Biting & Stinging Insects

(and other vectors)

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What to do...

&

Who to call...

Los Angeles County West Vector
& Vector-Borne Disease Control District
6750 Centinela Avenue
Culver City, CA 90230
(310) 915-7370
www.lawestvector.org

MOSQUITOES

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Who to Call

- Contact the District at (310) 915-7370:
  - If you are bothered by mosquitoes
  - For assistance with mosquito breeding sources
  - To obtain free mosquito fish
- Contact your doctor if you suspect you have West Nile virus or any other mosquito-borne disease

Mosquito Facts

- Mosquitoes breed in standing water
- A mosquito can mature in 7-10 days
- Several mosquito species in California are vectors for disease (vector: any insect or other arthropod capable of transmitting a disease)

Mosquito Life Cycle

1. **Eggs** are laid in stagnant water

2. **Larvae** feed on organic matter

3. **Pupae** rest and do not feed

4. **Adults** rest on the surface until strong enough to fly, mate and feed. Only the female mosquito bites to obtain blood.

MOSQUITOES

Protection From Mosquitoes: Follow the "5 Ds"

1. Drain

Remove standing water on your property.

2. Deny

Install tight-fitting screens on windows and doors to prevent mosquitoes from entering your home.

3. Dawn & Dusk

Avoid spending time outside at dawn & dusk when mosquitoes are most active.

4. Dress

Wear long pants, a long-sleeved shirt, shoes and socks while outdoors.

5. DEET

Use an insect repellent containing 5% - 30% DEET (N,N diethyl-m-toluamide). Alternative repellents containing picaridin, citronella, or oil of lemon eucalyptus are also available. Read and follow all instructions on the label.

Backyard Breeding Sources

Look for anything that can hold water for more than a few days.

MOSQUITOES

Mosquitofish

The use of mosquitofish, *Gambusia affinis*, is a natural way of controlling mosquito larvae without the use of insecticides or chemicals. The District provides mosquitofish to residents free of charge. Fish can be picked up during normal business hours.

Where to Stock Mosquitofish:

- Backyard ponds
- Unused or “out of order” swimming pools
- Water gardens
- Fountains
- Animal troughs

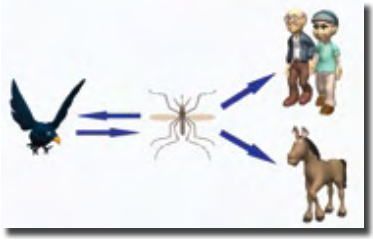
Note: Mosquitofish should never be placed in any natural habitat such as lakes, streams, rivers, or creeks. Their introduction into certain natural habitats may disrupt the existing ecological balance.

MOSQUITOES

Mosquito-Borne Diseases in California

- West Nile virus (WNV)
- St. Louis Encephalitis (SLE)
- Western Equine encephalomyelitis (WEE)
- Canine Heartworm (affects dogs and cats)

West Nile Virus



Mosquitoes become infected with West Nile virus when they feed on infected birds. These infected mosquitoes can then transmit West Nile virus to humans and animals while biting during subsequent blood meals. **Approximately 80 percent of people who are infected with WNV will not show symptoms. Up to 20 percent of the people who become infected may develop West Nile fever.**

Symptoms of West Nile fever:

- Flu-like symptoms
- Nausea and vomiting
- Diarrhea
- Skin rash
- Swollen lymph glands

Less than 1% of infected people will develop West Nile neuroinvasive disease (WNND)

Symptoms of WNND:

- High fever
- Neck stiffness
- Stupor; disorientation
- Coma
- Tremors
- Convulsions
- Paralysis
- Death (rare)

Canine Heartworm

Infected mosquitoes transmit canine heartworm to dogs and cats. The disease is caused by a roundworm which lives in the animal's lungs and heart.

AFRICANIZED HONEY BEES

Who to Call

- Multiple Stinging Emergencies
  Call 911
- Swarms/Hives (outside of a building)
  Contact the District at (310) 915-7370
- Swarms/Hives (inside of a building)
  Contact a licensed structural pest control operator

Africanized Honey Bee Facts

- Africanized honey bees (AHB), a.k.a. “killer bees” have been in Los Angeles County since 1998
- AHB look identical to European Honey Bees (EHB)
- AHB can only sting once
- When disturbed, AHB can respond quickly in larger numbers and pursue intruders 1/4 mile or more

Recognize Honey Bee Activity

Foraging Bees
Worker bees in search of pollen, nectar or water.

Swarm
A resting cluster of bees in search of a new place to live. Stay away from swarms.

Hive
An established colony of bees. Stay away from all hives.

AFRICANIZED HONEY BEES

Bee-proof Your Home

- Keep an eye out for swarms and hives
- Check for bees entering or leaving the same area of your home or yard
- Inspect outside walls and eaves of home and outbuildings
- Remove possible colony sites around home and yard
- Remove empty containers, old tires, boxes and trash
- Seal openings larger than 1/8 inch in walls, around chimneys, plumbing and storage sheds
- Install fine screens (1/8 inch hardware cloth) over tops of rain spouts, vents, and openings in water meter, cable, and utility boxes
- Remove and/or thin excessive landscape vegetation
- Fill and plug all tree and ground holes

Potential Bee Nesting Sites

AFRICANIZED HONEY BEES

Outdoor Safety Precautions

- Be alert when outdoors
- Be respectful of bees and wasps
- Develop a safety plan for your home and yard
- Use care when entering sheds or outbuildings
- Examine area before operating power equipment. Certain sounds and vibrations may cause AHB to attack without warning.
- Keep dogs under control when hiking
- Stay alert when horseback riding

If You Discover a Swarm or Colony

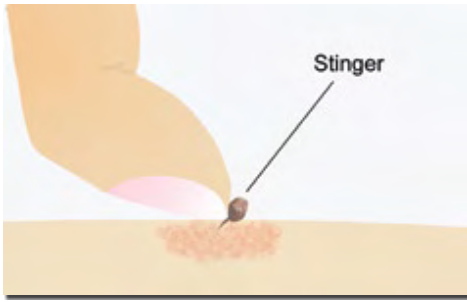
- Avoid the area
- **Do not** disturb or tease bees
- Keep children and pets away from the area
- Do not control or remove the bees yourself
- **Do not** throw rocks, shoot, burn, spray water or use aerosol pesticides on the bees

AFRICANIZED HONEY BEES

If Attacked

- Leave the area quickly
- Protect head and face with arms and/or available clothing
- Seek shelter in the nearest building or vehicle
- **Do not** jump into water
- Remove stingers as quickly as possible
- Call 911

If Stung



- Go quickly to a safe area
- Remove the stinger as soon as possible by scraping the stinger out with a fingernail or credit card; avoid squeezing the venom sac
- Wash the sting area with soap and water and apply an ice pack
- Watch for allergic reactions such as difficulty breathing, hives and dizziness
- Seek immediate medical attention for multiple stings and allergic reactions

TICKS

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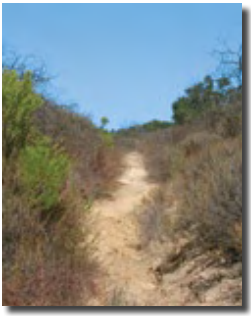
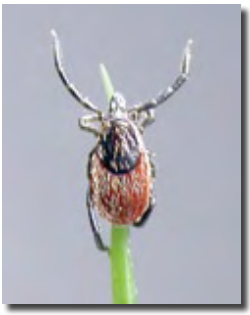
Who to Call

- Contact the District at (310) 915-7370 if you would like to have a tick specimen identified
- Contact your doctor if you suspect you have Lyme disease or any other tick-borne disease

Facts About Ticks





- Ticks do not jump or fly
- Ticks are found in natural areas that have grasses, shrubs, logs or leaf litter
- Both male and female ticks obtain blood from animal hosts
- Ticks may feed up to several days
- Adult ticks seek hosts by climbing on the tips of grasses and shrubs, often along trails
- Nymphs seek hosts in moist environments within and beneath leaf litter, vegetation and on logs
- In California, the western black-legged tick is the vector for Lyme disease

TICKS

Ticks in Los Angeles County

Actual size

Nymph | Adult male | Adult female | Engorged Adult

- Ticks (both adults and nymphs) in Los Angeles County can be found year-round

Western Black-legged Tick (*Ixodes pacificus*)

- Adults may be active November through May
- Nymphs may be active March through July

Pacific Coast Tick (*Dermacentor occidentalis*)

- Adults may be active November through July
- Nymphs may be active in spring and summer

American Dog Tick (*Dermacentor variabilis*)

- Adults may be active November through July
- Nymphs may be active from late winter to summer

TICKS

Protection From Ticks

While Outdoors:

- Avoid tick infested areas
- Stay on trails
- Avoid contact with bushes along trails
- Avoid sitting or lying on the ground

Wear:

- Shoes & socks
- Light colored clothing
- Long pants & long-sleeved shirts
- Tuck shirt into pants and pants into socks
- Apply a tick repellent. Read and follow all instructions on the label.

Tick Checks:

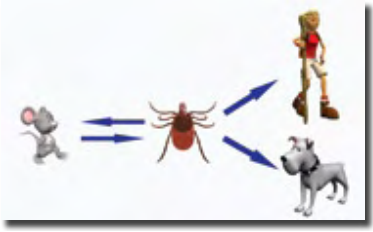
- Do frequent tick checks while outdoors
- Conduct a full body tick check after every hike. Ticks may remain attached to your body for several days.
- Pay close attention to hair line, armpit, back of knees and groin

Proper Tick Removal

- Use tweezers to grasp the tick's mouthparts as close to the skin as possible
- Pull the tick firmly, straight out, and away from skin. Do not jerk, twist or burn the tick.
- Disinfect the bite site and apply an antiseptic
- Wash hands with soap and water
- Save the tick for identification
- Contact your doctor if a rash or flu-like symptoms develop within 30 days

TICKS

Lyme Disease



Lyme disease is a bacterial infection transmitted by nymphal and adult female western black-legged ticks. Larvae and nymphs may become infected by feeding on wild rodents carrying the Lyme disease bacteria. Lyme disease can be transmitted to humans and other animals when the infected tick feeds in its next life stage.

Early Symptoms of Lyme Disease

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- Flu-like symptoms
- Swollen lymph glands
- Erythema Migrans (EM)
  - Varies in appearance from an expanding “bull’s-eye” rash to a bruise or blotchy rash
  - Rash may not be present in some people
  - Rash can appear 1 - 30 days after an infected tick bite, expand and then disappear
- Symptoms may disappear but infection may still be present if not treated early
- Facial paralysis, palpitations, or disturbances of heart rhythm may also occur but are less frequent

Late Symptoms of Lyme Disease

- Can occur weeks, months, or years after infection if not treated early
- Severe headaches; cognitive disorders
- Numbness or tingling in extremities
- Painful arthritis and swelling of joints
- Cardiac abnormalities
- Facial paralysis

RED IMPORTED FIRE ANTS

Who to Call

- Multiple Stinging Emergencies
  Call 911
- Red Imported Fire Ant infestations
  Contact the District at (310) 915-7370

Facts About Red Imported Fire Ants

- Red Imported Fire Ants (RIFA) are known for their aggressive behavior and painful stings
- The stings have been compared to being poked by a hot needle
- RIFA stings can lead to swelling, redness, itching, welts and allergic reactions

RIFA Nests

- RIFA live underground
- Nests appear as irregular type mounds with small piles of loose soil peppered with very small holes
- The mounds are wider than tall and can be more than 18 inches across
- RIFA attack when their mounds are disturbed. Because they can sting multiple times, a victim may receive many more stings than there are ants.

RED IMPORTED FIRE ANTS

Safety

- Dress properly while outdoors; wear gloves and closed-toe shoes with socks
- Dress children properly for outdoor play
- Survey your property for suspected ant mounds before outdoor activity

If Stung

© USDA

- Cleanse the area with soap and water
- Elevate the sting area
- Apply an ice pack and avoid scratching blisters
- Apply a topical ointment containing steroids and/or take an oral antihistamine to relieve the itching
- Seek medical attention if: pain or swelling becomes intense, area becomes infected, or if you experience an allergic reaction

If you Suspect a Red Imported Fire Ant Infestation

- Avoid the area
- Keep children and pets away from the area
- Do not disturb the ants or mound
- Do not attempt to control the ants yourself
- Contact the District at (310) 915-7370

Vector Control

What is a Vector?

Any insect (or other arthropod) capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury.

Cities and Areas Served by the District

- Agoura Hills
- Beverly Hills
- Calabasas
- Culver City
- El Segundo
- Hawthorne
- Hermosa Beach
- Hidden Hills
- Inglewood
- Lawndale
- Lomita
- Los Angeles City*
- Los Angeles County*
- Malibu
- Manhattan Beach
- Palos Verdes Estates
- Rancho Palos Verdes
- Redondo Beach
- Rolling Hills
- Rolling Hills Estates
- Santa Monica
- Torrance
- West Hollywood
- Westlake Village

(*Portions of Los Angeles City and Los Angeles County are within District boundaries)

Who to Call

Mosquitoes

Contact the Los Angeles County West Vector & Vector-Borne Disease Control District at (310) 915-7370

Honey Bees

Multiple Stinging Emergencies
Call 911

Swarms/Hives (outside of a building)
Contact the Los Angeles County West Vector & Vector-Borne Disease Control District at (310) 915-7370

Swarms/Hives (inside of a building)
Contact a licensed structural pest control operator by consulting your local yellow pages

Tick Identification & Information

Contact the Los Angeles County West Vector & Vector-Borne Disease Control District at (310) 915-7370

Red Imported Fire Ants

Multiple Stinging Emergencies
Call 911

Service Calls
Contact the Los Angeles County West Vector & Vector-Borne Disease Control District at (310) 915-7370