## California Arbovirus Surveillance Bulletin #5

Week 13 Friday, April 3, 2015



# **Weekly Update**

## Humans

No human infections have been reported in 2015.

# **Dead Birds**

No positive dead birds were reported this week. To date this year, four birds have tested positive for WNV from Alameda (1) and Santa Clara (3) counties. At this time last year, eight WNV positive birds had been detected in three counties.

# **Mosquito Pools**

No positive mosquito pools were reported this week. To date this year, one WNV positive mosquito pool has been reported from Los Angeles County.

# **Sentinel Chickens**

No seroconversions have been reported in 2015.

2014 & 2015 YTD West Nile Virus Comparisons				
	2014	2015		
Total # Dead Bird Reports	831	1,518		
# Positive Counties	3	3		
# Human Cases	0	0		
# Positive Dead Birds / # Tested	8 / 76	4 / 168		
# Positive Mosquito Pools / # Tested	0 / 128	1 / 630		
# Seroconversions / # Tested	1 / 209	0 / 143		

Website Information: For updated information on WNV in California, please visit the California WNV website, <a href="https://www.westnile.ca.gov">www.westnile.ca.gov</a>, or the California Vectorborne Disease Surveillance System website, <a href="https://www.calsurv.org">www.calsurv.org</a>. For national information on WNV and other arboviruses, please visit the CDC website, <a href="https://www.cdc.gov">www.cdc.gov</a>, and the USGS website, <a href="https://www.westnilemaps.usgs.gov">www.westnilemaps.usgs.gov</a>

## California Arbovirus Surveillance Bulletin #5

Week 13 Friday, April 3, 2015

# **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	9	0
	YTD	168	4

## Chickens & Mosquitoes

		Number Tested	WNV Positive	SLEV Positive	WEEV Positive
Chicken Sera	Week	0	0	0	0
	YTD	143	0	0	0
Mosquito Pools	Week	76	0	0	0
	YTD	630	1	0	0

# **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: <a href="mailto:tina.feiszli@cdph.ca.gov">tina.feiszli@cdph.ca.gov</a>.