

City of Los Alamitos

Agenda Report Consent Calendar

August 24, 2015
Item No: 8B

To: Mayor Richard D. Murphy & Members of the City Council

From: Gerri L. Graham-Mejia, Orange County Vector Control District Representative for Los Alamitos

Prepared by: Windmera Quintanar, CMC, City Clerk

Subject: Orange County Vector Control District (OCVCD) Update

Summary: This report provides an update on the Orange County Vector Control Board.

Recommendation: Receive and file.

Background

On December 16, 2013, the City Council appointed Gerri L. Graham-Mejia to the Orange County Vector Control District Board (OCVCD) for a two-year term. Her term of service will end the first Monday of the year at 11:59 a.m., which will be January 4, 2016. OCVCD bylaws dictate a representative may be appointed for two or four year term of office which commences at noon on the first Monday in January. As a resident of the City, Gerri L. Graham-Mejia will continue to serve as the City's representative until January 4, 2016.

Discussion

July 16, 2015 – Monthly Items of Discussion

- Letters have been mailed to historically high risk areas in Anaheim and Fullerton to inform homeowners to inspect their properties for mosquito breeding sources and report any mosquito activity to the District.
- The District website has been revised to provide ease of access for residents to get the most pertinent information on the vector topic they are interested in.
- There have been six human cases of Flea -borne typhus in Orange County in 2015. The cases are located in Garden Grove (3), Anaheim (1), Buena Park (1), and Santa Ana (1).
- In 2015, there have been eight West Nile virus (WNV) positive mosquito sample located in Huntington Beach (1), Orange (1), Tustin (6). There have been four West Nile virus positive dead birds collected in Anaheim (1), Orange (1), and Yorba Linda (2). This is the only WNV activity in Orange County so far this year.
- The Orange County Mosquito and Vector Control District has an exhibit at the Discovery Cube Orange County that will be opened at the ribbon cutting for the Discovery Cube Expansion on June 11, 2015. The exhibit is entitled: "Inspector Training Course".

August 20, 2015 – Monthly Items of Discussion

- The first human West Nile virus case in 2015 has been confirmed in the city of Orange.
- When attending outdoor evening events this summer take proper steps to protect yourself from mosquito bites: Wear long sleeves and long pants, wear loose fitting clothing, or wear repellents containing DEET, Picaridin, Oil of Lemon Eucalyptus, or IR3535.
- OCMVCD Staff have attended numerous concerts in the park at various cities this summer to pass out literature and repellents to the attendees of the events
- In 2015, there have been 86 West Nile virus (WNV) positive mosquito samples Anaheim (6), Cypress (3), Fullerton (3), Huntington Beach (1), Orange (11), San Juan Capistrano (2), Santa Ana (10), Tustin (49), and Yorba Linda (1). There have been 10 West Nile virus positive dead birds collected in Anaheim (1), Huntington Beach (1), Irvine (1), Orange (1), San Juan Capistrano (1), Santa Ana (2), Tustin (1), and Yorba Linda (2).
- In 2015 there have been 9 suspected or confirmed human cases of flea -borne typhus in Orange County (Anaheim 1, Brea 1, Buena Park 1, Garden Grove 4, Westminster 1).

Ongoing Items of Discussion

- Visit www.ocvcd.org for more information on rats, mosquitoes, Red Imported Fire Ants, and other pests you could have on your property.
- Follow the Orange County Mosquito and Vector Control District on Facebook and Twitter to receive important vector control tips and information about disease outbreaks that will help protect you and your family this summer. www.facebook.com/OCVectorControl www.twitter.com/OCVector

Fiscal Impact

None.

Approved By:



Bret M. Plumlee
City Manager

*Attachments: 1. July 2015 – Vector of the Month and Vector Management Update
2. August 2015 – Vector of the Month and Vector Management Update*

Vector of the Month

Vector Control Agencies to Step Up Efforts Against Invasive Mosquitoes: Natural, chemical-free method added to ongoing control efforts to take the fight straight to Asian tiger mosquitoes

San Gabriel Valley Mosquito & Vector Control District
Greater Los Angeles County Vector Control District
June 18, 2015

South El Monte, Calif. – Residents in the city of South El Monte may experience a little more relief from dangerous, invasive Asian tiger mosquitoes (*Aedes albopictus*). In collaboration with the University of Kentucky and the San Gabriel Valley Mosquito and Vector Control District (SGVMVCD), the Greater Los Angeles County Vector Control District (GLACVCD) will release sterile, male Asian tiger mosquitoes to reduce the existing infestation in the city.

The Sterile Male Tiger Mosquito Pilot Program will involve releasing the mosquitoes in an impacted South El Monte neighborhood beginning June 23 and will continue through the end of the season in October. Male mosquitoes **do not bite and do not transmit disease**. When released, they will find and mate with female tiger mosquitoes in the area. Eggs laid by these mated females will be sterile and will not hatch, thereby breaking the mosquito life cycle.

The pilot project will begin in a 5.7 acre area between the streets of Weaver St. to the north; Santa Anita Ave to the east; Enloe Street to the south; and Central Ave to the west. Residents in the pilot area may see more flying mosquitoes, but since the sterile mosquitoes are all males, they will not get more bites. The sterile male mosquitoes are not expected to fly outside of the pilot area. The population of tiger mosquitoes in this pilot area is projected to decline significantly through the summer months. The districts hope to expand this program to other areas in the future.

In addition to the sterile male releases, vector control officials will continue to actively monitor and control invasive species wherever they are found. These efforts include yard inspections in residential neighborhoods, source reduction in public areas, and educational outreach programs in schools and communities.

The Need

The presence of invasive Asian tiger mosquitoes increases the risk of residents being exposed to exotic diseases such as dengue and chikungunya. These viruses are currently not transmitted locally, but travel-related



*Photo by
San Gabriel Valley Mosquito & Vector Control District*

cases occur annually in Los Angeles County.

“It’s not a matter of if, but when we will see local transmission of these debilitating diseases,” says Susanne Kluh, Scientific-Technical Services Director for GLACVCD. “It takes just one traveler infected with chikungunya or dengue fever to be bitten by the invasive mosquito to start local transmission.”

The GLACVCD and the SGVMVCD have been working together since 2011 to control Asian tiger mosquitoes. Since then, the infestation has been detected in 15 communities in and around the San Gabriel Valley.

The Asian tiger mosquito currently poses a larger threat compared to the other two invasive *Aedes* mosquitoes – yellow fever mosquito and Australian backyard mosquito – since it is the most pervasive in L.A. County. These mosquitoes are excellent at colonizing new areas, and vector control officials warn that they could be anywhere in the county.

These invasive *Aedes* are able to lay eggs on the walls of small containers, including buckets, plant saucers, and even in recyclables that can hold standing water. Their ability to adapt to urban environments makes them extremely difficult to control in cities around the world.

“Our focus is to suppress populations of these mosquitoes wherever they are detected and to limit their expansion into surrounding cities,” says Dr. Wakoli Wekesa, Scientific Program Manager at the

SGVMVCD. “It’s critical that we utilize all the tools and resources available to us – from traditional management techniques to the latest, environmentally-friendly technology – to combat this urban threat.”

The vector control agencies are calling upon all residents to do their part:

- REPORT any sightings of small, black-and-white mosquitoes, or if you are being bitten by mosquitoes during the day! [Orange County residents can report mosquito issues to the Orange County Mosquito and Vector Control District by calling (714) 971-2421 or online at www.ocvcd.org.]
- Dump and drain all water around your home. Eliminate plant saucers and other unnecessary containers and thoroughly scrub outdoor pet water dishes and bird baths weekly to remove eggs.
- Do not transport or share plant stems rooted in water which may carry eggs. Do not keep outdoor buckets full of water.
- Use insect repellent that contain CDC-recommended active ingredients such as DEET, picaridin, IR3535, para-menthane diol, or oil of lemon eucalyptus to avoid bites.

Vector Management Update

Record Number of Mosquito Samples Test Positive for West Nile Virus in the Coachella Valley

Jill Oviatt, Public Information Manager
Coachella Valley Mosquito and Vector Control District
June 26, 2015

New positive samples for the virus from Indio, La Quinta, and Indian Wells bring the total to 54

INDIO, CA: West Nile virus has been detected in more mosquito samples this year than in any other year during the same period since the virus was initially detected in the Valley in 2003. The virus was detected in Indian Wells for the first time this year with one positive sample. Additional samples tested positive in Indio and La Quinta.

A total of 11 mosquito samples tested yesterday in the Coachella Valley Mosquito and Vector Control District lab were positive for the virus, bringing the total number of West Nile virus-positive mosquito samples this year to 54. Indio has the most positive samples for 2015 with 36. La Quinta has 16, while Indian Wells and the west shore of the Salton Sea had one positive mosquito sample each. The latest positive samples were collected from traps located near Avenue 48 and Washington Street, Shields Road and Paseo de Norte, Youngs Lane and Avenue 48, Bunker Lane and Wood Lane, Caleo Bay Drive and Dulce del Mar, and Fred Waring and Eldorado Drive.

There were no positive mosquito samples in the Coachella Valley at this time last year and the highest number of positive samples prior to this year at this time was 34 in 2004. "The virus activity we are seeing this year in the urban area is unprecedented," says Jeremy Wittie, MS, the District's Scientific Operations Manager. "We are appealing to residents particularly in Indio, La Quinta, and Indian Wells, to be vigilant about getting rid of or changing the water in any sources that could provide mosquitoes with a place to lay their eggs. That means containers, plant saucers, bird baths, nonfunctioning pools, and ensuring irrigation is not running off into the streets and filling up catch basins."

Catch basins are a perfect, protected habitat for mosquitoes, and irrigation run off increases potential active breeding sites for mosquitoes. District staff will post additional disease notification signs in affected communities to alert residents and 11,000 disease

notification postcards will be mailed to area residents with steps to prevent standing water sources and protection tips. Staff will also set additional traps, increase larval surveillance to identify sources, and carry out larval and adult control as necessary in an effort to reduce the number of mosquitoes and interrupt further transmission of disease.

[Orange County residents can visit the Orange County Mosquito and Vector control District's website at www.ocvcd.org for information on West Nile virus activity and surveillance in Orange County.]

Vector of the Month

Child Contracts Plague at Yosemite National Park

Veronica Rocha, LA Times
August 6, 2015



Plague Ecology in the United States

Plague in Nature

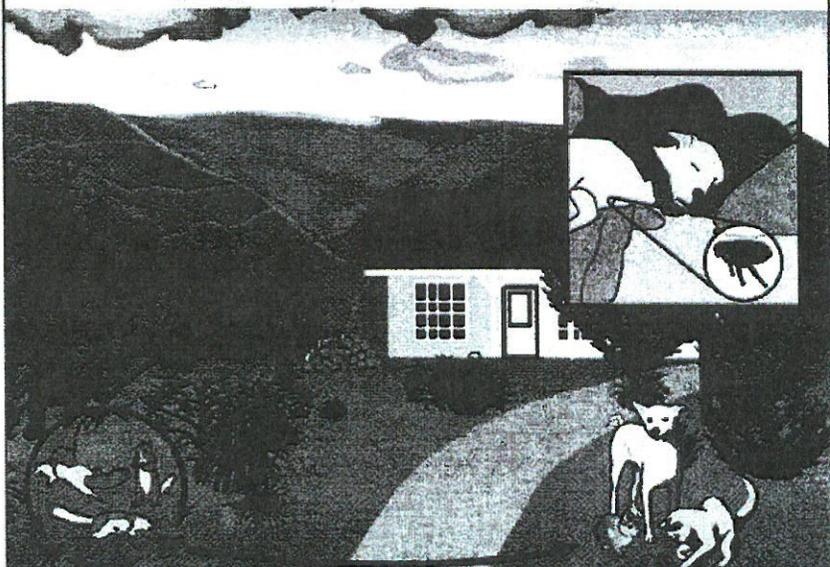
Plague occurs naturally in the western U.S., especially in the semi-arid grasslands and scrub woodlands of the southwestern states of Arizona, Colorado, New Mexico and Utah.



The plague bacterium (*Yersinia pestis*) is transmitted by fleas and cycles naturally among wild rodents, including rock squirrels, ground squirrels, prairie dogs and wood rats.

Plague in Humans

Occasionally, infections among rodents increase dramatically, causing an outbreak, or epizootic. During plague epizootics, many rodents die, causing hungry fleas to seek other sources of blood. Studies suggest that epizootics in the southwestern U.S. are more likely during cooler summers that follow wet winters.



Humans and domestic animals that are bitten by fleas from dead animals are at risk for contracting plague, especially during an epizootic. Cats usually become very ill from plague and can directly infect humans when they cough infectious droplets into the air. Dogs are less likely to be ill, but they can still bring plague-infected fleas into the home. In addition to flea bites, people can be exposed while handling skins or flesh of infected animals.

CS2290-08

State public health officials are conducting an environmental evaluation in the Stanislaus National Forest, Yosemite National Park and surrounding areas after a child contracted the plague during a July visit.

The child, who lives in Los Angeles County, is recovering but fell ill and was hospitalized after a family trip to the Northern California forest and camping at Crane Flat Campground in Yosemite National Park in mid-July, according to the California Department of Public Health. No other family members reported symptoms.

“Human cases of plague are rare, with the last reported human infection in California occurring in 2006,” Public Health Director and State Health Officer Karen Smith said in a statement.

State officials are working with the Los Angeles County Department of Public Health, the Centers for Disease Control and Prevention and park and forest officials to determine the source of the child’s infection.

Health officials are looking at the child’s travel history and activities before becoming sick.

The Yosemite National Park will provide visitors with information about how to prevent plague exposure. Signs also will be posted at the Crane Flat campground and nearby campgrounds.

The infectious disease is carried by squirrels, chipmunks, other rodents and their fleas. After an infected rodent becomes sick and dies, its fleas can carry the disease to other animals and humans.

A person infected with the disease will experience high fever, chills, nausea, weakness and swollen lymph nodes in the neck, armpit or groin. If left untreated, plague can be fatal.

In California, the last reported cases of human plague occurred in Mono, Los Angeles and Kern counties in 2005 and 2006.

The three patients in those cases received treatment with antibiotics and survived. In California, there have been 42 human cases of plague since 1970. Nine were fatal.

Plague-infected animals usually are found in the foothills, mountains and sometimes along the coast of California.

In 2014, plague activity was detected in animals in El Dorado, Mariposa, Modoc, Plumas, San Diego, Santa Barbara and Sierra counties.

On Tuesday, a Colorado resident died of the plague after contracting the disease from a rodent, fleas or dead animal in a rural area of southwestern Pueblo County.

Vector Management Update

Orange Man is First O.C. Case of West Nile Virus in 2015

Jenna Chandler, OC Register
August 7, 2015

A 51-year-old man was infected with West Nile virus in July, the Orange County Health Care Agency said Friday.

The Orange resident is the first human case of the disease this year in the county and the 19th in California. He was not hospitalized and has recovered fully, according to the Health Care Agency.

Amid a major outbreak last year, 280 people in Orange County contracted the virus – which is spread by mosquitoes – accounting for 10 percent of all cases nationwide. Nine people in the county died from the virus in 2014.

“West Nile virus is endemic in Orange County, recurring every year during the summer months and continuing into the fall,” said county health officer Dr. Eric G. Handler.

The virus is mostly harmless. But when symptoms do appear, they can be serious: fever, headaches, joint pain, vomiting and diarrhea, along with lingering fatigue and weakness. In fewer than 1 percent of cases, an infectious mosquito bite will lead to neurological conditions, including encephalitis or meningitis.

People age 50 and older are at higher risk of developing serious complications.

Following last year’s deadly outbreak, Orange County Vector Control has ramped up efforts to treat underground storm drains, abandoned pools and other sources of standing water, where mosquitoes like to breed.

So far, though, tests have indicated fewer mosquitoes are carrying the virus this year, likely because the birds on which they feed and contract the disease have built up immunity. Outbreaks of West Nile virus have traditionally coincided with the life cycles of birds, peaking about every four years.

But as summer progresses, “we are beginning to see more of our mosquito samples testing positive, especially in the cities of Tustin and Orange,” said Jared Dever, a vector control spokesman.

“We have greatly expanded efforts in these cities to help suppress mosquito populations and inform the residents about the risk.”



Culex quinquefasciatus: The southern house mosquito is the species responsible for a majority of the Orange County Mosquito & Vector Control District’s mosquito abatement services and related control activities.

Prevent West Nile virus

- Eliminate standing water, including in flower pots and pet bowls.
- Keep windows and door screens in good condition.
- Use insect repellent containing DEET, picaridin, oil of lemon eucalyptus, or products containing IR3535.
- Limit outdoor activity at dawn and dusk, when mosquitoes are most active.
- Wear long-sleeved shirts and long pants when outdoors.