California Arbovirus Surveillance Bulletin #7

Week 15 Friday, April 17, 2015



Weekly Update

Humans

No human infections have been reported in 2015.

Dead Birds

Two West Nile virus (WNV) positive dead birds were reported this week from San Diego County. To date this year, seven birds have tested positive for WNV from Alameda (1), San Diego (3), and Santa Clara (3) counties. At this time last year, 12 WNV positive birds had been detected in four counties.

Mosquito Pools

One WNV positive mosquito pool was reported from Santa Barbara County. **This is the first detection of WNV in Santa Barbara County in 2015.** To date this year, two WNV positive mosquito pools have been reported from two counties (Los Angeles and Santa Barbara).

Sentinel Chickens

No seroconversions have been reported in 2015.

2014 & 2015 YTD West Nile Virus Comparisons							
	2014	2015					
Total # Dead Bird Reports	959	1,757					
# Positive Counties	4	5					
# Human Cases	0	0					
# Positive Dead Birds / # Tested	12 / 85	7 / 213					
# Positive Mosquito Pools / # Tested	0 / 177	2 / 944					
# Seroconversions / # Tested	1 / 527	0 / 429					

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.calsurv.org</u>. For national information on WNV and other arboviruses, please visit the CDC website, <u>www.cdc.gov</u>, and the USGS website, <u>www.westnilemaps.usgs.gov</u>

California Arbovirus Surveillance Bulletin #7

Week 15 Friday, April 17, 2015

YTD Activity by Element and County, 2015								
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens				
Alameda		1						
Los Angeles			1					
San Diego		3						
Santa Barbara			1					
Santa Clara		3						
Totals	0	7	2	0				

TESTING SUMMARIES

Humans

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

Dead Birds

		Number Tested	WNV Positive		
Dead	Week	19	2		
Birds	YTD	213	7		

Chickens & Mosquitoes

			Number Tested	WNV Positive	SLEV Positive	WEEV Positive
	Chicken Sera	Week	0	0	0	0
		YTD	429	0	0	0
	Mosquito Pools	Week	117	1	0	0
		YTD	944	2	0	0

California Arbovirus Surveillance Bulletin #7

Week 15 Friday, April 17, 2015

NEW POSITIVES

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus
San Diego	San Diego Co VCP	San Diego	92111	American Crow	4/14/2015	WNV
San Diego	San Diego Co VCP	Spring Valley	91977	American Crow	4/16/2015	WNV

Mosquitoes

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
				101				
Santa Barbara	SBCO33	11	Cx. tarsalis	Freeway	50	CO2	4/2/2015	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:

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.