

# California Arbovirus Surveillance Bulletin # 14

Week 21 Friday, May 25, 2007

## Weekly and Year-To-Date Summaries

### WEEKLY COMMENTS



#### Humans

No human cases have been reported in 2007.

#### Horses

No new equine cases were reported this week.

#### Dead Birds & Tree Squirrels

No positive dead birds or tree squirrels were reported this week.

#### Mosquito Pools

This week, the Center for Vectorborne Diseases reported that West Nile virus (WNV) was detected in one pool of *Culex quinquefasciatus* collected on May 15 in Los Angeles County.

#### Sentinel Chickens

No new seroconversions were reported this week.

### YTD ARBOVIRUS ACTIVITY

WNV* Activity by Element and County, 2007						
County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Tree Squirrels
Imperial					1	
Los Angeles			2	2	1	
Orange			6			
Riverside				1		
San Diego			5			
Santa Clara			8			
Stanislaus			1			
Sonoma		1				
<b>State Totals</b>	<b>0</b>	<b>1</b>	<b>22</b>	<b>3</b>	<b>2</b>	<b>0</b>

\*No other arbovirus activity has been detected in 2007.

2007 & 2006 YTD West Nile Virus Comparisons		
	2007	2006
# Hotline Calls	7,497	9,533
Total # Dead Bird Reports	7,155	12,901
# Website Visits	41,060	NA
# Positive Counties	8	8
# Positive Humans/ # Tested	0/344	0/446
# Positive Horses/ # Tested	1/95	0/135
# Positive Dead Birds/ # Tested	22/1,242	19/1,560
# Positive Mosquito Pools/ # Tested	3/3,648	8/2,983
# Positive Chicken Sera/ # Tested	2/6,390	1/7,447
# Positive Squirrels/ # Tested	0/37	0/22

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

## TEST SUMMARIES

### Humans & Horses

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	13	0	0	0	0	0	0	0	0
	YTD	344	0	0	0	0	0	0	0	0
Horses Tested	Week	0	0	0	0	0	0	0	0	0
	YTD	95	0	1	0	0	0	0	0	0

### Dead Birds & Tree Squirrels

		Number Tested	WNV Positive
Dead Birds	Week	95	0
	YTD	1242	22
Tree Squirrels	Week	2	0
	YTD	37	0

### Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Flavivirus* Positive
Chicken Sera	Week	702	0	0	0	0
	YTD	6390	2	0	0	0
Mosquito Pools: RT-PCR	Week	510	1	0	0	0
	YTD	3504	3	0	0	0
Mosquito Pools: RAMP	Week	39	0	N/A	N/A	N/A
	YTD	144	0	N/A	N/A	N/A

\*Does not include those later confirmed as WNV or SLE

## POSITIVES

### Mosquito Pools

Site Code	Pool #	Species	# in Pool	Collected	Tested	City	County	Virus
GRLA2194	274	Cx quinquefasciatus	44	5/15/2007	5/25/2007	South El Monte	Los Angeles	WN

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## NATIONAL COMMENTS

As of May 18, 2007, three confirmed human cases of West Nile virus have been reported in Mississippi.

## 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 VRDL for further testing or confirmation by plaque reduction neutralization test (PRNT).

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### **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.

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### **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 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 and squirrels are forwarded to the UC Davis Center for Vector borne 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.

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### **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. Positive samples are confirmed by western-blot or PRNT.

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### **Mosquito Pools:**

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.

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*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 Feiszli by phone (510) 412-6298, FAX (510) 412-6263, or email: [tfeiszli@dhs.ca.gov](mailto:tfeiszli@dhs.ca.gov).*