

California Arbovirus Surveillance Bulletin # 6

Week 11 Friday, March 17, 2006

Weekly Summary

Comments

Humans:

No human cases have been reported in 2006.

Horses:

Since January 1, 64 horses from 33 counties have been tested for WNV. The California Department of Food & Agriculture has reported no new case of equine WNV this year.

Dead Birds:

In the last two weeks, the hotline has received 827 dead bird reports for a YTD total of 3,627 reports. Two out of 132 (1.5%) dead birds collected from 27 counties tested positive for WNV.

- 1/121 dead birds tested positive via RT-PCR.
- 0/4 dead birds tested positive via VecTest.
- 0/0 dead birds tested positive via RAMP.
- 1/7 dead birds tested positive via IHC.

The WNV positive dead birds were an American Crow and a sharp-shinned hawk collected from Orange and Sacramento counties, respectively. **This is the first indication of WNV activity in 2006 in Sacramento County.** See "WNV Positive Dead Birds" table for details.

Since January 1, 2006, seven out of 414 (1.7%) dead birds have tested positive for WNV from four counties: Orange (2); Sacramento (1); San Diego (1); and Santa Clara (3).

Mosquito Pools:

CVEC has reported no positive mosquito pools in 2006.

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.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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TEST SUMMARIES for 2006

Humans and Horses

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	48	0	0	0	0	0	0	0	0
	YTD	203	0	0	0	0	0	0	0	0
Horses Tested	Week	64	0	0	0	0	0	0	0	0
	YTD	64	0	0	0	0	0	0	0	0

Dead Birds

	Number Tested	WNV Positive
Week	132	2
YTD	414	7

Sentinel Chickens and Mosquito Pools*

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
	YTD	658	0	0	0	0
Mosquito pools	Week	98	0	0	0	0
	YTD	538	0	0	0	0

*Total has been adjusted to include local agency submission

WNV Positive Dead Birds Reported (March 6- March 17)

Species	County	City	Zip Code	Date Collected	Date Tested	Tested By
American Crow	Orange	Laguna Niguel	92677	3/2/06	3/2/06	IHC
Sharp-shinned Hawk	Sacramento	Sacramento	95831	3/8/06	3/13/06	RT-PCR

No new national update.

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TEST PROTOCOLS

Dead Birds:

All bird species, except chickens, doves, and pigeons, from all zip codes are currently being accepted for testing unless otherwise requested by a local agency. Positive RAMP and Vec-Tests from oral swabs from corvids are no longer confirmed. Other bird species are tested by singleplex RT-PCR and confirmed with a second primer set.

Dead birds are necropsied at the California Animal Health and Food Safety (CAHFS) Laboratories and kidney tissue from the dead birds are forward to the UC Davis Center for Vectorborne Diseases (CVEC) for WNV using the PCR Taqman assay. 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.

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. The VRDL also forwards selected serum to 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.

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].