California Arbovirus Surveillance Bulletin #8

Week 21 Friday, May 25, 2018



Weekly Update

Humans

No human infections have been reported in 2018. At this time last year, 1 human case of West Nile virus (WNV) illness had been reported from Kings County.

Dead Birds

Two WNV positive dead bird were reported this week from Alameda and Sacramento counties. **This is the first detection of WNV in Alameda and Sacramento counties this year.** In 2018, a total of 7 WNV positive dead birds have been reported from 5 counties. At this time last year, 8 WNV positive dead birds had been reported from 5 counties.

Mosquito Pools

One positive mosquito pool was reported this week from Alameda County. **This is the first detection of WNV in Alameda County this year.** In 2018, 2 WNV positive mosquito pools have been reported from 2 counties. At this time last year, 12 WNV positive mosquito pools had been reported from 5 counties.

Sentinel Chickens

No seroconversions have been reported in 2018.

2017 & 2018 YTD West Nile Virus Comparisons						
2017 2018						
Total # Dead Bird Reports	1,921	1,522				
# Positive Counties	9	6				
# Human Cases	1	0				
# Positive Dead Birds / # Tested	8 / 360	7 / 304				
# Positive Mosquito Pools / # Tested	12 / 8,582	2 / 5,046				
# Seroconversions / # Tested	0 / 1,961	0 / 1,756				

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.calsurv.org. For national information on WNV and other arboviruses, please visit the CDC websites: www.calsurv.org. For national information on WNV and other arboviruses, please visit the CDC websites: www.cdc.gov/arbonet/maps/ADB Diseases Map/index.html

California Arbovirus Surveillance Bulletin #8

Week 21 Friday, May 25, 2018

YTD WNV Activity by Element and County, 2018								
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens				
Alameda		1	1					
El Dorado		1						
Sacramento		1						
San Bernardino			1					
San Mateo		2						
Santa Clara		2						
Totals	0	7	2	0				

TESTING SUMMARIES

Humans

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

Dead Birds Chickens

		Number Tested	WNV Positive
Dead Birds	Week	62	2
	YTD	304	7

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	365	0	0	0
	YTD	1,756	0	0	0

Mosquitoes

		Positive / Total Tested					
		WNV	SLEV	WEEV	СНІК	DENV	ZIKA
Mosquito Pools	Week	1 / 1,356	0 / 574	0 / 506	0/2	0/0	0/2
	YTD	2 / 5,046	0 / 4,251	0 / 4,066	0 / 91	0/89	0 / 91

California Arbovirus Surveillance Bulletin #8

Week 21 Friday, May 25, 2018

New Positives

Dead Birds

County	Submitting Agency	City	City Zip Code Species		Date Reported	Virus
Alameda	Alameda Co MAD	AD Union City 94587 American Crow		5/24/2018	WNV	
Sacramento	Sacramento-Yolo MVCD	Sacramento	95815	American Crow	5/18/2018	WNV

Mosquitoes

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Alameda	ALCO113	19541	Cx. pipiens	Hayward	1	CO2	5/22/2018	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.

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 Tina Feiszli by phone (510) 412-6253 or email: tina.feiszli@cdph.ca.gov.