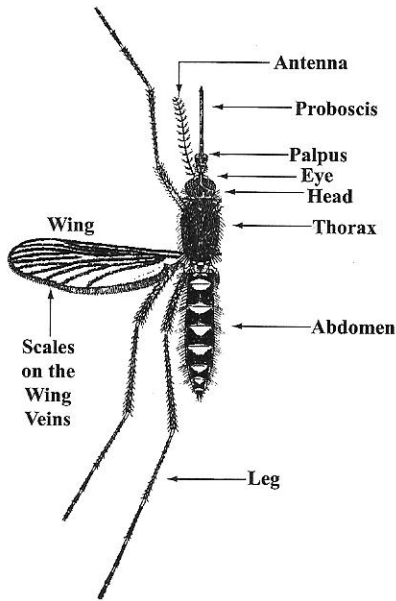


# MOSQUITO FACTS

## Adult Female Mosquito



## How Far Do Mosquitoes Fly?

Most mosquitoes fly only short distances from where they hatch. Some species can fly many miles from where they hatch.

Riding on a airplane, a mosquito can fly many thousands of miles. Airlines spray to kill any hijacking mosquitoes, preventing species from invading other countries.

## How to Determine the Sex of Adult Mosquitoes



The Male mosquito may be distinguished from the female by the feather-like or plumose appearance of the antenna and palpus.

## Why Do Mosquito Bites Itch?

When a mosquito bites, it injects chemicals to prevent the blood from clotting and reduce pain. These chemicals cause irritation.

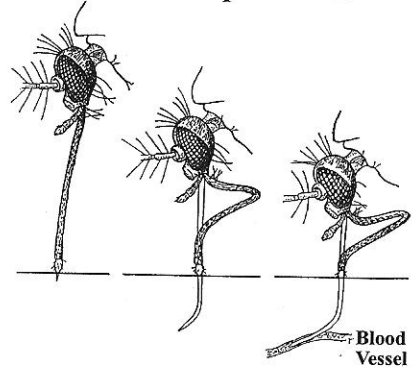
## How Do Mosquitoes Choose Who to Bite?

Mosquitoes are attracted by CO<sub>2</sub> (Carbon dioxide) in our breath. They can detect this from great distances.

When the female mosquito gets close, she makes a final choice using skin temperature, odor and other chemical or visual factors.

If two people are outside together, one will almost always get most of the mosquito bites.

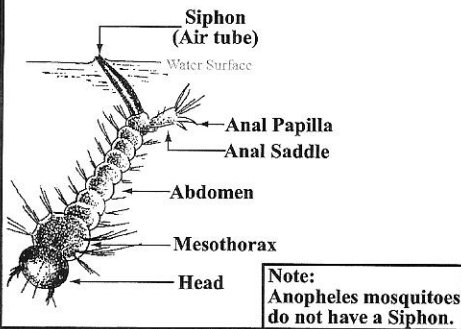
## How a Mosquito Bites



The female mosquito probes the skin for an easy entry for her proboscis, then inserts the feeding stylets and searches for a capillary blood vessel. Once the stylets are in a capillary, the female will pump blood into her abdomen.

Blood is needed to provide protein for egg formation. Some species of mosquitoes can lay the first batch of eggs without a blood meal.

## Mature Mosquito Larva



## Do All Mosquitoes Suck Our Blood?

Only the female mosquitoes feed on blood, male mosquitoes feed on plant nectar and juices.

Some species only feed on the blood of amphibians (frogs). Mosquitoes have been observed feeding on other insects, even other mosquitoes.

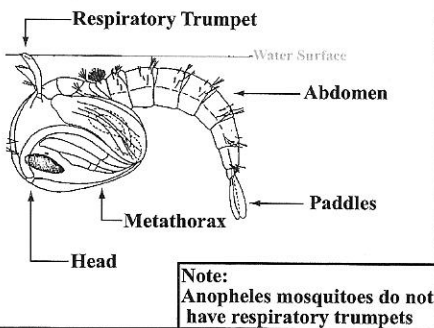
Male and female mosquitoes in the genus *Toxorhynchites* feed on plant nectar.

The minute mosquitoes in the genus *Malaya* wait for ants then thrust their proboscis between the mandibles (jaws) of the ant. The ant then feeds the mosquito.

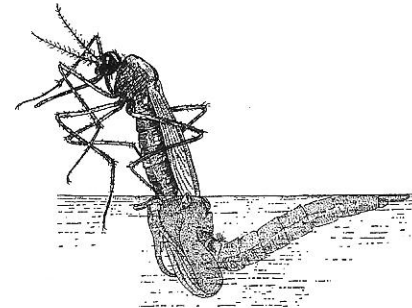
## What Do Mosquito Larvae and Pupae Eat?

Mosquito larvae eat organic material, bacteria and microscopic plants and animals found in water. Pupae do not feed.

## Mosquito Pupa



## Emergence of an Adult Mosquito



When a pupa is ready to become an adult mosquito, the pupa case splits open and an adult mosquito emerges from the pupa case. The adult mosquito then balances on the pupa case and the surface of the water until its wings are dry and hard. It can then fly away. During this transition, the mosquito is very vulnerable to wing, predators (such as water striders).

## Some Interesting Mosquito Facts

With as many species of mosquitoes as there are in the world there are many different variations from the "normal" mosquito biology. Mosquito larvae and pupae in the genus *Coquillettia* do not breathe at the surface of the water, their siphon tubes are formed to puncture the hollow stems of aquatic plants for air. Some African *Anopheles* mosquito larvae pull themselves out of the water onto plant stems to avoid predators. Mosquito larvae in the genus *Toxorhynchites* eat other mosquito larvae and the adults of this genus have a curved proboscis to feed on nectar. Many mosquito species are adapted to use very specialized water sources such as the inside of pitcher plants, leaf axels, abandoned snail shells, holes dug by crabs, cut bamboo or rot cavities of plants. There is plenty more to be studied and discovered.