

# California Arbovirus Surveillance Bulletin # 18

Week 24 Friday, June 17, 2005

## Weekly Summary

### Comments:

#### **Humans:**

No human cases of WNV have been reported this year.

#### **Horses:**

The California Department of Food & Agriculture reported a horse tested positive for WNV from Kern County. This is a six-year-old mare. The horse came down with clinical signs on 6/4 and was vaccinated against WNV for the first time, approximately two weeks ago. This is the third WNV positive horse for the year. Last week, we reported a second WNV positive horse from Sonoma County. It was an undetermined age mare. The horse came down with clinical signs on 6/2 and was not vaccinated.

#### **Dead Birds:**

This week the hotline received 2,209 dead bird reports, for an YTD total of 20,883 reports. Fifteen out of 237 (6.3%) dead birds collected from 45 counties tested positive for WNV.

- Fourteen out of 233 dead birds tested positive via RT-PCR performed at UC Davis Center for Vectorborne Diseases (CVEC).
- Zero out of three corvids tested positive via VecTest.
- One corvid tested positive via RAMP.

The WNV positive dead birds were collected from Fresno, Merced, Riverside, Sacramento, Santa Barbara, and Tulare counties. **This is the first indication of WNV activity in Merced and Santa Barbara counties in 2005.**

The following bird species tested positive for WNV: American crow (14); sparrow (1). See "WNV Positive Dead Birds" table for details.

Since January 1, 2005, 121 of 2,962 (4.1%) dead birds have tested positive for WNV.

#### **Mosquito Pools:**

CVEC reported 22 positive WNV mosquito pools from the following counties: Fresno (3), Kern (7), Los Angeles (1), Merced (3), Orange (4), Riverside (2), and San Bernardino (2). These were the first reports of positive WNV pools from Kern, Merced, and Riverside counties. The YTD total is 34. Furthermore, five mosquito pools were WEE positive from Riverside (2) and Imperial (3) counties. This is the first WEE reporting for Riverside. The YTD total is 9.

#### **Sentinel Chickens:**

VRDL reported that the second flavivirus positive chicken from Antelope Valley has been confirmed WNV positive by PRNT. Two chickens from Indio and Lake Elsinore (Riverside County) were flavivirus positive. Further confirmation will be performed and results reported in the next bulletin.

#### **Website Information:**

For updated information on WNV, please visit the California WNV website, [www.westnile.ca.gov](http://www.westnile.ca.gov), the CDC website, [www.cdc.gov](http://www.cdc.gov), and the USGS website, [www.westnilemaps.usgs.gov](http://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	20	0	0	0	0	0	0	0	0
	YTD	498	0	0	0	0	0	0	0	0
Horses Tested	Week	25	0	1	0	0	0	0	0	0
	YTD	174	0	3	0	0	0	0	0	0

### Dead Birds

	Number Tested	WNV Positive
Week	237	15
YTD	2,962	121

### Sentinel Chickens and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
Chicken sera	Week	994*	1	0	0	0
	YTD	12133	3	0	0	0
Mosquito pools	Week	870	22	5	0	0
	YTD	7055	34	9	0	0

\*Total has been adjusted to include local agency submission

### Virus Isolations From Mosquito Pools:

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Cx. tarsalis	10-6	CNSL	118	Appolosa West	Fresno	15-June
WNV	Cx. tarsalis	10-6	CNSL	120	Appolosa West	Fresno	15-June
WNV	Cx. tarsalis	10-6	CNSL	121	Appolosa West	Fresno	15-June
WNV	Cx. tarsalis	31-5	COAV	1648	North Shore	Riverside	15-June
WNV	Cx. tarsalis	29-5	COAV	1656	Mecca	Riverside	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	143	Bakersfield	Kern	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	145	Bakersfield	Kern	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	146	Bakersfield	Kern	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	147	Bakersfield	Kern	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	149	Bakersfield	Kern	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	150	Bakersfield	Kern	15-June
WNV	Cx. quinquefasciatus	10-6	KERN	151	Bakersfield	Kern	15-June
WNV	Cx. tarsalis	14-6	LONG	134	Long Beach City Hall	Los Angeles	15-June
WNV	Cx. tarsalis	8-6	MERC	63	Livingston	Merced	10-June
WNV	Cx. tarsalis	8-6	MERC	64	Livingston	Merced	10-June
WNV	Cx. pipiens	8-6	MERC	67	Livingston	Merced	10-June
WNV	Cx. quinquefasciatus	7-6	ORCO	1590	Garden Grove	Orange	14-June
WNV	Cx. quinquefasciatus	7-6	ORCO	1600	Seal Beach	Orange	14-June
WNV	Cx. quinquefasciatus	7-6	ORCO	1608	Huntington Beach	Orange	14-June
WNV	Cx. quinquefasciatus	7-6	ORCO	1621	Huntington Beach	Orange	14-June
WNV*	Cx. quinquefasciatus	7-6	WVAL	428	Chino	San Bernardino	14-June
WNV*	Cx. tarsalis	7-6	WVAL	463	Chino Hills	San Bernardino	14-June

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WEE	Cx. tarsalis	2-6	COAV	1573	Mecca	Riverside	9-June
WEE	Cx. tarsalis	2-6	COAV	1575	Mecca	Riverside	9-June
WEE	Cx. tarsalis	7-6	COAV	1623	Westmoreland	Imperial	15-June
WEE	Cx. tarsalis	7-6	COAV	1625	Westmoreland	Imperial	15-June
WEE	Cx. tarsalis	7-6	COAV	1626	Westmoreland	Imperial	15-June

**\* RAMP Tested Mosquito Pools**

Please note that mosquito pool specimens submitted to CVEC for confirmation after being tested by “rapid antigen detection tests” such as RAMP require re-processing that may reduce sensitivity. The resulting sensitivity should be comparable to or greater than the initial “rapid test” result.

**Chicken Seroconversions Reported by DHS:**

Virus	County	State	Acode	City	Location
WNV	Los Angeles	CA	ANTV 3247	Lancaster	CA Fairgrounds
<b>Band: 8830</b>					<b>Probable Seroconversion Date: 8-June-05</b>
Flav. +	Riverside	CA	COAV 0204	Indio	York
<b>Band: 730</b>					<b>Probable Seroconversion Date: 6-June-05</b>
Flav. +	Riverside	CA	NWST 6666	Lake Elsinore	Lake Elsinore
<b>Band: 6189</b>					<b>Probable Seroconversion Date: 7-June-05</b>

**WNV Positive Dead Birds Reported June 11- June 17, 2005**

Species	County	City	Zip Code	Date Collected	Date Tested
American Crow <sup>1</sup>	Fresno	Clovis	93611	6/8/05	6/8/05
American Crow	Merced	Livingston	95334	6/3/05	6/13/05
American Crow	Riverside	Nuevo	92567	6/1/05	6/13/05
American Crow	Riverside	Nuevo	92567	6/2/05	6/13/05
American Crow	Riverside	Nuevo	92567	6/3/05	6/13/05
American Crow	Riverside	San Jacinto	92583	6/6/05	6/13/05
American Crow	Riverside	Nuevo	92567	5/30/05	6/13/05
American Crow	Riverside	March Air Reserve Base	92518	6/7/05	6/13/05
American Crow	Sacramento	Elk Grove	95624	6/6/05	6/13/05
American Crow	Sacramento	Elk Grove	95624	6/7/05	6/13/05
American Crow	Santa Barbara	Carpinteria	93013	6/2/05	6/13/05
American Crow	Santa Barbara	Goleta	93117	6/7/05	6/13/05
American Crow	Tulare	Visalia	93277	5/30/05	6/13/05
American Crow	Tulare	Visalia	93277	6/6/05	6/13/05
Sparrow	Tulare	Tulare	93274	6/2/05	6/13/05

<sup>1</sup>Indicates RAMP

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## National Comments:

As of June 17, 2005, non-human West Nile virus activity has been detected in the following 17 states: Alabama, Arizona, California, Florida, Georgia, Illinois, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, Tennessee and Texas. No human cases have been reported yet this year.

## 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) 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].*