

California Arbovirus Surveillance Bulletin # 20

Week 27 Friday, July 7, 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, 18 out of 174 (10.3%) dead birds collected from 34 counties tested positive for WNV.

- 9/152 dead birds tested positive via RT-PCR.
- 7/12 dead birds tested positive via VecTest.
- 1/1 dead birds tested positive via RAMP.
- 1/9 dead birds tested positive via IHC.

The WNV positive dead birds were collected from the following counties: Contra Costa (1); Fresno (7); Glenn (1); Merced (1); Orange (1); Sacramento (1); Shasta (1); Stanislaus (4); and Yolo (1). **This is the first indication of WNV activity in Contra Costa, Glenn, and Yolo Counties in 2006.**

In 2006, 63 out of 2,322 (2.7%) dead birds have tested positive for WNV from 15 counties: Contra Costa (1); Fresno (12); Glenn (1); Merced (2); Orange (19); Sacramento (4); San Diego (2); San Joaquin (5); San Mateo (1); Santa Clara (5); Shasta (2); Stanislaus (5); Ventura (2); Yolo (1) and Yuba (1).

The hotline has received a total of 20,632 dead bird reports this year.

Mosquito Pools

CVEC reported 12 WNV positive mosquito pools this week from Imperial (2); Kings (3); Merced (1); and Sutter (6) counties. **This is the first indication of WNV activity in Kings and Sutter counties in 2006.**

Sac-Yolo MVCD reported two WNV positive mosquito pools, one each from Sacramento and Yolo counties. Additionally, San Joaquin MVCD reported a presumptive WNV positive mosquito pool tested by RAMP which will be sent to CVEC for confirmation by RT-PCR.

In 2006, 36 mosquito pools have tested positive for WNV from 12 counties: Fresno (1); Imperial (3); Kern (3); Kings (3); Los Angeles (3); Merced (2); Riverside (6); Sacramento (1); Stanislaus (6); Sutter (6); Yolo (1); and Yuba (1). In addition, Santa Clara County has reported one WNV positive mosquito pool tested by RAMP.

Sentinel Chickens

VRDL reported one WNV positive chicken this week from a flock located near Niland in Imperial County. In 2006, seven WNV seroconversions in chickens have been reported from Imperial (3) 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	14	0	0	0	0	0	0	0	0
	YTD	606	0	1	0	0	0	0	0	0
Horses Tested	Week	10	0	0	0	0	0	0	0	0
	YTD	201	0	0	0	0	0	0	0	0

Dead Birds

	Number Tested	WNV Positive
Week	174	18
YTD	2322	63

Sentinel Chickens* and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Flavivirus Positive
	YTD	14,116	7	0	0	6
Mosquito pools	Week	384	12	0	0	0
	YTD	6068	34	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	1585	2	0	0	0
RAMP	Week	11	0	N/A	N/A	N/A
	YTD	141	1	--	--	--

POSITIVES

Mosquito Pools

Agency Code	County	City	Species	Pool #	Collected	Tested	Virus
COAV5001	Imperial	Niland	Cx tarsalis	5421	6/28/06	7/6/06	WN
COAV5002	Imperial	Niland	Cx tarsalis	5422	6/28/06	7/6/06	WN
KNGS3020	Kings	Corcoran	Cx tarsalis	130	6/27/06	7/7/06	WN
KNGS3027	Kings	Lemoore	Cx tarsalis	137	6/27/06	7/5/06	WN
KNGS3018	Kings	Lemoore	Cx tarsalis	138	6/27/06	7/5/06	WN
MERC0408	Merced	Gustine	Cx tarsalis	98	6/29/06	7/5/06	WN
SAYO4118*	Sacramento	Elverta	Cx tarsalis	1033	6/29/06	6/30/06	WN
SAYO3201*	Yolo		Cx stigmatosoma	1041	6/29/06	6/30/06	WN

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SUYA0044	Sutter	Pleasant Grove	Cx tarsalis	88	7/3/06	7/6/06	WN
SUYA0044	Sutter	Pleasant Grove	Cx tarsalis	89	7/3/06	7/6/06	WN
SUYA0044	Sutter	Pleasant Grove	Cx tarsalis	90	7/3/06	7/6/06	WN
SUYA0044	Sutter	Pleasant Grove	Cx tarsalis	91	7/3/06	7/6/06	WN
SUYA0044	Sutter	Pleasant Grove	Cx tarsalis	92	7/3/06	7/6/06	WN
SUYA0015	Sutter	Robbins	Cx tarsalis	95	7/3/06	7/6/06	WN

*Tested by local agency

Sentinel Chicken Seroconversions

Agency Code	County	Nearest City	Probable Seroconversion Date	BAND #	Virus
COAV5001	Imperial	Niland	6/26/06	1250	WN

WNV Positive Dead Birds

Species	County	City	ZIP	Collected	Tested	Tested By
American Crow	Contra Costa	Oakley	94561	06/30/06	6/30/06	RAMP
American Crow	Glenn	Willows	95988	07/03/06	7/03/06	VecTest
American Crow	Stanislaus	Newman	95360	06/27/06	6/27/06	VecTest
American Crow	Stanislaus	Turlock	95380	06/28/06	6/28/06	VecTest
American Crow	Stanislaus	Turlock	95382	06/28/06	6/28/06	VecTest
American Crow	Yolo	Davis	95616	06/28/06	7/3/06	RT-PCR
Greater Roadrunner	Orange	Yorba Linda	92886	06/21/06	6/21/06	IHC
House Sparrow	Stanislaus	Newman	95360	06/23/06	7/3/06	RT-PCR
Northern Mockingbird	Fresno	Fresno	93711	06/21/06	7/3/06	RT-PCR
Oak Titmouse	Shasta	Anderson	96007	06/20/06	7/3/06	RT-PCR
Western Scrub-Jay	Fresno	Clovis	93611	06/25/06	7/3/06	RT-PCR
Western Scrub-Jay	Fresno	Fresno	93726	06/25/06	7/3/06	RT-PCR
Western Scrub-Jay	Fresno	Fresno	93710	06/22/06	7/3/06	RT-PCR
Western Scrub-Jay	Fresno	Fresno	93722	06/28/06	6/28/06	VecTest
Western Scrub-Jay	Fresno	Fresno	93704	07/02/06	7/02/06	VecTest
Western Scrub-Jay	Fresno	Fresno	93727	07/03/06	7/03/06	VecTest
Western Scrub-Jay	Merced	Merced	95340	06/21/06	7/03/06	RT-PCR
Yellow-billed Magpie	Sacramento	Elverta	95626	06/21/06	7/03/06	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].