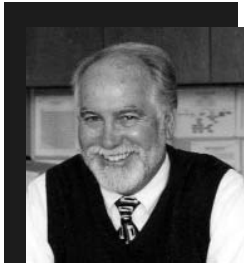


BUZZWORD

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Volume 10 No. 3

Fall 2004



District Manager Jack Hazelrigg

MANAGER'S MESSAGE

California's Long Hot West Nile Virus Summer

The song writing team of De Sylva and Meyer never had West Nile virus (WNV) in mind when they wrote "California Here I Come." If they had, the tune popularized by Al Jolson it would have most certainly never been memorialized. As predicted, after a sheepish debut in 2003 in California, the virus reprised its visit, but with the ferocity and abandonment of a Hell's Angels convention languishing throughout the summer season. The arbovirology prognosticators had it both right and wrong- it was a "long hot summer", but not quite as calamitous for some health agencies as others.

With the outbreak of WNV achieving epidemic proportions in the state, not since the 1953 WEE/SLE outbreak in California, which largely affected the state's central valley, and the 1984 SLE outbreak that affected southern California, has a mosquito-borne disease been more prevalent or devastating. The challenge was met aggressively by the local mosquito and vector control, veterinary and county health officials, along with support from the state's Department of Health Services (DHS) that vigorously waged an anti-WNV educational campaign and provided disease surveillance testing services. As of 11-19-04, state health officials report a total of 808 human cases/infections confirmed with WNV from 23 of California's 58 counties, with 24 deaths among the total, human cases range geographically from San Diego to Shasta County.

A special "hotline" established by DHS to handle dead bird reports has processed 90,093 calls, with CVEC (UC Davis Center for Vectorborne Disease) confirming 3,210 WN+ birds. Although not often mentioned as victims of this disease, many equines suffered and died throughout the state as a result of WNV, with 536 horses confirmed WN+, of which 228 died as a result of their infections. To date, CVEC has also tested 14,609 mosquito pools and reported 1,134 WN+ isolated from 9 mosquito species in 20 counties. In all, an alphabet soup of local health departments and mosquito and vector control districts along with DHS have done Herculean work in combating WNV throughout the state.

In summarizing the human cases to date, statistically, the median age of all cases/infections where data are available = 52 (range: 2 to 94 years). Of the cases with symptoms (752), 275 are listed as

West Nile fever, 219 listed as the more serious West Nile neuroinvasive (encephalitis, meningitis), and 258 listed as unknown. West Nile fever victims range in age from 7 to 89 years (median=49 years), and West Nile neuroinvasive victims range in age from 4-91 years (median=58 years). Some 74 of the reported-to-date cases/infections are in individuals initially reported as asymptomatic, their infections detected through blood-bank screening. However, 12 of these individuals later became symptomatic. More cases are males (62% or 465). Of the 24 reported fatalities, the median age is 75.5 years (range: 57-91 years). Los Angeles County has experienced the most reported cases, 300 and nearly half the deaths (13). A final tally of human and related WNV events in the state will not occur probably until late November or beyond.

These statistics may appear woeful and ominous, but in reality, less than 2 persons in 100,000 of California's population have been confirmed victims of WNV this year, extremely low compared to Colorado's 2003 WNV aftermath, where the disease-incidence ratio exceeded 60 infected persons in 100,000, or Arizona's concurrent epidemic with California's, where the disease-incidence ratio is slightly higher than 40 per 100,000. These data strongly evidence the importance and success of community-based organized vector control programs such as GLACVCD's.

It remains uncertain as to the level of WNV events and human cases California may experience in 2005. In northern California, one may expect to observe increased events related to WNV, since most of this portion of the state experienced a "late" arrival of the virus relative to the southern area. As a corollary, southern California, particularly metropolitan Los Angeles, are likely to experience fewer WNV events, similar to the events of other states/areas having experienced high first-year WNV events followed in the subsequent year by a subsidence of events, particularly numbers of human cases. Time, of course, will tell.

Wipe Out West Nile Virus Ad Campaign

GLACVCD, along with several Southern California vector control districts and the Long Beach Health Department, launched a six-month (April-September) West Nile virus advertising campaign "Wipe Out West Nile virus" to promote West Nile virus awareness and educate the public on how to protect themselves from the serious disease.

The ad campaign contract was awarded to the Miller Group advertisement firm because of their creative, cost-effective outreach efforts by developing corporate partnerships to sponsor the campaign. GLACVCD allocated \$500,000 for an emergency WNV reserve fund, and appropriated \$114,500 for the ad campaign. An additional \$85,000 was generated for paid media by the other participating vector control districts, such as San Gabriel Valley, Orange County, and West Valley Mosquito and Vector Control District, along with the Long Beach Health Department, totaling \$199,500.

"Wipe Out West Nile virus" was a tremendous success and got the WNV message out through diverse markets such as:

***Retail sponsors-**The following retail sponsors committed to printing, displaying, or distributing flyers at: Armstrong Garden Centers, Costco, 7-Eleven, Stater Bros, Lowes, REI, Safeway, Longs, Albertsons, Sav-Ons, Ralphs, Food-4-Less, S.C. Johnson Wax (OFF), Sport Chalet, and 99 Cents Only Stores.

***Events/Venues-** Long Beach Aquarium, Arrow 93.1 Freedom Festival, TAG RV events, Latin Festival, Krikorian Theatres, L.A. Coliseum, Los Angeles County Fair, and many others.

***Organizations-** Salvation Army, Goodwill Industries, California Restaurant Association, Jewish Family Services, YMCA, American Red Cross, and AARP.

Water Districts agreed to print WNV information of water bills, making flyers available for customers, inserting stuffers in bills, and publishing WNV articles in their newsletters.

Paid media was used solely for radio spots-158 sixty-second commercials with Arrow 93.1 FM, KNX, and KRTH and 183 60-second commercials and 27 30-second ads with KABC, KDIS, KSPN. Ethnic radio-KHHT, KSCA, and KXOL were also reached with 106 sixty-second commercials.

Free media in newspapers ran ads and dozens provided extensive editorial coverage. The Miller Group also promoted the Mosquito and Vector Control Association of California's produced Lindsey Wagner PSA through Adlink services, which aired twenty 60-second television commercials, and the Miller Group coordinated 28 radio interviews.

The estimated total number of impressions made with all programs was 23,509,859, and the estimated total value of all programs was \$1,455, 483-that's a tenfold return!

One-page "Wipe Out West Nile flyers" were printed in English, Spanish, Chinese, Vietnamese, and Cambodian. Many people expressed the flyers were an excellent educational tool in learning English.

There are hopes to bring the Miller Group back in 2005 and continue the successful ad campaign. It is uncertain as to what level WNV will occur in Southern California next year, but it will definitely be back, and an aggressive ad campaign will still be needed to combat WNV. Corporate sponsors are asking to participate next year and donate money, which would enable participating districts/health agencies to once again run paid radio spots as well as print millions of flyers, all in hopes of saving more lives.



What's Happened To All the Crows?

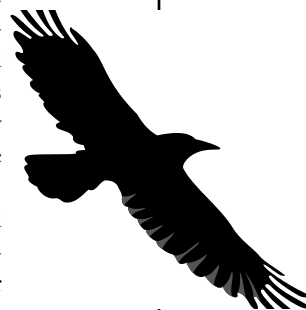
Crows are highly susceptible to West Nile virus and are experiencing the ill effects. Research has shown that only 3% of crows have antibodies for West Nile virus. Once they become infected, the mortality rate is high, approximately 95-98%, and usually die within 5 days. Many residents have asked, "What's happened to the crows in my neighborhood? We don't have as many crows as we used to?" To some, this is a sigh of relief and others miss the mischievous birds, but it's difficult to estimate how much of the entire crow population succumbed to the disease.

The CA Dept of health Services operates a dead bird hotline (1-877-WNV-BIRD) and encourage residents to assist in the efforts to detect and monitor WNV by calling the WNV hotline if they find a crow, raven, magpie, jay, sparrow, finch, or hawk that has been dead for about one day. To date, the hotline has received 91,342 reported dead birds statewide and 3,210 have tested positive for WNV. From Los Angeles County, 839 tested positive and within GLACVCD boundaries 608 birds have been confirmed WNV positive. This is

just a known sample of dead birds, but it would be difficult to estimate the numbers of bird species and percentage of population reduction.

The Whittier Narrows Nature Preserve/Dam and recreational area is home to approximately 50,000+ roosting crows, which disperse for many miles from this location. A roost is a place where birds congregate and sleep. These crows serve as "sitting ducks" for biting mosquitoes because they remain still while they sleep and an easy blood meal for thirsty mosquitoes, thus replicating and amplifying the virus. Crows can also contract WNV through contact with infected flock mates. Cities bordering the Whittier Narrows Nature Preserve/Dam area have experienced fewer crows in the vicinity and similar observations have been made at other large roosting sites in Los Angeles County.

The bird population initially exposed to West Nile virus had no immunity since it's a newly introduced disease in California. However, in time, the birds will gain immunity and their numbers will rebound.



Vector Crossword Puzzle

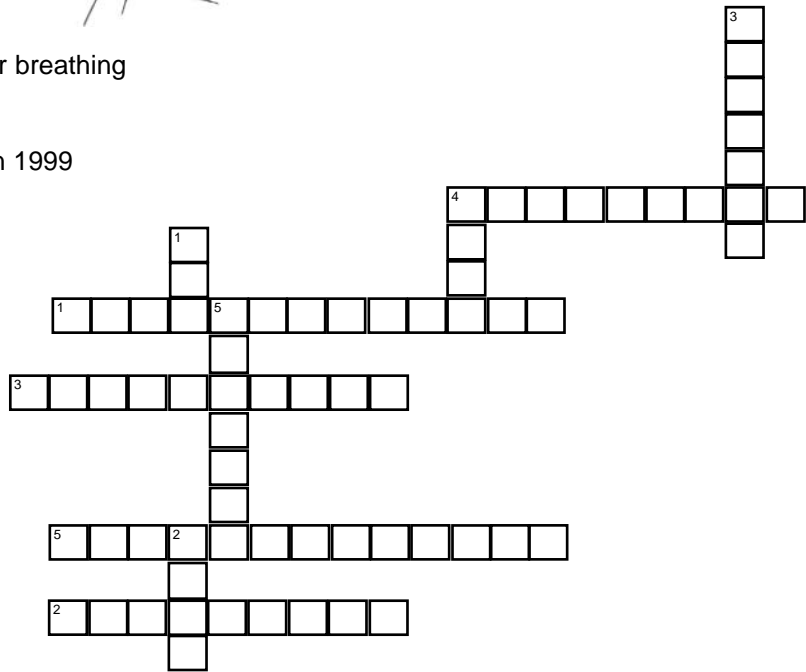


ACROSS

1. Stops blood from clotting
2. Small openings along the abdomen used for breathing
3. Exotic introduced species
4. Mouthpart used for feeding
5. Mosquito disease discovered in New York in 1999

DOWN

1. Biological control agent
2. Common backyard breeding source
3. Mosquito disease caused by protozoan parasites
4. Third stage of the mosquito life cycle
5. Serves as a sentinel host



Answers

Across: 1) anticoagulant 2) spiracles 3) albopictus 4) proboscis 5) West Nile virus
Down: 1) Bit 2) tire 3) malaria 4) pupa 5) chicken

Employee Profile: Tina Smith

Tina Smith has been with the District for nine years as a Vector Control Specialist at the Santa Fe Springs office. Each Vector Control Specialist is responsible for surveying, inspecting, and treating mosquito breeding sources and other vector habitats, but Tina has taken the initiative to maintain and update safety MSDS sheets and conduct the annual pesticide training for staff. She also maintains the "insect zoo" for the visiting elementary school field trips at the District.

Before being employed at the District, Tina was a Mosquito Technician at San Gabriel Valley Mosquito and Vector Control District for three years. Her initial vector experience was gained at the Orange County Vector Control District as a laboratory assistant for three years.

She received a B.S. degree in Agricultural Biology from Cal Poly Pomona and is now pursuing her M.S. in Biology, which will be completed by the end of this year at Cal Poly Pomona. In her undergraduate program, Tina was the first recipient for the Southern California Strawberry Growers Scholarship and also received the Lena and Fay Reynolds Memorial and National Honor Society Scholarships. She annually made the Deans List for her exceptional grades and is currently carrying a 3.98 GPA as a graduate student, while working full-time at the District.

When Tina is not at work, she volunteers her time at the Wetlands and Wildlife Rehabilitation Center of Orange County, which is a wildlife hospital specializing in birds. Her hobbies include insect collecting and bird watching. She enjoys spending time with her three nephews, two nieces, and two cats. Something interesting others wouldn't know about Tina is her beautiful singing voice. She sang the solo for a performing girl scout troop as a child.

Tina's extensive education and strong entomological background, coupled with 16 years of vector work experience makes her an exceptional asset. She applies her diverse talents to good use at the District



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BUZZWORD

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Please e-mail your input on this issue to: smiladin@glacvcd.org

Even
though Winter is
approaching...

Be aware! Mosquitoes
are active year round in
Los Angeles County, and
could still spread West Nile
virus.

District Mission

The Greater Los Angeles County Vector Control District is a California government and public health service agency. Its mission is to: reduce populations of Board-mandated vectors below nuisance levels; prevent human infection associated with mosquito-transmitted diseases; guard against human infection and discomfort associated with other vector-transmitted diseases; and prevent the loss of property values and commercial enterprise as the result of vector occurrence and activity.



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