

California Arbovirus Surveillance Bulletin # 3

Week 9 Monday, March 8, 2010

Weekly Summary

WEEKLY COMMENTS



Humans

No human cases have been reported in 2010.

Horses

No equine cases have been reported in 2010.

Dead Birds & Tree Squirrels

A presumptive West Nile virus positive dead bird has been reported from Los Angeles County. An American crow, reported dead on 2/28/10, tested positive for WNV by VecTest; confirmatory testing is being conducted at CVEC this week. At this time last year, one WNV positive dead bird had been reported from San Diego County.

Reminder: Statewide testing of dead birds and tree squirrels will resume Monday, March 15th and all zip codes will be re-opened unless otherwise requested. The WNV and Dead Bird Hotline will have live operators available 7 days a week from 8am to 5pm. Agencies can reach the hotline directly by dialing 510-412-4601 and 510-412-4602, but should continue to direct calls from the public to the toll free number (1-877-WNV-BIRD).

Mosquito Pools

No positive mosquito pools have been reported in 2010.

Sentinel Chickens

No seroconversions have been reported in 2010.

At this time last year, two WNV seroconversions in chickens from Los Angeles County had been detected.

| 2009 & 2010 West Nile Virus Comparisons | | |
|---|-------------------|---------|
| | 2009 [^] | 2010 |
| Total # Dead Bird Reports | 971 | 502 |
| # Positive Counties | 2 | 0 |
| # Human Cases | 0 | 0 |
| # Horse Cases | 0 | 0 |
| # Positive Dead Birds / # Tested | 1 / 54 | 0 / 48 |
| # Positive Mosquito Pools / # Tested | 0 / 175 | 0 / 29 |
| # Seroconversions / # Tested | 2 / 60 | 0 / 236 |
| # Positive Squirrels / # Tested | 0 / 0 | 0 / 0 |

[^]2009 data for week 10 not available. Numbers reflect week 8.

California Arbovirus Surveillance Bulletin # 3

Week 9 Monday, March 8, 2010

2010 WEEKLY TEST SUMMARIES

Human & Horse Cases

| | | Number Tested | WNV | | WEE | | SLE | | Other | |
|----------------|------|---------------|----------|-------|----------|-------|----------|-------|----------|-------|
| | | | Imported | Local | Imported | Local | Imported | Local | Imported | Local |
| Humans Tested* | Week | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | YTD | 123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Horses Tested | Week | 0 | -- | -- | 0 | 0 | 0 | 0 | 0 | 0 |
| | YTD | 0 | -- | -- | 0 | 0 | 0 | 0 | 0 | 0 |

Dead Birds & Tree Squirrels

| | | Number Tested | WNV Positive |
|----------------|------|---------------|--------------|
| Dead Birds | Week | 15 | 0 |
| | YTD | 48 | 0 |
| Tree Squirrels | Week | 0 | -- |
| | YTD | 0 | -- |

Sentinel Chickens & Mosquito Pools

| | | Number Tested | WNV Positive | SLE Positive | WEE Positive |
|------------------------|------|---------------|--------------|--------------|--------------|
| Chicken Sera | Week | 0 | 0 | 0 | 0 |
| | YTD | 236 | 0 | 0 | 0 |
| Mosquito Pools: RT-PCR | Week | 5 | 0 | 0 | 0 |
| | YTD | 29 | 0 | 0 | 0 |
| Mosquito Pools: RAMP | Week | 0 | -- | N/A | N/A |
| | YTD | 0 | -- | N/A | N/A |

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 by plaque reduction neutralization test (PRNT).

*Human denominator data only includes specimens tested at VRDL and does not include additional negative specimens that are tested by local agencies only.

Horses:

Serum or brain tissue specimens from horses displaying neurological symptoms are submitted to the California Animal Health and Safety Laboratory (CAHFS) and tested by EIA and PRNT.

Dead Birds and Tree Squirrels:

Dead birds and tree squirrels are necropsied at CAHFS laboratory at University of California, Davis. Oral swabs from American Crows and kidney tissue from all other dead birds and squirrels are forwarded to the UC Davis Center for Vectorborne Diseases (CVEC) for West Nile virus testing using the singleplex RT-PCR Taqman assay and confirmed with a second primer set. The WNV Dead Bird Surveillance Coordinator, Erin Parker, can be reached directly at (510) 412-6254.

California Arbovirus Surveillance Bulletin # 3

Week 9 Monday, March 8, 2010

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 (WEE), and St. Louis encephalitis (SLE) 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 WEE, SLE, 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

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 website, www.cdc.gov, and the USGS website, www.westnilemaps.usgs.gov.