

California Arbovirus Surveillance Bulletin #14

Week 22 Friday, June 5, 2015



Weekly Update

Humans

No human infections have been reported in 2015.

Dead Birds

Four West Nile virus (WNV) positive dead birds were reported this week from Alameda (1), Riverside (1), Santa Clara (1), and Tulare (1) counties. **This is the first WNV positive dead bird from Tulare County this year.** To date this year, 53 birds have tested positive for WNV from nine counties. At this time last year, 52 WNV positive birds had been detected in eleven counties.

Mosquito Pools

A total of 26 WNV positive mosquito pools were reported this week from the following five counties: Kings (4), Orange (1), Riverside (4), San Diego (1), and Tulare (16). **This is the first detection of WNV activity in Kings County in 2015.** To date this year, 66 WNV positive mosquito pools have been reported from seven counties. At this time last year, 23 WNV positive mosquito pools had been detected from six counties.

Sentinel Chickens

No seroconversions have been reported in 2015.

2014 & 2015 YTD West Nile Virus Comparisons		
	2014	2015
Total # Dead Bird Reports	2,583	3,521
# Positive Counties	13	13
# Human Cases	0	0
# Positive Dead Birds / # Tested	52 / 414	53 / 738
# Positive Mosquito Pools / # Tested	23 / 4,104	66 / 6,252
# Seroconversions / # Tested	1 / 3,329	0 / 3,045

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 #14

Week 22 Friday, June 5, 2015

YTD Activity by Element and County, 2015				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Alameda		2		
Kings			4	
Los Angeles			2	
Orange			3	
Riverside		2	16	
San Diego		28	2	
San Mateo		2		
Santa Barbara			1	
Santa Clara		14		
Solano		1		
Sonoma		2		
Stanislaus		1		
Tulare		1	38	
Totals	0	53	66	0

TESTING SUMMARIES

Humans

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

Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	176	4
	YTD	738	53

Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	530	0	0	0
	YTD	3,045	0	0	0
Mosquito Pools	Week	1,320	26	0	0
	YTD	6,252	66	0	0

NEW POSITIVES

California Arbovirus Surveillance Bulletin #14

Week 22 Friday, June 5, 2015

Dead Birds

County	Agency	City	Zip	Species	Reported	Virus
Alameda	Alameda Co MAD	Fremont	94536	American Crow	6/3/2015	WNV
Riverside	Northwest MVCD	Norco	92860	American Crow	5/27/2015	WNV
Santa Clara	Santa Clara Co VCD	Mountain View	94040	American Crow	5/27/2015	WNV
Tulare	Delta VCD	Visalia	93292	American Crow	5/29/2015	WNV

Mosquitoes

County	Site Code	Pool #	Species	City	# in Pool	Trap Type	Collected	Virus
Kings	KNGS3046	31	Cx. pipiens	Hanford	31	CO2	5/27/2015	WNV
Kings	KNGS3102	28	Cx. tarsalis	Armona	23	CO2	5/27/2015	WNV
Kings	KNGS4401	45	Cx. pipiens	Lemoore	40	BGSENT	5/28/2015	WNV
Kings	KNGS8002	29	Cx. tarsalis	Armona	33	CO2	5/27/2015	WNV
Orange	ORCO205	1117	Cx. quinquefasciatus	Tustin	29	GRVD	5/27/2015	WNV
Riverside	COAV3112	1560	Cx. quinquefasciatus	Indio	50	GRVD	6/4/2015	WNV
Riverside	COAV3112	1561	Cx. quinquefasciatus	Indio	50	GRVD	6/4/2015	WNV
Riverside	COAV3112	1562	Cx. quinquefasciatus	Indio	35	GRVD	6/4/2015	WNV
Riverside	COAV3112	1563	Cx. quinquefasciatus	Indio	50	GRVD	6/4/2015	WNV
San Diego	SAND467	45	Cx. quinquefasciatus	Lemon Grove	4	CO2	5/21/2015	WNV
Tulare	DLTA7316	248	Cx. quinquefasciatus	Traver	37	GRVD	5/29/2015	WNV
Tulare	DLTA9401	291	Cx. quinquefasciatus	Visalia	23	GRVD	6/4/2015	WNV
Tulare	DLTA9401	295	Cx. quinquefasciatus	Visalia	19	GRVD	6/4/2015	WNV
Tulare	DLTA9401	298	Cx. quinquefasciatus	Visalia	24	GRVD	6/4/2015	WNV
Tulare	DLTA9402	286	Cx. quinquefasciatus	Visalia	31	GRVD	6/4/2015	WNV
Tulare	DLTA9402	290	Cx. quinquefasciatus	Visalia	41	GRVD	6/4/2015	WNV
Tulare	DLTA9503	247	Cx. quinquefasciatus	Visalia	13	GRVD	5/29/2015	WNV
Tulare	DLTA9505	250	Cx. quinquefasciatus	Visalia	16	GRVD	5/29/2015	WNV
Tulare	DLTA9505	251	Cx. quinquefasciatus	Visalia	21	GRVD	5/29/2015	WNV
Tulare	DLTA9505	252	Cx. quinquefasciatus	Visalia	14	GRVD	5/29/2015	WNV
Tulare	DLTA9505	253	Cx. quinquefasciatus	Visalia	50	GRVD	5/29/2015	WNV
Tulare	DLTA9505	254	Cx. quinquefasciatus	Visalia	48	GRVD	5/29/2015	WNV
Tulare	DLTA9505	255	Cx. quinquefasciatus	Visalia	12	GRVD	5/29/2015	WNV
Tulare	DLTA9505	256	Cx. quinquefasciatus	Visalia	49	GRVD	5/29/2015	WNV
Tulare	DLTA9505	257	Cx. quinquefasciatus	Visalia	15	GRVD	5/29/2015	WNV
Tulare	KNGS3052	30	Cx. pipiens	Waukena	42	CO2	5/27/2015	WNV

California Arbovirus Surveillance Bulletin #14

Week 22 Friday, June 5, 2015

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 Center for Vectorborne Diseases (CVEC) for West Nile virus by the singleplex RT-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 the presence of 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 are submitted to CVEC and screened for West Nile, western equine encephalomyelitis, and St. Louis encephalitis viral RNA using a Taqman multiplex RT-PCR. CVEC no longer performs confirmatory 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.