

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011



WEEKLY UPDATE

Human Cases

Fifteen new human cases of West Nile virus (WNV) were reported this week from Butte (1), Fresno (1), Kern (1), Los Angeles (5), Orange (2), San Bernardino (2), San Joaquin (1), and Tulare (2) counties. To date this year, 48 WNV cases have been reported from 12 counties; of the 48 cases, 32 (67%) developed neuroinvasive disease. The median age for all cases is 59 years (range: 19-86 years) and 34 (71%) are male. No fatalities have been reported. Additionally, 8 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, 45 WNV cases had been reported from 11 counties.

National Activity: As of September 13, 2011, 202 human cases of WNV had been reported nationwide in 30 states: Arizona (23), California (33), Colorado (2), Connecticut (3), Florida (12), Georgia (3), Idaho (1), Illinois (6), Indiana (4), Louisiana (6), Maryland (5), Massachusetts (1), Michigan (6), Mississippi (28), Missouri (3), Nebraska (10), Nevada (8), New Jersey (3), New Mexico (2), New York (9), North Dakota (3), Ohio (9), Pennsylvania (3), South Dakota (1), Tennessee (2), Texas (9), Vermont (1), Virginia (4), West Virginia (1), and Wyoming (1). Of the 202 cases, 134 (66%) developed neuroinvasive disease. Seven WNV-related fatalities have been reported in Florida (2), Indiana (1), Michigan (1), Mississippi (1), Pennsylvania (1), and Texas (1).

Horses

Two new horse cases of WNV were reported this week from Merced (1) and Placer (1) counties. Of the 2 horses, one was unvaccinated for WNV, and vaccination status was unknown for the other. In 2011, 7 horse cases of WNV have been reported from 6 counties; one fatality has been reported. At this time last year, 14 horse cases of WNV had been reported from 9 counties.

Dead Birds & Squirrels

Forty WNV positive dead birds were reported this week from 13 counties: Contra Costa (4), Glenn (1), Kings (1), Los Angeles (14), Merced (2), Riverside (1), Sacramento (5), San Bernardino (2), San Joaquin (3), Santa Clara (2), Stanislaus (3), Tulare (1), and Yuba (1). This is the first WNV positive dead bird reported from Glenn county and the first detection of WNV activity in Yuba county in 2011. To date this year, 398 dead birds from 21 counties and one tree squirrel from one county have tested positive for WNV. An additional 97 birds have tested positive for chronic* WNV infection from 23 counties.

At this time last year, 333 birds from 25 counties, and 14 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 172 WNV positive mosquito pools were reported this week from the following 18 counties: Fresno (7), Imperial (1), Kern (32), Kings (5), Lake (1), Los Angeles (26), Orange (7), Placer (10), Riverside (19), Sacramento (22), San Bernardino (29), San Joaquin (3), Santa Clara (2), Stanislaus (2), Sutter (1), Tulare (1), Yolo (3), and Yuba (1). This is the first WNV positive mosquito pool detected in Yuba County this year. In 2011, 1,651 mosquito pools from 24 counties have tested positive for WNV.

At this time last year, 1,159 mosquito pools from 23 counties had tested positive for WNV.

Sentinel Chickens

Thirty-two WNV seroconversions were reported this week from 16 flocks in the following 5 counties: Imperial (3), Kern (1), Los Angeles (16), Riverside (3), and San Bernardino (9). These are the first WNV positive chickens reported from Imperial County in 2011. To date this year, 167 WNV positive chickens have been detected among 41 flocks in 11 counties.

At this time last year, 190 chickens (48 flocks) had tested positive for WNV from 19 counties.

Website Information: For updated information on WNV in California, please visit the California WNV website, www.westmile.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.westmilemaps.usgs.gov

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011

2010 & 2011 YTD West Nile Virus Comparisons		
	2010	2011
Total # Dead Bird Reports	9,059	7,770
# Positive Counties	34	29
# Human Cases	45	48
# Horse Cases	14	7
# Positive Dead Birds / # Tested	333 / 1,809	398 / 1,812
# Positive Mosquito Pools / # Tested	1,159 / 24,406	1,651 / 25,427
# Seroconversions / # Tested	190 / 20,185	167 / 16,301
# Positive Squirrels / # Tested	14 / 80	1 / 64

YTD WNV Activity by Element and County, 2011

County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Squirrels
Butte	2				5	
Contra Costa			14	4		
El Dorado			1			
Fresno	5	2	11	112		
Glenn	1		1		1	
Imperial				2	3	
Inyo				2		
Kern	5	1	3	308	79	
Kings			3	44		
Lake				2		
Los Angeles	15	1	159	350	31	
Madera	1		1	4		
Merced		1	3	8	2	
Orange	3		16	79		
Placer		1	3	42		
Riverside			4	41	8	
Sacramento			80	320	1	1
San Bernardino	2		16	97	34	
San Diego				1		
San Joaquin	2		12	44		
Santa Barbara	1					
Santa Clara			20	14		
Shasta				1		
Stanislaus	7		11	67		
Sutter				25	1	
Tulare	4	1	36	78	2	
Ventura			1			
Yolo			2	5		
Yuba			1	1		
Totals	48	7	398	1,651	167	1

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011

TESTING SUMMARIES

Humans and Horses

		WNV		WEEV		SLEV	
		Local	Imported	Local	Imported	Local	Imported
Human Cases	Week	15	0	0	0	0	0
	YTD	48	0	0	0	0	0
Horse Cases	Week	2	0	0	0	0	0
	YTD	7	0	0	0	0	0

Dead Birds & Squirrels

		Number Tested	WNV Positive (recent only)
Dead Birds	Week	65	40
	YTD	1,812	398
Tree Squirrels	Week	1	0
	YTD	64	1

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	787	32	0	0
	YTD	16,301	167	0	0
Mosquito Pools: RT-PCR	Week	1,646	172	0	0
	YTD	25,244	1,642	0	0
Mosquito Pools: RAMP	Week	7	0	N/A	N/A
	YTD	183	9	N/A	N/A

NEW POSITIVES

Humans

WNV Cases							
ID	Report Date	County	Age	Sex	Clin Pres	Onset Date	WNV Fatality?
11-0034	09/12/11	Butte	>18	M	WNND	08/25/11	NO
11-0035	09/12/11	Fresno	66	M	WNF	08/25/11	NO
11-0036	09/13/11	San Joaquin	46	M	WNF	08/12/11	NO
11-0037	09/13/11	San Bernardino	57	F	WNND	08/29/11	NO
11-0038	09/14/11	Kern	40	M	WNND	08/19/11	NO
11-0039	09/14/11	Orange	48	M	WNND	WEEK 31	NO
11-0040	09/14/11	Orange	78	M	WNND	WEEK 32	NO
11-0041	09/14/11	Tulare	64	M	WNND	08/24/11	NO
11-0042	09/14/11	Tulare	28	F	WNND	08/11/11	NO
11-0043	09/15/11	Los Angeles	49	M	WNF	08/10/11	NO
11-0044	09/15/11	Los Angeles	70	M	WNND	08/27/11	NO
11-0045	09/15/11	Los Angeles	64	M	WNND	09/04/11	NO
11-0046	09/15/11	Los Angeles	80	M	WNND	08/29/11	NO
11-0047	09/15/11	Los Angeles	60	M	WNND	08/23/11	NO
11-0048	09/16/11	San Bernardino	77	M	WNND	08/17/11	NO
Presumptive Viremic Blood Donors (Asymptomatic Infections)							
BD11-0006	09/12/11	Butte	>18	M			

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus	Type of Infection	Method
Contra Costa	Contra Costa MVCD	Concord	94518	Western Scrub-Jay	9/1/2011	WNV	Recent	RT-PCR
Contra Costa	Contra Costa MVCD	Concord	94518	American Crow	9/7/2011	WNV	Recent	RAMP
Contra Costa	Contra Costa MVCD	Concord	94518	American Crow	9/8/2011	WNV	Recent	RAMP
Contra Costa	Contra Costa MVCD	Pleasant Hill	94523	American Crow	9/12/2011	WNV	Recent	RAMP
Contra Costa	Contra Costa MVCD	Brentwood	94513	Western Scrub-Jay	9/5/2011	WNV	Chronic	RT-PCR
Glenn	Glenn Co MVCD	Orland	95963	Western Scrub-Jay	9/1/2011	WNV	Recent	RT-PCR
Kings	Kings MAD	Hardwick	93230	Budgie	9/2/2011	WNV	Recent	RT-PCR
Los Angeles	Greater Los Angeles Co VCD - Sylmar	Van Nuys	91406	American Crow	9/1/2011	WNV	Recent	RT-PCR
Los Angeles	Greater Los Angeles Co VCD - Sylmar	Burbank	91504	House Finch	9/2/2011	WNV	Chronic	RT-PCR
Los Angeles	Los Angeles Co Vet	Reseda	91335	American Crow	8/31/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Woodland Hills	91367	California Towhee	8/31/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Covina	91722	American Crow	8/31/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Chatsworth	91311	Western Scrub-Jay	8/30/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Tarzana	91356	Red-shouldered Hawk	8/30/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	North Hills	91343	American Crow	8/30/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Chatsworth	91311	American Crow	8/28/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	West Hills	91307	American Crow	8/26/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Canoga Park	91303	American Crow	8/24/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Hollywood	90068	Great Horned Owl	8/7/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Santa Clarita	91355	American Crow	8/29/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Van Nuys	91405	American Crow	8/31/2011	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Azusa	91702	American Crow	8/30/2011	WNV	Chronic	RT-PCR
Los Angeles	Los Angeles Co Vet	West Hills	91304	Common Raven	8/30/2011	WNV	Chronic	RT-PCR
Los Angeles	San Gabriel Valley MVCD	El Monte	91731	American Crow	9/11/2011	WNV	Recent	RAMP
Merced	Merced Co MAD	Delhi	95315	Mourning Dove	8/31/2011	WNV	Recent	RT-PCR
Merced	Merced Co MAD	Delhi	95315	Yellow-billed Magpie	9/2/2011	WNV	Recent	RT-PCR
Placer	Placer MVCD	Granite Bay	95746	House Finch	8/31/2011	WNV	Chronic	RT-PCR
Placer	Placer MVCD	Lincoln	95648	House Sparrow	9/2/2011	WNV	Chronic	RT-PCR
Placer	Placer MVCD	Rocklin	95677	House Sparrow	9/2/2011	WNV	Chronic	RT-PCR
Riverside	Riverside Public Services	Riverside	92503	American Crow	9/1/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95624	American Crow	9/2/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	Western Scrub-Jay	9/4/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	North Highlands	95660	House Finch	9/5/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	American Crow	9/6/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Wilton	95693	American Crow	9/6/2011	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Carmichael	95608	Lesser Goldfinch	8/31/2011	WNV	Chronic	RT-PCR
San Bernardino	San Bernardino VCP	Bloomington	92316	American Crow	8/29/2011	WNV	Recent	RT-PCR
San Bernardino	San Bernardino VCP	Rialto	92376	American Crow	8/29/2011	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Manteca	95336	American Crow	8/28/2011	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Manteca	95336	American Crow	8/31/2011	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Manteca	95336	American Crow	8/31/2011	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Manteca	95336	House Sparrow	8/31/2011	WNV	Chronic	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95123	American Crow	9/8/2011	WNV	Recent	VecTest
Santa Clara	Santa Clara Co VCD	Saratoga	95070	American Crow	9/9/2011	WNV	Recent	VecTest
Stanislaus	Turlock MAD	Hughson	95326	Yellow-billed Magpie	8/31/2011	WNV	Recent	RT-PCR
Stanislaus	Turlock MAD	Turlock	95380	American Crow	9/1/2011	WNV	Recent	RT-PCR
Stanislaus	Turlock MAD	Turlock	95382	Western Scrub-Jay	9/6/2011	WNV	Recent	RT-PCR
Tulare	Delta VCD	Visalia	93292	House Sparrow	9/1/2011	WNV	Recent	RT-PCR
Tulare	Delta VCD	Visalia	93277	Western Scrub-Jay	9/2/2011	WNV	Chronic	RT-PCR
Ventura	City Of Moorpark VCD	Moorpark	93021	Brewer's Blackbird	9/6/2011	WNV	Chronic	RT-PCR
Yuba	Beale Air Force Base Public Health Office	Beale AFB	95903	Red-tailed Hawk	9/8/2011	WNV	Recent	RT-PCR

California Arbovirus Surveillance Bulletin #31
 Week 37 Friday, September 16, 2011

Mosquitoes

County	Site Code	Pool #	Species	# in Pool	Collected	City	Virus	Method
Fresno	CNSL2076	743	Cx. quinquefasciatus	50	9/9/2011	Parlier	WNV	RTPCR
Fresno	CNSL2171	735	Cx. quinquefasciatus	15	9/9/2011	Sanger	WNV	RTPCR
Fresno	CNSL2239	742	Cx. tarsalis	41	9/9/2011	Sanger	WNV	RTPCR
Fresno	CNSL2242	738	Cx. quinquefasciatus	50	9/9/2011	Sanger	WNV	RTPCR
Fresno	CNSL3067	444	Cx. quinquefasciatus	50	9/9/2011	Reedley	WNV	RTPCR
Fresno	CNSL3193	443	Cx. quinquefasciatus	50	9/9/2011	Reedley	WNV	RTPCR
Fresno	CNSL3249	445	Cx. tarsalis	17	9/13/2011	Reedley	WNV	RTPCR
Imperial	COAV5001	2137	Cx. tarsalis	26	9/7/2011	Niland	WNV	RTPCR
Kern	KERN1002	2065	Cx. quinquefasciatus	50	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN0115	2058	Cx. tarsalis	50	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN0115	2059	Cx. tarsalis	50	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN0115	2060	Cx. tarsalis	50	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN0115	2064	Cx. quinquefasciatus	30	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN0012	2131	Cx. quinquefasciatus	18	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN0121	2144	Cx. quinquefasciatus	50	9/9/2011	Bakersfield	WNV	RTPCR
Kern	KERN0015	2159	Cx. quinquefasciatus	50	9/9/2011	Pumpkin Center	WNV	RTPCR
Kern	KERN0015	2161	Cx. quinquefasciatus	50	9/9/2011	Pumpkin Center	WNV	RTPCR
Kern	KERN2010	2192	Cx. quinquefasciatus	29	9/9/2011	Bakersfield	WNV	RTPCR
Kern	KERN2018	2153	Cx. quinquefasciatus	33	9/9/2011	Bakersfield	WNV	RTPCR
Kern	KERN2021	2194	Cx. quinquefasciatus	50	9/9/2011	Wasco	WNV	RTPCR
Kern	KERN2028	2147	Cx. quinquefasciatus	50	9/9/2011	Bakersfield	WNV	RTPCR
Kern	KERN2030	2134	Cx. quinquefasciatus	50	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN2031	2136	Cx. quinquefasciatus	50	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN2040	2188	Cx. quinquefasciatus	50	9/9/2011	Arvin	WNV	RTPCR
Kern	KERN2042	2190	Cx. quinquefasciatus	33	9/9/2011	Lamont	WNV	RTPCR
Kern	KERN2043	2067	Cx. quinquefasciatus	14	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN2051	2140	Cx. quinquefasciatus	21	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN0029	2117	Cx. tarsalis	38	9/8/2011	Lamont	WNV	RTPCR
Kern	KERN0029	2120	Cx. quinquefasciatus	50	9/8/2011	Lamont	WNV	RTPCR
Kern	KERN3004	2113	Cx. tarsalis	50	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN3004	2114	Cx. tarsalis	25	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN3017	2107	Cx. quinquefasciatus	30	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN3024	2082	Cx. quinquefasciatus	50	9/7/2011	Bakersfield	WNV	RTPCR
Kern	KERN3026	2168	Cx. tarsalis	40	9/9/2011	Arvin93203	WNV	RTPCR
Kern	KERN3027	2087	Cx. quinquefasciatus	50	9/7/2011	Arvin	WNV	RTPCR
Kern	KERN3031	2056	Cx. quinquefasciatus	50	9/7/2011	Shafter	WNV	RTPCR
Kern	KERN0031	2179	Cx. tarsalis	50	9/9/2011	Arvin	WNV	RTPCR
Kern	KERN0032	2177	Cx. tarsalis	34	9/9/2011	Arvin	WNV	RTPCR
Kern	KERN0035	2108	Cx. tarsalis	25	9/8/2011	Bakersfield	WNV	RTPCR
Kern	KERN0041	2106	Cx. tarsalis	50	9/7/2011	Lost Hills	WNV	RTPCR
Kings	KNGS3018	673	Cx. pipiens	50	9/9/2011	Lemoore	WNV	RTPCR
Kings	KNGS3022	683	Cx. tarsalis	50	9/9/2011	Hanford	WNV	RTPCR
Kings	KNGS3043	701	Cx. pipiens	31	9/9/2011	Lemoore	WNV	RTPCR
Kings	KNGS4006	710	Cx. pipiens	50	9/9/2011	Hanford	WNV	RTPCR
Kings	KNGS5504	651	Cx. tarsalis	36	9/9/2011	Hanford	WNV	RTPCR
Lake	LAKE1508	284	Cx. stigmatosoma	28	9/14/2011	Kelseyville	WNV	RTPCR
Los Angeles	GRLA2065	1401	Cx. quinquefasciatus	25	9/9/2011	Gardena	WNV	RTPCR
Los Angeles	GRLA2221	1391	Cx. quinquefasciatus	44	9/9/2011	Rowland Heights	WNV	RTPCR
Los Angeles	GRLA2228	1393	Cx. quinquefasciatus	39	9/9/2011	Diamond Bar	WNV	RTPCR
Los Angeles	GRLA2228	1394	Cx. stigmatosoma	22	9/9/2011	Diamond Bar	WNV	RTPCR
Los Angeles	GRLA2247	1395	Cx. quinquefasciatus	50	9/9/2011	Pico Rivera	WNV	RTPCR
Los Angeles	GRLA2247	1397	Cx. quinquefasciatus	50	9/9/2011	Pico Rivera	WNV	RTPCR
Los Angeles	GRLA2247	1398	Cx. quinquefasciatus	50	9/9/2011	Pico Rivera	WNV	RTPCR
Los Angeles	GRLA2268	1369	Cx. quinquefasciatus	50	9/9/2011	Cerritos	WNV	RTPCR
Los Angeles	GRLA2414	6263	Cx. quinquefasciatus	42	9/8/2011	Granada Hills	WNV	RTPCR
Los Angeles	GRLA2416	6273	Cx. quinquefasciatus	28	9/8/2011	Panorama City	WNV	RTPCR
Los Angeles	GRLA2540	6264	Cx. quinquefasciatus	18	9/8/2011	Northridge	WNV	RTPCR
Los Angeles	GRLA2554	6265	Cx. quinquefasciatus	50	9/8/2011	Winnetka	WNV	RTPCR
Los Angeles	GRLA2554	6266	Cx. quinquefasciatus	26	9/8/2011	Winnetka	WNV	RTPCR

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011

Los Angeles	GRLA2583	6258	Cx. quinquefasciatus	50	9/8/2011	Studio City	WNV	RTPCR
Los Angeles	GRLA2583	6259	Cx. quinquefasciatus	33	9/8/2011	Studio City	WNV	RTPCR
Los Angeles	GRLA2592	6283	Cx. quinquefasciatus	50	9/8/2011	San Marino	WNV	RTPCR
Los Angeles	GRLA2614	6287	Cx. quinquefasciatus	50	9/9/2011	Newhall	WNV	RTPCR
Los Angeles	GRLA2655	6260	Cx. quinquefasciatus	50	9/8/2011	Encino	WNV	RTPCR
Los Angeles	GRLA2655	6261	Cx. quinquefasciatus	48	9/8/2011	Encino	WNV	RTPCR
Los Angeles	GRLA2936	6274	Cx. quinquefasciatus	44	9/8/2011	Burbank	WNV	RTPCR
Los Angeles	GRLA2936	6275	Cx. quinquefasciatus	12	9/8/2011	Burbank	WNV	RTPCR
Los Angeles	GRLA2962	6269	Cx. quinquefasciatus	49	9/8/2011	Chatsworth	WNV	RTPCR
Los Angeles	GRLA2995	6267	Cx. quinquefasciatus	50	9/8/2011	Woodland Hills	WNV	RTPCR
Los Angeles	GRLA2995	6268	Cx. quinquefasciatus	43	9/8/2011	Woodland Hills	WNV	RTPCR
Los Angeles	LACW1001	306	Cx. quinquefasciatus	14	9/1/2011	Rolling Hills Est...	WNV	RTPCR
Los Angeles	LACW1049	303	Cx. quinquefasciatus	16	8/30/2011	Inglewood	WNV	RTPCR
Orange	ORCO0000	1099	Cx. quinquefasciatus	24	9/8/2011	Garden Grove	WNV	RTPCR
Orange	ORCO0170	1062	Cx. quinquefasciatus	32	9/7/2011	Anaheim	WNV	RTPCR
Orange	ORCO0198	1077	Cx. quinquefasciatus	40	9/7/2011	La Habra	WNV	RTPCR
Orange	ORCO0198	1078	Cx. quinquefasciatus	38	9/7/2011	La Habra	WNV	RTPCR
Orange	ORCO0002	1072	Cx. quinquefasciatus	45	9/7/2011	Fullerton	WNV	RTPCR
Orange	ORCO0050	1098	Cx. quinquefasciatus	49	9/8/2011	Buena Park	WNV	RTPCR
Orange	ORCO0007	1059	Cx. quinquefasciatus	46	9/7/2011	Seal Beach	WNV	RTPCR
Placer	PLCR1037	1331	Cx. pipiens	50	9/1/2011	Roseville	WNV	RTPCR
Placer	PLCR1113	1520	Cx. tarsalis	50	9/13/2011	Pleasant Grove	WNV	RTPCR
Placer	PLCR1114	1381	Cx. tarsalis	50	9/7/2011	Lincoln	WNV	RTPCR
Placer	PLCR1114	1382	Cx. tarsalis	35	9/7/2011	Lincoln	WNV	RTPCR
Placer	PLCR0025	1421	Cx. tarsalis	42	9/7/2011	Lincoln	WNV	RTPCR
Placer	PLCR0025	1422	An. freeborni	50	9/7/2011	Lincoln	WNV	RTPCR
Placer	PLCR0030	1416	Cx. pipiens	50	9/7/2011	Lincoln	WNV	RTPCR
Placer	PLCR0030	1418	Cx. pipiens	50	9/7/2011	Lincoln	WNV	RTPCR
Placer	PLCR0095	1498	Cx. tarsalis	50	9/13/2011	Lincoln	WNV	RTPCR
Placer	PLCR0095	1499	Cx. tarsalis	35	9/13/2011	Lincoln	WNV	RTPCR
Riverside	COAV0121	2238	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0122	2230	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0017	2223	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0030	2175	Cx. tarsalis	50	9/9/2011	Mecca	WNV	RTPCR
Riverside	COAV0030	2191	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0030	2192	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0033	2267	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0034	2210	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0034	2213	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0037	2198	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0045	2254	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0048	2258	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0540	2214	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0540	2215	Cx. tarsalis	50	9/13/2011	Mecca	WNV	RTPCR
Riverside	COAV0610	2204	Cx. tarsalis	50	9/13/2011		WNV	RTPCR
Riverside	COAV0610	2206	Cx. tarsalis	50	9/13/2011		WNV	RTPCR
Riverside	COAV0610	2208	Cx. tarsalis	50	9/13/2011		WNV	RTPCR
Riverside	COAV0068	2174	Cx. tarsalis	31	9/9/2011	Mecca	WNV	RTPCR
Riverside	RIVR0031	655	Cx. tarsalis	50	9/13/2011	Nuevo	WNV	RTPCR
Sacramento	SAYO203027	5208	Cx. pipiens	8	9/9/2011	Sacramento	WNV	RTPCR
Sacramento	SAYO203030	5129	Cx. pipiens	15	9/9/2011	Sacramento	WNV	RTPCR
Sacramento	SAYO204004	5154	Cx. pipiens	49	9/9/2011	Citrus Heights	WNV	RTPCR
Sacramento	SAYO204046	5124	Cx. tarsalis	15	9/9/2011	Citrus Heights	WNV	RTPCR
Sacramento	SAYO204046	5126	Cx. pipiens	2	9/9/2011	Citrus Heights	WNV	RTPCR
Sacramento	SAYO213017	5138	Cx. pipiens	5	9/9/2011	Sacramento	WNV	RTPCR
Sacramento	SAYO232005	5382	Cx. tarsalis	50	9/13/2011	Sacramento	WNV	RTPCR
Sacramento	SAYO232005	5383	Cx. tarsalis	35	9/13/2011	Sacramento	WNV	RTPCR
Sacramento	SAYO233003	5344	Cx. pipiens	26	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233006	5326	Cx. pipiens	8	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233009	5370	Cx. pipiens	50	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233021	5313	Cx. pipiens	20	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233038	5315	Cx. tarsalis	6	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233040	5291	Cx. tarsalis	11	9/13/2011	Elk Grove	WNV	RTPCR

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011

Sacramento	SAYO233040	5292	Cx. pipiens	9	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233040	5293	Cx. pipiens	4	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233064	5327	Cx. tarsalis	14	9/13/2011	Sacramento	WNV	RTPCR
Sacramento	SAYO233067	5304	Cx. pipiens	5	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233068	5307	Cx. tarsalis	5	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO233069	5290	Cx. pipiens	1	9/13/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO242012	5259	Cx. erythrothorax	2	9/8/2011	Elk Grove	WNV	RTPCR
Sacramento	SAYO254015	5117	Cx. pipiens	2	9/9/2011	Galt	WNV	RTPCR
San Bernardino	WVAL2005	750	Cx. tarsalis	50	9/6/2011	Chino	WNV	RTPCR
San Bernardino	WVAL2005	751	Cx. tarsalis	25	9/6/2011	Chino	WNV	RTPCR
San Bernardino	WVAL2013	761	Cx. stigmatosoma	9	9/6/2011	Chino Hills	WNV	RTPCR
San Bernardino	WVAL2018	718	Cx. quinquefasciatus	37	9/6/2011	Chino	WNV	RTPCR
San Bernardino	WVAL2021	690	Cx. quinquefasciatus	13	9/6/2011	Fwy CA 71	WNV	RTPCR
San Bernardino	WVAL5004	692	Cx. quinquefasciatus	50	9/6/2011	Rancho Cucamonga	WNV	RTPCR
San Bernardino	WVAL5005	670	Cx. quinquefasciatus	50	9/6/2011	Rancho Cucamonga	WNV	RTPCR
San Bernardino	WVAL6002	754	Cx. stigmatosoma	14	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6003	683	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6003	684	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6003	685	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6003	686	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6003	687	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6003	688	Cx. quinquefasciatus	26	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6005	675	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6005	676	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6005	677	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6005	678	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6005	679	Cx. quinquefasciatus	16	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6011	696	Cx. quinquefasciatus	19	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6011	697	Cx. quinquefasciatus	52	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	712	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	713	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	714	Cx. quinquefasciatus	50	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	715	Cx. quinquefasciatus	27	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	716	Cx. quinquefasciatus	41	9/6/2011	Ontario	WNV	RTPCR
San Bernardino	WVAL7001	667	Cx. quinquefasciatus	45	9/6/2011	Montclair	WNV	RTPCR
San Bernardino	WVAL7002	703	Cx. quinquefasciatus	31	9/6/2011	Montclair	WNV	RTPCR
San Bernardino	WVAL7002	705	Cx. quinquefasciatus	50	9/6/2011	Montclair	WNV	RTPCR
San Joaquin	SJCM8070	922	Cx. tarsalis	33	9/15/2011	Galt	WNV	RTPCR
San Joaquin	SJCM8083	934	Cx. pipiens	12	9/15/2011	Escalon	WNV	RTPCR
San Joaquin	SJCM8097	904	Cx. tarsalis	33	9/13/2011	Banta	WNV	RTPCR
Santa Clara	STCL2839	4038	Cx. tarsalis	1	9/14/2011	San Jose	WNV	RTPCR
Santa Clara	STCL2841	4040	Cx. tarsalis	1	9/14/2011	San Jose	WNV	RTPCR
Stanislaus	TRLK0437	764	Cx. pipiens	50	9/13/2011	Patterson	WNV	RTPCR
Stanislaus	TRLK0521	698	Cx. pipiens	50	9/13/2011	Turlock	WNV	RTPCR
Sutter	SUYA0014	294	Cx. tarsalis	38	9/13/2011	Sutter	WNV	RTPCR
Tulare	TLRE0027	83	Cx. pipiens	40	9/14/2011	Tulare	WNV	RTPCR
Yolo	SAYO124004	5253	Cx. tarsalis	47	9/9/2011	Woodland	WNV	RTPCR
Yolo	SAYO125011	5254	Cx. tarsalis	18	9/9/2011	Woodland	WNV	RTPCR
Yolo	SAYO125011	5255	Cx. pipiens	4	9/9/2011	Woodland	WNV	RTPCR
Yuba	SUYA0007	283	Cx. pipiens	19	9/12/2011	Marysville	WNV	RTPCR

California Arbovirus Surveillance Bulletin #31

Week 37 Friday, September 16, 2011

Sentinel Chickens

County	Site Code	City	Date Bled	Virus	Band 01	Band 02	Band 03	Band 04
Imperial	COAV5001	Niland	9/6/2011	WNV	1319	1321	1323	
Kern	WEST6203	Hwy 119 and Hwy 43	9/6/2011	WNV	3250			
Los Angeles	ANTV7263	Lancaster	9/7/2011	WNV	1041			
Los Angeles	ANTV8656	Lancaster	9/7/2011	WNV	1032	1034	1035	1036
Los Angeles	GRLA2056	Long Beach	9/7/2011	WNV	1502	1505		
Los Angeles	GRLA2465	Los Angeles	9/6/2011	WNV	1548			
Los Angeles	GRLA2651	Encino	9/6/2011	WNV	1561	1562	1570	
Los Angeles	LACW1002	Torrance	8/24/2011	WNV	1787	1788		
Los Angeles	SGVA0009	Walnut	8/24/2011	WNV	2742	2743	2744	
Riverside	COAV0201	Thermal	9/6/2011	WNV	1233	1234	1238	
San Bernardino	SANB0001	Needles	8/24/2011	WNV	2511			
San Bernardino	SANB0002	Redlands	9/6/2011	WNV	2521			
San Bernardino	SANB0024	Needles	9/7/2011	WNV	2611			
San Bernardino	SANB0003	Colton	9/6/2011	WNV	2526	2533		
San Bernardino	SANB0004	San Bernardino	9/6/2011	WNV	2538	2540		
San Bernardino	SANB0007	Fontana	9/7/2011	WNV	2562	2563		

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.

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) 412-6253 or email: tina.feiszli@cdph.ca.gov.