

California Arbovirus Surveillance Bulletin # 2

Week 6 Friday, February 11, 2005

Weekly Summary

California Weekly Summary Comments:

*** This report summarizes the laboratory testing performed in January and early February***

Humans:

No positive human cases have been reported.

Horses:

The California Department of Food & Agriculture reported no new WNV positive equine cases.

Dead Birds:

As of January 19, 2005, 56.4% (3,232/5,727) of the dead birds tested positive for WNV in California in 2004.

The hotline received 1,367 reports of dead birds in 2005. The UC Davis Center for Vectorborne Diseases (CVEC) reported 4 out of 216 dead birds submitted in 2005 tested positive for WNV by RT-PCR. One dead bird tested positive via VecTest from Los Angeles County. The first positive birds for WNV in 2005 were from Santa Clara and Sonoma counties on January 3, 2005. Since then, three additional bird carcasses from Los Angeles (2) and Solano (1) counties tested positive for WNV. The positive birds were American crows (4) and a pine siskin (1). **The positive dead birds have been the first indication of WNV in Los Angeles, Santa Clara, Solano, and Sonoma counties in 2005.**

A cumulative total of 217 dead birds were tested, thus 2.5% (5/217) of the birds tested were WNV positive.

Mosquito Pools:

CVEC reported no positive mosquito pools.

Chickens:

VRDL reported no chicken seroconversions.

Website Information:

For updated information on WNV, please visit the California WNV website, www.westnile.ca.gov; the CDC website, www.cdc.gov, and the USGS website, www.westnilemaps.usgs.gov. Please go to the Vector website at <http://vector.ucdavis.edu/arbo.html> for flock location and more information on WNV and other vector-borne diseases.

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Humans and Horses

TESTING SUMMARIES

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Individuals Tested	Week	**	0	0	0	0	0	0	0	0
	YTD	99	0	0	0	0	0	0	0	0
Suspect Equine Cases	Week	**	0	0	0	0	0	0	0	0
	YTD	19	0	0	0	0	0	0	0	0

** No weekly submission data are currently available.

Dead Bird

Sentinel Chickens and Mosquito Pools

2004 Totals

	Number Tested	WNV Positive
YTD	5,727	3,232

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
Chicken sera	Week	**	0	0	0	0
	YTD	526	0	0	0	0
Mosquito pools	Week	**	0	0	0	0
	YTD	359	0	0	0	0

*This total has been adjusted to include local agency submission

2005 YTD

	Number Tested	WNV Positive
Week	**	
YTD	217	5

POSITIVES

2004 Dead Birds Tested Positive for WNV in 2005

Species	County	City	ZIP	Date Collected	Date Tested
American Kestrel	Contra Costa	Pittsburg	94565	12/09/04	1/18/05

***Indicates Vec-Test

Dead Birds Tested Positive for WNV in 2005

Species	County	City	ZIP	Date Collected	Date Tested
***American Crow	Santa Clara	San Jose	95215	1/3/05	1/3/05 [#]
Pine Siskin	Sonoma	Santa Rosa	93401	1/3/2005	1/18/2005
American Crow	Los Angeles	Valencia	91355	2/1/2005	2/7/2005
American Crow	Solano	Rio Vista	94571	2/1/2005	2/7/2005
***American Crow	Los Angeles	Valencia	91355	2/3/2005	2/3/2005

***Indicates Vec-Test

[#] Reported in Arbovirus Surveillance Bulletin #1

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Dead Birds:

Dead bird kidney tissues are tested at CVEC using the PCR Taqman assay, subsequent to carcass necropsy at the California Animal Health and Food Safety (CAHFS) Laboratories. Organ pools from PCR positive carcasses are tested using cell culture for virus isolation. The WNV Dead Bird Surveillance Coordinator, Ryan Carney, can be reached directly at (510) 412-6254.

All bird species (except chickens, doves, and pigeons) from all zip codes are being accepted for testing except from a limited number of agencies. Positive Vec-tests from oral swabs from crows are no longer confirmed. Other bird species tested by RT-PCR using singleplex and confirmed with a second primer set.

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. The VRDL performs additional testing (including Plaque Reduction Neutralization (PRNT) and IgM Capture – Enzyme Linked Immunosorbent Assay (MAC-ELISA)) on specimens from sentinel chickens in which antibodies are detected in new geographic areas. The VRDL also forwards selected serum to the UC Davis Center for Vectorborne Diseases (CVEC) for additional testing for WNV, WEE, and SLE antibodies as needed.

Mosquito Pools:

All 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. There will be an elimination of *in situ* EIA testing for all mosquito species.

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 Al Hom by phone (510) 412-6252, FAX (510) 412-6263, or email [ahom@dhs.ca.gov].