

California Arbovirus Surveillance Bulletin #6

Week 14 Friday, April 10, 2015



Weekly Update

Humans

No human infections have been reported in 2015.

Dead Birds

One positive dead bird was reported this week from San Diego County. **This is the first indication of WNV activity in San Diego County this year.** To date this year, five birds have tested positive for WNV from Alameda (1) San Diego (1), and Santa Clara (3) counties. At this time last year, 10 WNV positive birds had been detected in 4 counties.

Mosquito Pools

No positive mosquito pools were reported this week. To date this year, one WNV positive mosquito pool has been reported from Los Angeles County.

Sentinel Chickens

No seroconversions have been reported in 2015.

2014 & 2015 YTD West Nile Virus Comparisons		
	2014	2015
Total # Dead Bird Reports	883	1,610
# Positive Counties	4	4
# Human Cases	0	0
# Positive Dead Birds / # Tested	10 / 83	5 / 191
# Positive Mosquito Pools / # Tested	0 / 128	1 / 827
# Seroconversions / # Tested	1 / 368	0 / 429

Website Information: For updated information on WNV in California, please visit the California WNV website, www.westmile.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.westmilemaps.usgs.gov

California Arbovirus Surveillance Bulletin #6

Week 14 Friday, April 10, 2015

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	24	1
	YTD	191	5

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	286	0	0	0
	YTD	429	0	0	0
Mosquito Pools	Week	197	0	0	0
	YTD	827	1	0	0

NEW POSITIVES

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus
San Diego	San Diego Co VCP	Spring Valley	91977	Sharp-shinned Hawk	3/27/2015	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.

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:

California Arbovirus Surveillance Bulletin #6

Week 14 Friday, April 10, 2015

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.

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.