

# California Arbovirus Surveillance Bulletin # 32

Week 39 Friday, September 28, 2007

## Weekly and Year-To-Date Summaries

### WEEKLY COMMENTS



#### Humans

Thirty-three new human cases of West Nile virus (WNV) were reported this week from the following 13 counties: Colusa (1), Contra Costa (1), Fresno (2), Kern (2), Los Angeles (10), Madera (1), Orange (4), Riverside (1), San Bernardino (1), San Diego (4), San Joaquin (2), Shasta (1), and Stanislaus (3). **This is the first human case reported from Madera County this year.** A total of 290 WNV cases have been reported in 2007, for a statewide incidence of 0.86 cases per 100,000 people. Of the 290 cases reported, 161 (56%) are classified as West Nile fever, 120 (41%) are classified as neuroinvasive disease, and 9 (3%) are of unknown clinical presentation. The median age of all cases is 54 years (range: 2-96 years), and 153 cases (53%) are male. Fourteen WNV-related fatalities have been reported in 2007 from Colusa (1), Fresno (1), Kern (4), Kings (1), Los Angeles (1), Riverside (3), Sacramento (1), San Joaquin (1), and Tulare (1) counties. Forty-five WNV-positive blood donation samples have been reported this year; 15 of the individuals subsequently developed symptoms and were reclassified as cases.

#### Horses

Two new equine cases of WNV were reported this week from Kern and Tehama counties. Both horses were unvaccinated and euthanized. In 2007, 24 horses from 12 counties have tested positive for WNV, of which 12 were euthanized or died.

#### Dead Birds & Tree Squirrels

Eighty-nine WNV-positive dead birds were reported this week from 22 counties: Alameda (4), Contra Costa (2), Fresno (5), Glenn (3), Kern (7), Kings (4), Los Angeles (22), Madera (1), Mendocino (1), Merced (2), Napa (2), Nevada (1), Placer (1), Sacramento (16), San Bernardino (4), San Diego (1), San Joaquin (2), Sonoma (2), Stanislaus (4), Tulare (2), Ventura (1), and Yolo (2). **This is the first detection of WNV activity in Napa County in 2007.** A total of 1,170 dead birds from 50 counties have tested positive for WNV this year.

Two tree squirrels from Alameda (1) and Contra Costa (1) counties tested positive for WNV this week. Seventeen squirrels from eight counties have tested positive for WNV this year.

*Reminder: Local agencies should check the Surveillance Gateway for their county DYCAST bird reporting updates.*

#### Mosquito Pools

Twenty-three new WNV-positive mosquito pools were reported this week from 9 counties: Alameda (1), Los Angeles (5), Orange (3), Riverside (2), Sacramento (3), San Diego (2), San Joaquin (2), Shasta (1), and Stanislaus (4). **This is the first detection of WNV-positive mosquitoes in Alameda County this year.** A total of 941 mosquito pools from 30 counties have tested positive for WNV in 2007.

In 2007, a total of 16 mosquito pools have tested positive for western equine encephalomyelitis virus (WEE) from two counties: Fresno (1) and Kern (15).

#### Sentinel Chickens

Thirty new WNV seroconversions were reported this week from 12 counties: Butte (4), Contra Costa (1), Fresno (1), Kern (4), Los Angeles (2), Riverside (1), San Bernardino (1), San Joaquin (5), Shasta (2), Stanislaus (5), Sutter (3), and Tehama (1). A total of 360 sentinel chickens from 26 counties have tested positive for WNV this year.

Four WEE seroconversions were reported this week from Kern (3) and Los Angeles (1) counties. **This is the first detection of WEE activity in Los Angeles County in 2007.** A total of five\* chickens have tested positive for WEE this year from Kern (4) and Los Angeles (1) counties.

*\*One chicken from Kern County was incorrectly reported twice and removed from total.*

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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).

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## YTD WNV Activity by Element and County, 2007

County	Humans*	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Squirrels
Alameda			14	1		1
Amador			1	1		
Butte	16		27	5	29	
Calaveras			3			
Colusa	2		3	1	2	
Contra Costa	2		23	23	5	2
El Dorado			5			
Fresno	14	1	107	60	31	4
Glenn	7		36	1	8	
Humboldt			2			
Imperial	3			4	17	
Inyo			1			
Kern	117	4	120	201	62	
Kings	5	1	9	30	22	
Lake			3	8	2	
Lassen			2			
Los Angeles	24		137	81	12	
Madera	1		6	8	4	
Marin			2			
Mendocino	2		2			1
Merced	4		31	1	2	
Modoc			1			
Napa			2			
Nevada			3			
Orange	7		14	11		
Placer	2	1	15	23	6	
Plumas			1			
Riverside	10		4	30	26	
Sacramento	14	2	120	131	14	1
San Bernardino	3		23	5	21	
San Diego	8	4	86	5	1	
San Francisco			1			
San Joaquin	6	1	37	149	23	1
San Luis Obispo		1	6			
San Mateo			1			1
Santa Barbara			1			
Santa Clara	2		63	9		6
Santa Cruz			4			
Shasta	8	3	43	17	5	
Siskiyou			4			
Solano	1		2		5	
Sonoma	1	2	4	1		
Stanislaus	16		122	77	23	
Sutter	2		1	23	17	
Tehama	4	2	18	2	8	
Trinity			1			
Tulare	7	2	28	21	8	
Tuolumne			1			
Ventura	1		7			
Yolo	1		22	10	3	
Yuba			1	2	4	
<b>Totals</b>	<b>290</b>	<b>24</b>	<b>1,170</b>	<b>941</b>	<b>360</b>	<b>17</b>

\*Total does not include asymptomatic infections

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2007 & 2006 YTD West Nile Virus Comparisons		
	2007	2006
Total # Dead Bird Reports	27,495	40,935
# Positive Counties	51	52
# Human Cases/ # Tested	290 / 983	237 / 1,212
# Horse Cases/ # Tested	24 / 289	49 / 393
# Positive Dead Birds/ # Tested	1,170 / 4,677	1,162 / 4,893
# Positive Mosquito Pools/ # Tested	941 / 24,424	794 / 20,728
# Positive Chicken Sera/ # Tested	360 / 23,147	521 / 26,711
# Positive Squirrels/ # Tested	17 / 169	28 / 116

## TEST SUMMARIES

### Human & Horse Cases

		Number Tested	WNV		WEE		SLE		Other	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested	Week	63	0	33	0	0	0	0	0	0
	YTD	983	0	290	0	0	0	0	0	0
Horses Tested	Week	5	0	2	0	0	0	0	0	0
	YTD	289	0	24	0	0	0	0	0	0

### Dead Birds & Tree Squirrels

		Number Tested	WNV Positive
Dead Birds	Week	193	89
	YTD	4,677	1,170
Tree Squirrels	Week	13	2
	YTD	169	17

### Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive
Chicken Sera	Week	736	30	4	0
	YTD	23,147	360	5*	0
Mosquito Pools: RT-PCR	Week	1,029	21	0	0
	YTD	22,446	774	16	0
Mosquito Pools: RAMP	Week	24	2	N/A	N/A
	YTD	1,978	167	N/A	N/A

*\*One chicken was incorrectly reported twice and removed from total*

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## POSITIVES: 9/24/07-9/28/07

### Dead Birds & Tree Squirrels

County	City	Zip Code	Species	Reported	Tested	Test Method
Alameda	Dublin	94568	Mourning Dove	9/6/07	9/24/07	RT-PCR
Alameda	Livermore	94550	American Crow	9/19/07	9/24/07	RAMP
Alameda	Livermore	94550	American Crow	9/19/07	9/24/07	RAMP
Alameda	Livermore	94550	American Crow	9/17/07	9/24/07	RAMP
Alameda	San Leandro	94577	Western Gray Squirrel	9/18/07	9/24/07	RT-PCR
Contra Costa	Antioch	94509	American Crow	9/19/07	9/24/07	RAMP
Contra Costa	Concord	94519	Fox Squirrel	9/17/07	9/24/07	RT-PCR
Contra Costa	Knightsen	94548	American Crow	9/16/07	9/24/07	RAMP
Fresno	Fresno	93721	American Crow	9/21/07	9/24/07	VecTest
Fresno	Fresno	93722	American Crow	9/17/07	9/24/07	VecTest
Fresno	Fresno	93722	American Crow	9/16/07	9/24/07	VecTest
Fresno	Laton	93242	American Crow	9/13/07	9/24/07	RT-PCR
Fresno	Reedley	93654	Western Scrub-Jay	9/18/07	9/24/07	RT-PCR
Glenn	Elk Creek	95939	Belted Kingfisher	9/18/07	9/24/07	RT-PCR
Glenn	Willows	95988	American Crow	9/21/07	9/24/07	VecTest
Glenn	Willows	95988	American Crow	9/18/07	9/24/07	VecTest
Kern	Bakersfield	93308	Western Scrub-Jay	9/18/07	9/24/07	RT-PCR
Kern	Bakersfield	93307	Rock Dove	9/17/07	9/24/07	RT-PCR
Kern	Bakersfield	93311	House Finch	9/16/07	9/24/07	RT-PCR
Kern	Bakersfield	93308	Western Tanager	9/16/07	9/24/07	RT-PCR
Kern	Bakersfield	93312	Mourning Dove	9/13/07	9/24/07	RT-PCR
Kern	Bakersfield	93312	Rock Dove	9/10/07	9/24/07	RT-PCR
Kern	Delano	93215	American Crow	9/17/07	9/24/07	RT-PCR
Kings	Hanford	93230	American Crow	9/15/07	9/24/07	RT-PCR
Kings	Hanford	93230	American Crow	9/13/07	9/24/07	RT-PCR
Kings	Hanford	93230	Mourning Dove	9/11/07	9/24/07	RT-PCR
Kings	Lemoore	93245	American Crow	9/13/07	9/24/07	RT-PCR
Los Angeles	Beverly Hills	90210	American Crow	9/17/07	9/24/07	RT-PCR
Los Angeles	Downey	90241	American Crow	9/11/07	9/24/07	RT-PCR
Los Angeles	Granada Hills	91344	California Quail	9/13/07	9/24/07	RT-PCR
Los Angeles	Hidden Hills	91302	American Crow	9/18/07	9/24/07	RT-PCR
Los Angeles	Hidden Hills	91302	American Crow	9/17/07	9/24/07	RT-PCR
Los Angeles	Lancaster	93536	Brewer's Blackbird	9/17/07	9/24/07	RT-PCR
Los Angeles	Los Angeles	90025	Western Scrub-Jay	9/17/07	9/24/07	RT-PCR
Los Angeles	Los Angeles	90049	American Crow	9/13/07	9/24/07	RT-PCR
Los Angeles	North Hollywood	91602	American Crow	9/14/07	9/24/07	RT-PCR
Los Angeles	North Hollywood	91602	American Crow	9/14/07	9/24/07	RT-PCR
Los Angeles	Palos Verdes Estates	90274	American Crow	9/18/07	9/24/07	VecTest
Los Angeles	Reseda	91335	House Finch	9/17/07	9/24/07	RT-PCR
Los Angeles	Rowland Heights	91748	American Crow	9/14/07	9/24/07	RT-PCR
Los Angeles	Santa Clarita	91351	American Crow	9/13/07	9/24/07	RT-PCR
Los Angeles	Studio City	91604	American Crow	9/12/07	9/24/07	RT-PCR
Los Angeles	Studio City	91405	American Crow	9/12/07	9/24/07	RT-PCR
Los Angeles	Tarzana	91356	Mourning Dove	9/7/07	9/24/07	RT-PCR
Los Angeles	Valenica	91355	House Finch	9/19/07	9/24/07	RT-PCR
Los Angeles	Van Nuys	91405	American Crow	9/17/07	9/24/07	RT-PCR

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Los Angeles	West Hollywood	90069	American Crow	9/17/07	9/24/07	RT-PCR
Los Angeles	Winnetka	91306	American Crow	9/18/07	9/24/07	RT-PCR
Los Angeles	Woodland Hills	91367	American Crow	9/17/07	9/24/07	RT-PCR
Madera	Madera	93637	Western Scrub-Jay	9/17/07	9/24/07	RT-PCR
Mendocino	Ukiah	95482	Western Scrub-Jay	9/17/07	9/24/07	RT-PCR
Merced	Atwater	95301	Western Scrub-Jay	9/13/07	9/24/07	RT-PCR
Merced	Merced	95340	American Crow	9/13/07	9/24/07	RT-PCR
Napa	Napa	94559	American Crow	9/18/07	9/24/07	RT-PCR
Napa	Napa	94559	American Crow	9/18/07	9/24/07	RT-PCR
Nevada	Penn Valley	95946	American Crow	9/17/07	9/24/07	RT-PCR
Placer	Auburn	95603	House Finch	9/13/07	9/24/07	RT-PCR
Sacramento	Carmichael	95608	Oak Titmouse	9/17/07	9/24/07	RT-PCR
Sacramento	Elk Grove	95624	House Finch	9/17/07	9/24/07	RT-PCR
Sacramento	Elk Grove	95624	Yellow-billed Magpie	9/14/07	9/24/07	RT-PCR
Sacramento	Elverta	95626	American Crow	9/19/07	9/24/07	RT-PCR
Sacramento	Fair Oaks	95628	Western Scrub-Jay	9/14/07	9/24/07	RT-PCR
Sacramento	Galt	95632	American Crow	9/18/07	9/24/07	RT-PCR
Sacramento	Galt	95632	American Crow	9/14/07	9/24/07	RT-PCR
Sacramento	Galt	95632	Yellow-billed Magpie	9/11/07	9/24/07	RT-PCR
Sacramento	Rancho Cordova	95670	American Crow	9/11/07	9/24/07	RT-PCR
Sacramento	Sacramento	95820	American Crow	9/17/07	9/24/07	RT-PCR
Sacramento	Sacramento	95820	American Crow	9/16/07	9/24/07	RT-PCR
Sacramento	Sacramento	95822	American Crow	9/14/07	9/24/07	RT-PCR
Sacramento	Sacramento	95833	Yellow-billed Magpie	9/14/07	9/24/07	RT-PCR
Sacramento	Sacramento	95837	American Crow	9/13/07	9/24/07	RT-PCR
Sacramento	Sacramento	95816	Yellow-billed Magpie	9/12/07	9/24/07	RT-PCR
Sacramento	Sacramento	95827	American Crow	9/11/07	9/24/07	RT-PCR
San Bernardino	Alta Loma	91701	American Crow	9/18/07	9/24/07	RAMP
San Bernardino	Chino Hills	91709	Parakeet	9/17/07	9/24/07	RT-PCR
San Bernardino	Ontario	91764	American Crow	9/17/07	9/24/07	RAMP
San Bernardino	San Bernardino	92404	Cockatiel	9/17/07	9/24/07	RT-PCR
San Diego	El Cajon	92021	American Crow	9/20/07	9/24/07	VecTest
San Joaquin	Tracy	95376	American Crow	9/20/07	9/24/07	VecTest
San Joaquin	Tracy	95376	American Crow	9/20/07	9/24/07	RAMP
Sonoma	Santa Rosa	95401	Western Scrub-Jay	9/13/07	9/24/07	RT-PCR
Sonoma	Sebastopol	95472	American Crow	9/19/07	9/24/07	RAMP
Stanislaus	Ceres	95307	Yellow-billed Magpie	9/17/07	9/24/07	RT-PCR
Stanislaus	Riverbank	95367	Western Scrub-Jay	9/17/07	9/24/07	RT-PCR
Stanislaus	Turlock	95382	Yellow-billed Magpie	9/16/07	9/24/07	RT-PCR
Stanislaus	Turlock	95382	Yellow-billed Magpie	9/11/07	9/24/07	RT-PCR
Tulare	Visalia	93291	American Crow	9/19/07	9/24/07	RT-PCR
Tulare	Visalia	93291	American Crow	9/17/07	9/24/07	RT-PCR
Ventura	Moorpark	93021	House Finch	9/17/07	9/24/07	RT-PCR
Yolo	Davis	95616	American Crow	9/13/07	9/24/07	RT-PCR
Yolo	Woodland	95776	American Crow	9/18/07	9/24/07	RT-PCR

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## Mosquito Pools

County	Site Code	Pool #	Species	# in Pool	Collected	City	Virus
Alameda	ALCO0217	283	Cx pipiens	13	9/18/2007	Livermore	WNV
Los Angeles	GRLA2229	846	Cx quinquefasciatus	19	9/18/2007	Rowland Heights	WNV
Los Angeles	GRLA2652	5913	Cx quinquefasciatus	46	9/18/2007	Encino	WNV
Los Angeles	GRLA2655	5894	Cx quinquefasciatus	50	9/18/2007	Encino	WNV
Los Angeles	GRLA2655	5896	Cx quinquefasciatus	29	9/18/2007	Encino	WNV
Los Angeles	GRLA2937	5897	Cx quinquefasciatus	27	9/18/2007	Burbank	WNV
Orange	ORCO30	709	Cx quinquefasciatus	50	9/19/2007	La Habra	WNV
Orange	ORCO76	695	Cx quinquefasciatus	21	9/19/2007	San Juan Capistrano	WNV
Orange	ORCO82	715	Cx tarsalis	45	9/19/2007	Cypress	WNV
Riverside	COAV0033	1573	Cx tarsalis	50	9/18/2007	Mecca	WNV
Riverside	COAV0542	1570	Cx tarsalis	9	9/18/2007	Mecca	WNV
Sacramento	SAYO2207	6588	Cx tarsalis	50	9/25/2007	Wilton	WNV
Sacramento	SAYO2213	6470	Cx tarsalis	15	9/21/2007	Elk Grove	WNV
Sacramento	SAYO4365	6607	Cx pipiens	10	9/25/2007	Galt	WNV
San Diego	SAND0073	122	Cx erythrothorax	50	9/18/2007	San Diego	WNV
San Diego	SAND0112	127	Cx quinquefasciatus	16	9/19/2007	El Cajon	WNV
San Joaquin	SJCM8084	1869	Cx pipiens	32	9/20/2007	Stockton	WNV
San Joaquin	SJCM8100	1871	Cx pipiens	16	9/20/2007	Tracy	WNV
Shasta	SHAS0082	430	Cx pipiens	50	9/22/2007	Redding	WNV
Stanislaus	TRLK0429	1962	Cx pipiens	40	9/25/2007	Patterson	WNV
Stanislaus	TRLK0516	1892	Cx pipiens	50	9/25/2007	Denair	WNV
Stanislaus	TRLK0516	1897	Cx pipiens	50	9/25/2007	Denair	WNV
Stanislaus	TRLK0530	1846	Cx pipiens	20	9/25/2007	Turlock	WNV

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## Sentinel Chickens

County	Site Code	City	Result	Date Bled	Band 01	Band 02	Band 03	Band 04	Band 05
Butte	BUCO2	Oroville	WNV	9/16/2007	1099	1107			
Butte	BUCO4	Gridley	WNV	9/16/2007	1128				
Butte	BUCO5	Honcut	WNV	9/16/2007	1131				
Contra Costa	CNTR7402	Oakley	WNV	9/17/2007	1194				
Fresno	FRNO4	Kerman	WNV	9/10/2007	1621				
Kern	KERN102	Buttonwillow	WNV	9/17/2007	1794	1921			
Kern	KERN104	Old River	WNV	9/17/2007	1806				
Kern	KERN104	Old River	WEE/WNV	9/4/2007	1912				
Kern	KERN105	Pumpkin Center	WEE	9/4/2007	1816	1820			
Los Angeles	ANTV3247	Lancaster	WNV	9/12/2007	1035				
Los Angeles	ANTV5662	Lancaster	WEE	9/12/2007	1067				
Los Angeles	GRLA2651	Encino	WNV	9/25/2007	1712				
Riverside	NWST9227		WNV	9/12/2007	2475				
San Bernardino	WVAL6	Ontario	WNV	9/13/2007	3520				
San Joaquin	SJCM9906	French Camp	WNV	9/24/2007	2943	2944	2946	2947	2952
Shasta	SHAS9702	Millville	WNV	9/20/2007	3093	3094			
Stanislaus	TRLK401	Hickman	WNV	9/17/2007	3339				
Stanislaus	TRLK402	Denair	WNV	9/17/2007	3332				
Stanislaus	TRLK9701	Grayson	WNV	9/17/2007	3359	3360	3361		
Sutter	SUYA14	Sutter	WNV	9/20/2007	3246	3249			
Sutter	SUYA15	Robbins	WNV	9/20/2007	3221				
Tehama	TEHA2	Corning	WNV	9/19/2007	3293				

## NATIONAL COMMENTS

As of September 25, 2007, a total of 2,307 human cases had been reported nationwide in the following 39 states: Alabama (13), Arizona (31), Arkansas (9), California (257), Colorado (440), Connecticut (4), Florida (3), Georgia (27), Idaho (70), Illinois (34), Indiana (10), Iowa (14), Kansas (26), Kentucky (3), Louisiana (2), Maryland (6), Massachusetts (3), Michigan (7), Minnesota (86), Mississippi (76), Missouri (39), Montana (151), Nebraska (81), Nevada (9), New Mexico (44), New York (5), North Dakota (310), Ohio (10), Oklahoma (59), Oregon (17), Pennsylvania (3), South Carolina (4), South Dakota (189), Tennessee (4), Texas (61), Utah (28), Virginia (2), Wisconsin (3), and Wyoming (167). Of the 2,307 cases reported, 678 (29%) had West Nile neuroinvasive disease (i.e. encephalitis or meningitis). The median age of the 2,297 cases where data was available was 50 years (range: 1-96 years), and 55% were male. A total of 58 human fatalities had been reported from Alabama (3), Arkansas (1), California (14), Colorado (5), Florida (1), Georgia (1), Illinois (3), Indiana (1), Mississippi (3), Missouri (1), Montana (3), Nebraska (3), New Mexico (2), New York (1), North Dakota (2), Oklahoma (4), South Dakota (4), Tennessee (1), Texas (3), Utah (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>.

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## 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).

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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 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, Ryan Carney, can be reached directly at (510) 412-6254.

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### **Sentinel Chickens:**

Dried blood spot specimens from sentinel chickens are submitted to VRDL 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.

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### **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.

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*Prepared by the Vector-Borne Disease Section (Infectious Diseases Branch) and the Viral and Rickettsial Disease Laboratory 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](mailto:tina.feiszli@cdph.ca.gov)*