Weekly and Year-To-Date Summaries

WEEKLY COMMENTS

Humans
No human cases have been reported in 2008.

Horses
No equine cases have been reported in 2008.

Dead Birds & Tree Squirrels
One West Nile virus (WNV) positive dead bird was reported this week from Orange County. This is the first indication of WNV activity in Orange County this year. In 2008, 11 WNV positive dead birds have been detected from Kern (1), Orange (1), Sacramento (1), San Diego (7), and Santa Clara (1) counties.

No WNV positive tree squirrels have been reported in 2008.

Mosquito Pools
No new positive mosquito pools were reported this week. In 2008, nine WNV positive mosquito pools have been detected from Riverside County.

Sentinel Chickens
No new seroconversions were reported this week. In 2008, two WNV seroconversions have been detected in chickens from Los Angeles County.


YTD WNV Activity by Element and County, 2008

<table>
<thead>
<tr>
<th>County</th>
<th>Humans*</th>
<th>Horses</th>
<th>Dead Birds</th>
<th>Mosquito Pools</th>
<th>Sentinel Chickens</th>
<th>Squirrels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kern</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riverside</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacramento</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Diego</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Clara</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>9</td>
<td>2</td>
<td>0</td>
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2008 & 2007 YTD West Nile Virus Comparisons

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2007</th>
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<tbody>
<tr>
<td>Total # Dead Bird Reports</td>
<td>3,901</td>
<td>4,024*</td>
</tr>
<tr>
<td># Positive Counties</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td># Human Cases/ # Tested</td>
<td>0 / 171</td>
<td>1 / 283</td>
</tr>
<tr>
<td># Horse Cases/ # Tested</td>
<td>0 / 0</td>
<td>1 / 79</td>
</tr>
<tr>
<td># Positive Dead Birds/ # Tested</td>
<td>11 / 502</td>
<td>18 / 923</td>
</tr>
<tr>
<td># Positive Mosquito Pools/ # Tested</td>
<td>9 / 1,373</td>
<td>2 / 1,744</td>
</tr>
<tr>
<td># Positive Chicken Sera/ # Tested</td>
<td>2 / 2,709</td>
<td>2 / 2,467</td>
</tr>
<tr>
<td># Positive Squirrels/ # Tested</td>
<td>0 / 24</td>
<td>0 / 0</td>
</tr>
</tbody>
</table>

*Total adjusted to exclude dead bird die-off reports not related to WNV

2008 TEST SUMMARIES

Human & Horse Cases

<table>
<thead>
<tr>
<th></th>
<th>Number Tested</th>
<th>WNV</th>
<th>WEE</th>
<th>SLE</th>
<th>Other</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Imported</td>
<td>Local</td>
<td>Imported</td>
<td>Local</td>
</tr>
<tr>
<td>Humans Tested*</td>
<td>Week</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>YTD</td>
<td>171</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Horses Tested</td>
<td>Week</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>YTD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</table>

Dead Birds & Tree Squirrels

<table>
<thead>
<tr>
<th></th>
<th>Number Tested</th>
<th>WNV Positive</th>
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</thead>
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<tr>
<td>Dead Birds</td>
<td>Week</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>YTD</td>
<td>502</td>
</tr>
<tr>
<td>Tree Squirrels</td>
<td>Week</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>YTD</td>
<td>24</td>
</tr>
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</table>

Sentinel Chickens & Mosquito Pools

<table>
<thead>
<tr>
<th></th>
<th>Number Tested</th>
<th>WNV Positive</th>
<th>WEE Positive</th>
<th>SLE Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken Sera</td>
<td>Week</td>
<td>807</td>
<td>0</td>
<td>0</td>
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<tr>
<td></td>
<td>YTD</td>
<td>2,709</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Mosquito Pools: RT-PCR</td>
<td>Week</td>
<td>449</td>
<td>0</td>
<td>0</td>
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<tr>
<td></td>
<td>YTD</td>
<td>1,359</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Mosquito Pools: RAMP</td>
<td>Week</td>
<td>2</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>YTD</td>
<td>14</td>
<td>0</td>
<td>N/A</td>
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</table>

POSITIVES

<table>
<thead>
<tr>
<th>County</th>
<th>Agency</th>
<th>City</th>
<th>Zip</th>
<th>Species</th>
<th>Reported</th>
<th>Tested</th>
<th>Test Method</th>
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<tbody>
<tr>
<td>Orange</td>
<td>Orange Co VCD</td>
<td>Garden Grove</td>
<td>92843</td>
<td>American Crow</td>
<td>4/3/08</td>
<td>4/3/08</td>
<td>RT-PCR</td>
</tr>
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</table>
NATIONAL COMMENTS

No new update. Arizona, Mississippi, and Tennessee have each reported their first human case this year. None of the cases have resulted in fatalities. In addition, California and Alabama have reported non-human WNV activity.

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:
All bird and tree squirrel 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 and 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 WNV 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.

Sentinel Chickens:
Dried blood spot specimens from sentinel chickens are submitted to VBDS and 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. 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) 412-6298, FAX (510) 412-6263, or email: tina.feiszli@cdph.ca.gov