

California Arbovirus Surveillance Bulletin #11

Week 19 Friday, May 15, 2015



Weekly Update

Humans

No human infections have been reported in 2015.

Dead Birds

Nine West Nile virus (WNV) positive dead birds were reported this week from San Diego (2), San Mateo (1), Santa Clara (3), Sonoma (2), and Stanislaus (1) counties. **This is the first detection of WNV activity in Sonoma and Stanislaus Counties in 2015.** To date this year, 18 birds have tested positive for WNV from 6 counties. At this time last year, thirteen WNV positive birds had been detected in five counties.

Mosquito Pools

Eleven WNV positive mosquito pools were reported this week from San Diego (1) and Tulare (10) counties. **This is the first WNV positive mosquito pool reported from San Diego County in 2015.** To date this year, 17 WNV positive mosquito pools have been reported from five counties. At this time last year, five WNV positive mosquito pools had been detected from one county (San Bernardino).

Sentinel Chickens

No seroconversions have been reported in 2015.

2014 & 2015 YTD West Nile Virus Comparisons		
	2014	2015
Total # Dead Bird Reports	1,560	2,515
# Positive Counties	6	10
# Human Cases	0	0
# Positive Dead Birds / # Tested	13 / 175	18 / 396
# Positive Mosquito Pools / # Tested	5 / 1,771	17 / 3,616
# Seroconversions / # Tested	1 / 1,805	0 / 1,687

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 website, www.cdc.gov, and the USGS website, www.westnilemaps.usgs.gov

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YTD Activity by Element and County, 2015				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda		1		
Los Angeles			1	
Riverside			3	
San Diego		6	1	
San Mateo		2		
Santa Barbara			1	
Santa Clara		6		
Sonoma		2		
Stanislaus		1		
Tulare			11	
Totals	0	18	17	0

TESTING SUMMARIES

Humans

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

Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	64	9
	YTD	396	18

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	452	0	0	0
	YTD	1,687	0	0	0
Mosquito Pools	Week	851	11	0	0
	YTD	3,616	17	0	0

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NEW POSITIVES

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus
San Diego	San Diego Co VCP	Lemon Grove	91945	American Crow	5/5/2015	WNV
San Diego	San Diego Co VCP	Lemon Grove	91945	American Crow	5/7/2015	WNV
San Mateo	San Mateo Co MAD	Redwood City	94062	Common Raven	5/11/2015	WNV
Santa Clara	Santa Clara Co VCD	Mountain View	94043	American Crow	5/11/2015	WNV
Santa Clara	Santa Clara Co VCD	San Jose	95132	American Crow	5/7/2015	WNV
Santa Clara	Santa Clara Co VCD	San Jose	95139	American Crow	5/8/2015	WNV
Sonoma	Marin-Sonoma MVCD	Windsor	95492	American Crow	5/12/2015	WNV
Sonoma	Marin-Sonoma MVCD	Windsor	95492	American Crow	5/12/2015	WNV
Stanislaus	East Side MAD	Modesto	95350	American Crow	5/14/2015	WNV

Mosquitoes

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
San Diego	SAND451	4	Cx. quinquefasciatus	Lemon Grove	33	GRVD	4/21/2015	WNV
Tulare	DLTA6408	143	Cx. quinquefasciatus	Dinuba	24	GRVD	5/12/2015	WNV
Tulare	DLTA6518	144	Cx. quinquefasciatus	Cutler	37	GRVD	5/12/2015	WNV
Tulare	DLTA8425	107	Cx. quinquefasciatus	Visalia	32	GRVD	5/6/2015	WNV
Tulare	DLTA8425	114	Cx. quinquefasciatus	Visalia	50	GRVD	5/6/2015	WNV
Tulare	DLTA8425	116	Cx. quinquefasciatus	Visalia	50	GRVD	5/6/2015	WNV
Tulare	DLTA8427	84	Cx. quinquefasciatus	Visalia	36	GRVD	5/1/2015	WNV
Tulare	DLTA8436	145	Cx. quinquefasciatus	Visalia	50	GRVD	5/13/2015	WNV
Tulare	DLTA8436	146	Cx. quinquefasciatus	Visalia	42	GRVD	5/13/2015	WNV
Tulare	DLTA8529	132	Cx. quinquefasciatus	Visalia	16	GRVD	5/8/2015	WNV
Tulare	DLTA8530	98	Cx. quinquefasciatus	Visalia	23	GRVD	5/6/2015	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 or confirmation.

Dead Birds

Oral swab samples from corvids are collected onto RNA preservation cards and tested by the UC Davis Center for Vectorborne Diseases (CVEC) for West Nile virus by the singleplex RT-PCR Taqman assay and confirmed with a second primer set. Some local agencies test birds using the RAMP© test or conduct RT-PCR on tissue samples.

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Sentinel Chickens:

Dried blood spot specimens from sentinel chickens are submitted to the California Department of Public Health Vector-Borne Disease Laboratory and tested for the presence of antibodies to West Nile, western equine encephalomyelitis, and St. Louis encephalitis viruses by EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

Mosquito Pools:

Mosquito pools are submitted to CVEC and screened for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a Taqman multiplex RT-PCR. CVEC no longer performs confirmatory testing on PCR-positive pools of *Cx. tarsalis* and *Cx. quinquefasciatus* but will continue to confirm multiplex PCR-positive results for other mosquito species using singleplex RT-PCR.

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