	WNV
Tulare	DLTA44349	254	Cx. quinquefasciatus	Visalia	27	GRVD	6/2/21	WNV
Tulare	DLTA44349	257	Cx. quinquefasciatus	Visalia	11	GRVD	6/2/21	WNV
Tulare	DLTA44350	268	Cx. quinquefasciatus	Visalia	12	GRVD	6/3/21	WNV
Tulare	DLTA44351	288	Cx. quinquefasciatus	Visalia	34	GRVD	6/4/21	WNV
Tulare	DLTA44351	290	Cx. quinquefasciatus	Visalia	17	GRVD	6/4/21	WNV
Tulare	DLTA44351	291	Cx. quinquefasciatus	Visalia	19	GRVD	6/4/21	WNV
Tulare	DLTA44351	293	Cx. quinquefasciatus	Visalia	15	GRVD	6/4/21	WNV
Tulare	DLTA44355	306	Cx. quinquefasciatus	Visalia	15	GRVD	6/8/21	WNV
Tulare	DLTA44356	310	Cx. quinquefasciatus	Visalia	17	GRVD	6/9/21	WNV
Yolo	SAYO44355	864	Cx. tarsalis	Knights Landing	2	CO2	6/8/21	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.

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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.

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