

# California Arbovirus Surveillance Bulletin # 28

Week 35 Friday, September 3, 2010

## Weekly Summary

### WEEKLY COMMENTS



#### Humans

Eight new human cases of West Nile virus (WNV) were reported this week from the following 5 counties: Fresno (3), Los Angeles (1), Placer (1), Sacramento (2) and San Joaquin (1). In addition, one asymptomatic WNV infection in a blood donor from San Joaquin County was reported this week. To date this year, 35 WNV cases have been reported from 11 counties. Of the 35 individuals, 19 (54%) developed neuroinvasive disease. The median age of the 35 individuals is 53 years (range: 17-76 years); 15 (43%) are male. None of the cases have resulted in fatalities. At this time last year, 26 human cases had been reported from 8 counties.

#### Horses

Three horse cases were reported this week from Amador (1), Fresno (1), and Kern (1) counties. None of the horses were vaccinated against WNV and all are recovering. In 2010, a total of 11 horses from 5 counties have tested positive for WNV infection and 3 fatalities have been reported. At this time last year, 5 horse cases of WNV had been reported from 4 counties.

#### Dead Birds & Squirrels

Twenty five recently-infected\* WNV positive dead birds were reported this week from the following 12 counties: Butte (1), El Dorado (1), Fresno (5), Los Angeles (3), Mono (1), Placer (1), Sacramento (2), San Bernardino (1), San Joaquin (3), Stanislaus (4), Tulare (2), and Yolo (1). This is the first detection of WNV activity for El Dorado and Mono counties this year. An additional 8 birds from 8 counties tested positive for chronic infection with WNV. Two WNV positive tree squirrels were reported this week from San Mateo (1), and Santa Clara (1) counties.

In 2010, 285 recently-infected\* WNV positive dead birds have been reported from 24 counties, and 13 WNV positive squirrels have been reported from 7 counties. An additional 119 chronic WNV infections have been detected in birds from 25 counties (see [www.westnile.ca.gov](http://www.westnile.ca.gov) for more details). At this time last year, 385 birds from 34 counties and 6 tree squirrels from 6 counties had tested positive for WNV. Year-to-date totals from last year and previous years include both recent and chronic infections.

*\*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 West Nile virus 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

This week, 113 WNV positive mosquito pools were reported from the following 13 counties: Butte (1), Fresno (6), Kern (20), Lake (1), Los Angeles (2), Madera (1), Placer (3), Riverside (14), Sacramento (12), Stanislaus (15), Sutter (2), Tulare (33), and Yolo (3). In 2010, 1,032 mosquito pools from 23 counties have tested positive for WNV. At this time last year, 845 WNV positive mosquito pools had been reported from 27 counties.

#### Sentinel Chickens

This week, 40 WNV seroconversions were reported from 20 flocks located in Colusa (1), Fresno (1), Imperial (2), Kern (20), Placer (2), Riverside (5), Sacramento (1), San Bernardino (3), and Tulare (5) counties. These are the first WNV positive chickens detected in Placer County this year. In 2010, 133 WNV positive chickens have been detected among 29 flocks from 15 counties. At this time last year, 171 WNV positive chickens from 18 counties had been reported.

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2009 & 2010 YTD West Nile Virus Comparisons		
	2009	2010
Total # Dead Bird Reports	12,791	8,476
# Positive Counties	40	31
# Human Cases	26	35
# Horse Cases	5	11
# Positive Dead Birds / # Tested	385 / 2,207	285 / 1,673
# Positive Mosquito Pools / # Tested	845 / 19,463	1,032 / 22,320
# Seroconversions / # Tested	171 / 17,984	133 / 18,516
# Positive Squirrels / # Tested	6 / 75	13 / 72

## YTD WNV Activity by Element and County, 2010

County	Humans	Horses	Dead Birds <sup>^</sup>	Mosquito Pools	Sentinel Chickens	Squirrels
Amador		1				
Butte	1		3	5	1	1
Colusa			1		4	
Contra Costa			4	1		
El Dorado			1			
Fresno	11	1	19	109	4	2
Glenn			2			
Imperial				10	12	
Kern	2	1	11	213	43	
Kings				44		
Lake				2		
Los Angeles	1		20	33	2	1
Madera	3	3	10	9	1	
Merced			10	5		
Mono			1			
Orange			6	10		
Placer	1		5	33	2	
Riverside				66	29	
Sacramento	5	2	85	177	4	2
San Bernardino	1		3	26	7	1
San Diego			2	1		
San Joaquin	1	1	25	32		
San Mateo						2
Santa Clara			23	10		4
Santa Cruz			4			
Shasta			2			
Stanislaus	7	1	27	49	7	
Sutter			1	24	8	
Tulare	2	1	14	166	8	
Yolo			6	5		
Yuba				2	1	
<b>Totals</b>	<b>35</b>	<b>11</b>	<b>285</b>	<b>1,032</b>	<b>133</b>	<b>13</b>

<sup>^</sup> Chronic infections are not included in county totals.

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## TEST SUMMARIES

### Human & Horse Cases

		Number Tested	WNV		WEE		SLE	
			Local	Imported	Local	Imported	Local	Imported
Humans Tested*	Week	27	8	0	0	0	0	0
	YTD	494	35	0	0	0	0	0
Horses Tested	Week	5	3	0	0	0	0	0
	YTD	129	11	0	0	0	0	0

### Dead Birds & Tree Squirrels

		Number Tested	WNV Positive (recent only)
Dead Birds	Week	65	25
	YTD	1,673	285
Tree Squirrels	Week	2	2
	YTD	72	13

### Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	SLE Positive	WEE Positive
Chicken Sera	Week	1,101	40	0	0
	YTD	18,516	133	0	0
Mosquito Pools: RT-PCR	Week	1,348	113	0	0
	YTD	21,583	1,015	0	0
Mosquito Pools: RAMP	Week	17	0	N/A	N/A
	YTD	737	17	N/A	N/A

## NEW POSITIVES

### Humans

WNV Cases							
ID	Report Date	County <sup>1</sup>	Age	Sex	Clin Pres	Onset Date	WNV Fatality?
10-0028	08/27/10	San Joaquin	56	F	WNND	08/06/10	NO
10-0029	08/27/10	Sacramento	50	M	WNND	07/24/10	NO
10-0030	08/27/10	Fresno	61	F	WNF	08/08/10	NO
10-0031	08/27/10	Sacramento	62	M	WNF	07/30/10	NO
10-0032	08/30/10	Placer	>18	M	WNND	08/08/10	NO
10-0033	08/31/10	Fresno	64	F	WNND	08/14/10	NO
10-0034	08/31/10	Fresno	52	F	WNF	08/19/10	NO
10-0035	09/03/10	Los Angeles	18	M	WNF	08/12/10	NO
Presumptively Viremic Blood Donors (Asymptomatic Infections)							
BD10-0008	08/27/10	SAN JOAQUIN	50	F			

<sup>1</sup>County of residence

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## Dead Birds & Squirrels

County	Agency	City	Zip	Species	Reported	Virus	Type of Infection	Method
Butte	Butte Co MVCD	Chico	95928	Western Scrub-Jay	8/23/2010	WNV	Recent	RT-PCR
El Dorado	El Dorado Vector Control	South Lake Tahoe	96150	Steller's Jay	8/24/2010	WNV	Recent	RT-PCR
Fresno	Consolidated MAD	Fresno	93720	American Crow	8/5/2010	WNV	Recent	RT-PCR
Fresno	Consolidated MAD	Fresno	93710	American Crow	8/10/2010	WNV	Recent	RT-PCR
Fresno	Consolidated MAD	Fresno	93720	American Crow	8/16/2010	WNV	Recent	RT-PCR
Fresno	Fresno MVCD	Fresno	93711	Western Scrub-Jay	8/20/2010	WNV	Recent	RT-PCR
Fresno	Fresno MVCD	Fresno	93722	Western Scrub-Jay	8/25/2010	WNV	Recent	RT-PCR
Glenn	Glenn Co MVCD	Orland	95963	Yellow-billed Magpie	8/23/2010	WNV	Chronic	RT-PCR
Kern	Kern MVCD	Bakersfield	93306	Northern Mockingbird	8/20/2010	WNV	Chronic	RT-PCR
Los Angeles	Greater LA Co VCD -SFS	Cerritos	90703	American Crow	8/16/2010	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Winnetka	91306	Mourning Dove	8/24/2010	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	West Covina	91791	American Crow	8/24/2010	WNV	Recent	RT-PCR
Los Angeles	Los Angeles Co Vet	Downey	90240	House Sparrow	8/24/2010	WNV	Chronic	RT-PCR
Mono	El Dorado Vector Control	Topaz	96133	Swainson's Hawk	8/24/2010	WNV	Recent	RT-PCR
Monterey	North Salinas Valley MAD	Salinas	93908	Western Scrub-Jay	8/23/2010	WNV	Chronic	RT-PCR
Placer	Placer MVCD	Roseville	95678	Northern Mockingbird	8/19/2010	WNV	Recent	RT-PCR
Placer	Placer MVCD	Auburn	95603	Finch	8/23/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95823	American Crow	8/19/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95624	American Crow	8/19/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Folsom	95630	Green Heron	8/22/2010	WNV	Chronic	RT-PCR
San Bernardino	San Bernardino VCP	Fontana	92335	Northern Mockingbird	8/20/2010	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	French Camp	95231	Western Scrub-Jay	8/17/2010	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	French Camp	95231	Western Scrub-Jay	8/19/2010	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Stockton	95215	Yellow-billed Magpie	8/25/2010	WNV	Recent	RT-PCR
San Mateo	San Mateo Co MAD	Portola Valley	94028	Common Raven	8/24/2010	WNV	Chronic	RT-PCR
San Mateo	San Mateo Co. MAD	Redwood City	94061	Western Gray Squirrel	8/17/2010	WNV	Recent	RT-PCR
Santa Clara	Santa Clara MVCD	San Jose	95129	Western Gray Squirrel	8/17/2010	WNV	Recent	RT-PCR
Stanislaus	East Side MAD	Salida	95368	House Finch	8/24/2010	WNV	Recent	RT-PCR
Stanislaus	East Side MAD	Modesto	95350	Western Scrub-Jay	8/23/2010	WNV	Chronic	RT-PCR
Stanislaus	Merced Co MAD	Newman	95360	Western Scrub-Jay	8/20/2010	WNV	Recent	RT-PCR
Stanislaus	Turlock MAD	Turlock	95380	Yellow-billed Magpie	8/18/2010	WNV	Recent	RT-PCR
Stanislaus	Turlock MAD	Turlock	95380	American Crow	8/24/2010	WNV	Recent	RT-PCR
Tulare	Tulare MAD	Porterville	93257	Northern Mockingbird	8/23/2010	WNV	Recent	RT-PCR
Tulare	Tulare MAD	Lindsay	93247	Western Scrub-Jay	8/25/2010	WNV	Recent	RT-PCR
Yolo	Sacramento-Yolo MVCD	Dunnigan	95937	American Crow	8/18/2010	WNV	Recent	RT-PCR

## Mosquitoes

County	Site Code	Pool #	Species	# in Pool	City	Collected	Virus	Method
Butte	BUCO0	85	Unknown	50	Oroville	8/27/2010	WNV	RTPCR
Fresno	CNSL2266	548	Culex quinquefasciatus	50	Sanger	8/24/2010	WNV	RTPCR
Fresno	CNSL3023	623	Culex quinquefasciatus	24	Parlier	8/24/2010	WNV	RTPCR
Fresno	CNSL4060	627	Culex quinquefasciatus	50	Fresno	8/26/2010	WNV	RTPCR
Fresno	CNSL4124	633	Culex quinquefasciatus	50	Selma	8/31/2010	WNV	RTPCR
Fresno	CNSL5081	632	Culex quinquefasciatus	30	Laton	8/31/2010	WNV	RTPCR
Fresno	CNSL6174	624	Culex tarsalis	50	Riverdale	8/24/2010	WNV	RTPCR
Kern	KERN11	1025	Culex quinquefasciatus	34	Bakersfield	8/27/2010	WNV	RTPCR
Kern	KERN13	1009	Culex tarsalis	50	Bakersfield	8/25/2010	WNV	RTPCR

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Kern	KERN29	1038	Culex quinquefasciatus	50	Lamont	8/27/2010	WNV	RTPCR
Kern	KERN31	1007	Culex tarsalis	50	Arvin	8/25/2010	WNV	RTPCR
Kern	KERN31	1008	Culex tarsalis	50	Arvin	8/25/2010	WNV	RTPCR
Kern	KERN33	1005	Culex quinquefasciatus	50	Arvin	8/25/2010	WNV	RTPCR
Kern	KERN42	975	Culex quinquefasciatus	27	Bakersfield	8/24/2010	WNV	RTPCR
Kern	KERN83	1014	Culex tarsalis	50	Arvin	8/25/2010	WNV	RTPCR
Kern	KERN115	992	Culex tarsalis	50	Bakersfield	8/24/2010	WNV	RTPCR
Kern	KERN2002	1031	Culex quinquefasciatus	50	Bakersfield	8/27/2010	WNV	RTPCR
Kern	KERN2020	1032	Culex quinquefasciatus	50	Bakersfield	8/27/2010	WNV	RTPCR
Kern	KERN2025	1036	Culex quinquefasciatus	27	Bakersfield	8/27/2010	WNV	RTPCR
Kern	KERN2040	1010	Culex quinquefasciatus	33	Arvin	8/25/2010	WNV	RTPCR
Kern	KERN2049	1011	Culex quinquefasciatus	50	Lamont	8/25/2010	WNV	RTPCR
Kern	KERN3014	995	Culex tarsalis	50	Bakersfield	8/24/2010	WNV	RTPCR
Kern	KERN3034	1035	Culex quinquefasciatus	25	Bakersfield	8/27/2010	WNV	RTPCR
Kern	KERN3035	1033	Culex quinquefasciatus	32	Bakersfield	8/27/2010	WNV	RTPCR
Kern	WEST6231	27	Culex quinquefasciatus	30	Taft	9/1/2010	WNV	RTPCR
Kern	WEST6240	29	Culex quinquefasciatus	50	South Taft	9/1/2010	WNV	RTPCR
Kern	WEST6240	30	Culex quinquefasciatus	50	South Taft	9/1/2010	WNV	RTPCR
Lake	LAKE152	232	Culex tarsalis	50		8/24/2010	WNV	RTPCR
Los Angeles	GRLA2097	1415	Culex quinquefasciatus	45	La Mirada	8/26/2010	WNV	RTPCR
Los Angeles	GRLA2955	1411	Culex quinquefasciatus	50	Cerritos	8/26/2010	WNV	RTPCR
Madera	MADR1039	71	Culex quinquefasciatus	8	Madera Ranchos	8/27/2010	WNV	RTPCR
Placer	PLCR58	751	Culex tarsalis	50	LINCOLN	8/30/2010	WNV	RTPCR
Placer	PLCR85	840	Culex pipiens	9	Lincoln	8/30/2010	WNV	RTPCR
Placer	PLCR1030	795	Anopheles freeborni	12	Roseville	8/30/2010	WNV	RTPCR
Riverside	COAV6	2586	Culex tarsalis	50	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV10	2613	Culex quinquefasciatus	20	Thermal	8/31/2010	WNV	RTPCR
Riverside	COAV30	2557	Culex tarsalis	13	Mecca	8/26/2010	WNV	RTPCR
Riverside	COAV45	2630	Culex tarsalis	50	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV45	2632	Culex tarsalis	44	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV121	2622	Culex tarsalis	50	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV123	2626	Culex tarsalis	43	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV130	2563	Culex tarsalis	50	Mecca	8/26/2010	WNV	RTPCR
Riverside	COAV130	2564	Culex tarsalis	50	Mecca	8/26/2010	WNV	RTPCR
Riverside	COAV130	2565	Culex tarsalis	50	Mecca	8/26/2010	WNV	RTPCR
Riverside	COAV130	2615	Culex tarsalis	50	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV130	2618	Culex tarsalis	12	Mecca	8/31/2010	WNV	RTPCR
Riverside	COAV131	2601	Culex tarsalis	50	Oasis	8/31/2010	WNV	RTPCR
Riverside	COAV131	2603	Culex tarsalis	50	Oasis	8/31/2010	WNV	RTPCR
Sacramento	SAYO202006	4840	Culex tarsalis	2	Sacramento	9/2/2010	WNV	RTPCR
Sacramento	SAYO203011	4816	Culex pipiens	50	Antelope	9/2/2010	WNV	RTPCR
Sacramento	SAYO213009	4526	Culex tarsalis	4	Sacramento	8/26/2010	WNV	RTPCR
Sacramento	SAYO213017	4579	Culex pipiens	7	Sacramento	8/27/2010	WNV	RTPCR
Sacramento	SAYO222005	4572	Culex pipiens	50	Sacramento	8/27/2010	WNV	RTPCR
Sacramento	SAYO223017	4812	Culex pipiens	17	Sacramento	9/2/2010	WNV	RTPCR
Sacramento	SAYO223019	4530	Culex pipiens	17	Sacramento	8/26/2010	WNV	RTPCR
Sacramento	SAYO233001	4799	Culex pipiens	34	Elk Grove	9/2/2010	WNV	RTPCR
Sacramento	SAYO233009	4673	Culex tarsalis	50	Elk Grove	8/31/2010	WNV	RTPCR
Sacramento	SAYO233009	4674	Culex tarsalis	46	Elk Grove	8/31/2010	WNV	RTPCR
Sacramento	SAYO233010	4777	Culex tarsalis	22	Sacramento	9/2/2010	WNV	RTPCR
Sacramento	SAYO233010	4780	Culex pipiens	16	Sacramento	9/2/2010	WNV	RTPCR
Stanislaus	TRLK407	667	Culex pipiens	30	Turlock	8/31/2010	WNV	RTPCR
Stanislaus	TRLK408	668	Culex pipiens	50	Turlock	8/31/2010	WNV	RTPCR

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Stanislaus	TRLK421	712	Culex pipiens	50	Hughson	8/31/2010	WNV	RTPCR
Stanislaus	TRLK421	713	Culex pipiens	50	Hughson	8/31/2010	WNV	RTPCR
Stanislaus	TRLK421	715	Culex pipiens	48	Hughson	8/31/2010	WNV	RTPCR
Stanislaus	TRLK432	676	Culex pipiens	50	Turlock	8/31/2010	WNV	RTPCR
Stanislaus	TRLK432	679	Culex pipiens	50	Turlock	8/31/2010	WNV	RTPCR
Stanislaus	TRLK432	680	Culex pipiens	50	Turlock	8/31/2010	WNV	RTPCR
Stanislaus	TRLK432	683	Culex pipiens	50	Turlock	8/31/2010	WNV	RTPCR
Stanislaus	TRLK436	723	Culex pipiens	19	South Modesto	8/31/2010	WNV	RTPCR
Stanislaus	TRLK504	695	Culex pipiens	50	Denair	8/31/2010	WNV	RTPCR
Stanislaus	TRLK516	700	Culex pipiens	44	Denair	8/31/2010	WNV	RTPCR
Stanislaus	TRLK536	672	Culex pipiens	48	Turlock	8/31/2010	WNV	RTPCR
Stanislaus	TRLK613	717	Culex pipiens	48	Hickman	8/31/2010	WNV	RTPCR
Stanislaus	TRLK625	684	Culex tarsalis	4	Turlock	8/31/2010	WNV	RTPCR
Sutter	SUYA31	327	Culex tarsalis	47	Rio Oso	8/24/2010	WNV	RTPCR
Sutter	SUYA84	309	Culex pipiens	45	Yuba City	8/18/2010	WNV	RTPCR
Tulare	DLTA6408	873	Culex quinquefasciatus	28	Dinuba	8/25/2010	WNV	RTPCR
Tulare	DLTA6408	875	Culex quinquefasciatus	32	Dinuba	8/25/2010	WNV	RTPCR
Tulare	DLTA7309	938	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	910	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	911	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	912	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	913	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	918	Culex tarsalis	39	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	924	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	930	Culex quinquefasciatus	50	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	940	Culex quinquefasciatus	47	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	943	Culex quinquefasciatus	41	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA7316	945	Culex quinquefasciatus	30	Traver	8/27/2010	WNV	RTPCR
Tulare	DLTA8312	890	Culex quinquefasciatus	46		8/26/2010	WNV	RTPCR
Tulare	DLTA8312	892	Culex tarsalis	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8313	894	Culex tarsalis	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8314	895	Culex quinquefasciatus	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8314	897	Culex tarsalis	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8314	898	Culex tarsalis	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8314	899	Culex tarsalis	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8314	901	Culex tarsalis	50		8/26/2010	WNV	RTPCR
Tulare	DLTA8314	902	Culex tarsalis	44		8/26/2010	WNV	RTPCR
Tulare	DLTA8418	882	Culex quinquefasciatus	50	Goshen	8/26/2010	WNV	RTPCR
Tulare	DLTA8418	884	Culex tarsalis	50	Goshen	8/26/2010	WNV	RTPCR
Tulare	DLTA8418	887	Culex tarsalis	50	Goshen	8/26/2010	WNV	RTPCR
Tulare	DLTA8434	879	Culex quinquefasciatus	50	Visalia	8/26/2010	WNV	RTPCR
Tulare	DLTA8521	906	Culex quinquefasciatus	50	Visalia	8/26/2010	WNV	RTPCR
Tulare	DLTA8521	907	Culex quinquefasciatus	25	Visalia	8/26/2010	WNV	RTPCR
Tulare	DLTA9501	954	Culex quinquefasciatus	47	Farmersville	8/31/2010	WNV	RTPCR
Tulare	DLTA9512	953	Culex quinquefasciatus	50	Farmersville	8/31/2010	WNV	RTPCR
Tulare	TLRE0	70	Unknown	50	Tulare	9/2/2010	WNV	RTPCR
Tulare	TLRE0	74	Unknown	50	Tulare	9/2/2010	WNV	RTPCR
Tulare	TLRE0	76	Unknown	50	Tulare	9/2/2010	WNV	RTPCR
Yolo	SAYO114001	4649	Culex tarsalis	51	Zamora	8/27/2010	WNV	RTPCR
Yolo	SAYO144002	4717	Culex tarsalis	26	Davis	8/31/2010	WNV	RTPCR
Yolo	SAYO145016	4721	Culex pipiens	1	Davis	8/31/2010	WNV	RTPCR

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## Sentinel Chickens

County	Site Code	Date Bled	Nearest City	Virus	Band 01	Band 02	Band 03	Band 04	Band 05	Band 06
Colusa	CLSA0001	8/30/2010	Colusa	WNV	1407					
Fresno	FRWS5101	8/24/2010	Mendota Airport	WNV	1610					
Imperial	COAV5001	8/23/2010	Niland	WNV	1330	1343				
Kern	DLNO0035	8/30/2010		WNV	1479					
Kern	KERN0102	8/23/2010	Buttonwillow	WNV	1766	1769				
Kern	KERN0107	8/23/2010	Arvin	WNV	1772	1776				
Kern	KERN0112	8/23/2010	Wasco	WNV	1790					
Kern	KERN0113	8/23/2010	Bakersfield	WNV	1795	1798				
Kern	KERN0114	8/23/2010	Bakersfield	WNV	1806	1809	1836			
Kern	KERN0115	8/23/2010	Bakersfield	WNV	1811	1839	1874			
Kern	KERN0117	8/23/2010	Bakersfield	WNV	1854	1855	1814	1831	1832	1833
Placer	PLCR0017	8/23/2010	Sheridan	WNV	2455	2459				
Riverside	COAV0122	8/23/2010	Mecca	WNV	1261	1267				
Riverside	COAV0035	8/23/2010	Mecca	WNV	1334	1340				
Riverside	COAV0131	8/23/2010	Oasis	WNV	1352					
Sacramento	SAYO222009	8/23/2010	Sacramento	WNV	2647					
San Bernardino	SANB0007	8/23/2010	Fontana	WNV	2810	2813				
San Bernardino	SANB0011	8/23/2010	Rialto	WNV	2845					
Tulare	DLTA8530	8/23/2010	Visalia	WNV	1520	1521	1522			
Tulare	DLTA8705	8/23/2010	Woodlake	WNV	1534	1538				

## NATIONAL COMMENTS

As of August 31, 2010, 177 human cases of WNV had been reported nationwide in 25 states: Alabama (1), Arizona (54), Arkansas (1), California (27), Colorado (10), Florida (2), Georgia (4), Iowa (1), Kansas (2), Louisiana (7), Maryland (3), Massachusetts (1), Michigan (4), Minnesota (2), Mississippi (4), Missouri (2), Nebraska (11), New Jersey (3), New York (18), North Dakota (4), Ohio (1), Pennsylvania (1), South Dakota (9), Texas (4), and Wyoming (1). Of the 177 cases, 96 (54%) had neuroinvasive disease. Three WNV-related fatalities have been reported in Arizona.

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

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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:**

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. The WNV Dead Bird Surveillance Coordinator, Erin Parker, can be reached directly at (510) 412-6254.

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## **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 (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), 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](mailto:tina.feiszli@cdph.ca.gov)*

*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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