

California Arbovirus Surveillance Bulletin # 6

Week 12 Friday, March 25, 2005

Weekly Summary

California Weekly Summary Comments:

Humans:

No positive human cases have been reported this week.

Horses:

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

Dead Birds:

This week the hotline received 795 dead bird reports, for a YTD total of 5,416 reports. WNV RNA was detected in three of 132 (2.3%) dead birds from 36 counties. The positive dead birds were collected from Humboldt, Kern, and Orange counties.

Two of the three WNV positive dead birds tested positive via RT-PCR performed by the UC Davis Center for Vectorborne Diseases (CVEC) and one corvid tested positive by immunohistochemistry (IHC).

The following bird species tested positive for WNV: American crow (1); barn owl (1); and pine siskin (1). See "WNV Positive Birds" table for details.

West Nile virus positive birds have been reported in the following counties in 2005: Alameda (1); Contra Costa (3); El Dorado (1); Fresno (3); Humboldt (3); Kern (2); Kings (1); Los Angeles (2); Orange (4); Placer (1); Sacramento (1); Santa Clara (2); Santa Cruz (1); Solano (1); Sonoma (5); Stanislaus (2); Tulare (2); and Yolo (1).

Since January 1, 2005, 36 of 815 (4.4%) dead birds have tested positive for WNV.

Mosquito Pools:

CVEC reported no positive mosquito pools.

Sentinel Chickens:

VRDL reported no sentinel 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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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	14	0	0	0	0	0	0	0	0
	YTD	199	0	0	0	0	0	0	0	0
Horses Tested	Week	44	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	3
YTD	815	36

Sentinel Chickens and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
Chicken sera	Week	597	0	0	0	0
	YTD	2067	1	0	0	0
Mosquito pools	Week	260	0	0	0	0
	YTD	1027	1	0	0	0

WNV POSITIVE DEAD BIRDS

WNV Positive Dead Birds Reported March 19-March 25, 2005

Species	County	City	Zip	Date Collected	Date Tested
American Crow ¹	Orange	Orange	92867	3/4/2005	3/4/2005
Barn Owl	Kern	Edwards	93523	2/28/2005	3/21/2005
Pine Siskin	Humboldt	Eureka	95501	3/1/2005	3/21/2005

¹ Indicates VecTest

² Indicates RAMP

³ Indicates IHC

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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 Vec-Tests from oral swabs from crows 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) and 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].