

California Arbovirus Surveillance Bulletin #4

Week 12 Friday, March 27, 2015



Weekly Update

Humans

No human infections have been reported in 2015.

Dead Birds

Three West Nile virus (WNV) positive dead birds were reported from Santa Clara County this week. **This is the first indication of WNV activity in Santa Clara County in 2015.** To date this year, four birds have tested positive for WNV from Alameda (1) and Santa Clara (3) counties. At this time last year, seven WNV positive birds had been detected in three counties.

Mosquito Pools

One WNV positive mosquito pool was reported this week from Los Angeles County. **This is the first WNV positive mosquito pool detected in California this year, and the first indication of WNV activity in Los Angeles County in 2015.**

Sentinel Chickens

No seroconversions have been reported in 2015.

2014 & 2015 YTD West Nile Virus Comparisons		
	2014	2015
Total # Dead Bird Reports	768	1,420
# Positive Counties	3	3
# Human Cases	0	0
# Positive Dead Birds / # Tested	7 / 69	4 / 159
# Positive Mosquito Pools / # Tested	0 / 118	1 / 554
# Seroconversions / # Tested	1 / 188	0 / 143

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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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	9	3
	YTD	159	4

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	0	0	0	0
	YTD	143	0	0	0
Mosquito Pools	Week	127	1	0	0
	YTD	554	1	0	0

New Positives

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus
Santa Clara	Santa Clara Co VCD	Cupertino	95014	American Crow	3/20/2015	WNV
Santa Clara	Santa Clara Co VCD	San Jose	95123	American Crow	3/20/2015	WNV
Santa Clara	Santa Clara Co VCD	San Jose	95124	American Crow	3/19/2015	WNV

Mosquitoes

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Los Angeles	GRLA2548	5023	Cx. quinquefasciatus	Sylmar	29	Gravid	3/18/15	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.

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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.

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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