# California Arbovirus Surveillance Bulletin # 5

Week **11** Friday, March 18, 2005

### **Weekly Summary**

#### **California Weekly Summary Comments:**

#### **Humans:**

No positive human cases have been reported this week. A suspect human case with onset of illness in January tested positive for WNV at the Los Angeles County Public Health Laboratory as well as the state Viral and Rickettsial Disease Laboratory. However, upon review of the patient's serology results and clinical history, the timing of infection could not be determined. As the patient's clinical course in January was not characteristic for WNV illness, this case is being considered as a WNV infection at an undetermined time in 2004 rather than a 2005 case.

#### Horses:

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

#### **Dead Birds:**

This week the hotline received 1,128 dead bird reports, for a YTD total of 4,621 reports. Four out of 137 (3.0%) dead birds from 31 counties tested positive for WNV via RT-PCR performed by the UC Davis Center for Vectorborne Diseases (CVEC). In addition, one out of two corvids tested positive by RAMP only, and one house finch tested positive by immunohistochemistry.

The following bird species tested positive for WNV: American crow (1); barn owl (1); house finch (2); western scrub-jay (1); and yellow-rumped warbler (1). See "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 (2); Kern (1); Kings (1); Los Angeles (2); Orange (3); Placer (1); Sacramento (1); Santa Clara (2); Santa Cruz (1); Solano (1); Sonoma (5); Stanislaus (2); Tulare (2); and Yolo (1). This is the first indication of WNV activity in El Dorado, Kern and Placer counties in 2005.

Since January 1, 2005, 33 out of 683 (4.8%) dead birds have tested positive for WNV.

### **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, <a href="www.westnile.ca.gov">www.westnile.ca.gov</a>, the CDC website, <a href="www.westnile.ca.gov">www.westnile.ca.gov</a>, and the USGS website, <a href="www.westnile.ca.gov">www.westnile.ca.gov</a>. Please go to the Vector website at <a href="http://vector.ucdavis.edu/arbo.html">http://vector.ucdavis.edu/arbo.html</a> for flock location and more information on WNV and other vector-borne diseases.

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## **Humans and Horses**

## **TESTING SUMMARIES**

		Number	WNV Positive		WEE Positive		SLE Positive		Other Positive	
		Tested	Imported	Local	Imported	Local	Imported	Local	Imported	Local
Individuals Tested	Week	24	0	0	0	0	0	0	0	0
	YTD	185	0	0	0	0	0	0	0	0
Suspect Equine	Week	0	0	0	0	0	0	0	0	0
Cases	YTD	20	0	0	0	0	0	0	0	0

## **Dead Birds**

	Number Tested	WNV Positive
Week	140	6
YTD	683	33

# **Sentinel Chickens and**

Mosquito Pools			Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
	Chicken sera	Week	0	0	0	0	0
	Chicken Sera	YTD	883	1	0	0	0
	Mosquito pools	Week	100	0	0	0	0
		YTD	767	1	0	0	0

# **POSITIVES**

# WNV Positive Birds Reported March 12-March 18, 2005

Species	pecies County		Zip	Date Collected	Test Date	
American Crow#	Fresno	Friant 9362		3/10/2005	3/10/05	
Barn Owl	Humboldt	Loleta	95551	3/1/2005	3/14/05	
House Finch	Kern	Bakersfield	93306	2/25/2005	3/14/05	
House Finch <sup>^</sup>	Orange	Anaheim	90680	2/10/2005	2/10/05	
Western Scrub-Jay	El Dorado	Placerville	95667	2/23/2005	3/14/05	
Yellow-rumped Warbler	Placer	Lincoln Hills	95648	2/24/2005	3/14/05	

<sup>\*\*</sup>Indicates VecTest

# Indicates RAMP

<sup>^</sup> Indicates IHC

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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 with the exception of 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) 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].