California Arbovirus Surveillance Bulletin #5

Week 14 Friday, April 5, 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 with chronic West Nile virus (WNV) infection was reported from Sacramento County last week. To date this year, one dead bird has tested positive for WNV from Los Angeles County; an additional nine birds with chronic WNV infection have been reported from Kern (1), Riverside (1), Sacramento (4), San Bernardino (1), and Santa Clara (2) counties.

At this time last year, 3 dead birds had tested positive for WNV from Los Angeles, Sacramento, and Santa Clara 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	1,328	1,472				
# Positive Counties	4	1				
# Human Cases	0	0				
# Horse Cases	0	0				
# Positive Dead Birds / # Tested	3 / 276	1 / 229				
# Positive Mosquito Pools / # Tested	1 / 752	0 / 219				
# Seroconversions / # Tested	0 / 571	0 / 242				
# Positive Squirrels / # Tested	0 / 12	0/8				

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

California Arbovirus Surveillance Bulletin #5

Week 14 Friday, April 5, 2013

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	Week	24	0
Birds	YTD	229	1
Tree	Week	2	0
Squirrels	YTD	8	0

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	0	0	0	0
	YTD	242	0	0	0
Mosquito Pools	Week	30	0	0	0
	YTD	219	0	0	0

Positives

Dead Birds & Squirrels

County	Agency	City	Zip	Species	Reported	Virus	Type of Infection	Method
Sacramento	Sac-Yolo MVCD	Elk Grove	95624	Cedar Waxwing	2/28/2013	WNV	Chronic	RT-PCR

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.

California Arbovirus Surveillance Bulletin #5

Week 14 Friday, April 5, 2013

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 Tagman 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.