

## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011



### WEEKLY UPDATE

#### **Human Cases**

Six new human cases of West Nile virus (WNV) were reported this week from Kern (1), Los Angeles (3), San Joaquin (1), and Stanislaus (1) counties. To date this year, 18 WNV cases have been reported from 8 counties. Of the 18 cases, 12 (67%) developed neuroinvasive disease. The median age for all cases is 60 years (range: 19-79 years) and 12 (67%) are male. No fatalities have been reported. Additionally, 4 WNV-positive blood donors have been reported this year; 3 of the individuals subsequently developed symptoms and were reclassified as cases. At this time last year, 27 WNV cases had been reported from 8 counties.

National Activity: As of August 23, 2011, 77 human cases of WNV had been reported nationwide in 20 states: Arizona (16), California (12), Colorado (2), Florida (8), Georgia (1), Illinois (2), Louisiana (2), Maryland (2), Mississippi (15), Missouri (1), Nebraska (1), Nevada (1), New Jersey (1), New York (1), North Dakota (2), Ohio (1), South Dakota (1), Texas (6), Virginia (1), and Wyoming (1). Of the 77 cases, 47 (61%) developed neuroinvasive disease. Three WNV-related fatalities have been reported in Florida (1), Mississippi (1), and Texas (1).

#### **Horses**

No new horse cases were reported this week. To date this year, one horse from Los Angeles County has tested positive for WNV. At this time last year, 8 horse cases of WNV had been reported from 5 counties.

#### **Dead Birds & Squirrels**

Fifty-four WNV positive dead birds were reported this week from 7 counties: Contra Costa (2), Fresno (1), Los Angeles (32), Sacramento (11), San Bernardino (3), San Joaquin (2), and Stanislaus (3). To date this year, 229 dead birds from 15 counties and one tree squirrel from one county have tested positive for WNV. An additional 64 birds have tested positive for chronic\* WNV infection from 21 counties. At this time last year, 260 birds from 22 counties, and 11 tree squirrels from 7 counties had tested positive for WNV.

*\*In 2010, The University of California, Center for Vectorborne Diseases (CVEC) and the California Department of Public Health, Vector-Borne Disease Section began differentiating between chronic and acute infections in WNV positive dead birds. Birds considered to have chronic infection with WNV are unlikely to have been infected recently with WNV and have limited surveillance utility.*

#### **Mosquito Pools**

A total of 220 WNV positive mosquito pools were reported this week from the following 16 counties: Fresno (9), Kern (52), Kings (7), Los Angeles (42), Madera (1), Merced (2), Orange (8), Placer (11), Riverside (3), Sacramento (50), San Joaquin (6), Santa Clara (2), Stanislaus (18), Sutter (3), Tulare (5), and Yolo (1). This is the first detection of WNV activity in Yolo County this year. In 2011, 1,028 mosquito pools from 20 counties have tested positive for WNV.

At this time last year, 919 mosquito pools from 23 counties had tested positive for WNV.

#### **Sentinel Chickens**

Twenty-four WNV seroconversions were reported this week from 11 flocks in the following 5 counties: Glenn (1), Kern (19), Sacramento (1), Sutter (1), and Tulare (2). This is the first detection of WNV activity in Glenn County and the first WNV positive chickens reported from Sacramento, Sutter, and Tulare counties in 2011. To date this year, 79 WNV positive chickens have been detected among 20 flocks in 7 counties.

At this time last year, 93 chickens (28 flocks) had tested positive for WNV from 14 counties.

## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

<b>2010 &amp; 2011 YTD West Nile Virus Comparisons</b>		
	<b>2010</b>	<b>2011</b>
Total # Dead Bird Reports	8,152	6,258
# Positive Counties	28	23
# Human Cases	27	18
# Horse Cases	8	1
# Positive Dead Birds / # Tested	260 / 1,608	229 / 1,495
# Positive Mosquito Pools / # Tested	919 / 20,955	1,028 / 20,883
# Seroconversions / # Tested	93 / 17,415	79 / 14,076
# Positive Squirrels / # Tested	11 / 70	1 / 57

### YTD WNV Activity by Element and County, 2011

County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Squirrels
Contra Costa			4	1		
Fresno	3		7	96		
Glenn					1	
Imperial				1		
Inyo				2		
Kern	1		3	182	49	
Kings			1	19		
Los Angeles	6	1	99	255	8	
Madera	1			4		
Merced				7		
Orange			12	53		
Placer			1	24		
Riverside			2	10		
Sacramento			36	179	1	1
San Bernardino			6	30	17	
San Joaquin	1		5	26		
Santa Barbara	1					
Santa Clara			12	5		
Stanislaus	3		7	43		
Sutter				15	1	
Tulare	2		33	75	2	
Ventura			1			
Yolo				1		
<b>Totals</b>	<b>18</b>	<b>1</b>	<b>229</b>	<b>1,028</b>	<b>79</b>	<b>1</b>

# California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

## TESTING SUMMARIES

### Humans and Horses

		WNV		WEEV		SLEV	
		Local	Imported	Local	Imported	Local	Imported
Human Cases	Week	6	0	0	0	0	0
	YTD	18	0	0	0	0	0
Horse Cases	Week	0	0	0	0	0	0
	YTD	1	0	0	0	0	0

### Dead Birds & Squirrels

		Number Tested	WNV Positive (recent only)
Dead Birds	Week	140	54
	YTD	1,495	229
Tree Squirrels	Week	1	0
	YTD	57	1

### Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	533	24	0	0
	YTD	14,076	79	0	0
Mosquito Pools: RT-PCR	Week	1,492	220	0	0
	YTD	20,773	1,024	0	0
Mosquito Pools: RAMP	Week	25	0	N/A	N/A
	YTD	110	4	N/A	N/A

## NEW POSITIVES

### Humans

WNV Cases							
ID	Report Date	County	Age	Sex	Clin Pres	Onset Date	WNV Fatality?
11-0013	08/22/11	Stanislaus	65	M	WNND	07/23/11	NO
11-0014	08/24/11	Kern	53	M	WNF	08/11/11	NO
11-0015	08/24/11	San Joaquin	74	M	WNND	08/02/11	NO
11-0016	08/25/11	Los Angeles	59	M	WNND	08/13/11	NO
11-0017	08/25/11	Los Angeles	79	F	WNF	08/14/11	NO
11-0018	08/17/11	Los Angeles	47	M	WNF	07/20/11	NO
Presumptive Viremic Blood Donors (Asymptomatic Infections)							
BD11-0002	08/22/11	Fresno	28	M			

## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

### Dead Birds

County	Agency	City	Zip	Species	Reported	Virus	Type of Infection	Method
Contra Costa	Contra Costa MVCD	Concord	94518	American Crow	8/19/2011	WNV	Recent	RAMP
Contra Costa	Contra Costa MVCD	Pleasant Hill	94523	American Crow	8/10/2011	WNV	Recent	RT-PCR
Contra Costa	Contra Costa MVCD	Alamo	94507	Western Scrub-Jay	8/10/2011	WNV	Chronic	RT-PCR
Fresno	Consolidated MAD	Clovis	93619	Western Scrub-Jay	8/5/2011	WNV	Recent	RT-PCR
Inyo	Inyo Co Env Health	Bishop	93514	Brewer's Blackbird	8/9/2011	WNV	Chronic	RT-PCR
Los Angeles	Antelope Valley MVCD	Lancaster	93536	House Finch	8/11/2011	WNV	Chronic	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Cerritos	90703	American Crow	8/2/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Cerritos	90703	American Crow	8/2/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Cerritos	90703	House Finch	8/4/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Norwalk	90650	American Crow	8/5/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Norwalk	90650	American Crow	8/5/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Artesia	90701	American Crow	8/5/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Cerritos	90703	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Long Beach	90815	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Norwalk	90650	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Long Beach	90815	American Crow	8/9/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	La Mirada	90638	American Crow	8/9/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - SFS	Whittier	90603	American Crow	8/10/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - Sylmar	Studio City	91604	House Sparrow	8/16/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - Sylmar	Encino	91316	House Sparrow	8/16/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - Sylmar	Sylmar	91342	American Crow	8/11/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - Sylmar	North Hills	91343	American Crow	8/12/2011	WNV	Recent	RT-PCR
Los Angeles	Greater LA Co VCD - Sylmar	Chatsworth	91311	American Crow	8/12/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	Covina	91723	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	Bellflower	90706	American Crow	8/9/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	North Hollywood	91606	American Crow	8/10/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	West Hills	91307	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	Agoura Hills	91301	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	Northridge	91325	American Crow	8/9/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Veterinarian	Van Nuys	91405	American Crow	8/8/2011	WNV	Recent	RT-PCR
Los Angeles	San Gabriel Valley MVCD	Covina	91723	American Crow	8/15/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	West Covina	91790	American Crow	8/16/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	Covina	91722	American Crow	8/23/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	Covina	91722	American Crow	7/25/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	Arcadia	91006	American Crow	8/1/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	Covina	91723	American Crow	8/2/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	West Covina	91790	American Crow	8/9/2011	WNV	Recent	RAMP
Los Angeles	San Gabriel Valley MVCD	West Covina	91790	American Crow	8/12/2011	WNV	Recent	RAMP
Merced	Merced Co MAD	Merced	95341	Brewer's Blackbird	8/13/2011	WNV	Chronic	RT-PCR
Placer	Placer MVCD	Auburn	95602	Western Scrub-Jay	8/11/2011	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	American Crow	8/10/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95838	Western Scrub-Jay	8/11/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95828	American Crow	8/13/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95757	Western Scrub-Jay	8/14/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95829	Unknown	8/15/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95819	Western Scrub-Jay	8/15/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95828	American Crow	8/15/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95829	American Crow	8/16/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95828	Unknown	8/16/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	American Crow	8/16/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95624	American Crow	8/18/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rio Linda	95673	White-breasted Nuthatch	8/15/2011	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95833	Black-crowned Night-Heron	8/11/2011	WNV	Chronic	RT-PCR
San Bernardino	San Bernardino Vector Control Program	San Bernardino	92415	American Crow	8/4/2011	WNV	Recent	RT-PCR
San Bernardino	San Bernardino Vector Control Program	Highland	92346	American Crow	8/12/2011	WNV	Recent	RT-PCR
San Bernardino	West Valley MVCD	Chino Hills	91709	American Crow	8/10/2011	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Tracy	95376	American Crow	8/12/2011	WNV	Recent	RT-PCR

## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

San Joaquin	San Joaquin Co MVCD	Stockton	95207	American Robin	8/12/2011	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Lodi	95240	Western Scrub-Jay	8/10/2011	WNV	Chronic	RT-PCR
San Joaquin	San Joaquin Co MVCD	Tracy	95304	House Sparrow	8/12/2011	WNV	Chronic	RT-PCR
Stanislaus	East Side MAD	Modesto	95351	Yellow-billed Magpie	8/10/2011	WNV	Recent	RT-PCR
Stanislaus	Turlock MAD	Turlock	95380	Yellow-billed Magpie	8/10/2011	WNV	Recent	RT-PCR
Stanislaus	Turlock MAD	Turlock	95380	Western Scrub-Jay	8/11/2011	WNV	Recent	RT-PCR
Tulare	Delta VCD	Visalia	93291	Canada Goose	8/9/2011	WNV	Chronic	RT-PCR

### Mosquitoes

County	Site Code	Pool #	Species	# in Pool	City	Collected	Virus	Method
Fresno	CNSL1690	706	Cx. quinquefasciatus	50	Clovis	8/18/2011	WNV	RTPCR
Fresno	CNSL1696	715	Cx. quinquefasciatus	14	Fresno	8/23/2011	WNV	RTPCR
Fresno	CNSL2069	708	Cx. quinquefasciatus	50	Sanger	8/18/2011	WNV	RTPCR
Fresno	CNSL2075	707	Cx. quinquefasciatus	45	Sanger	8/18/2011	WNV	RTPCR
Fresno	CNSL2202	700	Cx. stigmatosoma	16	Sanger	8/17/2011	WNV	RTPCR
Fresno	CNSL3184	418	Cx. quinquefasciatus	50	Reedley	8/18/2011	WNV	RTPCR
Fresno	CNSL5135	416	Cx. quinquefasciatus	38	Kingsburg	8/18/2011	WNV	RTPCR
Fresno	CNSL5136	417	Cx. quinquefasciatus	50	Kingsburg	8/18/2011	WNV	RTPCR
Fresno	CNSL6036	423	Cx. quinquefasciatus	50	Riverdale	8/23/2011	WNV	RTPCR
Kern	KERN0009	1760	Cx. quinquefasciatus	17	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN0029	1699	Cx. quinquefasciatus	30	Lamont	8/17/2011	WNV	RTPCR
Kern	KERN0031	1729	Cx. tarsalis	50	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0031	1730	Cx. tarsalis	30	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0033	1740	Cx. tarsalis	50	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0033	1741	Cx. tarsalis	36	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0035	1694	Cx. tarsalis	47	Bakersfield	8/17/2011	WNV	RTPCR
Kern	KERN0040	1690	Cx. tarsalis	41	Lost Hills	8/16/2011	WNV	RTPCR
Kern	KERN0083	1732	Cx. tarsalis	50	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0083	1733	Cx. tarsalis	50	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0083	1738	Cx. quinquefasciatus	50	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN0115	1662	Cx. tarsalis	50	Bakersfield	8/16/2011	WNV	RTPCR
Kern	KERN0115	1663	Cx. tarsalis	13	Bakersfield	8/16/2011	WNV	RTPCR
Kern	KERN0115	1664	Cx. quinquefasciatus	50	Bakersfield	8/16/2011	WNV	RTPCR
Kern	KERN0121	1774	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN0121	1775	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN0121	1776	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN0121	1777	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN0121	1778	Cx. quinquefasciatus	30	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2002	1762	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2002	1763	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2002	1764	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2003	1758	Cx. quinquefasciatus	16	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2010	1772	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2014	1770	Cx. quinquefasciatus	46	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2015	1709	Cx. quinquefasciatus	50	Bakersfield	8/17/2011	WNV	RTPCR
Kern	KERN2016	1722	Cx. quinquefasciatus	50	Bakersfield	8/18/2011	WNV	RTPCR
Kern	KERN2018	1719	Cx. quinquefasciatus	50	Bakersfield	8/18/2011	WNV	RTPCR
Kern	KERN2018	1720	Cx. quinquefasciatus	50	Bakersfield	8/18/2011	WNV	RTPCR
Kern	KERN2018	1721	Cx. quinquefasciatus	12	Bakersfield	8/18/2011	WNV	RTPCR
Kern	KERN2020	1766	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2020	1767	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2020	1768	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2021	1756	Cx. quinquefasciatus	48	Wasco	8/18/2011	WNV	RTPCR
Kern	KERN2022	1754	Cx. quinquefasciatus	50	Shafter	8/18/2011	WNV	RTPCR
Kern	KERN2024	1773	Cx. quinquefasciatus	22	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2027	1771	Cx. quinquefasciatus	41	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2028	1781	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2028	1782	Cx. quinquefasciatus	50	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2028	1783	Cx. quinquefasciatus	47	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN2031	1757	Cx. quinquefasciatus	38	Bakersfield	8/19/2011	WNV	RTPCR

## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

Kern	KERN2040	1726	Cx. quinquefasciatus	50	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN2040	1727	Cx. quinquefasciatus	6	Arvin	8/18/2011	WNV	RTPCR
Kern	KERN2042	1728	Cx. quinquefasciatus	27	Lamont	8/18/2011	WNV	RTPCR
Kern	KERN2049	1724	Cx. quinquefasciatus	50	Lamont	8/18/2011	WNV	RTPCR
Kern	KERN3004	1702	Cx. tarsalis	13	Bakersfield	8/17/2011	WNV	RTPCR
Kern	KERN3014	1669	Cx. tarsalis	31	Bakersfield	8/16/2011	WNV	RTPCR
Kern	KERN3019	1784	Cx. quinquefasciatus	14	Bakersfield	8/19/2011	WNV	RTPCR
Kern	KERN3030	1750	Cx. quinquefasciatus	29	Shafter	8/18/2011	WNV	RTPCR
Kern	KERN3032	1692	Cx. quinquefasciatus	18		8/16/2011	WNV	RTPCR
Kern	KERN3041	1667	Cx. quinquefasciatus	50	Bakersfield	8/16/2011	WNV	RTPCR
Kern	KERN3041	1668	Cx. quinquefasciatus	42	Bakersfield	8/16/2011	WNV	RTPCR
Kings	KNGS3018	515	Cx. tarsalis	50	Lemoore	8/16/2011	WNV	RTPCR
Kings	KNGS3018	517	Cx. pipiens	50	Lemoore	8/16/2011	WNV	RTPCR
Kings	KNGS3022	521	Cx. tarsalis	50	Hanford	8/17/2011	WNV	RTPCR
Kings	KNGS3022	522	Cx. tarsalis	50	Hanford	8/17/2011	WNV	RTPCR
Kings	KNGS3046	529	Cx. pipiens	43	Hanford	8/17/2011	WNV	RTPCR
Kings	KNGS3061	534	Cx. tarsalis	42	Guernsey	8/18/2011	WNV	RTPCR
Kings	KNGS4006	524	Cx. tarsalis	21	Hanford	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2094	1224	Cx. quinquefasciatus	37	Whittier	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2165	1277	Cx. quinquefasciatus	50	Downey	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2165	1278	Cx. quinquefasciatus	51	Downey	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2166	1283	Cx. quinquefasciatus	49	Montebello	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2182	1281	Cx. quinquefasciatus	27	Pico Rivera	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2194	1286	Cx. quinquefasciatus	50	South El Monte	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2194	1287	Cx. quinquefasciatus	50	South El Monte	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2274	1249	Cx. quinquefasciatus	50	Lakewood	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2274	1250	Cx. quinquefasciatus	49	Lakewood	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2278	1246	Cx. quinquefasciatus	50	Long Beach	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2359	1265	Cx. quinquefasciatus	50	Pico Rivera	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2365	1271	Cx. quinquefasciatus	50	Pico Rivera	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2531	6141	Cx. quinquefasciatus	50	Chatsworth	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2531	6142	Cx. quinquefasciatus	50	Chatsworth	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2531	6156	Cx. quinquefasciatus	25	Chatsworth	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2539	6144	Cx. quinquefasciatus	32	Northridge	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2549	6145	Cx. quinquefasciatus	50	Granada Hills	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2549	6146	Cx. quinquefasciatus	39	Granada Hills	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2550	6147	Cx. quinquefasciatus	50	Mission Hills	8/16/2011	WNV	RTPCR
Los Angeles	GRLA2635	6174	Cx. quinquefasciatus	50	Van Nuys	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2635	6175	Cx. quinquefasciatus	43	Van Nuys	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2636	6172	Cx. quinquefasciatus	42	Van Nuys	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2637	6166	Cx. quinquefasciatus	43	Van Nuys	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2650	6167	Cx. quinquefasciatus	46	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2651	6168	Cx. quinquefasciatus	50	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2651	6169	Cx. quinquefasciatus	14	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2652	6170	Cx. quinquefasciatus	50	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2652	6171	Cx. quinquefasciatus	20	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2655	6176	Cx. quinquefasciatus	50	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2655	6177	Cx. quinquefasciatus	50	Encino	8/19/2011	WNV	RTPCR
Los Angeles	GRLA2889	1237	Cx. quinquefasciatus	50	Lakewood	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2889	1238	Cx. quinquefasciatus	41	Lakewood	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2890	1239	Cx. quinquefasciatus	50	Lakewood	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2890	1240	Cx. quinquefasciatus	50	Lakewood	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2891	1244	Cx. quinquefasciatus	50	Hawaiian Gardens	8/17/2011	WNV	RTPCR
Los Angeles	GRLA2938	6160	Cx. quinquefasciatus	39	Burbank	8/17/2011	WNV	RTPCR
Los Angeles	GRLA3046	1254	Cx. quinquefasciatus	50	Bellflower	8/17/2011	WNV	RTPCR
Los Angeles	GRLA3046	1255	Cx. quinquefasciatus	50	Bellflower	8/17/2011	WNV	RTPCR
Los Angeles	GRLA3047	1257	Cx. quinquefasciatus	50	Downey	8/17/2011	WNV	RTPCR
Los Angeles	GRLA3047	1258	Cx. quinquefasciatus	43	Downey	8/17/2011	WNV	RTPCR
Los Angeles	GRLA3048	1260	Cx. quinquefasciatus	50	Pico Rivera	8/17/2011	WNV	RTPCR
Los Angeles	GRLA3049	1274	Cx. quinquefasciatus	50	Downey	8/19/2011	WNV	RTPCR
Madera	MADR1039	31	Cx. tarsalis	50	Madera Ranchos	8/5/2011	WNV	RTPCR

# California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

Merced	MERC1104	49	Cx. pipiens	4	Delhi	8/16/2011	WNV	RTPCR
Merced	MERC401	51	Cx. pipiens	50	Hilmar	8/17/2011	WNV	RTPCR
Orange	ORCO0002	860	Cx. quinquefasciatus	21	Fullerton	8/17/2011	WNV	RTPCR
Orange	ORCO0036	864	Cx. quinquefasciatus	21	Cypress	8/17/2011	WNV	RTPCR
Orange	ORCO0041	862	Cx. quinquefasciatus	16	Anaheim	8/17/2011	WNV	RTPCR
Orange	ORCO0050	844	Cx. quinquefasciatus	18	Buena Park	8/17/2011	WNV	RTPCR
Orange	ORCO0050	867	Cx. quinquefasciatus	23	Buena Park	8/17/2011	WNV	RTPCR
Orange	ORCO0050	869	Cx. quinquefasciatus	34	Buena Park	8/17/2011	WNV	RTPCR
Orange	ORCO0082	881	Cx. quinquefasciatus	10	Cypress	8/18/2011	WNV	RTPCR
Orange	ORCO0082	888	Cx. quinquefasciatus	49	Cypress	8/18/2011	WNV	RTPCR
Placer	PLCR0139	1092	Cx. tarsalis	50	ROSEVILLE	8/23/2011	WNV	RTPCR
Placer	PLCR1030	1018	Cx. tarsalis	50	Roseville	8/18/2011	WNV	RTPCR
Placer	PLCR1030	1114	Cx. tarsalis	50	Roseville	8/23/2011	WNV	RTPCR
Placer	PLCR1037	1006	Cx. tarsalis	50	Roseville	8/18/2011	WNV	RTPCR
Placer	PLCR1037	1010	Cx. tarsalis	50	Roseville	8/18/2011	WNV	RTPCR
Placer	PLCR1037	1103	Cx. tarsalis	50	Roseville	8/23/2011	WNV	RTPCR
Placer	PLCR1113	1075	Cx. tarsalis	50	Pleasant Grove	8/23/2011	WNV	RTPCR
Placer	PLCR1113	1077	Cx. tarsalis	50	Pleasant Grove	8/23/2011	WNV	RTPCR
Placer	PLCR1114	1121	Cx. tarsalis	50	Lincoln	8/23/2011	WNV	RTPCR
Placer	PLCR1114	1122	Cx. tarsalis	50	Lincoln	8/23/2011	WNV	RTPCR
Placer	PLCR1114	1123	Cx. tarsalis	50	Lincoln	8/23/2011	WNV	RTPCR
Riverside	COAV0322	2019	Cx. quinquefasciatus	23	Cathedral City	8/19/2011	WNV	RTPCR
Riverside	COAV0322	2020	Cx. quinquefasciatus	19	Cathedral City	8/19/2011	WNV	RTPCR
Riverside	COAV0331	1990	Cx. quinquefasciatus	50	Palm Desert	8/18/2011	WNV	RTPCR
Sacramento	SAYO213007	3862	Cx. tarsalis	23	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO213007	3863	Cx. pipiens	46	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO213007	3865	Cx. stigmatosoma	1	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO213025	3849	Cx. pipiens	10	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO226008	3832	Cx. pipiens	1	Rancho Murieta	8/19/2011	WNV	RTPCR
Sacramento	SAYO232012	3937	Cx. tarsalis	26	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO232012	3975	Cx. pipiens	8	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO232022	3970	Cx. pipiens	12	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233001	3891	Cx. pipiens	6	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233003	3899	Cx. tarsalis	49	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233003	3900	Cx. pipiens	6	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233003	3901	Cx. pipiens	7	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233004	3923	Cx. tarsalis	33	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233004	3925	Cx. pipiens	5	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233008	3872	Cx. tarsalis	18	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO233008	3874	Cx. pipiens	27	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO233008	3973	Cx. pipiens	36	Sacramento	8/20/2011	WNV	RTPCR
Sacramento	SAYO233009	3926	Cx. tarsalis	50	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233009	3927	Cx. pipiens	50	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233009	3929	Cx. pipiens	29	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233009	4087	Cx. tarsalis	33	Elk Grove	8/23/2011	WNV	RTPCR
Sacramento	SAYO233011	3893	Cx. tarsalis	5	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233011	3894	Cx. pipiens	17	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233011	3895	Cx. pipiens	4	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233012	3921	Cx. pipiens	4	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233018	3968	Cx. pipiens	5	Sacramento	8/20/2011	WNV	RTPCR
Sacramento	SAYO233034	3941	Cx. tarsalis	3	Sacramento	8/20/2011	WNV	RTPCR
Sacramento	SAYO233043	3933	Cx. tarsalis	50	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233043	3934	Cx. tarsalis	5	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233043	3936	Cx. pipiens	4	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233060	3919	Cx. tarsalis	16	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233064	3917	Cx. pipiens	30	Sacramento	8/20/2011	WNV	RTPCR
Sacramento	SAYO233065	3866	Cx. tarsalis	1	Elk Grove	8/19/2011	WNV	RTPCR
Sacramento	SAYO233065	3867	Cx. pipiens	5	Elk Grove	8/19/2011	WNV	RTPCR
Sacramento	SAYO233066	3860	Cx. tarsalis	6	Sacramento	8/19/2011	WNV	RTPCR
Sacramento	SAYO233068	3938	Cx. tarsalis	18	Elk Grove	8/20/2011	WNV	RTPCR
Sacramento	SAYO233068	3939	Cx. pipiens	4	Elk Grove	8/20/2011	WNV	RTPCR

## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

Sacramento	SAYO234016	4015	Cx. tarsalis	27	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO235005	4026	Cx. tarsalis	6	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO235012	4019	Cx. tarsalis	50	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO235012	4020	Cx. tarsalis	43	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO235012	4021	Cx. tarsalis	1	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO235012	4022	Cx. pipiens	27	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO235012	4024	Cx. stigmatosoma	2	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO245002	4038	Cx. tarsalis	37	Wilton	8/20/2011	WNV	RTPCR
Sacramento	SAYO254015	4139	Cx. tarsalis	12	Galt	8/23/2011	WNV	RTPCR
Sacramento	SAYO254016	4052	Cx. pipiens	50	Galt	8/23/2011	WNV	RTPCR
Sacramento	SAYO254021	4048	Cx. tarsalis	39	Galt	8/23/2011	WNV	RTPCR
Sacramento	SAYO254021	4049	Cx. pipiens	40	Galt	8/23/2011	WNV	RTPCR
Sacramento	SAYO254021	4050	Cx. pipiens	5	Galt	8/23/2011	WNV	RTPCR
San Joaquin	SJCM8005	562	Cx. tarsalis	5	Stockton	8/23/2011	WNV	RTPCR
San Joaquin	SJCM8056	602	Cx. pipiens	19	Manteca	8/23/2011	WNV	RTPCR
San Joaquin	SJCM8084	609	Cx. pipiens	36	Stockton	8/23/2011	WNV	RTPCR
San Joaquin	SJCM8100	597	Cx. tarsalis	23	Tracy	8/23/2011	WNV	RTPCR
San Joaquin	SJCM8161	592	Cx. tarsalis	15	Ripon	8/23/2011	WNV	RTPCR
San Joaquin	SJCM8161	593	Cx. pipiens	50	Ripon	8/23/2011	WNV	RTPCR
Santa Clara	STCL2484	3971	Cx. tarsalis	4	San Jose	8/25/2011	WNV	RTPCR
Santa Clara	STCL2824	3966	Cx. tarsalis	9	San Jose	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0432	515	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0432	516	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0432	517	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0436	566	Cx. pipiens	12	Modesto	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0526	524	Cx. pipiens	50	Denair	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0526	525	Cx. pipiens	50	Denair	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0530	500	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0530	501	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0530	502	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0531	505	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0536	513	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0536	514	Cx. pipiens	38	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0613	559	Cx. tarsalis	35	Hickman	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0625	519	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0705	539	Cx. pipiens	50	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK0705	543	Cx. pipiens	42	Turlock	8/23/2011	WNV	RTPCR
Stanislaus	TRLK1102	550	Cx. pipiens	50	Denair	8/23/2011	WNV	RTPCR
Stanislaus	TRLK1102	551	Cx. pipiens	26	Denair	8/23/2011	WNV	RTPCR
Sutter	SUYA0031	227	Cx. tarsalis	50	Rio Oso	8/23/2011	WNV	RTPCR
Sutter	SUYA0031	228	Cx. tarsalis	50	Rio Oso	8/23/2011	WNV	RTPCR
Sutter	SUYA0044	219	Cx. tarsalis	50	Pleasant Grove	8/22/2011	WNV	RTPCR
Tulare	TLRE0000	63	Unknown	50	Tulare	8/25/2011	WNV	RTPCR
Tulare	TLRE0000	64	Unknown	50	Tulare	8/25/2011	WNV	RTPCR
Tulare	TLRE0000	65	Unknown	50	Tulare	8/25/2011	WNV	RTPCR
Tulare	TLRE0000	67	Unknown	50	Tulare	8/25/2011	WNV	RTPCR
Tulare	TLRE0067	61	Cx. pipiens	49	Tulare	8/24/2011	WNV	RTPCR
Yolo	SAYO136010	4222	Cx. tarsalis	50	Woodland	8/23/2011	WNV	RTPCR



## California Arbovirus Surveillance Bulletin #28

Week 34 Friday, August 26, 2011

### Sentinel Chickens

County	Site Code	City	Date Bled	Virus	Band 01	Band 02	Band 03	Band 04	Band 05
Glenn	GLEN9701	Willows	8/17/2011	WNV	1499				
Kern	DLNO0035	McFarland	8/18/2011	WNV	1461				
Kern	DLNO0060	Delano	8/18/2011	WNV	1431				
Kern	KERN0112	Wasco	8/15/2011	WNV	1604	1605	1607		
Kern	KERN0113	Bakersfield	8/15/2011	WNV	1644	1645			
Kern	KERN0114	Bakersfield	8/15/2011	WNV	1664	1665	1666	1670	
Kern	KERN0115	Bakersfield	8/15/2011	WNV	1624	1626	1627	1629	1630
Kern	KERN0117	Bakersfield	8/15/2011	WNV	1671	1678	1680		
Sacramento	SAYO245019	Wilton	8/15/2011	WNV	2385				
Sutter	SUYA0030	Live Oak	8/18/2011	WNV	3111				
Tulare	DLNO0021	Earlimart	8/18/2011	WNV	1437	1441			

### 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.

#### **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:**

Dead birds and tree 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 West Nile virus testing using the singleplex RT-PCR Taqman assay and confirmed with a second primer set.

#### **Sentinel Chickens:**

Dried blood spot specimens from sentinel chickens are submitted to the California Department of Public Health Vector-Borne Disease Laboratory and tested for the presence of antibodies to West Nile, western equine encephalomyelitis (WEEV), and St. Louis encephalitis (SLEV) 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 WEEV, SLEV, 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.