

California Arbovirus Surveillance Bulletin # 16

Week 23 Friday, June 8, 2007

Weekly and Year-To-Date Summaries

WEEKLY COMMENTS



Humans

No human cases have been reported in 2007.

Horses

No new equine cases were reported this week.

Dead Birds & Tree Squirrels

This week, two West Nile virus (WNV) positive American crows were reported from Kern and Stanislaus counties. **This is the first detection of WNV activity in Kern County this year.** No tree squirrels have tested positive for WNV this year.

Reminder: Local agencies should check the Surveillance Gateway for their county DYCAST bird reporting updates.

Mosquito Pools

One pool of *Culex pipiens* collected in Stanislaus County tested positive for WNV this week. This is the first detection of WNV in mosquitoes from Stanislaus County this year.

Sentinel Chickens

No new seroconversions were reported this week.

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YTD ARBOVIRUS ACTIVITY

WNV* Activity by Element and County, 2007

County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Squirrels
Imperial					1	
Kern			1			
Los Angeles			2	2	1	
Orange			7			
Riverside				1		
San Diego			5			
Santa Clara			8			
Stanislaus			2	1		
Sonoma		1				
State Totals	0	1	25	4	2	0

*No other arbovirus activity has been detected in 2007.

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2007 & 2006 YTD West Nile Virus Comparisons		
	2007	2006
# Hotline Calls	8,898	17,186
Total # Dead Bird Reports	8,515	14,290
# Positive Counties	9	10
# Positive Humans/ # Tested	0 / 393	0 / 489
# Positive Horses/ # Tested	1 / 115	0 / 143
# Positive Dead Birds/ # Tested	25 / 1,470	24 / 1,707
# Positive Mosquito Pools/ # Tested	4 / 4,642	10 / 4,390
# Positive Chicken Sera/ # Tested	2 / 8,324	1 / 9,374
# Positive Squirrels/ # Tested	0 / 43	0 / 28

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.

TEST SUMMARIES

Humans & Horses

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	27	0	0	0	0	0	0	0	0
	YTD	393	0	0	0	0	0	0	0	0
Horses Tested	Week	6	0	0	0	0	0	0	0	0
	YTD	115	0	1	0	0	0	0	0	0

Dead Birds & Tree Squirrels

		Number Tested	WNV Positive
Dead Birds	Week	104	2
	YTD	1470	25
Tree Squirrels	Week	5	0
	YTD	43	0

Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Flavivirus* Positive
Chicken Sera	Week	784	0	0	0	0
	YTD	8324	2	0	0	0
Mosquito Pools: RT-PCR	Week	673	1	0	0	0
	YTD	4509	4	0	0	0
Mosquito Pools: RAMP	Week	23	0	N/A	N/A	N/A
	YTD	133 [^]	0	N/A	N/A	N/A

*Does not include those later confirmed as WNV or SLE

[^] Total adjusted to exclude pools confirmed by RT-PCR

POSITIVES: 6/4/07-6/8/07

Dead Birds

County	City	Zip Code	Species	Date Collected	Date Tested	Test Type
Kern	Bakersfield	93306	American Crow	5/25/07	6/4/07	RT-PCR
Stanislaus	Modesto	95350	American Crow	5/28/07	6/4/07	RT-PCR

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Mosquito Pools

Site Code	Pool #	Species	Date Collected	Date Tested	City	County	Virus
TRLK0432	306	Cx. pipiens	6/5/2007	6/7/2007	Turlock	Stanislaus	WN

NATIONAL COMMENTS

As of May 29, 2007, avian, animal or mosquito WNV infections have been detected in California, Florida, Illinois, Indiana, Mississippi, and Texas. A total of 3 human cases have been reported this year in Mississippi.

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 VRDL for further testing or confirmation by plaque reduction neutralization test (PRNT).

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:

All bird and tree squirrel species from all zip codes are currently being accepted for testing unless otherwise requested by a local agency. Additionally, once WNV has been detected within a county, doves, pigeons, and chickens will no longer be accepted for testing from that county. Corvids that test positive via RAMP or VecTest are no longer confirmed. Dead birds and squirrels are necropsied at the California Animal Health and Food Safety (CAHFS) laboratory at UC 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 WNV testing using the singleplex RT-PCR Taqman assay and confirmed with a second primer set. The WNV Dead Bird Surveillance Coordinator, Ryan Carney, can be reached directly at (510) 412-6254.

Sentinel Chickens:

Dried blood spot specimens from sentinel chickens submitted each week to the DHS Viral and Rickettsial Disease Laboratory (VRDL) are tested for the presence of antibodies to West Nile virus (WNV), western equine encephalomyelitis (WEE), and St. Louis encephalitis (SLE) viruses by EIA and IFA. Positive samples are confirmed by western-blot or PRNT.

Mosquito Pools:

Mosquito pools are screened for WEE, SLE, 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) and the Viral and Rickettsial Disease Laboratory Branch, Division of Communicable Disease Control, California Department of Health Services, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Tina Feiszli by phone (510) 412-6298, FAX (510) 412-6263, or email: tfeiszli@dhs.ca.gov.