California Arbovirus Surveillance Bulletin # 10

Week 17 Friday, April 28, 2006

Weekly Summary

COMMENTS

Humans

No human infections have been reported in 2006.

Horses

No equine infections have been reported in 2006 by the California Department of Food & Agriculture.

Dead Birds

This week, the hotline received 953 dead bird reports for a YTD total of 7,832 reports. Three out of 85 (3.5%) dead birds collected from 26 counties tested positive for WNV.

- 0/62 dead birds tested positive via RT-PCR.
- 0/3 dead birds tested positive via VecTest.
- 1/2 dead birds tested positive via RAMP.
- 2/18 dead birds tested positive via IHC.

The WNV positive dead birds were collected from Orange and San Mateo counties. This is the first indication of WNV activity in San Mateo County in 2006.

The following bird species tested positive for WNV: American Crow (2); and black-headed grosbeak (1). See "WNV Positive Dead Birds" table for details.

Since January 1, 2006, 15 out of 986 (1.5%) dead birds have tested positive for WNV from six counties: Orange (6); Sacramento (2); San Diego (1); San Mateo (1); Santa Clara (4); and Ventura (1).

Mosquito Pools

CVEC reported 5 pools of *Culex tarsalis*, collected near the Salton Sea in Riverside County, tested positive for WNV. These are the first positive mosquito pools reported in 2006 and the first indication of WNV activity in Riverside County this year.

Sentinel Chickens

VRDL has reported no seroconversions in 2006.

Website Information

For updated information on WNV, please visit the California WNV website, www.westnile.ca.gov, the CDC 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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TEST SUMMARIES

Humans and Horses

	Number		WNV Positive		WEE Positive		SLE Positive		Other Positive	
		Tested	Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	13	0	0	0	0	0	0	0	0
	YTD	344	0	0	0	0	0	0	0	0
	Week	7	0	0	0	0	0	0	0	0
Horses Tested	YTD	105	0	0	0	0	0	0	0	0

Dead Birds

	Number Tested	WNV Positive
Week	85	3
YTD	986	15

Sentinel Chickens* and Mosquito Pools

			Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
1	Chicken sera	Week	994	0	0	0	0
	Chicken Sera	YTD	3486	0	0	0	0
	Mosquito pools	Week	233	5	0	0	0
1		YTD	1048	5	0	0	0

^{*}Total has been adjusted to include local agency submission

POSITIVES

Virus Isolations From Mosquito Pools

Virus	Mosquito Species	Date Collected	ACODE	Pool #	City	County	Date Received
WN	Cx tarsalis	4/13/2006	COAV	349	Mecca	Riverside	4/26/06
WN	Cx tarsalis	4/13/2006	COAV	355	Mecca	Riverside	4/26/06
WN	Cx tarsalis	4/13/2006	COAV	356	Mecca	Riverside	4/26/06
WN	Cx tarsalis	4/13/2006	COAV	357	Mecca	Riverside	4/26/06
WN	Cx tarsalis	4/21/2006	COAV	453	Mecca	Riverside	4/26/06

WNV Positive Dead Birds Reported

Species	County	City	Zip Code	Date Collected	Date Tested	Tested By
American Crow	Orange	Mission Viejo	92692	4/11/06	4/11/06	IHC
American Crow	San Mateo	Moss Beach	94038	4/20/06	4/20/06	RAMP
Black-headed Grosbeak	Orange	Mission Viejo	92691	4/13/06	4/13/06	IHC

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TEST PROTOCOLS

Dead Birds:

All bird 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 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 are forward 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. The VRDL performs additional testing, including plaque reduction neutralization (PRNT), on specimens from sentinel chickens from geographic areas where WNV is detected for the first time.

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.

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 Albrecht by phone (510) 412-6298, FAX (510) 412-6263, or email [talbrech@dhs.ca.gov].