

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017



Weekly Update

Humans

A total of 28 new human cases of West Nile virus (WNV) illness were reported this week from the following nine counties: Butte (1), Kern (2), Los Angeles (12), Orange (2), Riverside (1), Sacramento (1), San Bernardino (6), San Joaquin (2), and Tulare (1). **This is the first human WNV case reported from Sacramento County in 2017.** To date this year, a total of 87 human cases of WNV illness have been reported from 13 counties. Of the 87 case-patients, 67 (77%) had neuroinvasive disease and three fatalities have been reported from Kern (1), Los Angeles (1), and San Bernardino (1) counties. The median age of the individuals is 59 years (range: 4–83 years) and 60 (69%) are male. Dates of symptom onset ranged from March 16 to August 20. In addition to the 87 symptomatic cases, 10 asymptomatic WNV-positive blood donors have been reported from Humboldt (1), Los Angeles (4) Orange (1), Stanislaus (1), and San Bernardino (3) counties. As of this date in 2016, 123 human WNV cases had been reported from 23 counties.

Dead Birds

A total of 25 WNV positive dead birds were reported this week from the following nine counties: Contra Costa (1), Lake (1), Los Angeles (8), Orange (3), Riverside (2), Sacramento (7), San Diego (1), Santa Clara (1), and Yolo (1). To date this year, 264 birds from 30 counties have tested positive for WNV. As of this date in 2016, 1,137 WNV positive birds had been reported from 32 counties.

Mosquito Pools

West Nile Virus

A total of 261 WNV positive mosquito pools were reported this week from the following 18 counties: Butte (5), Fresno (38), Glenn (1), Kern (11), Kings (4), Lake (1), Los Angeles (44), Madera (11), Orange (56), Placer (4), Riverside (3), Sacramento (12), San Joaquin (19), Solano (1), Stanislaus (22), Sutter (1), Tulare (10), and Yolo (18). To date this year, 2,545 WNV positive mosquito pools have been reported from 24 counties. As of this date in 2016, 2,939 WNV positive mosquito pools had been reported from 30 counties.

St. Louis Encephalitis Virus

A total of 22 mosquito pools tested positive for St. Louis encephalitis virus (SLEV) this week from seven counties: Butte (1), Fresno (9), Imperial (1), Kern (3), Madera (1), Riverside (1), and Stanislaus (6). **These are the first detections of SLEV activity in Butte, Imperial, and Madera counties in 2017.** To date this year, 70 SLEV positive mosquito pools have been reported from 11 counties: Butte (1), Fresno (30), Imperial (1), Kern (11), Kings (11), Madera (1), Placer (1), Riverside (2), Stanislaus (9), Tulare (2), and Yuba (1). As of this date in 2016, 127 SLEV positive mosquito pools had been reported from five counties.

Sentinel Chickens

West Nile virus

A total of 25 WNV seroconversions were reported this week from five counties: Butte (16), Glenn (1), San Benito (1), Sutter (4), and Yuba (3). **This is the first WNV seroconversion reported from Glenn County, and the first detection of WNV activity in San Benito County in 2017.** To date this year, 155 WNV seroconversions have been reported from 12 counties. As of this date in 2016, 231 WNV seroconversions had been detected from 15 counties.

St. Louis Encephalitis Virus

No SLEV seroconversions were reported this week. To date this year, seven SLEV positive chickens have been reported from Merced (1) and San Bernardino (6) counties. As of this date in 2016, two SLEV seroconversions had been detected in one flock located in San Bernardino County.

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

2016 & 2017 YTD West Nile Virus Comparisons		
	2016	2017
Total # Dead Bird Reports	7,614	5,613
# Positive Counties	36	34
# Human Cases	123	87
# Positive Dead Birds / # Tested	1,137 / 2,319	264 / 1,438
# Positive Mosquito Pools / # Tested	2,939 / 32,887	2,545 / 31,999
# Seroconversions / # Tested	231 / 7,575	155 / 8,062

YTD WNV Activity by Element and County, 2017				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda		1		
Butte	2	2	36	25
Colusa		1		
Contra Costa		6	5	4
El Dorado		1		
Fresno	1	3	136	
Glenn			12	1
Inyo			7	
Kern	10	3	148	
Kings	1	1	69	
Lake		2	12	1
Los Angeles	39	51	375	66
Madera			46	
Monterey		1		
Merced		1	32	14
Nevada		1		
Orange	5	24	172	
Placer		1	32	
Riverside	3	26	162	
Sacramento	1	56	91	2
San Benito				1
San Bernardino	12	30	207	23
San Diego		16	3	
San Joaquin	3	6	171	
San Mateo		1		
Santa Clara		6		
Santa Cruz		1		
Solano		1	5	1
Sonoma		1		
Stanislaus	6	3	152	
Sutter	1	2	16	12
Tulare	3	8	581	
Yolo		2	58	
Yuba		6	17	5
Totals	87	264	2,545	155

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 #22

Week 35 Friday, September 1, 2017

TESTING SUMMARIES

Humans

		WNV	SLE	WEE
Human Cases	Week	28	0	0
	YTD	87	0	0

Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	56	25
	YTD	1,438	264

Chickens

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	401	25	0	0
	YTD	8,062	155	7	0

Mosquitoes

		Positive / Total Tested						
Mosquito Pools		WNV	SLEV	WEEV	CHIK	DENV	ZIKA	
		Week	261 / 1,852	22 / 1,337	0 / 1,337	0 / 59	0 / 59	0 / 59
		YTD	2,545 / 31,999	70 / 26,365	0 / 24,573	0 / 1,025	0 / 1,025	0 / 1,025

New Positives

Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Contra Costa	Contra Costa MVCD	Danville	94506	Western Scrub-Jay	8/24/2017	WNV
Lake	Lake Co VCD	Lakeport	95453	American Crow	8/25/2017	WNV
Los Angeles	Greater Los Angeles Co VCD - Sylmar	Santa Clarita	91321	American Crow	8/23/2017	WNV
Los Angeles	Los Angeles Co Veterinarian	Hollywood Hills	90068	American Crow	8/23/2017	WNV
Los Angeles	Los Angeles Co Veterinarian	Pasadena	91107	American Crow	8/25/2017	WNV
Los Angeles	Los Angeles Co Veterinarian	Rosemead	91770	American Crow	8/25/2017	WNV
Los Angeles	Los Angeles Co Veterinarian	San Gabriel	91775	American Crow	8/24/2017	WNV
Los Angeles	Los Angeles Co Veterinarian	Valencia	91354	American Crow	8/22/2017	WNV
Los Angeles	Los Angeles Co Veterinarian	Woodland Hills	91367	American Crow	8/24/2017	WNV
Los Angeles	Los Angeles Co West VCD	Los Angeles	90048	American Crow	8/25/2017	WNV
Orange	Orange Co VCD	Garden Grove	92845	American Crow	8/25/2017	WNV

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

Orange	Orange Co VCD	Irvine	92614	American Crow	8/25/2017	WNV
Orange	Orange Co VCD	La Habra	90631	House Sparrow	8/23/2017	WNV
Riverside	Northwest Mosquito VCD	Norco	92860	American Crow	8/23/2017	WNV
Riverside	Northwest Mosquito VCD	Riverside	92509	American Crow	8/17/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	Western Scrub-Jay	8/25/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Rio Linda	95673	Yellow-billed Magpie	8/24/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95820	American Crow	8/28/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95822	Northern Mockingbird	8/21/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95822	Northern Mockingbird	8/21/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95822	Northern Mockingbird	8/21/2017	WNV
Sacramento	Sacramento-Yolo MVCD	Wilton	95693	American Crow	8/25/2017	WNV
San Diego	San Diego Co VCP	San Diego	92127	American Crow	8/24/2017	WNV
Santa Clara	Santa Clara Co VCD	Los Gatos	95030	Unknown - songbird	8/24/2017	WNV
Yolo	Sacramento-Yolo MVCD	Davis	95616	Yellow-billed Magpie	8/28/2017	WNV

Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Butte	BUCO123	333	Cx. tarsalis	Oroville	50	CO2	8/28/17	WNV
Butte	BUCO123	334	Cx. tarsalis	Oroville	26	CO2	8/28/17	WNV
Butte	BUCO28	315	Cx. tarsalis	Biggs	50	CO2	8/23/17	WNV
Butte	BUCO28	316	Cx. tarsalis	Biggs	50	CO2	8/23/17	WNV
Butte	BUCO38	327	Cx. tarsalis	Oroville	50	CO2	8/28/17	SLEV
Butte	BUCO6	313	Cx. tarsalis	Chico	50	CO2	8/22/17	WNV
Fresno	CNSL1270	444	Cx. quinquefasciatus	Clovis	50	GRVD	8/24/17	WNV
Fresno	CNSL1451	445	Cx. quinquefasciatus	Clovis	19	GRVD	8/24/17	WNV
Fresno	CNSL1751	436	Cx. quinquefasciatus	Fresno	15	GRVD	8/23/17	WNV
Fresno	CNSL2316	433	Cx. quinquefasciatus	Sanger	16	GRVD	8/23/17	WNV
Fresno	CNSL2340	441	Cx. quinquefasciatus	Sanger	42	GRVD	8/24/17	WNV
Fresno	FRNO10	274	Cx. tarsalis	Fresno	34	CO2	8/23/17	SLEV
Fresno	FRNO10	274	Cx. tarsalis	Fresno	34	CO2	8/23/17	WNV
Fresno	FRNO111	277	Cx. tarsalis		38	BGSENT	8/25/17	SLEV
Fresno	FRNO36	270	Cx. quinquefasciatus	Fresno	9	BGSENT	8/22/17	SLEV
Fresno	FRWS100006	468	Cx. tarsalis	Dos Palos	50	CO2	8/29/17	WNV
Fresno	FRWS1202	462	Cx. tarsalis	Dos Palos	50	CO2	8/29/17	WNV
Fresno	FRWS1202	463	Cx. quinquefasciatus	Dos Palos	50	CO2	8/29/17	WNV
Fresno	FRWS1202	464	Cx. tarsalis	Dos Palos	50	CO2	8/29/17	WNV
Fresno	FRWS300005	452	Cx. quinquefasciatus	Firebaugh	37	CO2	8/24/17	SLEV
Fresno	FRWS300008	458	Cx. quinquefasciatus	Firebaugh	48	GRVD	8/25/17	WNV
Fresno	FRWS300013	410	Cx. quinquefasciatus	Firebaugh	50	BGSENT	8/23/17	WNV
Fresno	FRWS300013	412	Cx. quinquefasciatus	Firebaugh	50	BGSENT	8/23/17	WNV
Fresno	FRWS300017	421	Cx. quinquefasciatus	Firebaugh	50	CO2	8/24/17	WNV
Fresno	FRWS300017	424	Cx. tarsalis	Firebaugh	50	CO2	8/24/17	SLEV
Fresno	FRWS300017	424	Cx. tarsalis	Firebaugh	50	CO2	8/24/17	WNV
Fresno	FRWS300017	425	Cx. tarsalis	Firebaugh	50	CO2	8/24/17	WNV
Fresno	FRWS300026	418	Cx. quinquefasciatus	Firebaugh	50	BGSENT	8/23/17	WNV
Fresno	FRWS300108	434	Cx. quinquefasciatus		50	BGSENT	8/24/17	WNV
Fresno	FRWS300110	433	Cx. quinquefasciatus		50	BGSENT	8/24/17	WNV
Fresno	FRWS300118	456	Cx. tarsalis		50	CO2	8/25/17	SLEV
Fresno	FRWS3101	455	Cx. quinquefasciatus	Firebaugh	50	BGSENT	8/25/17	SLEV
Fresno	FRWS3101	455	Cx. quinquefasciatus	Firebaugh	50	BGSENT	8/25/17	WNV

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

Fresno	FRWS3201	461	Cx. quinquefasciatus	Firebaugh	50	GRVD	8/29/17	WNV
Fresno	FRWS400017	473	Cx. quinquefasciatus	Mendota	50	CO2	8/29/17	WNV
Fresno	FRWS400027	435	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400027	436	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400027	437	Cx. tarsalis		50	CO2	8/24/17	SLEV
Fresno	FRWS400027	437	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400027	438	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400027	439	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400027	440	Cx. quinquefasciatus		50	CO2	8/24/17	SLEV
Fresno	FRWS400027	440	Cx. quinquefasciatus		50	CO2	8/24/17	WNV
Fresno	FRWS400027	441	Cx. quinquefasciatus		50	CO2	8/24/17	WNV
Fresno	FRWS400027	442	Cx. quinquefasciatus		50	CO2	8/24/17	WNV
Fresno	FRWS400047	443	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400047	444	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400047	445	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400047	446	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS400047	447	Cx. tarsalis		50	CO2	8/24/17	WNV
Fresno	FRWS510001	449	Cx. tarsalis	Mendota	40	CO2	8/24/17	WNV
Fresno	FRWS5101	470	Cx. tarsalis	Mendota	44	CO2	8/29/17	WNV
Fresno	FRWS5110	471	Cx. tarsalis	Tranquillity	50	CO2	8/29/17	WNV
Glenn	BUCO47	332	Cx. tarsalis	Hamilton City	50	CO2	8/28/17	WNV
Imperial	IMPR40	510	Cx. quinquefasciatus	Imperial	50	BGSENT	8/25/17	SLEV
Kern	DLNO105	219	Cx. quinquefasciatus	Delano	50	GRVD	8/29/17	WNV
Kern	DLNO108	218	Cx. quinquefasciatus	Delano	15	GRVD	8/29/17	WNV
Kern	DLNO29	220	Cx. quinquefasciatus	Delano	50	GRVD	8/29/17	WNV
Kern	DLNO68	216	Cx. quinquefasciatus	Delano	50	GRVD	8/25/17	SLEV
Kern	DLNO68	216	Cx. quinquefasciatus	Delano	50	GRVD	8/25/17	WNV
Kern	KERN2021	482	Cx. quinquefasciatus	Wasco	50	GRVD	8/24/17	WNV
Kern	KERN2028	480	Cx. quinquefasciatus	Bakersfield	50	GRVD	8/23/17	WNV
Kern	KERN2041	474	Cx. quinquefasciatus	Arvin	19	GRVD	8/22/17	WNV
Kern	KERN2043	471	Cx. quinquefasciatus	Bakersfield	37	GRVD	8/22/17	WNV
Kern	KERN35	485	Cx. tarsalis	Bakersfield	50	CO2	8/24/17	SLEV
Kern	KERN40	477	Cx. tarsalis	Lost Hills	50	CO2	8/22/17	WNV
Kern	KERN47	478	Cx. quinquefasciatus	Buttonwillow	50	GRVD	8/23/17	WNV
Kern	KERN50	483	Cx. tarsalis	Bakersfield	50	CO2	8/24/17	SLEV
Kern	KERN50	483	Cx. tarsalis	Bakersfield	50	CO2	8/24/17	WNV
Kings	KNGS4411	354	Cx. tarsalis	Lemoore	15	BGSENT	8/23/17	WNV
Kings	KNGS5506	363	Cx. pipiens	Hanford	24	BGSENT	8/25/17	WNV
Kings	KNGS5512	358	Cx. pipiens	Hanford	33	BGSENT	8/23/17	WNV
Kings	KNGS5513	362	Cx. pipiens	Hanford	17	BGSENT	8/25/17	WNV
Lake	LAKE325	539	Cx. tarsalis	Upper Lake	50	CO2	8/29/17	WNV
Los Angeles	ANTV1133	65	Cx. quinquefasciatus	Lancaster	17	GRVD	8/29/17	WNV
Los Angeles	GRLA2031	5673	Cx. quinquefasciatus	Northridge	10	GRVD	8/24/17	WNV
Los Angeles	GRLA2114	697	Cx. quinquefasciatus	Boyle Heights	37	GRVD	8/24/17	WNV
Los Angeles	GRLA2194	680	Cx. quinquefasciatus	South El Monte	50	GRVD	8/23/17	WNV
Los Angeles	GRLA2221	687	Cx. quinquefasciatus	Rowland Heights	48	GRVD	8/23/17	WNV
Los Angeles	GRLA2222	686	Cx. quinquefasciatus	Rowland Heights	50	GRVD	8/23/17	WNV
Los Angeles	GRLA2323	692	Cx. quinquefasciatus	Los Angeles	50	GRVD	8/24/17	WNV
Los Angeles	GRLA2325	696	Cx. quinquefasciatus	Boyle Heights	50	GRVD	8/24/17	WNV
Los Angeles	GRLA2359	681	Cx. quinquefasciatus	Pico Rivera	35	GRVD	8/23/17	WNV
Los Angeles	GRLA2383	691	Cx. quinquefasciatus	Whittier	50	GRVD	8/23/17	WNV
Los Angeles	GRLA2416	5649	Cx. quinquefasciatus	Panorama City	50	GRVD	8/22/17	WNV
Los Angeles	GRLA2419	5650	Cx. quinquefasciatus	Panorama City	50	GRVD	8/22/17	WNV
Los Angeles	GRLA2465	5661	Cx. quinquefasciatus	Los Feliz	13	GRVD	8/23/17	WNV

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

Los Angeles	GRLA2500	5656	Cx. quinquefasciatus	Los Angeles	23	GRVD	8/23/17	WNV
Los Angeles	GRLA2503	5657	Cx. quinquefasciatus	Los Angeles	30	GRVD	8/23/17	WNV
Los Angeles	GRLA2511	5659	Cx. quinquefasciatus	Los Angeles	34	GRVD	8/23/17	WNV
Los Angeles	GRLA2512	5660	Cx. quinquefasciatus	Los Angeles	22	GRVD	8/23/17	WNV
Los Angeles	GRLA2550	5680	Cx. quinquefasciatus	Mission Hills	42	GRVD	8/25/17	WNV
Los Angeles	GRLA2555	5670	Cx. quinquefasciatus	Encino	16	GRVD	8/24/17	WNV
Los Angeles	GRLA2636	5668	Cx. quinquefasciatus	Van Nuys	26	GRVD	8/24/17	WNV
Los Angeles	GRLA2637	5648	Cx. quinquefasciatus	Van Nuys	45	GRVD	8/22/17	WNV
Los Angeles	GRLA2650	5647	Cx. quinquefasciatus	Encino	50	GRVD	8/22/17	WNV
Los Angeles	GRLA2651	5645	Cx. quinquefasciatus	Encino	50	GRVD	8/22/17	WNV
Los Angeles	GRLA2936	5665	Cx. quinquefasciatus	Burbank	30	GRVD	8/23/17	WNV
Los Angeles	GRLA2937	5664	Cx. quinquefasciatus	Burbank	38	GRVD	8/23/17	WNV
Los Angeles	GRLA3042	683	Cx. quinquefasciatus	Hacienda Heights	29	GRVD	8/23/17	WNV
Los Angeles	GRLA3052	689	Cx. quinquefasciatus	La Habra Heights	50	GRVD	8/23/17	WNV
Los Angeles	GRLA3053	688	Cx. quinquefasciatus	Hacienda Heights	37	GRVD	8/23/17	WNV
Los Angeles	GRLA3071	695	Cx. quinquefasciatus	East Los Angeles	50	GRVD	8/24/17	WNV
Los Angeles	GRLA3074	701	Cx. quinquefasciatus	Lincoln Heights	50	GRVD	8/24/17	WNV
Los Angeles	GRLA3078	5658	Cx. quinquefasciatus	Los Feliz	36	CO2	8/23/17	WNV
Los Angeles	GRLA3088	5679	Cx. quinquefasciatus	Pacoima	32	GRVD	8/25/17	WNV
Los Angeles	GRLA3133	5675	Cx. quinquefasciatus	San Fernando	13	GRVD	8/25/17	WNV
Los Angeles	LONG302	54	Cx. quinquefasciatus	Long Beach	37	GRVD	8/29/17	WNV
Los Angeles	LONG311	55	Cx. quinquefasciatus	Long beach	48	GRVD	8/29/17	WNV
Los Angeles	SGVA755	2052	Cx. quinquefasciatus	Rosemead	21	GRVD	8/24/17	WNV
Los Angeles	SGVA755	2053	Cx. quinquefasciatus	Rosemead	17	GRVD	8/24/17	WNV
Los Angeles	SGVA931	2037	Cx. quinquefasciatus	Azusa	15	GRVD	8/23/17	WNV
Los Angeles	SGVA931	2042	Cx. quinquefasciatus	Azusa	13	GRVD	8/23/17	WNV
Los Angeles	SGVA931	2045	Cx. quinquefasciatus	Azusa	20	GRVD	8/23/17	WNV
Los Angeles	SGVA971	2055	Cx. quinquefasciatus	Covina	25	GRVD	8/23/17	WNV
Los Angeles	SGVA972	2073	Cx. quinquefasciatus	Covina	25	GRVD	8/23/17	WNV
Los Angeles	SGVA972	2074	Cx. quinquefasciatus	Covina	25	GRVD	8/23/17	WNV
Los Angeles	SGVA973	2084	Cx. quinquefasciatus		13	GRVD	8/24/17	WNV
Madera	MADR1109	265	Cx. tarsalis	Madera	44	CO2	8/22/17	WNV
Madera	MADR1117	268	Cx. tarsalis	Firebaugh	50	CO2	8/21/17	SLEV
Madera	MADR1117	269	Cx. tarsalis	Firebaugh	50	CO2	8/21/17	WNV
Madera	MADR1117	270	Cx. tarsalis	Firebaugh	50	CO2	8/21/17	WNV
Madera	MADR1117	276	Cx. quinquefasciatus	Firebaugh	50	CO2	8/22/17	WNV
Madera	MADR178	290	Cx. quinquefasciatus	Madera	50	CO2	8/25/17	WNV
Madera	MADR208	279	Cx. quinquefasciatus	Madera	50	CO2	8/23/17	WNV
Madera	MADR298	286	Cx. quinquefasciatus	Chowchilla	25	CO2	8/25/17	WNV
Madera	MADR298	288	Cx. quinquefasciatus	Chowchilla	50	CO2	8/25/17	WNV
Madera	MADR334	291	Cx. tarsalis	Madera	19	CO2	8/25/17	WNV
Madera	MADR48	273	Cx. quinquefasciatus	Chowchilla	50	CO2	8/24/17	WNV
Madera	MADR952	266	Cx. tarsalis	Madera	21	CO2	8/22/17	WNV
Orange	ORCO1005	3564	Cx. quinquefasciatus	Buena Park	50	GRVD	8/23/17	WNV
Orange	ORCO1005	3571	Cx. quinquefasciatus	Buena Park	50	GRVD	8/23/17	WNV
Orange	ORCO1005	3618	Cx. quinquefasciatus	Buena Park	50	GRVD	8/24/17	WNV
Orange	ORCO1005	3725	Cx. quinquefasciatus	Buena Park	29	GRVD	8/29/17	WNV
Orange	ORCO1005	3727	Cx. quinquefasciatus	Buena Park	50	GRVD	8/29/17	WNV
Orange	ORCO1005	3728	Cx. quinquefasciatus	Buena Park	37	GRVD	8/29/17	WNV
Orange	ORCO1008	3626	Cx. quinquefasciatus	Fullerton	36	GRVD	8/24/17	WNV
Orange	ORCO1009	3624	Cx. quinquefasciatus	Garden Grove	50	GRVD	8/24/17	WNV
Orange	ORCO1011	3450	Cx. quinquefasciatus	La Habra	20	GRVD	8/18/17	WNV
Orange	ORCO1011	3451	Cx. quinquefasciatus	La Habra	25	GRVD	8/18/17	WNV
Orange	ORCO1011	3602	Cx. quinquefasciatus	La Habra	11	GRVD	8/24/17	WNV

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

Orange	ORCO1011	3603	Cx. quinquefasciatus	La Habra	26	GRVD	8/24/17	WNV
Orange	ORCO1011	3604	Cx. quinquefasciatus	La Habra	23	GRVD	8/24/17	WNV
Orange	ORCO1011	3606	Cx. quinquefasciatus	La Habra	16	GRVD	8/24/17	WNV
Orange	ORCO1011	3607	Cx. quinquefasciatus	La Habra	52	GRVD	8/24/17	WNV
Orange	ORCO1011	3609	Cx. quinquefasciatus	La Habra	50	GRVD	8/24/17	WNV
Orange	ORCO1011	3612	Cx. quinquefasciatus	La Habra	31	GRVD	8/24/17	WNV
Orange	ORCO1011	3613	Cx. quinquefasciatus	La Habra	19	GRVD	8/24/17	WNV
Orange	ORCO1011	3614	Cx. quinquefasciatus	La Habra	50	GRVD	8/24/17	WNV
Orange	ORCO1011	3617	Cx. quinquefasciatus	La Habra	7	GRVD	8/24/17	WNV
Orange	ORCO1011	3621	Cx. quinquefasciatus	La Habra	42	GRVD	8/24/17	WNV
Orange	ORCO1011	3721	Cx. quinquefasciatus	La Habra	18	CO2	8/29/17	WNV
Orange	ORCO1011	3726	Cx. quinquefasciatus	La Habra	38	GRVD	8/29/17	WNV
Orange	ORCO1026	3497	Cx. quinquefasciatus	Seal Beach	3	CO2	8/22/17	WNV
Orange	ORCO1027	3574	Cx. quinquefasciatus	La Palma	40	GRVD	8/23/17	WNV
Orange	ORCO1036	3598	Cx. quinquefasciatus	Buena Park	35	GRVD	8/24/17	WNV
Orange	ORCO1037	3599	Cx. quinquefasciatus	La Habra	33	GRVD	8/24/17	WNV
Orange	ORCO119	3701	Cx. quinquefasciatus	Santa Ana	50	CO2	8/29/17	WNV
Orange	ORCO119	3702	Cx. quinquefasciatus	Santa Ana	10	CO2	8/29/17	WNV
Orange	ORCO18	3483	Cx. stigmatosoma	Lake Forest	4	GRVD	8/22/17	WNV
Orange	ORCO198	3601	Cx. quinquefasciatus	La Habra	49	GRVD	8/24/17	WNV
Orange	ORCO2	3594	Cx. quinquefasciatus	Fullerton	40	GRVD	8/24/17	WNV
Orange	ORCO213	3488	Cx. quinquefasciatus	Garden Grove	14	CO2	8/22/17	WNV
Orange	ORCO216	3699	Cx. quinquefasciatus	Orange	21	CO2	8/29/17	WNV
Orange	ORCO217	3507	Cx. quinquefasciatus	Santa Ana	34	GRVD	8/22/17	WNV
Orange	ORCO217	3717	Cx. quinquefasciatus	Santa Ana	25	GRVD	8/29/17	WNV
Orange	ORCO218	3460	Cx. quinquefasciatus	Anaheim	37	GRVD	8/22/17	WNV
Orange	ORCO218	3510	Cx. quinquefasciatus	Anaheim	50	GRVD	8/23/17	WNV
Orange	ORCO218	3513	Cx. quinquefasciatus	Anaheim	50	GRVD	8/23/17	WNV
Orange	ORCO218	3531	Cx. quinquefasciatus	Anaheim	22	GRVD	8/23/17	WNV
Orange	ORCO218	3533	Cx. quinquefasciatus	Anaheim	44	GRVD	8/23/17	WNV
Orange	ORCO218	3636	Cx. quinquefasciatus	Anaheim	33	GRVD	8/25/17	WNV
Orange	ORCO218	3640	Cx. quinquefasciatus	Anaheim	23	GRVD	8/25/17	WNV
Orange	ORCO218	3643	Cx. quinquefasciatus	Anaheim	17	GRVD	8/25/17	WNV
Orange	ORCO218	3655	Cx. quinquefasciatus	Anaheim	50	GRVD	8/29/17	WNV
Orange	ORCO218	3656	Cx. quinquefasciatus	Anaheim	50	GRVD	8/29/17	WNV
Orange	ORCO218	3657	Cx. quinquefasciatus	Anaheim	50	GRVD	8/29/17	WNV
Orange	ORCO218	3658	Cx. quinquefasciatus	Anaheim	24	GRVD	8/29/17	WNV
Orange	ORCO218	3712	Cx. quinquefasciatus	Anaheim	50	GRVD	8/29/17	WNV
Orange	ORCO238	3492	Cx. quinquefasciatus	Anaheim	50	GRVD	8/22/17	WNV
Orange	ORCO238	3496	Cx. quinquefasciatus	Anaheim	36	GRVD	8/22/17	WNV
Orange	ORCO34	3600	Cx. quinquefasciatus	Brea	39	GRVD	8/24/17	WNV
Orange	ORCO36	3591	Cx. quinquefasciatus	Cypress	15	GRVD	8/24/17	WNV
Orange	ORCO41	3547	Cx. quinquefasciatus	Anaheim	41	GRVD	8/23/17	WNV
Orange	ORCO83	3464	Cx. quinquefasciatus	Costa Mesa	24	GRVD	8/22/17	WNV
Orange	ORCO83	3676	Cx. quinquefasciatus	Costa Mesa	35	GRVD	8/29/17	WNV
Placer	PLCR1113	1673	Cx. tarsalis	Pleasant Grove	50	CO2	8/29/17	WNV
Placer	PLCR1113	1679	Cx. tarsalis	Pleasant Grove	46	CO2	8/29/17	WNV
Placer	PLCR194232	1648	Cx. tarsalis		50	CO2	8/29/17	WNV
Placer	PLCR30	1646	Cx. tarsalis	Lincoln	46	CO2	8/29/17	WNV
Riverside	COAV123	3414	Cx. tarsalis	Mecca	28	CO2	8/29/17	WNV
Riverside	COAV34	3422	Cx. tarsalis	Mecca	7	CO2	8/29/17	WNV
Riverside	COAV48	3409	Cx. tarsalis	Mecca	47	CO2	8/29/17	SLEV
Riverside	COAV48	3409	Cx. tarsalis	Mecca	47	CO2	8/29/17	WNV
Sacramento	SAYO203037	5289	Cx. tarsalis	Elverta	32	CO2	8/29/17	WNV

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

Sacramento	SAYO213023	5244	Cx. pipiens	Sacramento	23	GRVD	8/29/17	WNV
Sacramento	SAYO232022	5145	Cx. tarsalis	Elk Grove	13	CO2	8/29/17	WNV
Sacramento	SAYO232022	5146	Cx. pipiens	Elk Grove	27	CO2	8/29/17	WNV
Sacramento	SAYO233009	5131	Cx. tarsalis	Elk Grove	46	CO2	8/29/17	WNV
Sacramento	SAYO233009	5133	Cx. pipiens	Elk Grove	11	CO2	8/29/17	WNV
Sacramento	SAYO242016	5148	Cx. tarsalis	Elk Grove	50	CO2	8/29/17	WNV
Sacramento	SAYO242016	5150	Cx. pipiens	Elk Grove	50	CO2	8/29/17	WNV
Sacramento	SAYO243040	5121	Cx. tarsalis	Elk Grove	9	CO2	8/29/17	WNV
Sacramento	SAYO245002	5009	Cx. tarsalis	Wilton	48	CO2	8/25/17	WNV
Sacramento	SAYO245010	5017	Cx. tarsalis	Wilton	50	CO2	8/25/17	WNV
Sacramento	SAYO271007	5026	Cx. pipiens	Isleton	17	CO2	8/25/17	WNV
San Joaquin	SJCM7000	2294	Cx. pipiens	Manteca	22	CO2	8/28/17	WNV
San Joaquin	SJCM8018	2246	Cx. pipiens	Stockton	12	CO2	8/28/17	WNV
San Joaquin	SJCM8029	2320	Cx. tarsalis	Farmington	20	CO2	8/30/17	WNV
San Joaquin	SJCM8029	2321	Cx. pipiens	Farmington	19	CO2	8/30/17	WNV
San Joaquin	SJCM8100	2277	Cx. pipiens	Tracy	50	CO2	8/28/17	WNV
San Joaquin	SJCM8160	2250	Cx. tarsalis	Lodi	50	CO2	8/28/17	WNV
San Joaquin	SJCM8160	2251	Cx. tarsalis	Lodi	50	CO2	8/28/17	WNV
San Joaquin	SJCM8161	2238	Cx. pipiens	Ripon	50	CO2	8/28/17	WNV
San Joaquin	SJCM8185	2216	Cx. tarsalis	Manteca	8	CO2	8/28/17	WNV
San Joaquin	SJCM8189	2325	Cx. pipiens	Acampo	50	CO2	8/30/17	WNV
San Joaquin	SJCM8189	2326	Cx. pipiens	Acampo	50	CO2	8/30/17	WNV
San Joaquin	SJCM8199	2221	Cx. tarsalis	Manteca	50	CO2	8/28/17	WNV
San Joaquin	SJCM8202	2296	Cx. tarsalis	Tracy	7	CO2	8/28/17	WNV
San Joaquin	SJCM8205	2311	Cx. pipiens	Farmington	17	CO2	8/30/17	WNV
San Joaquin	SJCM8206	2300	Cx. tarsalis	Lodi	50	CO2	8/29/17	WNV
San Joaquin	SJCM8209	2314	Cx. tarsalis	Lodi	28	CO2	8/30/17	WNV
San Joaquin	SJCM8210	2318	Cx. tarsalis	Escalon	16	CO2	8/30/17	WNV
San Joaquin	SJCM8222	2240	Cx. tarsalis	Stockton	50	CO2	8/28/17	WNV
San Joaquin	SJCM8222	2241	Cx. tarsalis	Stockton	50	CO2	8/28/17	WNV
Solano	SOLA18	129	Cx. tarsalis	Dixon	31	CO2	8/23/17	WNV
Stanislaus	TRLK1305	907	Cx. tarsalis	Patterson	50	CO2	8/29/17	WNV
Stanislaus	TRLK1305	909	Cx. pipiens	Patterson	50	CO2	8/29/17	WNV
Stanislaus	TRLK1616	886	Cx. tarsalis	Modesto	50	CO2	8/29/17	WNV
Stanislaus	TRLK1616	887	Cx. tarsalis	Modesto	28	CO2	8/29/17	WNV
Stanislaus	TRLK17109	896	Cx. pipiens	Ceres	47	CO2	8/29/17	WNV
Stanislaus	TRLK1712	892	Cx. tarsalis	Newman	50	CO2	8/29/17	SLEV
Stanislaus	TRLK17175	841	Cx. pipiens	Turlock	50	CO2	8/24/17	WNV
Stanislaus	TRLK17212	849	Cx. pipiens	Turlock	50	CO2	8/24/17	WNV
Stanislaus	TRLK17223	898	Cx. pipiens	Turlock	50	CO2	8/29/17	WNV
Stanislaus	TRLK2	913	Cx. tarsalis	Vernalis	50	CO2	8/29/17	WNV
Stanislaus	TRLK2	914	Cx. tarsalis	Vernalis	50	CO2	8/29/17	WNV
Stanislaus	TRLK307	912	Cx. tarsalis	Grayson	36	CO2	8/29/17	WNV
Stanislaus	TRLK312	863	Cx. tarsalis	Newman	50	CO2	8/29/17	SLEV
Stanislaus	TRLK312	867	Cx. tarsalis	Newman	50	CO2	8/29/17	SLEV
Stanislaus	TRLK312	867	Cx. tarsalis	Newman	50	CO2	8/29/17	WNV
Stanislaus	TRLK312	868	Cx. tarsalis	Newman	50	CO2	8/29/17	SLEV
Stanislaus	TRLK312	868	Cx. tarsalis	Newman	50	CO2	8/29/17	WNV
Stanislaus	TRLK312	870	Cx. tarsalis	Newman	50	CO2	8/29/17	WNV
Stanislaus	TRLK424	928	Cx. pipiens	Patterson	50	CO2	8/29/17	WNV
Stanislaus	TRLK437	923	Cx. tarsalis	Patterson	15	CO2	8/29/17	WNV
Stanislaus	TRLK548	878	Cx. tarsalis	Newman	49	CO2	8/29/17	WNV
Stanislaus	TRLK549	859	Cx. tarsalis	Newman	50	CO2	8/29/17	SLEV
Stanislaus	TRLK549	859	Cx. tarsalis	Newman	50	CO2	8/29/17	WNV

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

Stanislaus	TRLK806	910	Cx. tarsalis	Grayson	50	CO2	8/29/17	WNV
Stanislaus	TRLK806	911	Cx. tarsalis	Grayson	48	CO2	8/29/17	WNV
Stanislaus	TRLK9732	880	Cx. tarsalis	Newman	50	CO2	8/29/17	WNV
Stanislaus	TRLK9732	881	Cx. tarsalis	Newman	50	CO2	8/29/17	SLEV
Stanislaus	TRLK9768	900	Cx. tarsalis	Modesto	50	CO2	8/29/17	WNV
Sutter	SUYA70	437	Cx. tarsalis	Yuba City	28	CO2	8/30/17	WNV
Tulare	DLNO60	213	Cx. quinquefasciatus	Delano	50	CO2	8/24/17	WNV
Tulare	DLTA6404	2385	Cx. tarsalis	Dinuba	11	CO2	8/23/17	WNV
Tulare	DLTA6404	2386	Cx. quinquefasciatus	Dinuba	14	CO2	8/23/17	WNV
Tulare	DLTA6404	2389	Cx. tarsalis	Dinuba	28	CO2	8/23/17	WNV
Tulare	DLTA6404	2390	Cx. quinquefasciatus	Dinuba	14	CO2	8/23/17	WNV
Tulare	DLTA6408	2412	Cx. quinquefasciatus	Dinuba	12	GRVD	8/24/17	WNV
Tulare	DLTA8422	2401	Cx. quinquefasciatus	Goshen	22	GRVD	8/23/17	WNV
Tulare	DLTA8527	2426	Cx. quinquefasciatus	Visalia	19	GRVD	8/24/17	WNV
Tulare	DLTA8530	2384	Cx. quinquefasciatus	Visalia	23	GRVD	8/23/17	WNV
Tulare	DLTA8534	2407	Cx. quinquefasciatus	Visalia	27	GRVD	8/24/17	WNV
Yolo	SAYO103007	4978	Cx. tarsalis	Dunnigan	50	CO2	8/25/17	WNV
Yolo	SAYO103007	4979	Cx. tarsalis	Dunnigan	50	CO2	8/25/17	WNV
Yolo	SAYO103007	4982	Cx. tarsalis	Dunnigan	50	CO2	8/25/17	WNV
Yolo	SAYO135006	5208	Cx. tarsalis	Woodland	50	CO2	8/29/17	WNV
Yolo	SAYO135014	5214	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO135015	5222	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO135015	5223	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO135015	5225	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO135015	5226	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO145005	5193	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO145013	5156	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO145017	5183	Cx. pipiens	Davis	4	CO2	8/29/17	WNV
Yolo	SAYO145018	5172	Cx. tarsalis	Davis	8	CO2	8/29/17	WNV
Yolo	SAYO145028	5228	Cx. tarsalis	Davis	50	CO2	8/29/17	WNV
Yolo	SAYO145028	5231	Cx. tarsalis	Davis	40	CO2	8/29/17	WNV
Yolo	SAYO145028	5233	Cx. pipiens	Davis	2	GRVD	8/29/17	WNV
Yolo	SAYO146006	5162	Cx. tarsalis	Davis	26	CO2	8/29/17	WNV
Yolo	SAYO146006	5164	Cx. pipiens	Davis	4	GRVD	8/29/17	WNV

Sentinel Chickens

County	Site Code	City	Date Bled	Virus	Band 01	Band 02	Band 03	Band 04
Butte	BUCO0002	Oroville	8/22/2017	WNV	1127	1128	1132	
Butte	BUCO0003	Oroville	8/22/2017	WNV	1136			
Butte	BUCO0004	Gridley	8/22/2017	WNV	1140	1141	1168	1173
Butte	BUCO0005	Honcut	8/22/2017	WNV	1147	1148	1149	
Butte	BUCO0006	Chico	8/22/2017	WNV	1152	1153	1154	1155
Butte	BUCO0007	Chico	8/22/2017	WNV	1160			
Glenn	GLEN9700	Willows	8/23/2017	WNV	1265			
San Benito	SBVC0100	Hollister	8/23/2017	WNV	1464			
Sutter	SUYA0014	Sutter	8/24/2017	WNV	1747	1748		
Sutter	SUYA0030	Live Oak	8/24/2017	WNV	1751			
Sutter	SUYA0084	Yuba City	8/24/2017	WNV	1701			
Yuba	SUYA0007	Marysville	8/24/2017	WNV	1708	1712	1713	

California Arbovirus Surveillance Bulletin #22

Week 35 Friday, September 1, 2017

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.

Dead Birds

Oral swab samples from corvids are collected onto RNA preservation cards and tested by the UC Davis Arbovirus Research and Training laboratory (DART) for West Nile virus by the singleplex qRT-PCR Taqman assay and confirmed with a second primer set. Some local agencies test birds using the RAMP© test or conduct RT-PCR on tissue samples.

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 antibodies to West Nile, western equine encephalomyelitis, and St. Louis encephalitis viruses by EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

Mosquito Pools:

Mosquito pools submitted to DART are tested for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a multiplex qRT-PCR. Invasive *Aedes* mosquitoes (*Ae. aegypti* and *Ae. albopictus*) are also tested for chikungunya, dengue, and Zika viral RNA by a separate qRT-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.