

# California Arbovirus Surveillance Bulletin #16

Week 23 Friday, June 6, 2014



## WEEKLY UPDATE

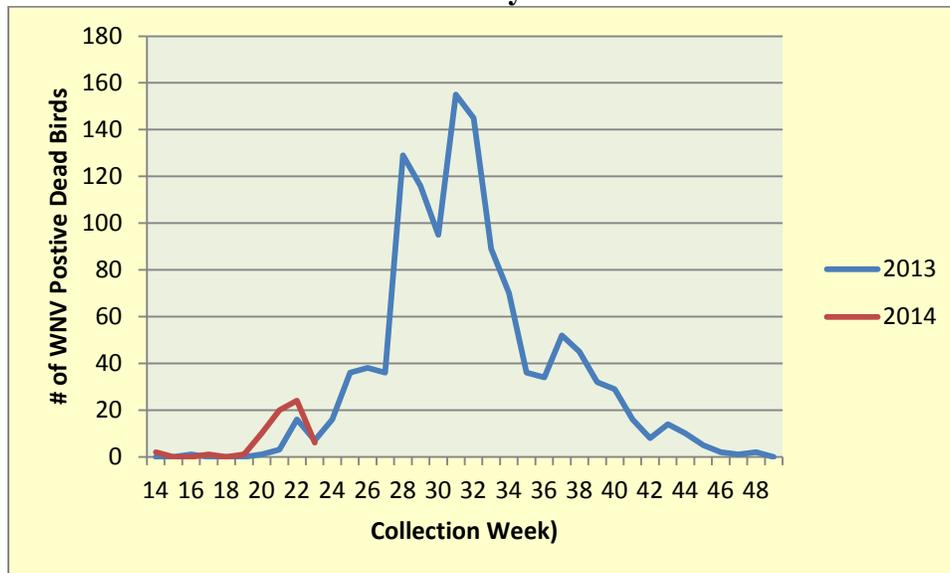
### Humans

No human cases or asymptomatic infections have been reported in 2014. At this time last year, a human case of West Nile virus (WNV) illness had been reported from Sacramento County.

### Dead Birds

A total of 22 WNV positive dead birds were reported this week from the following six counties: Orange (2), Sacramento (1), Santa Clara (11), Solano (1), Stanislaus (1), and Tulare (6). To date this year, 74 birds have tested positive for WNV from 11 counties. At this time last year, 10 WNV positive dead birds had been detected in seven counties.

**YTD WNV Activity in Dead Birds**



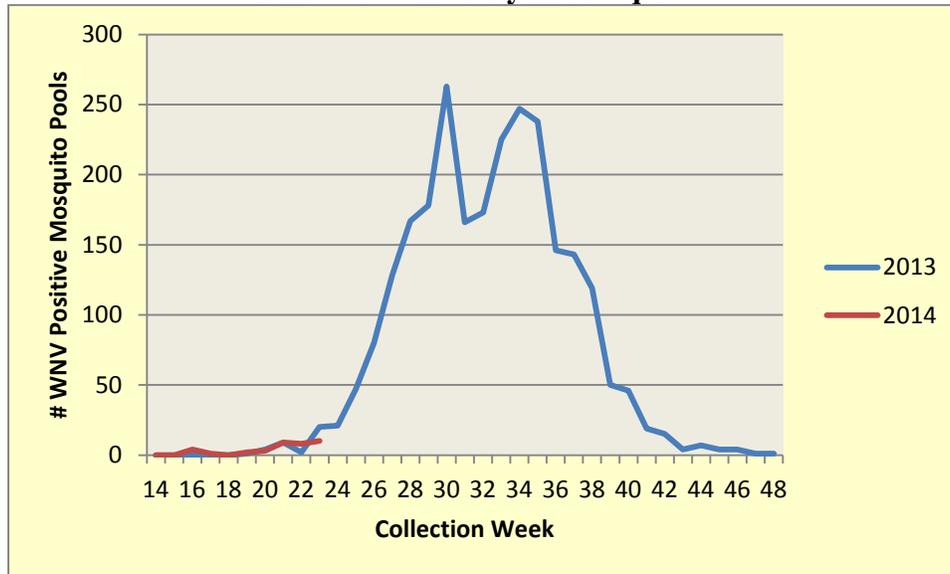
## California Arbovirus Surveillance Bulletin #16

Week 23 Friday, June 6, 2014

### Mosquito Pools

This week, 14 WNV positive mosquito pools were reported from the following seven counties: Fresno (1), Lake (2), Sacramento (2), San Joaquin (1), Sonoma (1), Stanislaus (1), and Tulare (6). **These are the first WNV positive mosquito pools reported from Fresno, Lake, Sacramento, and Stanislaus counties this year.** In 2014, 37 mosquito pools from 10 counties have tested positive for WNV. At this time last year, 21 WNV positive mosquito pools had been reported from six counties.

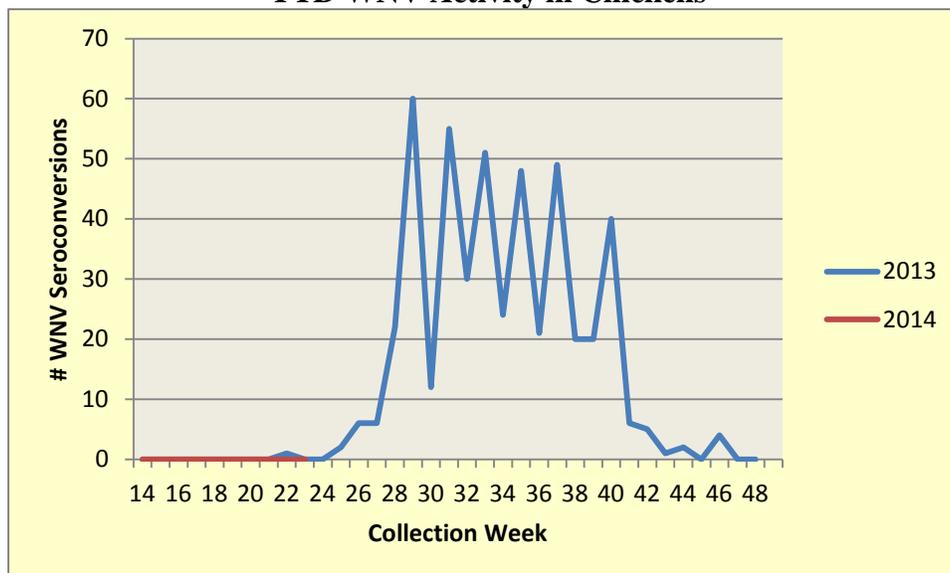
YTD WNV Activity in Mosquitoes



### Sentinel Chickens

No seroconversions were reported this week. To date this year, one WNV positive chicken has been reported from Los Angeles County. At this time last year, one WNV seroconversion had been detected from Los Angeles County.

YTD WNV Activity in Chickens



## California Arbovirus Surveillance Bulletin #16

Week 23 Friday, June 6, 2014

YTD Activity by Element and County, 2014				
County	Humans	Dead Birds	Mosquito Pools	Sentinel Chickens
Contra Costa		2		
Fresno		1	1	
Lake		3	2	
Los Angeles		2	1	1
Orange		5		
Sacramento		2	2	
San Bernardino			7	
San Joaquin		1	3	
Santa Clara		41	4	
Solano		3		
Sonoma			2	
Stanislaus		3	1	
Tulare		11	14	
<b>Totals</b>	<b>0</b>	<b>74</b>	<b>37</b>	<b>1</b>

### TESTING SUMMARIES

#### Humans

		WNV		WEEV		SLEV	
		Local	Imported	Local	Imported	Local	Imported
Human Cases	Week	0	0	0	0	0	0
	YTD	0	0	0	0	0	0

#### Dead Birds

		Number Tested	WNV Positive
Dead Birds	Week	91	22
	YTD	501	74

#### Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	566	0	0	0
	YTD	3,895	1	0	0
Mosquito Pools	Week	932	14	0	0
	YTD	5,036	37	0	0

#### 2013 & 2014 YTD West Nile Virus Comparisons

	2013	2014
Total # Dead Bird Reports	3,839	2,958
# Positive Counties	9	13
# Human Cases	1	0
# Positive Dead Birds / # Tested	10 / 691	74 / 501
# Positive Mosquito Pools / # Tested	21 / 8,504	37 / 5,036
# Seroconversions / # Tested	1 / 4,112	1 / 3,859

## California Arbovirus Surveillance Bulletin #16

Week 23 Friday, June 6, 2014

### NEW POSITIVES

#### Dead Birds

County	Agency	City	Zip	Species	Reported	Virus	Method
Orange	Orange Co VCD	Anaheim	92802	American Crow	5/28/2014	WNV	RT-PCR
Orange	Orange Co VCD	Anaheim	92804	American Crow	5/28/2014	WNV	RT-PCR
Sacramento	Sacramento-Yolo MVCD	Sacramento	95822	American Crow	6/2/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	Mountain View	94041	American Crow	5/30/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	Sunnyvale	94087	American Crow	6/2/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	Sunnyvale	94087	American Crow	6/2/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	Sunnyvale	94087	American Crow	6/2/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	Sunnyvale	94087	American Crow	5/30/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95008	American Crow	5/29/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95124	American Crow	5/29/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95124	American Crow	5/30/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95125	American Crow	5/29/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95125	American Crow	6/2/2014	WNV	RT-PCR
Santa Clara	Santa Clara Co VCD	San Jose	95128	American Crow	5/29/2014	WNV	RT-PCR
Solano	Solano Co MAD	Dixon	95620	American Crow	6/1/2014	WNV	RAMP
Stanislaus	Turlock MAD	Turlock	95382	American Crow	5/29/2014	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93277	House Sparrow	5/30/2014	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93277	Western Scrub-Jay	5/23/2014	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93277	Western Scrub-Jay	5/23/2014	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93277	American Crow	5/29/2014	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93291	Western Scrub-Jay	5/30/2014	WNV	RT-PCR
Tulare	Delta VCD	Visalia	93291	American Crow	5/28/2014	WNV	RT-PCR

#### Mosquitoes

County	Site Code	Pool #	Species	City	# in Pool	Trap	Collected	Virus	Method
Fresno	CNSL1062	14	Cx. quinquefasciatus	Fresno	32	GRVD	6/3/2014	WNV	RTPCR
Lake	LAKE0093	68	Cx. tarsalis		39	CO2	6/3/2014	WNV	RTPCR
Lake	LAKE0094	63	Cx. tarsalis		50	CO2	6/3/2014	WNV	RTPCR
Sacramento	SAYO223047	968	Cx. tarsalis	Sacramento	41	CO2	6/3/2014	WNV	RTPCR
Sacramento	SAYO223047	969	Cx. tarsalis	Sacramento	9	GRVD	6/3/14	WNV	RTPCR
San Joaquin	SJCM8185	323	Cx. tarsalis	Manteca	15	CO2	5/30/14	WNV	RTPCR
Sonoma	MARN1137	230	Cx. tarsalis	Petaluma	27	CO2	6/3/2014	WNV	RTPCR
Stanislaus	TRLK1310	71	Cx. tarsalis	Hughson	45	CO2	6/5/14	WNV	RTPCR
Tulare	DLTA8426	182	Cx. quinquefasciatus	Visalia	11	GRVD	6/4/2014	WNV	RTPCR
Tulare	DLTA8434	184	Cx. quinquefasciatus	Visalia	18	GRVD	6/4/2014	WNV	RTPCR
Tulare	DLTA8531	136	Cx. quinquefasciatus	Visalia	31	GRVD	5/28/2014	WNV	RTPCR
Tulare	DLTA8532	137	Cx. quinquefasciatus	Visalia	36	GRVD	5/28/2014	WNV	RTPCR
Tulare	DLTA8532	138	Cx. quinquefasciatus	Visalia	8	GRVD	5/28/2014	WNV	RTPCR
Tulare	DLTA9506	186	Cx. quinquefasciatus	Visalia	11	GRVD	6/4/2014	WNV	RTPCR

## California Arbovirus Surveillance Bulletin #16

Week 23 Friday, June 6, 2014

### 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 RNase 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.

---

**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 (WEEV), and St. Louis encephalitis (SLEV) 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 WEEV, SLEV, 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](mailto:tina.feiszli@cdph.ca.gov).*

*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.calsurv.org](http://www.calsurv.org). For national information on WNV and other arboviruses, please visit the CDC website, [www.cdc.gov](http://www.cdc.gov), and the USGS website, [www.westnilemaps.usgs.gov](http://www.westnilemaps.usgs.gov)*