California Arbovirus Surveillance Bulletin #8

Week 14 Friday, April 8, 2005

Weekly Summary

Comments:

Humans:

No human cases of WNV have been reported this year.

Horses:

The California Department of Food & Agriculture has reported no WNV positive equine cases this year.

Dead Birds:

This week the hotline received 812 dead bird reports, for a YTD total of 7,115 reports. WNV RNA was detected in 12 of 151 (7.9%) dead birds submitted from 36 counties. The positive dead birds were collected from the following counties: El Dorado; Kings; Los Angeles; Orange; Sacramento; San Mateo; Santa Clara; Sonoma; and Tulare. This is the first indication of WNV activity in San Mateo county in 2005.

Ten of the 12 WNV positive dead birds tested positive via RT-PCR performed by the UC Davis Center for Vectorborne Diseases (CVEC) and two birds tested positive by immunohistochemistry (IHC).

The following bird species tested positive for WNV: American crow (2); barn swallow (1); black-crowned nightheron (1); California quail (1); lesser goldfinch (1); house sparrow (1); northern mockingbird (1); pine siskin (1); rock dove (1); western scrub-jay (1); yellow-rumped warbler (1). See "WNV Positive Dead Birds" table for details.

Since January 1, 2005, 51 of 1178 (4.3%) dead birds have tested positive for WNV.

Mosquito Pools:

CVEC reported no positive mosquito pools.

Sentinel Chickens:

VRDL reported no sentinel chicken seroconversions.

Website Information:

For updated information on WNV, please visit the California WNV website, <u>www.westnile.ca.gov</u>, the CDC website, <u>www.cdc.gov</u>, and the USGS website, <u>www.westnilemaps.usgs.gov</u>. Please go to the Vector website at <u>http://vector.ucdavis.edu/arbo.html</u> for flock location and more information on WNV and other vector-borne diseases.

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TEST SUMMARIES

Humans and Horses

	Number		WNV Positive		WEE Positive		SLE Positive		Other Positive	
		Tested	Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	22	0	0	0	0	0	0	0	0
	YTD	250	0	0	0	0	0	0	0	0
Horses Tested	Week	17	0	0	0	0	0	0	0	0
	YTD	81	0	0	0	0	0	0	0	0

Dead Birds

Sentinel Chickens and Mosquito Pools

	Number Tested	WNV Positive
Week	151	12
YTD	1178	51

			Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
	Chicken sera	Week	734	0	0	0	0
		YTD	2801	1	0	0	0
	Mosquito pools	Week	300	0	0	0	0
		YTD	1679	1	0	0	0

WNV POSITIVE DEAD BIRDS

WNV Positive Dead Birds Reported April 2- April 8, 2005

Species	County	City	Zip	Date Collected	Date Tested
American Crow	Los Angeles	Woodland Hills	91364	3/28/2005	4/4/2005
American Crow [^]	Orange	Villa Park	92869	3/23/2005	3/23/2005
Barn Swallow	Sonoma	Santa Rosa	95407	3/28/2005	4/4/2005
Black-Crowned Night-Heron^	Orange	Dana Point	92629	3/21/2005	3/21/2005
California Quail	Santa Clara	San Jose	95120	3/15/2005	4/4/2005
House Sparrow	Santa Clara	San Jose	95118	3/25/2005	4/4/2005
Lesser Goldfinch	Santa Clara	San Jose	95123	3/17/2005	4/4/2005
Northern Mockingbird	Tulare	Farmersville	93223	3/23/2005	4/4/2005
Pine Siskin	San Mateo	Hillsborough	94010	3/24/2005	4/4/2005
Rock Dove	Kings	Hanford	93230	3/17/2005	4/4/2005
Western Scrub-Jay	Sacramento	Elk Grove	95624	3/25/2005	4/4/2005
Yellow-Rumped Warbler	El Dorado	Pollock Pines	95726	3/25/2005	4/4/2005

^Indicates IHC

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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) and 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].