California Arbovirus Surveillance Bulletin #4

Week 9 Friday, March 2, 2007

Weekly Summary

COMMENTS

Humans

No human cases have been reported in 2007.

Horses

No new equine cases were reported this week. In 2007, one horse from Sonoma County has tested positive for West Nile virus (WNV).

Dead Birds

This week, an American Crow from Santa Clara County and a sharp-shinned hawk from San Diego County tested positive for WNV. This is the first indication of WNV activity in these two counties in 2007.

The California Department of Health Services has received a total of 4,343 dead bird (hotline and website) reports this year.

Mosquito Pools

No mosquito pools were reported positive this week. In 2007, two WNV positive mosquito pools have been reported from Los Angeles (1) and Riverside (1) counties.

Sentinel Chickens

No new seroconversions were reported this week.

In 2007, two WNV seroconversions have been confirmed in chickens from Imperial (1) and Los Angeles (1) counties.

Website Information

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

TEST SUMMARIES

Humans and Horses

| | | | | Positive WEE | | ositive | SLE Positive | | Other Positive | |
|---------------|------|--------|----------|--------------|----------|---------|--------------|-------|----------------|-------|
| | | Tested | Imported | Local | Imported | Local | Imported | Local | Imported | Local |
| Humans Tested | Week | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | YTD | 161 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Horses Tested | Week | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | YTD | 25 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

Dead Birds

| | Number Tested | WNV Positive |
|------|------------------|-----------------|
| Week | 123 | 2 |
| YTD | 423 | 3 |

Sentinel Chickens and Mosquito Pools

| | | Number Tested | WNV Positive | WEE Positive | SLE Positive | Flavivirus* Positive |
|----------------|-------------|------------------|-----------------|-----------------|-----------------|-------------------------|
| Chicken sera | Week YTD | 70 932 | 0 | 0 | 0 | 0 |
| | Week | 932 66 | 2 | 0 | 0 | 0 |
| Mosquito pools | YTD | 280 | 2 | 0 | 0 | 0 |

*Does not include those later confirmed as WNV or SLE

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POSITIVES

| Dead Birds | | | | | | | | | |
|-------------|-------------|----------|--------------------|-----------|-----------|-------------|--|--|--|
| County | City | Zip Code | Species | Collected | Tested | Test Method | | | |
| San Diego | Vista | 92083 | Sharp-shinned Hawk | 2/2/2007 | 2/26/2007 | RT-PCR | | | |
| Santa Clara | Santa Clara | 95052 | American Crow | 2/15/2007 | 2/15/2007 | VecTest | | | |

National Comments: No new update.

TEST PROTOCOLS

Dead Birds:

All bird species from all zip codes are currently being accepted for testing unless otherwise requested by a local agency. Additionally, once WNV has been detected within a county, doves, pigeons, and chickens will no longer be accepted for testing from that county. Corvids that test positive via RAMP or VecTest are no longer confirmed. Dead birds are necropsied at the California Animal Health and Food Safety (CAHFS) laboratory at UC Davis. Oral swabs from American Crows and kidney tissue from all other dead birds are forwarded to the UC Davis Center for Vector borne Diseases (CVEC) for WNV testing using the singleplex RT-PCR Taqman assay and confirmed with a second primer set. The WNV Dead Bird Surveillance Coordinator, Ryan Carney, can be reached directly at (510) 412-6254.

Sentinel Chickens:

Dried blood spot specimens from sentinel chickens submitted each week to the DHS Viral and Rickettsial Disease Laboratory (VRDL) are tested for the presence of antibodies to West Nile virus (WNV), western equine encephalomyelitis (WEE), and St. Louis encephalitis (SLE) viruses by EIA and IFA. The VRDL performs additional testing, including plaque reduction neutralization (PRNT), on specimens from sentinel chickens from geographic areas where WNV is detected for the first time.

Mosquito Pools:

All mosquito pools are 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) and the Viral and Rickettsial Disease Laboratory Branch, Division of Communicable Disease Control, California Department of Health Services, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Tina Feiszli by phone (510) 412-6298, FAX (510) 412-6263, or email [tfeiszli@dhs.ca.gov].