

## California Arbovirus Surveillance Bulletin #14

Week 30 Friday, July 30, 2021



### Weekly Update

#### **Humans**

One human case of West Nile virus (WNV) illness was reported this week from Shasta County. **This is the first human WNV case reported from Shasta County this year.** In 2021, a total of four WNV human cases have been reported from four counties. Of the four cases, two (50%) had neuroinvasive illness and one (25%) was fatal. The median age of the cases was 51 years, and three (75%) were male. Dates of symptom onset ranged from June 4 to June 30. In addition to the four cases, two asymptomatic WNV infections have been reported from Kern (1) and San Bernardino (1) counties. At this time last year, four WNV cases had been reported from three counties.

#### **Dead Birds**

A total of 10 WNV positive dead birds were reported this week from 2 counties: Los Angeles (4), and Sacramento (6). In 2021, 94 WNV positive dead birds have been reported from 9 counties. At this time last year, 46 WNV positive dead birds had been reported from 9 counties.

#### **Mosquito Pools**

##### West Nile virus

A total of 149 WNV positive mosquito pools were reported this week from 17 counties: Butte (10), Fresno (18), Kern (8), Kings (3), Lake (1), Los Angeles (11), Madera (9), Placer (12), Sacramento (1), San Bernardino (1), San Joaquin (33), Shasta (2), Stanislaus (6), Sutter (5), Tulare (26), Yolo (1), and Yuba (2). **This is the first detection of WNV activity in Lake County this year.** In 2021, 563 WNV positive mosquito pools have been reported from 20 counties. At this time last year, 372 WNV positive mosquito pools had been reported from 20 counties.

##### St. Louis encephalitis virus

One mosquito pool from Imperial County was reported positive for St. Louis encephalitis virus (SLEV) this week. In 2021, three SLEV positive mosquito pools have been reported from Imperial County. At this time last year, 111 SLEV positive mosquito pools had been reported from 4 counties.

#### **Sentinel Chickens**

A total of 10 WNV positive chickens were reported this week from 3 counties: Butte (8), Merced (1), and Shasta (1). **These are the first WNV positive chickens reported from Butte, Merced, and Shasta counties this year.** In 2021, 10 WNV positive chickens have been reported from 3 counties. At this time last year, 10 WNV positive chickens had been reported from 2 counties.

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*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.maps.calsurv.org](http://www.maps.calsurv.org). For national information on WNV and other arboviruses, please visit the CDC websites: [www.cdc.gov](http://www.cdc.gov) and [www.cdc.gov/arbovet/maps/ADB\\_Diseases\\_Map/index.html](http://www.cdc.gov/arbovet/maps/ADB_Diseases_Map/index.html)

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<b>2020 &amp; 2021 YTD West Nile Virus Comparisons</b>		
	<b>2020</b>	<b>2021</b>
Total # Dead Bird Reports	2,907	3,414
# Positive Counties	23	22
# Human Cases	4	4
# Positive Dead Birds / # Tested	46 / 720	94 / 1,032
# Positive Mosquito Pools / # Tested	372 / 18,177	563 / 18,071
# Seroconversions / # Tested	10 / 3,081	10 / 3,093

<b>YTD WNV Activity by Element and County, 2021</b>					
<b>County</b>	<b>Humans</b>	<b>Horses</b>	<b>Dead Birds</b>	<b>Mosquito Pools</b>	<b>Sentinel Chickens</b>
Butte				41	8
Contra Costa				2	
Fresno	1	1		126	
Kern	1			28	
Kings				6	
Lake				1	
Los Angeles			16	60	
Madera				33	
Merced			1		1
Placer			2	20	
Riverside				2	
Sacramento			56	26	
San Bernardino			1	2	
San Joaquin			11	99	
San Luis Obispo	1				
Shasta	1			12	1
Sonoma			1	1	
Stanislaus			1	20	
Sutter				9	
Tulare			5	67	
Yolo				4	
Yuba				4	
<b>Totals</b>	<b>4</b>	<b>1</b>	<b>94</b>	<b>563</b>	<b>10</b>

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### TESTING SUMMARIES

#### Humans

		WNV	SLEV	WEEV
Human Cases	Week	1	0	0
	YTD	4	0	0

#### Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	54	10
	YTD	1,032	94

#### Sentinel Chickens

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	243	10	0	0
	YTD	3,093	10	0	0

#### Mosquitoes

		Positive / Total Tested						
Mosquito Pools		WNV	SLEV	WEEV	CHIK	DENV	ZIKA	
		Week	149 / 1,543	1 / 1,476	0 / 1,332	0 / 0	0 / 0	0 / 0
		YTD	563 / 18,071	3 / 16,946	0 / 15,719	0 / 234	0 / 234	0 / 234

### NEW POSITIVES

#### Dead Birds

County	Agency	City	Zip Code	Species	Date Reported	Virus
Los Angeles	San Gabriel Valley MVCD	Covina	91722	Unknown - Crow or Raven	7/23/2021	WNV
Los Angeles	San Gabriel Valley MVCD	South Pasadena	91030	California Scrub-Jay	7/22/2021	WNV
Los Angeles	San Gabriel Valley MVCD	South Pasadena	91030	Unknown - songbird	7/22/2021	WNV
Los Angeles	San Gabriel Valley MVCD	West Covina	91791	American Crow	7/26/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Citrus Heights	95621	American Crow	7/26/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Elk Grove	95758	Western Bluebird	7/20/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Orangevale	95662	California Scrub-Jay	7/26/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95818	American Crow	7/21/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95838	American Crow	7/22/2021	WNV
Sacramento	Sacramento-Yolo MVCD	Sacramento	95821	Northern Mockingbird	7/24/2021	WNV

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### Mosquito Pools

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Butte	BUCO118	244	Cx. tarsalis	Chico	50	CO2	7/20/21	WNV
Butte	BUCO118	245	Cx. tarsalis	Chico	50	CO2	7/20/21	WNV
Butte	BUCO118	246	Cx. tarsalis	Chico	50	CO2	7/20/21	WNV
Butte	BUCO118	247	Cx. tarsalis	Chico	50	CO2	7/20/21	WNV
Butte	BUCO124	243	Cx. tarsalis	Chico	50	CO2	7/20/21	WNV
Butte	BUCO141	237	Cx. tarsalis	Oroville	50	CO2	7/19/21	WNV
Butte	BUCO173	248	Cx. tarsalis	Chico	50	CO2	7/21/21	WNV
Butte	BUCO173	249	Cx. tarsalis	Chico	49	CO2	7/21/21	WNV
Butte	BUCO27	262	Cx. tarsalis	Gridley	50	CO2	7/21/21	WNV
Butte	BUCO68	250	Cx. tarsalis	Gridley	50	CO2	7/20/21	WNV
Fresno	CNSL1119	293	Cx. quinquefasciatus	Fresno	50	GRVD	7/23/21	WNV
Fresno	CNSL2138	286	Cx. stigmatosoma	Sanger	14	GRVD	7/21/21	WNV
Fresno	CNSL2586	291	Cx. quinquefasciatus	Sanger	50	GRVD	7/22/21	WNV
Fresno	CNSL8143	292	Cx. quinquefasciatus	Clovis	50	GRVD	7/23/21	WNV
Fresno	FRNO10	370	Cx. quinquefasciatus	Fresno	11	GRVD	7/27/21	WNV
Fresno	FRNO219	369	Cx. quinquefasciatus	Fresno	46	GRVD	7/27/21	WNV
Fresno	FRNO261	360	Cx. quinquefasciatus	Fresno	50	GRVD	7/22/21	WNV
Fresno	FRNO38	380	Cx. quinquefasciatus	Fresno	21	GRVD	7/28/21	WNV
Fresno	FRWS1101	188	Cx. tarsalis	Dos Palos	50	CO2	7/27/21	WNV
Fresno	FRWS1202	182	Cx. tarsalis	Dos Palos	50	CO2	7/27/21	WNV
Fresno	FRWS1202	184	Cx. tarsalis	Dos Palos	50	CO2	7/27/21	WNV
Fresno	FRWS3104	179	Cx. tarsalis	Firebaugh	34	CO2	7/27/21	WNV
Fresno	FRWS3201	193	Cx. quinquefasciatus	Firebaugh	14	OTHER	7/27/21	WNV
Fresno	FRWS400003	176	Cx. quinquefasciatus	Mendota	50	BGSENT	7/23/21	WNV
Fresno	FRWS4110	190	Cx. tarsalis	Mendota	50	CO2	7/27/21	WNV
Fresno	FRWS4110	191	Cx. tarsalis	Mendota	50	CO2	7/27/21	WNV
Fresno	FRWS5101	177	Cx. tarsalis	Mendota	50	CO2	7/27/21	WNV
Fresno	FRWS5110	178	Cx. tarsalis	Tranquillity	45	CO2	7/27/21	WNV
Imperial	IMPR85	244	Cx. tarsalis	Calexico	16	BGSENT	7/27/21	SLEV
Kern	DLNO21	76	Cx. tarsalis	Delano	50	CO2	7/22/21	WNV
Kern	KERN114	255	Cx. quinquefasciatus	Bakersfield	21	CO2	7/20/21	WNV
Kern	KERN115	274	Cx. tarsalis	Bakersfield	50	CO2	7/22/21	WNV
Kern	KERN12	270	Cx. quinquefasciatus	Bakersfield	50	GRVD	7/22/21	WNV
Kern	KERN3004	277	Cx. quinquefasciatus	Bakersfield	50	CO2	7/23/21	WNV
Kern	KERN3027	257	Cx. tarsalis	Arvin	47	CO2	7/20/21	WNV
Kern	KERN36	251	Cx. quinquefasciatus	Bakersfield	45	CO2	7/20/21	WNV
Kern	KERN45	266	Cx. quinquefasciatus	Buttonwillow	41	CO2	7/20/21	WNV
Kings	KNGS3067	53	Cx. tarsalis	Riverdale	47	CO2	7/20/21	WNV
Kings	KNGS3071	52	Cx. tarsalis	Riverdale	50	CO2	7/20/21	WNV
Kings	KNGS8033	70	Cx. tarsalis	Hanford	30	CO2	7/23/21	WNV
Lake	LAKE84	164	Cx. tarsalis	Upper Lake	24	CO2	7/21/21	WNV
Los Angeles	GRLA2500	5470	Cx. quinquefasciatus	Elysian Valley	50	GRVD	7/22/21	WNV
Los Angeles	SGVA1000	672	Cx. quinquefasciatus	Azusa	50	GRVD	7/28/21	WNV
Los Angeles	SGVA1022	670	Cx. quinquefasciatus	Azusa	48	GRVD	7/28/21	WNV
Los Angeles	SGVA1046	660	Cx. quinquefasciatus	La Verne	50	GRVD	7/28/21	WNV
Los Angeles	SGVA1230	658	Cx. quinquefasciatus	San Dimas	50	GRVD	7/28/21	WNV
Los Angeles	SGVA482	692	Cx. quinquefasciatus	Duarte	28	GRVD	7/28/21	WNV
Los Angeles	SGVA5	666	Cx. quinquefasciatus	Irwindale	39	GRVD	7/28/21	WNV
Los Angeles	SGVA509	673	Cx. quinquefasciatus	Glendora	50	GRVD	7/28/21	WNV
Los Angeles	SGVA62	671	Cx. quinquefasciatus	Covina	50	GRVD	7/28/21	WNV
Los Angeles	SGVA695	694	Cx. quinquefasciatus	Rosemead	50	GRVD	7/28/21	WNV

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Los Angeles	SGVA915	669	Cx. quinquefasciatus	San Dimas	50	GRVD	7/28/21	WNV
Madera	MADR1109	189	Cx. tarsalis	Madera	50	CO2	7/20/21	WNV
Madera	MADR1109	190	Cx. tarsalis	Madera	46	CO2	7/20/21	WNV
Madera	MADR208	186	Cx. tarsalis	Madera	50	CO2	7/20/21	WNV
Madera	MADR227	188	Cx. tarsalis	Madera	50	CO2	7/20/21	WNV
Madera	MADR603	195	Cx. tarsalis	Firebaugh	50	CO2	7/23/21	WNV
Madera	MADR692	182	Cx. tarsalis	Madera	46	CO2	7/15/21	WNV
Madera	MADR85	175	Cx. tarsalis	Madera	38	CO2	7/15/21	WNV
Madera	MADR85	176	Cx. quinquefasciatus	Madera	21	CO2	7/15/21	WNV
Madera	MADR889	179	Cx. tarsalis	Firebaugh	50	CO2	7/16/21	WNV
Placer	PLCR1113	940	Cx. tarsalis	Pleasant Grove	50	CO2	7/27/21	WNV
Placer	PLCR197802	934	Cx. tarsalis	Elverta	50	CO2	7/27/21	WNV
Placer	PLCR197802	935	Cx. tarsalis	Elverta	48	CO2	7/27/21	WNV
Placer	PLCR197802	978	Cx. tarsalis	Elverta	50	CO2	7/28/21	WNV
Placer	PLCR197802	979	Cx. tarsalis	Elverta	50	CO2	7/28/21	WNV
Placer	PLCR25	1005	Cx. tarsalis	Lincoln	50	CO2	7/28/21	WNV
Placer	PLCR25	1007	Cx. pipiens	Lincoln	2	CO2	7/28/21	WNV
Placer	PLCR30	1013	Cx. pipiens	Lincoln	50	CO2	7/28/21	WNV
Placer	PLCR525	943	Cx. pipiens	Lincoln	4	CO2	7/27/21	WNV
Placer	PLCR525	1020	Cx. pipiens	Lincoln	3	CO2	7/28/21	WNV
Placer	PLCR668	946	Cx. tarsalis	Elverta	30	CO2	7/27/21	WNV
Placer	PLCR668	1033	Cx. tarsalis	Elverta	50	CO2	7/28/21	WNV
Sacramento	SAYO232029	2669	Cx. pipiens	Elk Grove	3	GRVD	7/23/21	WNV
San Bernardino	WVAL252	929	Cx. quinquefasciatus	Chino Hills	5	GRVD	7/27/21	WNV
San Joaquin	SJCM8003	1172	Cx. pipiens	Tracy	12	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1064	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1065	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1066	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1067	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1068	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1069	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1070	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1071	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1072	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1073	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8018	1074	Cx. tarsalis	Stockton	29	CO2	7/27/21	WNV
San Joaquin	SJCM8041	1092	Cx. tarsalis	Lodi	8	CO2	7/27/21	WNV
San Joaquin	SJCM8076	1191	Cx. tarsalis	Stockton	24	CO2	7/29/21	WNV
San Joaquin	SJCM8079	1180	Cx. pipiens	Manteca	50	CO2	7/27/21	WNV
San Joaquin	SJCM8079	1181	Cx. pipiens	Manteca	50	CO2	7/27/21	WNV
San Joaquin	SJCM8111	1101	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8111	1102	Cx. tarsalis	Stockton	24	CO2	7/27/21	WNV
San Joaquin	SJCM8143	1085	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8143	1086	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8143	1087	Cx. tarsalis	Stockton	33	CO2	7/27/21	WNV
San Joaquin	SJCM8199	1165	Cx. tarsalis	Manteca	50	CO2	7/27/21	WNV
San Joaquin	SJCM8199	1167	Cx. pipiens	Manteca	31	CO2	7/27/21	WNV
San Joaquin	SJCM8200	1199	Cx. tarsalis	Lodi	38	CO2	7/29/21	WNV
San Joaquin	SJCM8208	1198	Cx. tarsalis	Lodi	54	CO2	7/29/21	WNV
San Joaquin	SJCM8209	1201	Cx. pipiens	Lodi	35	CO2	7/29/21	WNV
San Joaquin	SJCM8233	1093	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8233	1094	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8233	1095	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8233	1096	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV

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San Joaquin	SJCM8233	1097	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8233	1098	Cx. tarsalis	Stockton	50	CO2	7/27/21	WNV
San Joaquin	SJCM8233	1099	Cx. tarsalis	Stockton	48	CO2	7/27/21	WNV
Shasta	SHAS110	401	Cx. tarsalis	Redding	26	CO2	7/28/21	WNV
Shasta	SHAS410	375	Cx. tarsalis	Cottonwood	35	CO2	7/22/21	WNV
Stanislaus	EAST2014	21165	Cx. pipiens	Modesto	29	GRVD	7/20/21	WNV
Stanislaus	EAST2021	21156	Cx. pipiens	Modesto	31	GRVD	7/14/21	WNV
Stanislaus	EAST2023	21173	Cx. pipiens	Modesto	22	CO2	7/21/21	WNV
Stanislaus	EAST2023	21179	Cx. pipiens	Modesto	25	GRVD	7/21/21	WNV
Stanislaus	TRLK2	525	Cx. tarsalis	Vernalis	40	CO2	7/27/21	WNV
Stanislaus	TRLK806	491	Cx. pipiens	Grayson	50	CO2	7/27/21	WNV
Sutter	SUYA15	254	Cx. tarsalis	Robbins	50	CO2	7/27/21	WNV
Sutter	SUYA24	244	Cx. tarsalis	Yuba City	32	REST	7/26/21	WNV
Sutter	SUYA63	243	Cx. tarsalis	Live Oak	45	REST	7/26/21	WNV
Sutter	SUYA71	259	Cx. tarsalis	Meridian	40	REST	7/27/21	WNV
Sutter	SUYA84	246	Cx. tarsalis	Yuba City	21	CO2	7/27/21	WNV
Tulare	DLNO16	73	Cx. quinquefasciatus	Earlimart	45	BGSENT	7/22/21	WNV
Tulare	DLNO8	78	Cx. quinquefasciatus	Delano	50	CO2	7/22/21	WNV
Tulare	DLTA5	967	Cx. stigmatosoma	Dinuba	50	CO2	7/29/21	WNV
Tulare	DLTA741744	850	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	852	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	855	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	860	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	861	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	862	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	863	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	865	Cx. quinquefasciatus	Monson	50	CO2	7/27/21	WNV
Tulare	DLTA741744	868	Cx. tarsalis	Monson	37	CO2	7/27/21	WNV
Tulare	DLTA8419	893	Cx. quinquefasciatus	Goshen	24	GRVD	7/28/21	WNV
Tulare	DLTA8534	818	Cx. quinquefasciatus	Visalia	19	GRVD	7/22/21	WNV
Tulare	DLTA8631	783	Cx. quinquefasciatus	Farmersville	14	GRVD	7/22/21	WNV
Tulare	TLRE192434	103	Cx. quinquefasciatus	Tulare	46	GRVD	7/21/21	WNV
Tulare	TLRE192436	107	Cx. quinquefasciatus	Tulare	24	GRVD	7/22/21	WNV
Tulare	TLRE192531	95	Cx. quinquefasciatus	Tulare	45	GRVD	7/21/21	WNV
Tulare	TLRE202401	94	Cx. quinquefasciatus	Tulare	23	GRVD	7/21/21	WNV
Tulare	TLRE202403	97	Cx. quinquefasciatus	Tulare	32	GRVD	7/21/21	WNV
Tulare	TLRE202403	109	Cx. quinquefasciatus	Tulare	50	GRVD	7/22/21	WNV
Tulare	TLRE202403	120	Cx. quinquefasciatus	Tulare	25	GRVD	7/23/21	WNV
Tulare	TLRE202411	112	Cx. quinquefasciatus	Tulare	43	GRVD	7/23/21	WNV
Tulare	TLRE202415	114	Cx. quinquefasciatus	Tulare	50	GRVD	7/23/21	WNV
Tulare	TLRE202424	92	Cx. quinquefasciatus	Tulare	31	GRVD	7/22/21	WNV
Tulare	TLRE202506	88	Cx. quinquefasciatus	Tulare	18	GRVD	7/22/21	WNV
Yolo	SAYO115008	2696	Cx. tarsalis	Woodland	50	CO2	7/27/21	WNV
Yuba	SUYA39	273	Cx. tarsalis	Marysville	50	CO2	7/28/21	WNV
Yuba	SUYA39	274	Cx. tarsalis	Marysville	30	CO2	7/28/21	WNV

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### Sentinel Chickens

County	Site Code	Nearest City	Date Bled	Virus	Band 01	Band 02	Band 03	Band 04	Band 05
Butte	BUCO0003	Oroville	7/20/2021	WNV	2549	2550	2553		
Butte	BUCO0006	Chico	7/20/2021	WNV	2566	2567	2569	2571	2589
Merced	MERC0001	Merced	7/23/2021	WNV	1424				
Shasta	SHAS5038		7/23/2021	WNV	1165				

## 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 with a plaque reduction neutralization test (PRNT).

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### Dead Birds

Oral swab samples collected from bird carcasses are tested at the UC Davis Arbovirus Research and Training laboratory (DART) or at a local agency for West Nile virus by RT-qPCR.

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### Sentinel Chickens:

Dried blood spot samples from sentinel chickens are tested at the California Department of Public Health Vector-Borne Disease Laboratory for IgG antibodies to West Nile, St. Louis encephalitis, and western equine encephalomyelitis viruses by an EIA. Positive samples are confirmed by IFA, western-blot, or PRNT.

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### Mosquito Pools:

Mosquito pools are tested at DART or at a local agency for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a multiplex RT-qPCR. Invasive *Aedes* mosquitoes (*Ae. aegypti* and *Ae. albopictus*) are also tested at DART for chikungunya, dengue, and Zika viral RNA by a separate RT-qPCR.

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