

California Arbovirus Surveillance Bulletin # 22

Week 29 Friday, July 23, 2010

Weekly Summary

WEEKLY COMMENTS



Humans

Two new human cases of West Nile virus (WNV) were reported this week from Kern and Stanislaus counties; this is the first case of WNV reported from Kern County in 2010. To date this year, four WNV cases have been reported from two counties. Of these, two (50%) developed neuroinvasive disease. The median age for all cases is 46 years (range: 27-60 years) and one (25%) is male. No fatalities have been reported. Additionally, an asymptomatic WNV infection in a blood donor was reported from Tulare County. At this time last year, one human case had been reported from San Diego County.

Horses

No equine cases have been reported in 2010.

Dead Birds & Squirrels

Thirty recently-infected* WNV positive dead birds were reported this week from the following 9 counties: Fresno (4), Kern (1), Madera (1), Merced (2), Sacramento (17), San Joaquin (2), Santa Clara (1), Tulare (1), and Yolo (1). This is the first WNV positive bird reported from Tulare County this year. An additional 15 birds from 7 counties tested positive for chronic infection with WNV.

Two WNV positive squirrels, including a California ground squirrel, were reported this week from Fresno and San Bernardino counties. This is the first report of a ground squirrel in California testing positive for WNV infection.

In 2010, 96 recently-infected* WNV positive dead birds have been reported from 17 counties, and 3 WNV positive squirrels have been reported from 3 counties. An additional 35 chronic WNV infections have been detected in birds from 14 counties (see www.westnile.ca.gov for more details). At this time last year, 218 birds from 31 counties and one tree squirrel 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, 120 WNV positive mosquito pools were reported from the following 14 counties: Fresno (10), Imperial (2), Kern (25), Kings (4), Los Angeles (3), Madera (1), Orange (4), Placer (2), Riverside (7), Sacramento (38), Stanislaus (5), Sutter (1), Tulare (17), and Yolo (1). This is the first detection of WNV activity in Kings County, and the first WNV positive mosquito pools reported from Placer and Yolo counties this year. In 2010, 322 mosquito pools from 18 counties have tested positive for WNV. At this time last year, 233 WNV positive mosquito pools had been reported from 16 counties.

Sentinel Chickens

This week, 16 WNV seroconversions were reported from five flocks located in Imperial (5), Kern (1), and Riverside (10) counties. This is the first WNV positive chicken detected in Kern County this year. In 2010, 24 WNV positive chickens have been detected among 6 flocks from 3 counties. At this time last year, 13 WNV positive chickens from 3 counties (Los Angeles, San Diego, and Yolo) had been reported.

2009 & 2010 YTD West Nile Virus Comparisons		
	2009	2010
Total # Dead Bird Reports	9,962	6,241
# Positive Counties	32	21
# Human Cases	1	4
# Horse Cases	0	0
# Positive Dead Birds / # Tested	218 / 1,655	96 / 1,132
# Positive Mosquito Pools / # Tested	233 / 13,043	322 / 13,863
# Seroconversions / # Tested	13 / 12,813	24 / 13,103
# Positive Squirrels / # Tested	1 / 57	3 / 48

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YTD WNV Activity by Element and County, 2010

County	Humans	Horses	Dead Birds [^]	Mosquito Pools	Sentinel Chickens	Squirrels
Butte			2			1
Fresno			6	34		1
Imperial				9	8	
Kern	1		2	66	1	
Kings				4		
Los Angeles			8	4		
Madera			6	6		
Merced			5	4		
Placer			1	2		
Orange			2	7		
Riverside				39	15	
Sacramento			27	94		
San Bernardino			1	2		1
San Diego			1			
San Joaquin			3	6		
Santa Clara			21	10		
Santa Cruz			4			
Stanislaus	3		4	7		
Sutter				5		
Tulare			1	22		
Yolo			2	1		
Totals	4	0	96	322	24	3

[^] Chronic infections are not included in county totals.

TEST SUMMARIES

Human & Horse Cases

		Number Tested	WNV		WEE		SLE	
			Local	Imported	Local	Imported	Local	Imported
Humans Tested*	Week	12	2	0	0	0	0	0
	YTD	400	4	0	0	0	0	0
Horses Tested	Week	0	0	0	0	0	0	0
	YTD	81	0	0	0	0	0	0

Dead Birds & Tree Squirrels

		Number Tested	WNV Positive (recent only)
Dead Birds	Week	98	30
	YTD	1,132	96
Tree Squirrels	Week	7	2
	YTD	48	3

Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	SLE Positive	WEE Positive
Chicken Sera	Week	1,157	16	0	0
	YTD	13,103	24	0	0
Mosquito Pools: RT-PCR	Week	1,614	118	0	0
	YTD	13,387	309	0	0
Mosquito Pools: RAMP	Week	69	2	N/A	N/A
	YTD	476	13	N/A	N/A

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NEW POSITIVES

Humans

WNV Cases							
ID	Report Date	County ¹	Age	Sex	Clin Pres	Onset Date	WNV Fatality?
10-0003	07/22/10	Kern	60	M	WNND	n/a	NO
10-0004	07/23/10	Stanislaus	36	F	WNND	n/a	NO
WNV Positive Blood Donors (Asymptomatic Infections)							
ID	Report Date	County ¹	Age	Sex			
BD10-0003	07/20/10	Tulare	60	M			

¹County of residence

Dead Birds & Tree Squirrels

County	Submitting Agency	City	Zip	Species	Reported	Virus	Type of Infection	Method
El Dorado	El Dorado Co Env Mgmt	El Dorado	95623	European Starling	7/8/2010	WNV	Chronic	RT-PCR
Fresno	Consolidated MAD	Clovis	93611	Western Scrub-Jay	7/9/2010	WNV	Recent	RT-PCR
Fresno	Consolidated MAD	Fresno	93720	American Crow	7/12/2010	WNV	Recent	RT-PCR
Fresno	Consolidated MAD	Clovis	93612	American Crow	7/11/2010	WNV	Recent	RT-PCR
Fresno	Consolidated MAD	Fresno	93727	Purple Martin	7/8/2010	WNV	Chronic	RT-PCR
Fresno	Fresno MVCD	Fresno	93725	Western Scrub-Jay	7/6/2010	WNV	Chronic	RT-PCR
Fresno	Fresno MVCD	Fresno	93726	Western Scrub-Jay	7/6/2010	WNV	Recent	RT-PCR
Fresno	Fresno MVCD	Fresno	93702	Fox Squirrel	7/5/2010	WNV	Recent	RT-PCR
Kern	Kern MVCD	Bakersfield	93309	Western Scrub-Jay	7/12/2010	WNV	Recent	RT-PCR
Madera	Madera Co MVCD	Madera	93636	American Crow	7/6/2010	WNV	Recent	RT-PCR
Merced	Merced Co MAD	Merced	95348	Western Scrub-Jay	7/8/2010	WNV	Recent	RT-PCR
Merced	Merced Co MAD	Merced	95344	American Crow	7/9/2010	WNV	Recent	RT-PCR
Monterey	Northern Salinas Valley MAD	Salinas	93901	California Towhee	7/13/2010	WNV	Chronic	RT-PCR
Nevada	Nevada Co Env Health	Grass Valley	95949	Black-headed Grosbeak	7/13/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95831	House Finch	7/7/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rancho Cordova	95742	Red-winged Blackbird	7/8/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Citrus Heights	95610	Northern Mockingbird	7/11/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95829	American Robin	7/12/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rancho Cordova	95742	Red-winged Blackbird	7/13/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95819	Cooper's Hawk	7/13/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95826	American Crow	7/13/2010	WNV	Chronic	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Isleton	95641	American Crow	7/7/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rancho Cordova	95670	American Robin	7/8/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95842	American Crow	7/9/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95624	American Crow	7/9/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95624	American Crow	7/9/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95826	Yellow-billed Magpie	7/9/2010	WNV	Recent	RT-PCR

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Sacramento	Sacramento-Yolo MVCD	Sacramento	95828	Western Scrub-Jay	7/9/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rancho Cordova	95670	American Crow	7/11/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rancho Cordova	95742	Red-winged Blackbird	7/12/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Herald	95638	Western Scrub-Jay	7/12/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95817	American Crow	7/12/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Rio Linda	95673	Western Scrub-Jay	7/13/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95864	American Crow	7/12/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95827	American Crow	7/13/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95819	American Crow	7/13/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Carmichael	95608	Western Scrub-Jay	7/13/2010	WNV	Recent	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95826	American Crow	7/14/2010	WNV	Recent	RT-PCR
San Bernardino	San Bernardino Co Animal Ctrl	Big Bear Lake	92315	Acorn Woodpecker	7/5/2010	WNV	Chronic	RT-PCR
San Bernardino	San Bernardino Co Animal Ctrl	Victorville	92395	CA Ground Squirrel	7/7/2010	WNV	Recent	RT-PCR
San Bernardino	San Bernardino VCP	Loma Linda	92354	House Sparrow	7/9/2010	WNV	Chronic	RT-PCR
San Joaquin	San Joaquin Co MVCD	Stockton	95207	Western Scrub-Jay	7/13/2010	WNV	Recent	RT-PCR
San Joaquin	San Joaquin Co MVCD	Manteca	95336	Western Scrub-Jay	7/13/2010	WNV	Recent	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95124	American Crow	7/15/2010	WNV	Recent	VecTest
Tulare	Delta VCD	Visalia	93292	House Finch	7/13/2010	WNV	Chronic	RT-PCR
Tulare	Tulare MAD	Porterville	93257	Western Scrub-Jay	7/8/2010	WNV	Recent	RT-PCR
Yolo	Sacramento-Yolo MVCD	West Sacramento	95605	Western Scrub-Jay	7/7/2010	WNV	Recent	RT-PCR

Mosquitoes

County	Site Code	Pool #	Species	# in pool	City	Collected	Virus	Method
Fresno	CNSL1136	173	Culex tarsalis	42	Fresno	7/16/2010	WNV	RTPCR
Fresno	CNSL1145	174	Culex tarsalis	50	Fresno	7/16/2010	WNV	RTPCR
Fresno	CNSL1637	167	Culex quinquefasciatus	40	Clovis	7/14/2010	WNV	RTPCR
Fresno	CNSL1637	168	Culex tarsalis	26	Clovis	7/14/2010	WNV	RTPCR
Fresno	CNSL1668	172	Culex quinquefasciatus	19	Clovis	7/16/2010	WNV	RTPCR
Fresno	CNSL2145	169	Culex tarsalis	15	Sanger	7/14/2010	WNV	RTPCR
Fresno	CNSL2159	166	Culex quinquefasciatus	50	Sanger	7/14/2010	WNV	RTPCR
Fresno	CNSL4024	367	Culex quinquefasciatus	50	Selma	6/29/2010	WNV	RTPCR
Fresno	CNSL5037	415	Culex quinquefasciatus	25	Kingsburg	7/16/2010	WNV	RTPCR
Fresno	FRNO0014	30	Culex quinquefasciatus	50	Fresno	7/8/2010	WNV	RTPCR
Imperial	COAV5001	2280	Culex tarsalis	50	Niland	7/13/2010	WNV	RTPCR
Imperial	COAV5001	2281	Culex tarsalis	50	Niland	7/13/2010	WNV	RTPCR
Kern	KERN1005	562	Culex quinquefasciatus	50	Bakersfield	7/13/2010	WNV	RTPCR
Kern	KERN0115	555	Culex tarsalis	50	Bakersfield	7/13/2010	WNV	RTPCR
Kern	KERN2002	613	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2002	614	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2002	615	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2005	561	Culex quinquefasciatus	45	Bakersfield	7/13/2010	WNV	RTPCR
Kern	KERN2007	619	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2011	582	Culex quinquefasciatus	36	Bakersfield	7/14/2010	WNV	RTPCR
Kern	KERN2014	609	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2014	610	Culex quinquefasciatus	24	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2015	498	Culex quinquefasciatus	19	Bakersfield	7/8/2010	WNV	RTPCR
Kern	KERN2015	583	Culex quinquefasciatus	19	Bakersfield	7/14/2010	WNV	RTPCR
Kern	KERN2016	579	Culex quinquefasciatus	50	Bakersfield	7/14/2010	WNV	RTPCR
Kern	KERN2016	580	Culex quinquefasciatus	50	Bakersfield	7/14/2010	WNV	RTPCR
Kern	KERN2018	578	Culex quinquefasciatus	50	Bakersfield	7/14/2010	WNV	RTPCR

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Kern	KERN2020	611	Culex quinquefasciatus	27	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2024	617	Culex quinquefasciatus	25	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2028	624	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2028	625	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2028	626	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2028	627	Culex quinquefasciatus	50	Bakersfield	7/16/2010	WNV	RTPCR
Kern	KERN2049	595	Culex quinquefasciatus	16	Lamont	7/14/2010	WNV	RTPCR
Kern	KERN3009	603	Culex quinquefasciatus	24	Bakersfield	7/15/2010	WNV	RTPCR
Kern	KERN3010	607	Culex quinquefasciatus	50	Bakersfield	7/15/2010	WNV	RTPCR
Kern	KERN0050	604	Culex tarsalis	39	Bakersfield	7/15/2010	WNV	RTPCR
Kings	KNGS3022	206	Culex tarsalis	50	Hanford	7/20/2010	WNV	RTPCR
Kings	KNGS3030	221	Culex tarsalis	50	Lemoore	7/21/2010	WNV	RTPCR
Kings	KNGS3051	194	Culex tarsalis	50	Lemoore	7/15/2010	WNV	RTPCR
Kings	KNGS4007	198	Culex pipiens	8	Lemoore	7/19/2010	WNV	RTPCR
Los Angeles	GRLA2335	998	Culex quinquefasciatus	28	Whittier	7/9/2010	WNV	RTPCR
Los Angeles	GRLA2383	1059	Culex quinquefasciatus	50	Whittier	7/14/2010	WNV	RTPCR
Los Angeles	GRLA3051	1046	Culex quinquefasciatus	30	Signal Hill	7/14/2010	WNV	RTPCR
Madera	MADR1039	49	Culex tarsalis	12	Madera Ranchos	7/15/2010	WNV	RTPCR
Orange	ORCO0171	1176	Culex quinquefasciatus	31	Anaheim	7/20/2010	WNV	RTPCR
Orange	ORCO0033	1169	Culex quinquefasciatus	50	Westminster	7/20/2010	WNV	RTPCR
Orange	ORCO0033	1170	Culex quinquefasciatus	47	Westminster	7/20/2010	WNV	RTPCR
Orange	ORCO0034	1148	Culex stigmatosoma	29	Brea	7/15/2010	WNV	RTPCR
Placer	PLCR1113	122	Culex pipiens	21	Pleasant Grove	7/19/2010	WNV	RTPCR
Placer	PLCR0017	131	Culex tarsalis	50	Sheridan	7/20/2010	WNV	RTPCR
Riverside	COAV0116	2363	Culex tarsalis	6	Mecca	7/20/2010	WNV	RTPCR
Riverside	COAV0121	2359	Culex tarsalis	39	Mecca	7/20/2010	WNV	RTPCR
Riverside	COAV0121	2368	Culex quinquefasciatus	19	Mecca	7/20/2010	WNV	RTPCR
Riverside	COAV0132	2353	Culex quinquefasciatus	50	Mecca	7/20/2010	WNV	RTPCR
Riverside	COAV0048	2321	Culex tarsalis	30	Mecca	7/14/2010	WNV	RTPCR
Riverside	COAV0540	2339	Culex tarsalis	50	Mecca	7/20/2010	WNV	RTPCR
Riverside	COAV0542	2332	Culex tarsalis	50	Mecca	7/20/2010	WNV	RTPCR
Sacramento	SAYO203014	2896	Culex pipiens	1	Antelope	7/22/2010	WNV	RTPCR
Sacramento	SAYO203022	2747	Culex tarsalis	7	Sacramento	7/20/2010	WNV	RTPCR
Sacramento	SAYO204009	2861	Culex pipiens	9	Citrus Heights	7/22/2010	WNV	RTPCR
Sacramento	SAYO204014	2604	Culex tarsalis	32	Citrus Heights	7/16/2010	WNV	RTPCR
Sacramento	SAYO204014	2736	Culex tarsalis	2	Citrus Heights	7/20/2010	WNV	RTPCR
Sacramento	SAYO204015	2621	Culex tarsalis	28	Citrus Heights	7/16/2010	WNV	RTPCR
Sacramento	SAYO204020	2920	Culex tarsalis	9	Sacramento	7/22/2010	WNV	RTPCR
Sacramento	SAYO204020	2921	Culex tarsalis	2	Sacramento	7/22/2010	WNV	RTPCR
Sacramento	SAYO204031	2914	Culex tarsalis	5	Citrus Heights	7/22/2010	WNV	RTPCR
Sacramento	SAYO213007	2608	Culex tarsalis	50	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO213025	2642	Culex tarsalis	50	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO213025	2643	Culex tarsalis	5	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO213025	2644	Culex pipiens	42	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO214007	2894	Culex pipiens	34	Rancho Cordova	7/22/2010	WNV	RTPCR
Sacramento	SAYO214007	2895	Culex pipiens	3	Rancho Cordova	7/22/2010	WNV	RTPCR
Sacramento	SAYO214008	2612	Culex tarsalis	17	Carmichael	7/16/2010	WNV	RTPCR
Sacramento	SAYO214008	2613	Culex pipiens	50	Carmichael	7/16/2010	WNV	RTPCR
Sacramento	SAYO214008	2614	Culex pipiens	13	Carmichael	7/16/2010	WNV	RTPCR
Sacramento	SAYO214008	2615	Culex pipiens	9	Carmichael	7/16/2010	WNV	RTPCR
Sacramento	SAYO214025	2588	Culex pipiens	26	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO214026	2639	Culex pipiens	50	Rancho Cordova	7/16/2010	WNV	RTPCR
Sacramento	SAYO214026	2640	Culex pipiens	10	Rancho Cordova	7/16/2010	WNV	RTPCR
Sacramento	SAYO222013	2539	Culex pipiens	28	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO223023	2649	Culex tarsalis	23	Rancho Cordova	7/16/2010	WNV	RTPCR
Sacramento	SAYO224006	2510	Culex tarsalis	34	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO233001	2653	Culex tarsalis	22	Elk Grove	7/17/2010	WNV	RTPCR

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Sacramento	SAYO233016	2513	Culex tarsalis	50	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO233016	2515	Culex tarsalis	41	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO233016	2517	Culex pipiens	22	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO233018	2678	Culiseta incidens	13	Sacramento	7/20/2010	WNV	RTPCR
Sacramento	SAYO233033	2533	Culex tarsalis	13	Sacramento	7/16/2010	WNV	RTPCR
Sacramento	SAYO234002	2535	Culex tarsalis	15	Elk Grove	7/16/2010	WNV	RTPCR
Sacramento	SAYO234002	2536	Culex pipiens	4	Elk Grove	7/16/2010	WNV	RTPCR
Sacramento	SAYO234002	2666	Culex tarsalis	16	Elk Grove	7/20/2010	WNV	RTPCR
Sacramento	SAYO234007	2525	Culex tarsalis	14	Elk Grove	7/16/2010	WNV	RTPCR
Sacramento	SAYO234007	2527	Culex pipiens	3	Elk Grove	7/16/2010	WNV	RTPCR
Sacramento	SAYO234013	2522	Culex tarsalis	7	Elk Grove	7/16/2010	WNV	RTPCR
Sacramento	SAYO254026	2790	Culex pipiens	7	Herald	7/20/2010	WNV	RTPCR
Stanislaus	EAST1013	10068	Culex pipiens	50	Modesto	7/13/2010	WNV	RTPCR
Stanislaus	EAST1023	10088	Culex pipiens	50	Modesto	7/20/2010	WNV	RAMP
Stanislaus	EAST1023	10090	Culex pipiens	50	Modesto	7/20/2010	WNV	RAMP
Stanislaus	TRLK0432	320	Culex pipiens	50	Turlock	7/20/2010	WNV	RTPCR
Stanislaus	TRLK0601	297	Culex tarsalis	30	Ceres	7/15/2010	WNV	RTPCR
Sutter	SUYA0063	168	Culex tarsalis	45	Pennington	7/19/2010	WNV	RTPCR
Tulare	DLTA6507	461	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6507	465	Culex quinquefasciatus	48	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6507	466	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6508	457	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6508	460	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6517	439	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6517	440	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6517	441	Culex quinquefasciatus	39	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6517	447	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6517	452	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6517	453	Culex quinquefasciatus	50	Orosi	7/20/2010	WNV	RTPCR
Tulare	DLTA6518	421	Culex quinquefasciatus	50	Cutler	7/16/2010	WNV	RTPCR
Tulare	DLTA6518	422	Culex quinquefasciatus	50	Cutler	7/16/2010	WNV	RTPCR
Tulare	DLTA6518	424	Culex quinquefasciatus	50	Cutler	7/16/2010	WNV	RTPCR
Tulare	DLTA6518	425	Culex quinquefasciatus	50	Cutler	7/16/2010	WNV	RTPCR
Tulare	DLTA6518	426	Culex quinquefasciatus	50	Cutler	7/16/2010	WNV	RTPCR
Tulare	DLTA6520	417	Culex quinquefasciatus	21	Cutler	7/16/2010	WNV	RTPCR
Yolo	SAYO144002	2813	Culex tarsalis	19	Davis	7/20/2010	WNV	RTPCR

Chickens

County	Site Code	Date Bled	City	Virus	Band 01	Band 02	Band 03	Band 04	Band 05
Imperial	COAV5001	7/12/2010	Niland	WNV	1311	1316	1317	1319	1320
Kern	KERN0115	7/12/2010	Bakersfield	WNV	1818				
Riverside	COAV0035	7/12/2010	Mecca	WNV	1241	1242	1245	1247	1248
Riverside	COAV0122	7/12/2010	Mecca	WNV	1268				
Riverside	COAV0131	7/12/2010	Oasis	WNV	1274	1276	1277	1278	

NATIONAL COMMENTS

As of July 20, 2010, 26 human cases of WNV had been reported in 9 states: Alabama (1), Arizona (13), California (2), Colorado (3), Georgia (3), Kansas (1), Mississippi (1), North Dakota (1), and South Dakota (1). Ten (38%) cases had neuroinvasive illness. One fatality has been reported in Arizona.

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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).

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

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

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.

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.

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

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