

California Arbovirus Surveillance Bulletin # 27

Week 32 Monday, August 17, 2009

Weekly Summary

WEEKLY COMMENTS



As of August 14, 2009, 35 counties have reported West Nile virus (WNV) activity. At this time last year, 36 counties had reported WNV activity.

Humans

As of August 14, 2009, 10 human cases of West Nile virus have been identified in Contra Costa (1), Fresno (1), Kern (3), Kings (1), Los Angeles (2), Orange (1) and San Diego (1) counties. These are the first cases reported from Fresno, Kings, and Los Angeles counties this year. Of the 10 individuals, 5 (50%) developed neuroinvasive symptoms. The median age of the 10 individuals is 52 years (range: 15-76 years), and 6 (60%) are male. None of the cases have resulted in fatalities. In addition, 3 WNV-positive blood donation samples have been reported this year from Los Angeles (2) and San Joaquin (1) counties; all have remained asymptomatic. At this time last year, 55 human cases had been reported in California from 12 counties.

Horses

No new cases were reported last week. To date this year, 3 horses from 2 counties have tested positive for WNV; 2 of the cases were euthanized as a result of their illness. At this time last year, 4 equine WNV cases had been reported from 3 counties.

Dead Birds & Tree Squirrels

Last week, 27 WNV positive dead birds were reported from 12 counties: Butte (2), Contra Costa (1), El Dorado (1), Fresno (3), Kern (1), Los Angeles (1), San Bernardino (2), San Diego (4), San Joaquin (6), Solano (2), Stanislaus (1), and Tulare (3). This is the first detection of WNV activity in Solano County this year. In 2009, 298 birds from 33 counties have tested positive for WNV. At this time last year, 981 WNV positive dead birds had been reported from 32 counties.

Last week, a WNV positive western-gray squirrel was reported from San Bernardino County. In 2009, 2 tree squirrels from 2 counties have tested positive for WNV. At this time last year, 5 WNV positive tree squirrels had been reported from 2 counties.

Mosquito Pools

Last week, 116 WNV positive mosquito pools were reported from the following 15 counties: Butte (3), Fresno (8), Imperial (1), Kern (12), Kings (13), Los Angeles (30), Placer (1), Riverside (1), Sacramento (3), San Bernardino (7), San Diego (2), San Joaquin (8), Stanislaus (5), Sutter (4), and Tulare (18). These are the first WNV positive pools detected in Butte and San Diego counties this year. In 2009, 504 mosquito pools have tested positive for WNV from 20 counties. At this time last year, 712 WNV positive mosquito pools had been reported from 23 counties.

Sentinel Chickens

Twenty-four WNV seroconversions were reported last week from the following 5 counties: Imperial (15), Sacramento (1), San Diego (2), Tulare (5), and Yolo (1). This the first WNV positive chicken detected in Tulare County this year. In 2009, 56 chickens from 10 counties have tested positive for WNV antibodies. At this time last year, 50 WNV seroconversions had been reported from 8 counties.

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.

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YTD WNV Activity by Element and County, 2009

County	Humans	Horses	Dead Birds	Mosquito Pools	Sentinel Chickens	Squirrels
Alameda			8			
Butte			7	3		
Colusa			2			
Contra Costa	1		16	16	1	
El Dorado			4			
Fresno	1		54	95		1
Imperial				2	20	
Kern	3		25	81	5	
Kings	1		9	57		
Lake			1			
Los Angeles	2		43	38	13	
Madera			9	2		
Merced			2			
Modoc			1			
Monterey			1			
Orange	1		6	2		
Placer			3	5		
Riverside			1	7	1	
Sacramento			10	12	2	
San Bernardino			9	14	3	1
San Diego	1		18	2	4	
San Francisco			1			
San Joaquin		2	17	54		
San Mateo			1			
Santa Barbara			1			
Santa Clara			10	14		
Santa Cruz			1			
Shasta			6			
Solano			2			
Stanislaus		1	12	19		
Sutter				11		
Tulare			15	66	5	
Tuolumne			1			
Ventura			1			
Yolo			1	4	2	
Total	10	3	298	504	56	2

2009 & 2008 YTD West Nile Virus Comparisons		
	2008	2009
Total # Dead Bird Reports	21,360	11,487
# Positive Counties	36	35
# Human Cases / # Tested	55 / 523	10 / 596
# Horse Cases / # Tested	4 / 158	3 / 131
# Positive Dead Birds / # Tested	981 / 3,427	298 / 1,933
# Positive Mosquito Pools / # Tested	712 / 16,544	504 / 16,469
# Positive Chicken Sera / # Tested	50 / 17,407	56 / 15,252
# Positive Squirrels / # Tested	5 / 104	2 / 65

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TEST SUMMARIES

Human & Horse Cases

		Number Tested	WNV		WEE		SLE		Other	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Humans Tested*	Week	21	0	5	0	0	0	0	0	0
	YTD	596	1	9	0	0	0	0	0	0
Horses Tested	Week	11	0	0	0	0	0	0	0	0
	YTD	131	0	3	0	0	0	0	0	0

Dead Birds & Tree Squirrels

		Number Tested	WNV Positive
Dead Birds	Week	103	27
	YTD	1,933	298
Tree Squirrels	Week	5	1
	YTD	65	2

Sentinel Chickens & Mosquito Pools

		Number Tested	WNV Positive	SLE Positive	WEE Positive
Chicken Sera	Week	748	24	0	0
	YTD	15,252	56	0	0
Mosquito Pools: RT-PCR	Week	1,267	108	0	0
	YTD	15,936	465	0	0
Mosquito Pools: RAMP	Week	59	8	N/A	N/A
	YTD	533	39	N/A	N/A

POSITIVES

Dead Birds & Tree Squirrels

County	Agency	City	Zip	Species	Reported	Tested	Virus	Method
Butte	Butte Co MVCD	Chico	95928	Yellow-billed Magpie	7/29/09	8/10/09	WNV	RT-PCR
Butte	Butte Co MVCD	Oroville	95965	Western Scrub-Jay	8/4/09	8/10/09	WNV	RT-PCR
Contra Costa	Contra Costa MVCD	Discovery Bay	94505	House Finch	7/30/09	8/10/09	WNV	RT-PCR
El Dorado	El Dorado Co VCP	South Lake Tahoe	96150	Steller's Jay	7/27/09	7/27/09	WNV	RAMP
Fresno	Consolidated MAD	Sanger	93657	Western Scrub-Jay	8/11/09	8/11/09	WNV	RAMP
Fresno	Delta VCD	Dinuba	93618	American Robin	8/4/09	8/10/09	WNV	RT-PCR
Fresno	Fresno MVCD	Fresno	93723	American Crow	8/5/09	8/5/09	WNV	RAMP
Kern	Kern MVCD	Bakersfield	93308	Brewer's Blackbird	8/3/09	8/10/09	WNV	RT-PCR
Los Angeles	Antelope Valley MVCD	Quartz Hill	93536	Northern Mockingbird	8/3/09	8/10/09	WNV	RT-PCR
San Bernardino	San Bernardino VCP	Colton	92324	Northern Mockingbird	8/3/09	8/10/09	WNV	RT-PCR
San Bernardino	San Bernardino VCP	Lake Arrowhead	92352	Western Gray Squirrel	7/28/09	8/10/09	WNV	RT-PCR
San Bernardino	West Valley MVCD	Chino Hills	91709	American Crow	8/7/09	8/7/09	WNV	VecTest
San Diego	San Diego Co VCP	Del Mar	92014	American Crow	7/7/09	7/13/09	WNV	RT-PCR
San Diego	San Diego Co VCP	El Cajon	92021	American Crow	8/3/09	8/6/09	WNV	RT-PCR
San Diego	San Diego Co VCP	Encinitas	92024	American Crow	7/13/09	7/15/09	WNV	RT-PCR
San Diego	San Diego Co VCP	Oceanside	92056	American Crow	7/13/09	7/15/09	WNV	RT-PCR
San Joaquin	San Joaquin Co MVCD	Stockton	95205	House Sparrow	7/29/09	8/10/09	WNV	RT-PCR
San Joaquin	San Joaquin Co MVCD	Stockton	95207	Western Scrub-Jay	7/29/09	8/10/09	WNV	RT-PCR

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San Joaquin	San Joaquin Co MVCD	Acampo	95220	Yellow-billed Magpie	8/2/09	8/10/09	WNV	RT-PCR
San Joaquin	San Joaquin Co MVCD	Lodi	95240	House Finch	7/28/09	8/10/09	WNV	RT-PCR
San Joaquin	San Joaquin Co MVCD	Lodi	95242	American Robin	8/4/09	8/10/09	WNV	RT-PCR
San Joaquin	San Joaquin Co MVCD	Manteca	95337	Western Scrub-Jay	7/30/09	8/10/09	WNV	RT-PCR
Solano	Solano Co MAD	Benicia	94510	American Crow	8/5/09	8/5/09	WNV	RAMP
Solano	Solano Co MAD	Dixon	95620	American Crow	7/27/09	7/27/09	WNV	RAMP
Stanislaus	Turlock MAD	Ceres	95307	Yellow-billed Magpie	8/3/09	8/10/09	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93277	American Crow	8/5/09	8/10/09	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93291	Western Scrub-Jay	8/2/09	8/10/09	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93291	Western Scrub-Jay	8/5/09	8/10/09	WNV	RT-PCR

Mosquitoes

County	Site Code	Pool #	Species	# in Pool	Collected	Tested	City	Virus	Method
Butte	BUCO0034	39	Cx tarsalis	50	8/4/2009	8/11/2009	Richvale	WNV	RTPCR
Butte	BUCO0055	34	Cx tarsalis	50	8/4/2009	8/11/2009	Palermo	WNV	RTPCR
Butte	BUCO0055	35	Cx tarsalis	50	8/4/2009	8/11/2009	Palermo	WNV	RTPCR
Fresno	CNSL0207	628	Cx restuans	20	8/6/2009	8/12/2009	Sanger	WNV	RTPCR
Fresno	CNSL2065	629	Cx stigmatosoma	50	8/6/2009	8/12/2009	Sanger	WNV	RTPCR
Fresno	CNSL3230	637	Cx quinquefasciatus	50	8/11/2009	8/12/2009	Reedley	WNV	RTPCR
Fresno	CNSL4009	636	Cx quinquefasciatus	46	8/7/2009	8/12/2009	Fowler	WNV	RTPCR
Fresno	CNSL4010	634	Cx quinquefasciatus	50	8/7/2009	8/12/2009	Fowler	WNV	RTPCR
Fresno	CNSL4013	635	Cx quinquefasciatus	40	8/7/2009	8/12/2009	Fowler	WNV	RTPCR
Fresno	CNSL6141	349	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Riverdale	WNV	RTPCR
Fresno	CNSL6175	356	Cx quinquefasciatus	39	8/4/2009	8/12/2009	Riverdale	WNV	RTPCR
Imperial	COAV5001	1420	Cx tarsalis	50	7/28/2009	8/13/2009	Niland	WNV	RTPCR
Kern	AFSB0119	5136	Cx quinquefasciatus	15	8/6/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	AFSB0121	5144	Cx quinquefasciatus	50	8/6/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	AFSB0121	5145	Cx quinquefasciatus	50	8/6/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	AFSB0121	5146	Cx quinquefasciatus	5	8/6/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	AFSB0123	5143	Cx quinquefasciatus	50	8/6/2009	8/12/2009	oiddale	WNV	RTPCR
Kern	KERN1005	417	Cx quinquefasciatus	48	8/4/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	KERN1008	411	Cx quinquefasciatus	11	8/4/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	KERN2011	413	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	KERN2011	414	Cx quinquefasciatus	38	8/4/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	KERN2043	412	Cx quinquefasciatus	16	8/4/2009	8/12/2009	Bakersfield	WNV	RTPCR
Kern	WEST6235	56	Cx tarsalis	50	8/12/2009	8/13/2009	Tupman	WNV	RTPCR
Kern	WEST6235	57	Cx tarsalis	50	8/12/2009	8/13/2009	Tupman	WNV	RTPCR
Kings	KNGS3005	285	Cx tarsalis	50	8/10/2009	8/13/2009	Lemoore NAS	WNV	RTPCR
Kings	KNGS3010	262	Cx quinquefasciatus	21	8/11/2009	8/13/2009	Hanford	WNV	RTPCR
Kings	KNGS3018	249	Cx tarsalis	50	8/11/2009	8/13/2009	Lemoore	WNV	RTPCR
Kings	KNGS3018	251	Cx tarsalis	50	8/11/2009	8/14/2009	Lemoore	WNV	RTPCR
Kings	KNGS3022	296	Cx tarsalis	50	8/12/2009	8/13/2009	Hanford	WNV	RTPCR
Kings	KNGS3030	280	Cx tarsalis	50	8/10/2009	8/13/2009	Lemoore	WNV	RTPCR
Kings	KNGS3035	259	Cx tarsalis	17	8/11/2009	8/13/2009	Hanford	WNV	RTPCR
Kings	KNGS3039	291	Cx tarsalis	43	8/10/2009	8/13/2009	Lemoore	WNV	RTPCR
Kings	KNGS3046	269	Cx quinquefasciatus	9	8/10/2009	8/14/2009	Hanford	WNV	RTPCR
Kings	KNGS3057	263	Cx quinquefasciatus	10	8/11/2009	8/13/2009	Hanford	WNV	RTPCR
Kings	KNGS3057	264	Cx tarsalis	29	8/11/2009	8/13/2009	Hanford	WNV	RTPCR
Kings	KNGS4007	270	Cx quinquefasciatus	28	8/10/2009	8/13/2009	Lemoore	WNV	RTPCR

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Kings	KNGS8014	271	Cx quinquefasciatus	38	8/10/2009	8/13/2009	Laton	WNV	RTPCR
Los Angeles	ANTV5263	20	Cx quinquefasciatus	13	8/11/2009	8/12/2009	Lancaster	WNV	RTPCR
Los Angeles	GRLA2094	1484	Cx quinquefasciatus	18	8/7/2009	8/13/2009	Whittier	WNV	RTPCR
Los Angeles	GRLA2277	1409	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Long Beach	WNV	RTPCR
Los Angeles	GRLA2277	1411	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Long Beach	WNV	RTPCR
Los Angeles	GRLA2383	1435	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Whittier	WNV	RTPCR
Los Angeles	GRLA2540	5848	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Northridge	WNV	RTPCR
Los Angeles	GRLA2550	5854	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Mission Hills	WNV	RTPCR
Los Angeles	GRLA2550	5855	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Mission Hills	WNV	RTPCR
Los Angeles	GRLA2574	5883	Cx quinquefasciatus	48	8/7/2009	8/13/2009	Sherman Oaks	WNV	RTPCR
Los Angeles	GRLA2636	5829	Cx quinquefasciatus	43	8/4/2009	8/14/2009	Van Nuys	WNV	RTPCR
Los Angeles	GRLA2637	5839	Cx quinquefasciatus	45	8/4/2009	8/12/2009	Van Nuys	WNV	RTPCR
Los Angeles	GRLA2650	5817	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Encino	WNV	RTPCR
Los Angeles	GRLA2650	5818	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Encino	WNV	RTPCR
Los Angeles	GRLA2650	5821	Cx quinquefasciatus	50	8/4/2009	8/12/2009	Encino	WNV	RTPCR
Los Angeles	GRLA2938	5869	Cx quinquefasciatus	36	8/6/2009	8/13/2009	Burbank	WNV	RTPCR
Los Angeles	GRLA2952	1431	Cx quinquefasciatus	50	8/4/2009	8/14/2009	LA County	WNV	RTPCR
Los Angeles	GRLA2954	1437	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2954	1439	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2954	1440	Cx quinquefasciatus	43	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2954	1441	Cx quinquefasciatus	21	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2955	1421	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2955	1422	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2955	1423	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2955	1424	Cx quinquefasciatus	32	8/4/2009	8/13/2009	Cerritos	WNV	RTPCR
Los Angeles	GRLA2956	1425	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Lakewood	WNV	RTPCR
Los Angeles	GRLA2956	1426	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Lakewood	WNV	RTPCR
Los Angeles	GRLA2956	1427	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Lakewood	WNV	RTPCR
Los Angeles	GRLA2956	1429	Cx quinquefasciatus	44	8/4/2009	8/13/2009	Lakewood	WNV	RTPCR
Los Angeles	GRLA2957	1417	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Hawaiian Gardens	WNV	RTPCR
Los Angeles	GRLA3045	1448	Cx quinquefasciatus	50	8/4/2009	8/14/2009	Whittier	WNV	RTPCR
Placer	PLCR0518	475	Cx tarsalis	50	8/11/2009	8/12/2009	Roseville	WNV	RTPCR
Riverside	RIVR0060	367	Cx tarsalis	50	8/5/2009	8/10/2009	Hemet	WNV	RTPCR
Sacramento	SAYO4250	3034	Cx pipiens	50	8/12/2009	8/14/2009	Sacramento	WNV	RTPCR
Sacramento	SAYO4368	3065	Cx tarsalis	50	8/13/2009	8/14/2009	Galt	WNV	RTPCR
Sacramento	SAYO4369	2900	Cx tarsalis	50	8/7/2009	8/10/2009	Galt	WNV	RTPCR
San Bernardino	WVAL1008	664	Cx quinquefasciatus	50	7/28/2009	8/6/2009	Ontario	WNV	RTPCR
San Bernardino	WVAL2018	738	Cx quinquefasciatus	22	8/5/2009	8/13/2009	Chino	WNV	RTPCR
San Bernardino	WVAL5002	715	Cx quinquefasciatus	19	8/4/2009	8/13/2009	Rancho Cucamonga	WNV	RTPCR
San Bernardino	WVAL6002	696	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Ontario	WNV	RTPCR
San Bernardino	WVAL6002	698	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	708	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Ontario	WNV	RTPCR
San Bernardino	WVAL6012	709	Cx quinquefasciatus	50	8/4/2009	8/13/2009	Ontario	WNV	RTPCR
San Diego	SAND0192	62	Cx quinquefasciatus	45	8/5/2009	8/12/2009	Carlsbad	WNV	RTPCR
San Diego	SAND0282	60	Cx quinquefasciatus	20	8/5/2009	8/12/2009	Valley Center	WNV	RTPCR
San Joaquin	SJCM8010	669	Cx pipiens	50	8/10/2009	8/14/2009	Ripon	WNV	RTPCR
San Joaquin	SJCM8159	662	Cx pipiens	50	8/10/2009	8/11/2009	Stockton	WNV	RAMP
San Joaquin	SJCM8159	663	Cx pipiens	48	8/10/2009	8/11/2009	Stockton	WNV	RAMP
San Joaquin	SJCM8159	664	Cx pipiens	12	8/10/2009	8/11/2009	Stockton	WNV	RAMP
San Joaquin	SJCM8161	675	Cx pipiens	50	8/10/2009	8/11/2009	Ripon	WNV	RAMP
San Joaquin	SJCM8161	679	Cx pipiens	50	8/10/2009	8/11/2009	Ripon	WNV	RAMP
San Joaquin	SJCM8187	715	Cx pipiens	29	8/13/2009	8/12/2009	Stockton	WNV	RAMP

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San Joaquin	SJCM8188	716	Cx pipiens	50	8/13/2009	8/12/2009	Stockton	WNV	RAMP
Stanislaus	EAST1021	9151	Cx tarsalis	10	8/5/2009	8/5/2009	Valley Home	WNV	RAMP
Stanislaus	TRLK0306	561	Cx tarsalis	32	8/11/2009	8/12/2009	Grayson	WNV	RTPCR
Stanislaus	TRLK0310	568	Cx tarsalis	50	8/11/2009	8/12/2009	Grayson	WNV	RTPCR
Stanislaus	TRLK0502	592	Cx pipiens	50	8/11/2009	8/12/2009	Vernalis	WNV	RTPCR
Stanislaus	TRLK9772	559	Cx pipiens	50	8/11/2009	8/12/2009	Grayson	WNV	RTPCR
Sutter	SUYA0014	258	Cx tarsalis	50	8/10/2009	8/12/2009	Sutter	WNV	RTPCR
Sutter	SUYA0016	261	Cx tarsalis	35	8/10/2009	8/12/2009	Trowbridge	WNV	RTPCR
Sutter	SUYA0044	255	Cx tarsalis	50	8/10/2009	8/12/2009	Pleasant Grove	WNV	RTPCR
Sutter	SUYA0044	263	Cx tarsalis	50	8/11/2009	8/14/2009	Pleasant Grove	WNV	RTPCR
Tulare	DLTA8413	567	Cx quinquefasciatus	50	8/6/2009	8/11/2009	Visalia	WNV	RTPCR
Tulare	DLTA8413	570	Cx tarsalis	50	8/6/2009	8/11/2009	Visalia	WNV	RTPCR
Tulare	DLTA8413	571	Cx tarsalis	20	8/6/2009	8/11/2009	Visalia	WNV	RTPCR
Tulare	DLTA8414	578	Cx quinquefasciatus	50	8/6/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA8436	603	Cx quinquefasciatus	47	8/11/2009	8/14/2009	Visalia	WNV	RTPCR
Tulare	DLTA8436	606	Cx quinquefasciatus	46	8/11/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA8436	607	Cx quinquefasciatus	50	8/11/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA8530	614	Cx quinquefasciatus	44	8/12/2009	8/13/2009	Visalia	WNV	RTPCR
Tulare	DLTA8530	618	Cx quinquefasciatus	44	8/12/2009	8/13/2009	Visalia	WNV	RTPCR
Tulare	DLTA8531	608	Cx quinquefasciatus	28	8/11/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA8531	609	Cx quinquefasciatus	50	8/11/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA8531	611	Cx quinquefasciatus	50	8/11/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA8531	613	Cx quinquefasciatus	50	8/11/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA9401	589	Cx quinquefasciatus	50	8/7/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA9401	592	Cx quinquefasciatus	50	8/7/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA9401	593	Cx quinquefasciatus	50	8/7/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA9401	594	Cx quinquefasciatus	47	8/7/2009	8/12/2009	Visalia	WNV	RTPCR
Tulare	DLTA9401	619	Cx quinquefasciatus	32	8/12/2009	8/13/2009	Visalia	WNV	RTPCR

Sentinel Chickens

County	Site Code	City	Date Bled	Virus	Band 01	Band 02	Band 03
Imperial	IMPR0002	Seeley	7/14/2009	WNV	2766	2767	2769
Imperial	IMPR0002	Seeley	7/28/2009	WNV	2768		
Imperial	IMPR0003	El Centro	6/30/2009	WNV	2773		
Imperial	IMPR0003	El Centro	7/14/2009	WNV	2774		
Imperial	IMPR0003	El Centro	7/28/2009	WNV	2771	2775	
Imperial	IMPR0013	Calipatria	7/28/2009	WNV	2757	2759	2760
Imperial	IMPR0016	Holtville	7/14/2009	WNV	2763	2764	2765
Imperial	IMPR0016	Holtville	7/28/2009	WNV	2762		
Sacramento	SAYO7002	Hood	8/3/2009	WNV	1863		
San Diego	SAND0016	Carlsbad	7/29/2009	WNV	1634		
San Diego	SAND0016	Carlsbad	8/8/2009	WNV	1629		
Tulare	DLTA6309	Reedley	8/7/2009	WNV	2921	2922	
Tulare	DLTA8530	Visalia	7/28/2009	WNV	2944	2946	2948
Yolo	SAYO6000	Dunnigan	8/3/2009	WNV	1888		

California Arbovirus Surveillance Bulletin # 27

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NATIONAL COMMENTS

As of August 11, 2009, 58 human cases had been reported nationwide in the following 16 states: Arizona (7), Arkansas (1), California (5), Colorado (4), Idaho (1), Louisiana (3), Minnesota (1), Mississippi (11), Montana (1), Nebraska (1), Nevada (6), New York (1), South Dakota (3), Tennessee (1), Texas (11), and Wyoming (1). Of the 58 individuals, 41 (71%) have neuroinvasive illness. There have been two fatalities in Mississippi (1) and Texas (1).

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.

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