

California Arbovirus Surveillance Bulletin # 5

Week 20 Friday, May 21, 2004

Weekly Summary

California Weekly Summary Comments:

Dead Birds:

The hotline received 726 reported dead birds last week (YTD = 3188). As it was reported in the last week's bulletin, the UC Davis Center for Vectorborne Diseases (CVEC) reported six positive dead birds from Los Angeles and San Bernardino counties. The dead bird reported in San Bernardino was the first WNV activity for that county in 2004. Currently, the yearly total stands at sixteen positive dead birds from LA County (13), Riverside (1), San Bernardino (1) and Ventura (1) counties.

News Flash:

CVEC just reported a total of 36 WNV positive bird carcasses from Los Angeles, Riverside, and San Bernardino counties. The tally included 32 crows, 3 ravens, and 1 house sparrow. The results will be reported in the summary table next week in Bulletin # 6.

Mosquito Pools:

CVEC reported two pools of *Culex tarsalis* collected on 4/14 from sites near Mecca (Riverside County) tested positive for West Nile virus (WNV). This is the first detection of WNV activity in mosquitoes in 2004. Subsequently, CVEC reported nine additional positive pools from Riverside (6), Los Angeles (2), and San Bernardino (1) counties.

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

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.

POSITIVES

Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	San Bernardino	San Bernardino	92405	04/23/04	05/11/04
American Crow	Los Angeles	West Covina	91790	04/29/04	05/11/04
American Crow	Los Angeles	Arcadia	91006	05/03/04	05/11/04
American Crow	Los Angeles	Irwindale	91706	05/04/04	05/11/04
American Crow	Los Angeles	San Gabriel	91775	05/04/04	05/11/04
American Crow	Los Angeles	Arcadia	91007	05/05/04	05/11/04

Virus Isolations From Mosquito Pools:

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	<i>Culex tarsalis</i>	14-Apr	COAV	255	Mecca	Riverside	29-Apr
WNV	<i>Culex tarsalis</i>	14-Apr	COAV	261	Mecca	Riverside	29-Apr
WNV	<i>Culex tarsalis</i>	28-Apr	COAV	339	Mecca	Riverside	12-May
WNV	<i>Culex tarsalis</i>	28-Apr	COAV	340	Mecca	Riverside	12-May
WNV	<i>Culex tarsalis</i>	28-Apr	COAV	344	Mecca	Riverside	12-May
WMV	<i>Culex tarsalis</i>	28-Apr	COAV	345	Mecca	Riverside	12-May
WNV	<i>Culex tarsalis</i>	28-Apr	COAV	346	Mecca	Riverside	12-May
WNV	<i>Culex tarsalis</i>	28-Apr	COAV	347	Mecca	Riverside	12-May
WNV	<i>Cx. quinquefasciatus</i>	6-May	GRLA	287	Pico Rivera	Los Angeles	13-May
WNV	<i>Cx. quinquefasciatus</i>	6-May	GRLA	288	Pico Rivera	Los Angeles	13-May
WNV	<i>Cx. quinquefasciatus</i>	11-May	WVAL	19	Monclair	San Bernardino	13-May

California Arbovirus Surveillance Bulletin # 5

Week 20 Friday, May 21, 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	12	0	0	0	0	0	0	0	0
	YTD	186	0	0	0	0	0	0	0	0
Suspect Equine Cases	Week	9	0	0	0	0	0	0	0	0
	YTD	61	0	0	0	0	0	0	0	0

Dead Birds

	Number Tested	WNV Positive
Week	97	6
YTD	427	16

Sentinel Chickens and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
	YTD	5512	0	0	0	0
Mosquito pools	Week	275	11	0	0	0
	YTD	1696	11	0	0	0

National Comments:

As of May 19, 2004, West Nile virus activity has been detected in 14 states. Arizona, Illinois, Kentucky, and Michigan reported first activity this week. No new human cases have been reported. A previously reported human case from Ohio was found to have been a false-positive laboratory result.

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 the 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.

California Arbovirus Surveillance Bulletin # 5

Week 20 Friday, May 21, 2004

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].
