

Status

- Can transmit pathogens on its body
- Possible health threat

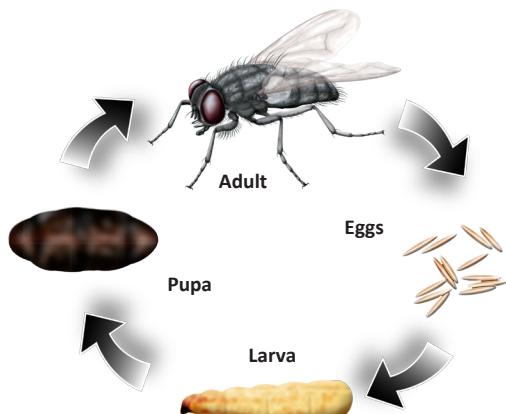
Filth Flies

General Information

There are about 160,000 known species of **flies**. They are found everywhere in the world — even in Antarctica. Flies have only two wings and belong to the order of insects called **Diptera**, which means “two wings.” Many flies are beneficial; several are involved in plant pollination, others are predators or parasites of other insects. Flies that reproduce in animal excrement, food waste, and garbage are called **filth flies**. Two common species are **house flies** and **bottle flies**. Filth flies are a nuisance as well as carriers of organisms that cause diseases in humans and domestic animals.

Life Cycle

Flies have four stages in their life cycle: **egg**, **larva**, **pupa**, and **adult**. In a period of two weeks, one filth fly may lay more than 1,000 eggs in animal excrement, garbage, kitchen refuse, piled lawn clippings, and other decomposing plant and animal matter. In warm weather, the life cycle (egg to adult) usually takes eight days. Due to this amazing reproductive capacity, tremendous populations can occur when the right environmental conditions are present. In situations where flies are breeding **prolifically**, their populations can quickly reach very high numbers and they become major **nuisance pests** in parks, schools, and neighborhoods.



Fly Facts

- Filth flies cannot chew; they have to suck up their food.
- Flies do not have eyelids; they have to rub their eyes with their feet to keep them clean.
- Flies taste, smell, and feel with the hairs that cover their bodies. Flies actually taste what they walk on.
- Flies can walk on smooth surfaces using sticky soft pads on their feet that act like glue. This allows them to walk on vertical glass surfaces and even upside down.
- Chocolate comes from fruits of the cacao tree of South America. Its flowers are pollinated by the chocolate midge, a tiny fly less than 1/8 inch long. Without this fly, there would be no chocolate.



Green Bottle Fly

How Can I Get Rid of Filth Flies?

- Eliminate potential sources of food and odors.
- Place garbage in plastic bags inside of trash cans.
- Keep trash lids closed.
- Dispose of trash at least every seven days.
- Pick up outdoor pet droppings regularly and place them in sealed plastic bags. Dog droppings should be picked up daily. Outdoor bird cages should be cleaned weekly. Cat litter boxes should be scooped daily and the litter changed weekly.
- Do not leave pet food outside, as it can attract flies and serve as a larval fly source.
- Quickly dispose of small animal carcasses, such as rats, opossums, and birds, by placing them in a plastic bag in the trash. Contact your local animal care agency or veterinarian for information on disposing of large animal or pet carcasses.
- Pick up dropped fruits and vegetables at least once per week. Place rotten ones in a plastic bag in the trash.
- Screen all windows and doors.
- Keep things that attract flies (such as pet food, bright colors, and attractive scents) away from unscreened doorways.

Health Risks

Filth flies play an important role in the transmission of disease-causing pathogens (fungi, bacteria, and viruses). The flies feed on animal excrement, food waste, and garbage where these pathogens exist. When filth flies land on your food, they can transfer pathogens to your food. Pathogens can cause problems such as diarrhea, cholera, food poisoning, dysentery, and eye infections.

Common Local Filth Flies



House Fly

The common house fly (*Musca domestica*, Muscidae) is a nuisance as well as a carrier of diseases to man and domestic animals.

In two weeks, one fly may lay more than 1,000 eggs

in animal excrement, garbage, kitchen refuse, piled lawn clippings, and other decomposing plant and animal matter. In warm weather, the life cycle (egg to adult) usually takes eight days. Warm or protected environments may permit fly production year-round.

In urban areas, the larval (maggot) sources of house flies can usually be found within the distance of a city block from where the adult fly was captured. Although adult flies may sometimes travel several miles from the source.

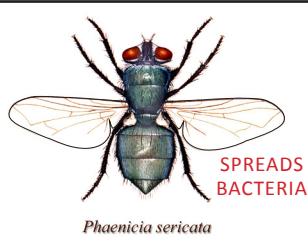
Besides the grayish-black house fly, several other kinds of flies are found in the home. Control of these is the same as for the house fly, although the elimination of larval sources varies between species.



Little House Fly

The little house fly (*Fannia canicularis*, Muscidae) characteristically hovers and flies to-and-fro in the shade of trees, porches, patios, and open garages. It sometimes flies through open doors and enters buildings. Seldom

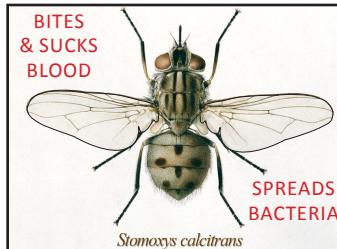
landing on human food, it is less apt to contaminate food than the house fly. Maggots develop from eggs laid in well-decayed vegetable matter or in excrement from animals such as rabbits, poultry, and pigeons. The life cycle requires about 24 days to complete.



Blow Fly

Blow flies (such as *Phaenicia sericata*, Calliphoridae) are larger than common house flies. Several species are characterized by shiny, metallic colors, either black, blue, green, or copper. In flight, they make a loud

droning buzz. Females lay eggs on exposed meat and dead animals; meat infested by their larvae is said to be "fly-blown" or just "blown." The larval development of green and copper blow flies, most commonly found in garbage wastes and pet droppings, is completed in less than a week, while that of black and blue blow flies requires 10 to 15 days.

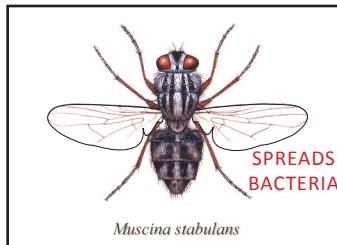


Stable Fly

The stable fly (*Stomoxys calcitrans*, Muscidae) resembles the house fly but has a slender, pointed beak with which it pierces skin and sucks blood. It is normally an outdoor fly, feeding on domesticated animals such as

horses and dogs, but may enter houses in rainy weather.

To control stable fly maggots, each week dispose of stable manure, urine-soaked straw, moist spilled feed, pet excrement, and moist decaying vegetation like lawn clippings or decaying seaweed washed up on shores and beaches. Its life cycle requires 18-54 days to complete.



False Stable Fly

The false stable fly (*Muscina stabulans*, Muscidae) is slightly larger and stouter than the house fly and generally dark gray in appearance. It cannot bite like the stable fly but

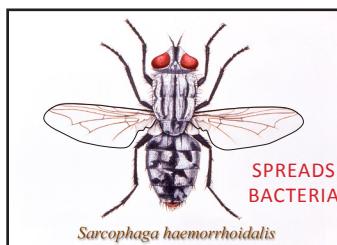
may enter houses and lay its eggs on slightly spoiled foods. Maggots are frequently seen in animal excrement and decaying vegetable matter. The life cycle is normally 14 days.



Black Garbage Fly

Black garbage flies (*Ophyra* spp., Muscidae) are small, slender, black, shiny flies about 1/5" long. They develop in great numbers in garbage wastes but are not usually found around homes

in large cities. They are abundant around rural premises, particularly those not having routine garbage collection. The life cycle requires about 10 days.



Flesh Fly

Flesh flies (such as *Sarcophaga haemorrhoidalis*, Sarcophagidae) look like overgrown house flies. The more common ones have a checkerboard pattern on the abdomen. They deposit living maggots (rather than eggs)

in decaying flesh and excrement, especially dog droppings. The flesh fly needs only 8 days to complete its life cycle. Another common source is animal carcasses.