

California Arbovirus Surveillance Bulletin #9

Week 18 Friday, May 3, 2013



WEEKLY UPDATE

Human Cases

No human cases have been reported in 2013.

Horses

No equine cases have been reported in 2013.

Dead Birds & Squirrels

One dead bird from Yuba County tested positive for West Nile virus (WNV) this week; this is the first indication of WNV activity in Yuba County this year. Additionally, five dead birds from Contra Costa, Monterey, San Luis Obispo, Santa Clara, and Stanislaus counties tested positive for chronic WNV infection. To date this year, two dead birds have tested positive for WNV from two counties and an additional 16 dead birds have tested positive for chronic WNV infection from 11 counties. At this time last year, 5 dead birds had tested positive for WNV from four counties.

Mosquito Pools

No positive mosquito pools have been reported in 2013. At this time last year, one mosquito pool from Riverside County had tested positive for WNV.

Sentinel Chickens

No seroconversions have been reported in 2013.

2012 & 2013 YTD West Nile Virus Comparisons		
	2012	2013
Total # Dead Bird Reports	1,975	2,178
# Positive Counties	5	2
# Human Cases	0	0
# Horse Cases	0	0
# Positive Dead Birds / # Tested	5 / 389	2 / 372
# Positive Mosquito Pools / # Tested	1 / 1,974	0 / 1,046
# Seroconversions / # Tested	0 / 1,579	0 / 1,216
# Positive Squirrels / # Tested	0 / 17	0 / 16

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 and Horses

		WNV		WEEV		SLEV	
		Local	Imported	Local	Imported	Local	Imported
Human Cases	Week	0	0	0	0	0	0
	YTD	0	0	0	0	0	0
Horse Cases	Week	0	0	0	0	0	0
	YTD	0	0	0	0	0	0

Dead Birds & Squirrels

		Number Tested	WNV Positive (recent only)
Dead Birds	Week	52	1
	YTD	372	2
Tree Squirrels	Week	4	0
	YTD	16	0

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	94	0	0	0
	YTD	1,216	0	0	0
Mosquito Pools	Week	292	0	0	0
	YTD	1,046	0	0	0

POSITIVES

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus	Type of Infection	Method
Contra Costa	Contra Costa MVCD	Danville	94506	Western Scrub-Jay	4/19/13	WNV	Chronic	RT-PCR
Monterey	N Salinas MAD	Monterey	93940	California Gull	4/19/13	WNV	Chronic	RT-PCR
San Luis Obispo	San Luis Obispo Animal Services	Atascadero	93422	Turkey Vulture	4/18/13	WNV	Chronic	RT-PCR
Santa Clara	Santa Clara VCD	San Jose	95125	American Crow	4/24/13	WNV	Chronic	RT-PCR
Stanislaus	East Side MAD	Modesto	95356	Great Horned Owl	4/19/13	WNV	Chronic	RT-PCR
Yuba	Sutter-Yuba MVCD	Marysville	95901	American Crow	4/19/13	WNV	Recent	RT-PCR

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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.

Horses:

Serum or brain tissue specimens from horses displaying neurological symptoms are submitted to the California Animal Health and Safety Laboratory (CAHFS) and tested by EIA and PRNT.

Dead Birds and Tree Squirrels:

Dead birds and tree squirrels are necropsied at CAHFS laboratory at University of California, Davis. Oral swabs from American Crows and kidney tissue from all other dead birds and squirrels are forwarded to the UC Davis Center for Vectorborne Diseases (CVEC) for West Nile virus testing using the singleplex RT-PCR Taqman assay and confirmed with a second primer set.

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 (WEEV), and St. Louis encephalitis (SLEV) viruses by EIA and IFA. Positive samples are confirmed by western-blot or PRNT.

Mosquito Pools:

Mosquito pools are submitted to CVEC and screened for WEEV, SLEV, and WNV viral RNA using a Taqman multiplex RT-PCR. CVEC will cease confirmation 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.