VENT PIPES

All vent pipes on the house should be covered with window screening and secured with a hose clamp or a plastic cable tie (available at hardware stores). Any vent pipes and inspection ports for your septic leachfield should also be screened. It's easy and inexpensive!



Original image courtesy of Stacey Henderson

COMMON MOSQUITO SOURCES



YOU CAN PREVENT MOSQUITO BREEDING!

- EMPTY OR COVER RECEPTACLES THAT WOULD OTHERWISE HOLD WATER.
- FILL TREE HOLES WITH A POLYMER.
- PUT MOSQUITO FISH IN PERMANENT PONDS.
- STORE OLD TIRES INSIDE OR COVER THEM.
- CLEAN CLOGGED GUTTERS.
- MANAGE IRRIGATION WATER EFFECTIVELY.
- REPORT MOSQUITO BREEDING SITES.

MARIN / SONOMA MOSQUITO & VECTOR CONTROL DISTRICT 595 HELMAN LANE COTATI, CA. 94931 707-285-2200 or 800-231-3236 www.msmosquito.com

SEPTIC TANKS



AND MOSQUITOES



Culex Pipiens Pipiens & Culex Pipiens Quinquefasciatus

These two subspecies are so similar that they will be treated here as one. They are commonly called "house" mosquitoes because of their often close relationship with humans and their habit of entering into houses and sometimes even breeding in containers indoors.

C. pipiens is a light brown, medium sized mosquito with a blunt-tipped abdomen. There are narrow white bands on the abdominal segments but none on the legs or proboscis (beak).

This is the most widely distributed mosquito species in the world. They are also widespread throughout the U.S. and California.



Mosquito Life Cycle

Mosquitoes have four distinct life stages as seen in the illustration, with the first three stages of *Culex* (egg-larva-pupa) being spent in the water.

An adult female lays about 150-200 eggs in clusters called rafts, which float on the surface of the water until they hatch in about one to two days.

Females usually prefer to lay eggs in standing, polluted water, such as sewage, street drainage, septic tanks, industrial wastes and backyard sources that include swimming pools, ornamental ponds, cooler drain-water and fouled water in containers. A wide variety of other water sources may also be infested with the aquatic stages of this common mosquito.

The eggs hatch into larvae (wigglers), which then feed on small organic particles and microorganisms in the water. At the end of the larval stage, the mosquito molts and becomes the aquatic pupa (tumbler). The pupa is active only if disturbed, for this is the "resting" stage where the larval form is transformed into the adult. This takes about two days during which time feeding does not occur. When the transformation is completed, the new adult splits the pupal skin and emerges.

Under optimum conditions development from egg to adult takes about a week. However, all mosquito developmental times depend on the temperature of the water in which they mature.

Septic tanks are a common source of mosquito breeding.

The house mosquito, *Culex pipiens*, thrives in these water sources. Because mosquitoes can breed so rapidly in septic systems, tanks and vent pipes must be sealed to prevent mosquitoes from entering any part of the system.

Placing plywood or boards over a tank or manhole cover will not provide adequate coverage.

A local septic contractor can quickly install PVC risers and lids (see Yellow Pages). This will also help you to maintain and pump your septic system as the lids are light and easy to remove. A gas-tight seal prevents odors from escaping as well as excluding mosquitoes and rainwater.



Septic Access Riser (Courtesy Zabel Environmental Technology)