

California Arbovirus Surveillance Bulletin # 2

Week 7 Friday, February 15, 2008

Weekly and Year-To-Date Summaries

WEEKLY COMMENTS



Humans

No human cases have been reported in 2008.

Horses

No equine cases have been reported in 2008.

Dead Birds & Tree Squirrels

No birds or tree squirrels have tested positive for WNV in 2008.

Mosquito Pools

No positive mosquito pools have been reported in 2008.

Sentinel Chickens

No seroconversions have been reported in 2008.

Website Information For updated information on WNV in California, please visit the California WNV website, www.westnile.ca.gov, or the California Vectorborne Disease Surveillance System website, www.calsurv.org. For national information on WNV and other arboviruses, please visit the CDC website, www.cdc.gov, and the USGS website, www.westnilemaps.usgs.gov.

2008 & 2007 YTD West Nile Virus Comparisons

	2008	2007
Total # Dead Bird Reports	948	3,906
# Positive Counties	0	4
# Human Cases/ # Tested	0 / 25	0 / 120
# Horse Cases/ # Tested	0 / 0	1 / 25
# Positive Dead Birds/ # Tested	0 / 89	1 / 298
# Positive Mosquito Pools/ # Tested	0 / 79	2 / 214
# Positive Chicken Sera/ # Tested	0 / 0	2 / 862
# Positive Squirrels/ # Tested	0 / 1	0 / 6

California Arbovirus Surveillance Bulletin # 2

Week 7 Friday, February 15, 2008

2008 TEST SUMMARIES

Human & Horse Cases

		Number Tested	WNV		WEE		SLE		Other	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested*	Week	10	0	0	0	0	0	0	0	0
	YTD	25	0	0	0	0	0	0	0	0
Horses Tested	Week	0	0	0	0	0	0	0	0	0
	YTD	0	0	0	0	0	0	0	0	0

Dead Birds & Tree Squirrels

		Number Tested	WNV Positive
Dead Birds	Week	37	0
	YTD	89	0
Tree Squirrels	Week	1	0
	YTD	1	0

Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive
Chicken Sera	Week	0	0	0	0
	YTD	0	0	0	0
Mosquito Pools: RT-PCR	Week	70	0	0	0
	YTD	79	0	0	0
Mosquito Pools: RAMP	Week	0	0	N/A	N/A
	YTD	0	0	N/A	N/A

NATIONAL COMMENTS

2007 Update

As of February 5, 2008, a total of 3,576 human cases had been reported nationwide in 2007 in the following 43 states: Alabama (24), Arizona (96), Arkansas (20), California (379), Colorado (576), Connecticut (4), Delaware (1), Florida (3), Georgia (49), Idaho (132), Illinois (101), Indiana (24), Iowa (30), Kansas (39), Kentucky (4), Louisiana (40), Maryland (10), Massachusetts (6), Michigan (13), Minnesota (101), Mississippi (133), Missouri (77), Montana (202), Nebraska (144), Nevada (12), New Jersey (1), New Mexico (60), New York (21), North Carolina (8), North Dakota (369), Ohio (23), Oklahoma (101), Oregon (26), Pennsylvania (9), Rhode Island (1), South Carolina (5), South Dakota (207), Tennessee (11), Texas (246), Utah (69), Virginia (5), Wisconsin (13), and Wyoming (181). Of the 3,576 cases reported, 1,187 (33%) had West Nile neuroinvasive disease (i.e. encephalitis or meningitis). The median age of the 3,572 cases where data was available was 51 years (range: 1 month-97 years), and 55% were male. A total of 115 human fatalities had been reported from Alabama (3), Arizona (5), Arkansas (1), California (17), Colorado (6), Florida (1), Georgia (2), Idaho (1), Iowa (3), Illinois (4), Indiana (1), Kansas (2), Louisiana (2), Michigan (3), Minnesota (2), Mississippi (3), Missouri (4), Montana (4), Nebraska (3), New Mexico (3), New York (4), North Dakota (3), Ohio (3), Oklahoma (8), South Dakota (6), Tennessee (1), Texas (16), Utah (2), Wisconsin (1), and Wyoming (1). For the latest updates about WNV activity in the United States, please visit the CDC WNV website at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>.

California Arbovirus Surveillance Bulletin # 2

Week 7 Friday, February 15, 2008

TEST PROTOCOLS

Humans:

Specimens are tested by local laboratories with an IgM or IgG immunofluorescent assay (IFA) and/or an IgM enzyme immunoassay (EIA). Specimens with inconclusive results are forwarded to the California Department of Public Health Viral and Rickettsial Disease Laboratory (VRDL) for further testing or confirmation by plaque reduction neutralization test (PRNT).

*Human denominator data only includes specimens tested at VRDL and does not include additional negative specimens that are tested by local agencies only.

Horses:

Serum or brain tissue specimens from horses displaying neurological symptoms are submitted to the California Animal Health and Safety Laboratory (CAHFS) and tested by EIA and PRNT.

Dead Birds and Tree Squirrels:

All bird and tree squirrel 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 and squirrels are necropsied at CAHFS laboratory at University of California, Davis. Oral swabs from American Crows and kidney tissue from all other dead birds and squirrels are forwarded 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, Erin Parker, can be reached directly at (510) 412-6254.

Sentinel Chickens:

Dried blood spot specimens from sentinel chickens are submitted to VBDS and 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. Positive samples are confirmed by western-blot or PRNT.

Mosquito Pools:

Mosquito pools are submitted to CVEC and 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), California Department of Public Health, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Tina Feiszli by phone (510) 412-6298, FAX (510) 412-6263, or email: tina.feiszli@cdph.ca.gov
