

California Arbovirus Surveillance Bulletin # 19

Week 26 Friday, June 30, 2006

Weekly Summary

COMMENTS

Humans

No human cases were reported this week. In 2006, one human case of WNV has been reported from Kern County.

Horses

No equine infections have been reported in 2006 by the California Department of Food & Agriculture.

Dead Birds

This week, 14 out of 121 (11.6%) dead birds collected from 33 counties tested positive for WNV.

- 2/100 dead birds tested positive via RT-PCR.
- 6/10 dead birds tested positive via VecTest.
- 5/9 dead birds tested positive via RAMP.
- 1/2 dead birds tested positive via IHC.

The WNV positive dead birds were collected from the following counties: Fresno (4); Merced (1); Orange (1); San Joaquin (5); Santa Clara (1); Stanislaus (1); and Ventura (1). **This is the first indication of WNV activity in San Joaquin County in 2006.**

In 2006, 45 out of 2,141 (2.1%) dead birds have tested positive for WNV from twelve counties: Fresno (5); Merced (1); Orange (18); Sacramento (3); San Diego (2); San Joaquin (5); San Mateo (1); Santa Clara (5); Shasta (1); Stanislaus (1); Ventura (2); and Yuba (1).

The hotline has received a total of 18,917 dead bird reports this year.

Mosquito Pools

CVEC reported nine WNV positive mosquito pools this week from Kern (3), Stanislaus (5), and Yuba (1) counties.

In 2006, 22 mosquito pools have tested positive for WNV from eight counties: Fresno (1); Imperial (1); Kern (3); Los Angeles (3); Merced (1); Riverside (6); Stanislaus (6); and Yuba (1). In addition, Santa Clara County has reported one WNV positive mosquito pool tested by RAMP.

Sentinel Chickens

VRDL reported two WNV positive chickens this week from a flock located near Niland in Imperial County. In 2006, six WNV seroconversions in chickens have been reported from Imperial (2) and Los Angeles (4) counties.

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	26	0	0	0	0	0	0	0	0
	YTD	592	0	1	0	0	0	0	0	0
Horses Tested	Week	20	0	0	0	0	0	0	0	0
	YTD	191	0	0	0	0	0	0	0	0

Dead Birds

	Number Tested	WNV Positive
Week	121	14
YTD	2141	45

Sentinel Chickens* and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Flavivirus Positive
	YTD	13,068	6	0	0	6
Mosquito pools	Week	760	9	0	0	0
	YTD	5684	22	0	0	0

*Total includes local agency submission

Mosquito pools tested by local agencies

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
	YTD	1328	0	0	0	0
RAMP	Week	73	1	N/A	N/A	N/A
	YTD	130	1	--	--	--

POSITIVES

Mosquito Pools

Virus	Species	County	City	Agency Code	Pool #	Collected	Tested
WN	Cx quinquefasciatus	Kern	Bakersfield	AFSB0102	5447	6/20/06	6/29/06
WN	Cx tarsalis	Kern	Bakersfield	AFSB0070	5488	6/22/06	6/29/06
WN	Cx quinquefasciatus	Kern	Bakersfield	KERN2001	191	6/23/06	6/29/06
WN	Cx tarsalis	Merced	Newman	TRLK0316	819	6/26/06	6/30/06
WN	Cx tarsalis	Stanislaus	Turlock	TRLK0408	735	6/23/06	6/29/06
WN	Cx tarsalis	Stanislaus	Crows Landing	TRLK9743	778	6/26/06	6/30/06
WN	Cx tarsalis	Stanislaus	Crows Landing	TRLK9745	779	6/26/06	6/30/06
WN	Cx tarsalis	Stanislaus	Grayson	TRLK9769	814	6/26/06	6/29/06
WN	Cx tarsalis	Yuba	Marysville	SUYA0097	79	6/27/06	6/30/06

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WNV Positive Mosquito Pools Tested by Local Agencies

Species	County	City	Agency Code	Pool #	Collected	Tested	Tested By
Cx tarsalis	Santa Clara	San Jose	STCL	31	6/22/06	6/22/06	RAMP

Sentinel Chicken Seroconversions

Virus	Agency Code	County	Nearest City	Probable Seroconversion Date	BAND #
WNV	COAV5001	Imperial	Niland	5/30/06	1249
WNV	COAV5001	Imperial	Niland	6/12/06	1242

WNV Positive Dead Birds

Species	County	City	ZIP	Collected	Tested By
American Crow	Fresno	Fresno	93704	06/21/06	VecTest
American Crow	Fresno	Fresno	93704	06/26/06	VecTest
American Crow	San Joaquin	Banta	95304	06/27/06	RAMP
American Crow	San Joaquin	Banta	95304	06/27/06	RAMP
American Crow	San Joaquin	Tracy	95376	06/23/06	RAMP
American Crow	San Joaquin	Tracy	95304	06/26/06	RAMP
American Crow	San Joaquin	Tracy	95304	06/27/06	RAMP
American Crow	Santa Clara	San Jose	95129	06/20/06	VecTest
American Crow	Stanislaus	Turlock	95380	06/22/06	VecTest
Northern Mockingbird	Orange	Anaheim	92806	06/13/06	IHC
Hawk	Ventura	Thousand Oaks	91362	06/19/06	RT-PCR
Western Scrub-Jay	Fresno	Fresno	93702	06/21/06	VecTest
Western Scrub-Jay	Fresno	Fresno	93704	06/23/06	VecTest
Western Scrub-Jay	Merced	Merced	95340	06/15/06	RT-PCR

National Comments: As of June 27, 2006, West Nile virus (WNV) activity has been detected in the following states: Arkansas, California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New York, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, West Virginia, Wisconsin, and Wyoming. A total of 5 human cases have been reported in California (1), Colorado (1), Mississippi (1), and Texas (2). No fatalities have been reported in 2006. .

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TEST PROTOCOLS

Dead Birds:

All bird species from all zip codes are currently being accepted for testing unless otherwise requested by a local agency. Additionally, once WNV has been detected within a county, doves, pigeons, and chickens will no longer be accepted for testing from that county. Corvids that test positive via RAMP or VecTest are no longer confirmed. Dead birds are necropsied at the California Animal Health and Food Safety (CAHFS) laboratory at UC Davis. Oral swabs from American Crows and kidney tissue from all other dead birds are forward to the UC Davis Center for Vectorborne Diseases (CVEC) for WNV testing using the singleplex RT-PCR Taqman assay and confirmed with a second primer set. 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.

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 Tina Albrecht by phone (510) 412-6298, FAX (510) 412-6263, or email [talbrech@dhs.ca.gov].