

California Arbovirus Surveillance Bulletin #6

Week 19 Friday, May 11, 2018



Weekly Update

Humans

No human infections have been reported in 2018. At this time last year, 1 human case of West Nile virus (WNV) illness had been reported from Kings County.

Dead Birds

No positive dead birds were reported this week. In 2018, a total of 4 WNV positive dead birds have been reported from 2 counties. At this time last year, 3 WNV positive dead birds had been reported from 3 counties.

Mosquito Pools

No positive mosquito pools were reported this week. In 2018, 1 WNV positive mosquito pool has been reported from 1 county. At this time last year, 5 WNV positive mosquito pools had been reported from 3 counties.

Sentinel Chickens

No seroconversions have been reported in 2018.

| 2017 & 2018 YTD West Nile Virus Comparisons | | |
|---|-----------|-----------|
| | 2017 | 2018 |
| Total # Dead Bird Reports | 1,388 | 1,042 |
| # Positive Counties | 7 | 3 |
| # Human Cases | 1 | 0 |
| # Positive Dead Birds / # Tested | 3 / 174 | 4 / 194 |
| # Positive Mosquito Pools / # Tested | 5 / 6,276 | 1 / 2,692 |
| # Seroconversions / # Tested | 0 / 1,061 | 0 / 1,052 |

Website Information: For updated information on WNV in California, please visit the California WNV website, www.westnile.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 websites: www.cdc.gov and https://wwwn.cdc.gov/arbovet/maps/ADB_Diseases_Map/index.html

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| YTD WNV Activity by Element and County, 2018 | | | | |
|--|----------|------------|----------------|-------------------|
| County | Humans | Dead Birds | Mosquito Pools | Sentinel Chickens |
| San Bernardino | | | 1 | |
| San Mateo | | 2 | | |
| Santa Clara | | 2 | | |
| Totals | 0 | 4 | 1 | 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 | 41 | 0 |
| | YTD | 194 | 4 |

Chickens

| | | Number Tested | WNV Positive | SLEV Positive | WEEV Positive |
|--------------|------|---------------|--------------|---------------|---------------|
| Chicken Sera | Week | 202 | 0 | 0 | 0 |
| | YTD | 1,052 | 0 | 0 | 0 |

Mosquitoes

| | | Positive / Total Tested | | | | | |
|----------------|------|-------------------------|-----------|-----------|--------|--------|--------|
| | | WNV | SLEV | WEEV | CHIK | DENV | ZIKA |
| Mosquito Pools | Week | 0 / 642 | 0 / 568 | 0 / 642 | 0 / 8 | 0 / 8 | 0 / 8 |
| | YTD | 1 / 2,692 | 0 / 2,618 | 0 / 2,692 | 0 / 43 | 0 / 43 | 0 / 43 |

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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).

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.

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.

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.

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.