

California Arbovirus Surveillance Bulletin # 9

Week 16 Friday, April 20, 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

Two WNV positive dead birds were reported this week from Orange and San Diego counties.

The California Department of Health Services has received a total of 7,014 dead bird reports (hotline and website) this year.

Mosquito Pools

No positive mosquito pools were reported this week.

Sentinel Chickens

No new seroconversions were reported this week.

.....

YTD ARBOVIRUS ACTIVITY

WNV* Activity by Element and County, 2007

County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Tree Squirrels
Imperial					1	
Los Angeles			2	1	1	
Orange			4			
Riverside				1		
San Diego			4			
Santa Clara			6			
Stanislaus			1			
Sonoma		1				
State Totals	0	1	17	2	2	0

*No other arbovirus activity has been detected in 2007.

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 # 9

Week 16 Friday, April 20, 2007

TEST SUMMARIES

Humans and Horses

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	15	0	0	0	0	0	0	0	0
	YTD	264	0	0	0	0	0	0	0	0
Horses Tested	Week	0	0	0	0	0	0	0	0	0
	YTD	71	0	1	0	0	0	0	0	0

Dead Birds

	Number Tested	WNV Positive
Week	78	2
YTD	874	17

Sentinel Chickens and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Flavivirus* Positive
	YTD	1985	2	0	0	0
Mosquito pools	Week	238	0	0	0	0
	YTD	1156	2	0	0	0

*Does not include those later confirmed as WNV or SLE

Sentinel Chickens and Mosquito Pools Tested by Local Agencies

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Flavivirus Positive
	YTD	352	0	0	0	0
Mosquito Pools: RT-PCR	Week	0	0	0	0	0
	YTD	255	0	0	0	0
Mosquito Pools: RAMP	Week	6	0	N/A	N/A	N/A
	YTD	20	0	N/A	N/A	N/A

POSITIVES REPORTED: 4/16/07-4/20/07

Dead Birds

County	City	ZIP	Species	Collected	Tested	Test Method
Orange	Newport Beach	92660	Red-tailed Hawk	04/06/07	04/06/07	IHC
San Diego	Fallbrook	92028	American Crow	04/09/07	04/09/07	VecTest

California Arbovirus Surveillance Bulletin # 9

Week 16 Friday, April 20, 2007

National Comments: As of April 20, 2007, two confirmed human cases of West Nile virus have been reported 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 Vector borne 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.