# WHAT is a VECTOR?

Vectors are animals or insects such as rats, mice, mosquitoes, ticks, bees, wasps, and flies that can transmit diseases or cause illness or discomfort to humans. The Mosquito and Vector Management District of Santa Barbara County will respond to all vector related questions and citizen complaints within all unincorporated areas of Santa Barbara County and the cities of Santa Barbara, Goleta, and Carpinteria. If you are bothered by mosquitoes, flies, bees, wasps, mice, or rats call the Mosquito and Vector Management District. A trained vector control technician will assist you in locating the problem and help you decide what is the best and safest way to solve it. The solution may be as simple as trimming ivy or picking up oranges in your backyard to prevent roof rats or adding fish to a pond to prevent mosquitoes. You can help to control disease-carrying vectors in the community by looking for vectors and their hideouts.

# Mosquitoes



All mosquitoes must have standing water 'to complete their lifecycle. Mosquitoes can carry diseases such as West Nile Virus, Encephalitis, and Malaria. You can help by:

- √ Emptying standing water in containers left outside, especially after it rains!
- √ Keeping swimming pools and ponds clean! Mosquito Fish are also provided free of charge from the Mosquito and Vector Management District to help keep mosquitoes under control.
- √ Reporting:
  - green, stagnant swimming pools.
  - still water sources, such as ditches, street gutters, bird baths, and ponds.
  - mosquito sightings in the community.

### **Ticks**

There are several species of ticks in southern

California. Ticks can carry Lyme Disease, Relapsing Fever, Rocky Mountain Spotted Fever, Tularemia, and Ehrlichiosis. There is no practical way to control ticks outdoors. Area application of insecticides is <u>not</u> effective for tick control. However, you can avoid their bites by:

- $\sqrt{\text{Tucking pants into boots or socks}}$ , and shirt into pants.
- √ Wearing light-colored clothing so ticks can easily be seen
- √ Applying an insect repellent registered for use against ticks on pants, socks, and shoes.
- √ Avoiding trail margins, brush, and grassy areas when in tick country.
- √ Checking yourself, your children, and pets frequently.
- $\sqrt{\text{Mowing grass along trails, buildings, and camping areas.}}$
- √ Removing brush along trails or other areas of high human activity.

#### Rats



Roof Rats live in many places around your yard and may even enter your home. Rats need only a 1/2" space to enter buildings. They nest in overgrown trees and shrubbery such as Palm trees, Yucca plants, Algerian Ivy, Oleander, Bougainvillea, Italian Cypress, as well as lumber piles. Rats also carry fleas that may carry Bubonic Plague or Murine Typhus. You can help by:

- $\sqrt{}$  Trimming all vegetation away from roof, walls, fences, and trees.
- $\sqrt{}$  Stacking firewood 18" off the ground and 18" away from the wall.
- √ Keeping ivy, shrubs, and palm trees trimmed.
- √ Removing potential food sources, such as uneaten pet food and ripe or fallen fruit.
- √ Screening off house vents and air conditioning vents. (Use 1/4" galvanized hardware cloth.)
- $\sqrt{\text{Repairing any hole bigger than a dime.}}$
- √ Repairing broken windows.
- $\sqrt{\text{Weather-stripping bottoms of doors.}}$
- √ Reporting:
  - all rat infestations.
  - all sightings of rats in the community.

#### Flies =



Some flies can transmit disease by contaminating human food. The trash can is the source of most fly problems around the home. These problems can be prevented by using good cleaning habits. Flies often lay their eggs in garbage, animal droppings, and other smelly places. You can help reduce the number of flies in your community by:

- √ Picking up pet droppings daily!
- √ Rinsing out trash cans weekly and keeping the lids on!
- √ Reporting all fly breeding sources from animal operations, horse stables, or large amounts of garbage.



More Vectors on Back Side

MOSQUITO and VECTOR MANAGEMENT DISTRICT of Santa Barbara County TELEPHONE: (805) 969-5050 \* WEBSITE: www.mvmdistrict.org

# MORE VECTORS

# Bees & Wasps

Normally, bees and wasps are aggressive only in defense of their nests. Africanized Honey Bees may react defensively to loud noise such as power equipment with 50 feet of their nest or to movement within 100 feet of their nest. Foraging bees and wasps rarely sting except when molested. Protect yourself and your family from bee and wasp stings by:

- √ Eliminating potential nesting sites around your house and yard! Bee-proofing information is available from the Mosquito and Vector Management District.
- $\sqrt{\text{Checking an area for nests or swarms before:}}$ 
  - allowing children to play.
  - tethering or penning animals.
  - starting up lawn mowers and other power equipment.
- √ Not fighting back if attacked! Run away as far and fast as possible. Take shelter in a building or car. Call 911.
- $\sqrt{\text{Reporting bee and wasp nests or swarms:}}$ 
  - around your house and yard.
  - in public places.
- $\sqrt{\text{Never}}$  trying to remove a nest or swarm yourself. Call:
  - a beekeeper or licensed professional exterminator.
  - the Mosquito and Vector Management District can provide a list of beekeepers.

# Head Lice =

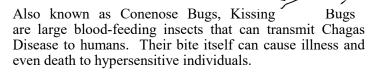


Although they do <u>not</u> transmit diseases to humans, Head Lice are common blood-feeding insects that can cause humans a great deal of discomfort.

# **Bedbugs**

Bedbugs are blood-feeding insects that sometimes invade human dwellings. They do <u>not</u> transmit any known diseases to humans.

# Kissing Bugs =



#### Mice



Mice are very similar to rats, but are smaller and are poor climbers. They can enter buildings through openings as small as 1/4". Some species, particularly Deer Mice, which are common in rural, semirural, foothill, and mountain areas, are carriers of Hantavirus and Arenavirus. These diseases are known to be fatal to humans. You can help to control mice by:

- √ Clearing brush and grass away from buildings.
- √ Keeping landscape vegetation well trimmed.
- $\sqrt{\text{Repairing all holes}}$  and gaps that are wider than 1/4".
- √ Removing food sources, including uneaten pet food.
- $\sqrt{\text{Reporting all mouse infestations.}}$
- $\sqrt{\text{When cleaning up after rodent infestations:}}$ 
  - wear a dust mask and rubber gloves.
  - spray droppings with bleach and water solution then wipe droppings up. **Do Not** sweep or vacuum due to the risk of inhaling disease contaminated dust.

### Fleas

Fleas are blood-feeding insects that occasionally attack humans. They can transmit diseases including Bubonic Plague and Flea-borne Typhus to humans. Fleas also act as intermediate hosts for some

#### Black Flies

Black Flies are very tiny biting flies similar to mosquitoes. However, their immature stages develop only in *flowing* water. They do <u>not</u> transmit any known diseases in California, but occasionally are serious nuisance biters.

## **Spiders**



Spiders cause many people to feel uneasy. Most are harmless, and are even beneficial for helping to control insect populations. However, the bites of certain species are toxic to humans.



# MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

OFFICE: 2450 Lillie Ave. \* MAIL: P.O. Box 1389 Summerland, CA 93067

TELEPHONE: (805) 969-5050 \* E-MAIL: mvmdistrict@mvmdistrict.org
Take a look at our **Public Information Website: www.mvmdistrict.org**