

# California Arbovirus Surveillance Bulletin # 8

Week 23 Friday, June 11, 2004

## Weekly Summary

### California Weekly Summary Comments:

#### **Humans:**

A 40-year-old female resident of San Bernardino County became the first person in California infected with West Nile virus (WNV) in 2004. She experienced fever, headache, and body aches on May 17. By May 19, she had developed a non-pruritic rash on her trunk and extremities. She also noted weakness and fatigue. She was seen as an outpatient on May 23 and again on May 26 at which time blood was drawn for WNV testing. A WNV screening test was positive at the referring facility and the specimen was forwarded to DHS Viral and Rickettsial Disease Laboratory (VRDL) where PRNT tests confirmed WNV. The patient has since recovered except for complaints of a residual headache and fatigue.

#### **Dead Birds:**

The hotline received 1442 reported dead birds last week (YTD = 8806). In the last week's bulletin, The UC Davis Center for Vectorborne Diseases (CVEC) reported 75 dead birds tested positive for WNV from Los Angeles, Orange, Riverside, and San Bernardino counties. Positive bird species included 67 American crows, two common ravens, two mallard ducks, one western tanager, one mockingbird, one western scrub jay, and one red-tailed hawk. Of interest to note are (1) the ducks in Riverside County represent the first positive dead birds from the desert areas of California and they were collected from the center of a highly populated area in the Palm Springs area; (2) the western scrub jay in Rancho Palo Verdes is along the coast, and is the first bird reported positive from coastal Los Angeles, just south of LAX airport; and (3) the red-tailed hawk in Redlands is the first positive raptor reported this year.

The positive birds were collected in a total of 34 cities within the counties of Orange (3), San Bernardino (37), Los Angeles (25), and Riverside (10). A total of 98 dead birds were tested that week from Los Angeles, San Bernardino, Riverside and Orange counties. Thus 77% (75/98) of the birds tested from these four counties were WNV positive. Thirty-one bird carcasses from other regions of California tested negative.

#### **News Flash:**

CVEC reported 111 dead American crows have tested positive for WNV via RT-PCR from San Bernardino (59), Los Angeles (43), and Riverside (9) on June 10. A total of 143 bird carcasses were tested from these three counties accounting for 77.6% positive results (111/143). Twenty-three bird carcasses from 15 other counties tested negative. The complete list will be published in next week bulletin.

#### **Mosquito Pools:**

CVEC reported five mosquito pools (four *Culex quinquefasciatus*; one *Cx. tarsalis*) collected on 5/24 and 5/26 from sites in Los Angeles County and seven pools (three *Cx. quinquefasciatus*; three *Cx. stigmatosoma*; one *Cx. tarsalis*) collected on 5/25 and 5/26 from sites in San Bernardino County tested positive for WNV. A noteworthy item to point out is that this is the first WNV positive reporting of *Culex stigmatosoma* species.

**All of the equine and chicken samples tested negative for arboviruses this week.**

#### **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.

## POSITIVES

### **Dead Birds Tested Positive for WNV last week**

Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	San Bernardino	Rialto	92376	5/21/2004	6/2/2004
American Crow	San Bernardino	Chino	91710	5/24/2004	6/2/2004
American Crow	San Bernardino	Ontario	91762	5/24/2004	6/2/2004
American Crow	Los Angeles	Whittier	90604-	5/21/2004	6/2/2004

# California Arbovirus Surveillance Bulletin # 8

Week 23      Friday, June 11, 2004

American Crow	Riverside	Riverside	92501	5/24/2004	6/2/2004
Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	San Bernardino	San Bernardino	92407	5/24/2004	6/2/2004
American Crow	San Bernardino	Redlands	92373	5/24/2004	6/2/2004
American Crow	San Bernardino	Highland	92346	5/24/2004	6/2/2004
Common Raven	Los Angeles	West Hollywood	90069	5/24/2004	6/2/2004
American Crow	Los Angeles	Monterey Park	91754	5/24/2004	6/2/2004
American Crow	Los Angeles	Cerritos	90703	5/24/2004	6/2/2004
American Crow	Los Angeles	Hacienda Heights	91745	5/25/2004	6/2/2004
American Crow	Los Angeles	West Covina	91791	5/25/2004	6/2/2004
American Crow	Los Angeles	Whittier	90606	5/25/2004	6/2/2004
American Crow	Los Angeles	El Monte	91732	5/25/2004	6/2/2004
American Crow	Los Angeles	Whittier	90605	5/25/2004	6/2/2004
American Crow	Los Angeles	Cerritos	90703	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92407	5/25/2004	6/2/2004
American Crow	San Bernardino	Ontario	91762	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92404	5/25/2004	6/2/2004
American Crow	San Bernardino	Fontana	92335	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92411	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92408	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92407	5/25/2004	6/2/2004
American Crow	Los Angeles	Reseda	91335	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92415	5/25/2004	6/2/2004
American Crow	Riverside	Riverside	92507	5/25/2004	6/2/2004
American Crow	San Bernardino	Fontana	92335	5/25/2004	6/2/2004
American Crow	Los Angeles	La Mirada	90638	5/25/2004	6/2/2004
American Crow	Los Angeles	La Mirada	90638	5/25/2004	6/2/2004
American Crow	San Bernardino	Ontario	91761	5/25/2004	6/2/2004
American Crow	Riverside	Riverside	92504	5/25/2004	6/2/2004
American Crow	San Bernardino	Chino	91710	5/25/2004	6/2/2004
American Crow	Los Angeles	Duarte	91010	5/25/2004	6/2/2004
American Crow	Los Angeles	Baldwin Park	91706	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92404	5/25/2004	6/2/2004
American Crow	Los Angeles	San Gabriel	91775	5/25/2004	6/2/2004
American Crow	Los Angeles	Alhambra	91801	5/25/2004	6/2/2004
American Crow	San Bernardino	Muscoy	92407	5/25/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92408	5/25/2004	6/2/2004
American Crow	San Bernardino	Montclair	91763	5/25/2004	6/2/2004
American Crow	San Bernardino	Montclair	91763	5/25/2004	6/2/2004
American Crow	San Bernardino	Rialto	92376	5/26/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92404	5/26/2004	6/2/2004
American Crow	San Bernardino	San Bernardino	92404	5/26/2004	6/2/2004
American Crow	Riverside	Riverside	92503	5/26/2004	6/2/2004
American Crow	Riverside	Riverside	92503	5/26/2004	6/2/2004
American Crow	San Bernardino	Fontana	92335	5/26/2004	6/2/2004
Red-Tailed Hawk	San Bernardino	Redlands	92374	5/26/2004	6/2/2004
Common Raven	San Bernardino	Fontana	92336	5/26/2004	6/2/2004
Western Tanager	Orange	Santa Ana	92707	4/23/2004	6/3/2004
American Crow	Orange	Buena Park	90621	4/27/2004	6/3/2004

# California Arbovirus Surveillance Bulletin # 8

Week 23      Friday, June 11, 2004

Species	County	City	Zip Code	Date Collected	Date Tested
Mockingbird	Orange	Santa Ana	92705	5/1/2004	6/3/2004
Mallard Duck	Riverside	Cathedral City	92234	5/20/2004	6/3/2004
Mallard Duck	Riverside	Cathedral City	92234	5/20/2004	6/3/2004
American Crow	Riverside	Norco	92860	5/20/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92404	5/21/2004	6/3/2004
American Crow	Los Angeles	Hacienda Heights	91745	5/21/2004	6/3/2004
American Crow	Los Angeles	Whittier	90605	5/21/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92404	5/21/2004	6/3/2004
American Crow	Los Angeles	Pomona	91767	5/23/2004	6/3/2004
American Crow	Los Angeles	Bell Gardens	90201	5/21/2004	6/3/2004
American Crow	San Bernardino	Fontana	92335	5/24/2004	6/3/2004
American Crow	Los Angeles	La Mirada	90638	5/21/2004	6/3/2004
American Crow	Los Angeles	Santa Fe springs	90670	5/21/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92404	5/24/2004	6/3/2004
American Crow	Los Angeles	Whittier	90604	5/21/2004	6/3/2004
American Crow	San Bernardino	Upland	91784	5/24/2004	6/3/2004
American Crow	Riverside	Riverside	92501	5/24/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92407	5/24/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92410	5/24/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92410	5/24/2004	6/3/2004
Western Scrub-Jay	Los Angeles	Rancho Palos Verdes	90275	5/24/2004	6/3/2004
American Crow	San Bernardino	San Bernardino	92410	5/24/2004	6/3/2004
American Crow	San Bernardino	Loma Linda	92354	5/24/2004	6/3/2004

## Virus Isolations From Mosquito Pools:

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Culex quinquefasciatus	24-May	GRLA	375	Harbor City	Los Angeles	3-June
WNV	Culex tarsalis	24-May	GRLA	394	So. El Monte	Los Angeles	3-June
WNV	Culex quinquefasciatus	26-May	GRLA	435	Lakewood	Los Angeles	3-June
WNV	Culex quinquefasciatus	26-May	GRLA	428	Pico Rivera	Los Angeles	3-June
WNV	Culex quinquefasciatus	26-May	GRLA	432	Whittier	Los Angeles	3-June
WMV	Culex quinquefasciatus	17-May	SANB	34	Fontana	San Bernardino	28-May
WNV	Culex tarsalis	25-May	SANB	35	Fontana	San Bernardino	28-May
WNV	Culex stigmatosoma	25-May	SANB	38	Rialto	San Bernardino	28-May
WNV	Culex stigmatosoma	26-May	SANB	54	Rialto	San Bernardino	28-May
WNV	Cx. quinquefasciatus	26-May	SANB	43	Highland	San Bernardino	28-May
WNV	Culex stigmatosoma	26-May	SANB	45	Highland	San Bernardino	28-May
WNV	Cx. quinquefasciatus	25-May	SANB	42	Fontana	San Bernardino	28-May

# California Arbovirus Surveillance Bulletin # 8

Week 23 Friday, June 11, 2004

## TESTING SUMMARIES

### Humans and Equines

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Individuals Tested	Week	36	0	1	0	0	0	0	0	0
	YTD	256	0	1	0	0	0	0	0	0
Suspect Equine Cases	Week	44	0	0	0	0	0	0	0	0
	YTD	116	0	0	0	0	0	0	0	0

### Dead Birds

	Number Tested	WNV Positive
Week	126	75
YTD	856	284

### Sentinel Chickens and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
	YTD	8449	6	0	0	0
Mosquito pools	Week	338	12	0	0	0
	YTD	2604	37	0	0	0

### National Comments:

As of June 8, 2004, West Nile Virus (WNV) activity has been detected in 20 states, with Indiana and Missouri reporting their first activity this week. New Mexico announced the first human case on Wednesday, May 26<sup>th</sup>. Arizona has since reported six human cases. California and South Dakota announced their first human cases this week.

### 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) 412-6251.

### 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) and IgM Capture – Enzyme Linked Immunosorbent Assay (MAC-ELISA)) 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. All species except *Culex tarsalis* are also tested for California Encephalitis via EIA. All positive pools are confirmed by both singleplex RT-PCR as well as *in situ* EIA.

*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) 412-6254, FAX (510) 412-6263, or email [ahom@dhs.ca.gov].*

# California Arbovirus Surveillance Bulletin # 8

Week 23      Friday, June 11, 2004