

### *Just the Facts...*

*Several species of flies commonly enter homes. Most are merely nuisance pests. Others are important because they can transmit diseases. House flies, face flies and blow flies develop in manure and garbage and are commonly contaminated with disease-causing bacteria, including those associated with food poisoning. The most commonly observed stage of a fly is the winged, adult stage. The immature stage is a pale, legless maggot. When full-grown, maggots migrate from the breeding site in search of a place to pupate. Many flies complete development (egg-larva-pupa-adult) in a short period, seven to 14 days, and produce numerous generations during a typical season. Although flies most often are a nuisance during the warm season, indoor overwintering is common with cluster flies and face flies. Sanitation practices that remove breeding areas are fundamental to the control of filth-breeding flies, such as house flies and blow flies. Remove or cover garbage regularly and cleanup spilled animal feed and manure. Face flies, which typically develop in pasture lands, and cluster flies (earthworm parasites) often are difficult to control by breeding area management.*

To control fungus gnats, correct the conditions of the breeding area. Allow the soil to dry thoroughly between watering and eliminate decomposing plant materials. This reduces the amount of fungi where fungus gnats breed. Fruit flies are best controlled by removing breeding sources. Discard overripe fruit, and wash bottles and cans during recycling to eliminate common breeding sites. Drain flies, which develop on the gelatin-like coating that forms in drains and pipes, often are eliminated by correcting cracks or leaks in pipes that allow seepage or serve as breeding sources.

Screening and other exclusion techniques can be a very important management tool for several types of indoor fly problems. Caulk or cover all openings into a home to prevent flies from entering. Efforts to exclude flies must be done before they enter buildings. For example, cluster flies rarely are found indoors until late winter or spring but typically enter buildings during late August and September.

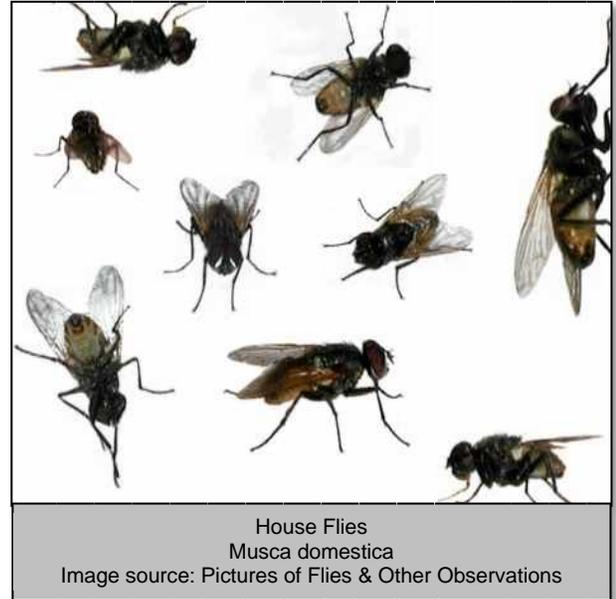
Insecticides used for control should only be considered as a supplement to other controls. Serious problems exist with insecticide-resistant flies and many fly populations are now difficult to control with insecticides.

Spot treatments with insecticides applied to areas of high fly activity are most efficient. For example, flies that tend to rest in dark corners can be controlled by applications to these areas. Cluster flies are controlled by treatments applied to upper stories of building exteriors immediately before periods when flies move indoors for overwintering.

Where fungus gnats are a problem, insecticides can supplement the cultural control of reduced watering. Houseplant aerosol pesticides, applied at two to three-day intervals for three to four weeks, should eliminate most of the adult fungus gnats.

Several types of traps for flies also are available and can supplement other controls. Fly paper can kill flies but are only effective in areas where exclusion and sanitation efforts have already reduced the fly populations to low numbers.

Various food-based traps also are for sale. These traps often contain a protein bait, sometimes with the addition of a pheromone (sex attractant) used by flies. As with other traps, they can supplement other control methods such as sanitation and exclusion.



## Summary of techniques useful for the control of flies in and around homes.

<u>Fly species</u>	<u>Scientific name</u>	<u>Controls</u>
Blow flies	<i>Calliphoridae</i>	Tightly seal garbage containers and remove animal (particularly dog) manure from area around the home. Screen windows in summer. Use fly paper or fly traps.
House fly	<i>Musca domestica</i>	Tightly seal garbage containers. Screen windows in summer. Use fly paper or traps to attract and capture flies. Spot treatment of room corners to kill resting flies.
Face fly	<i>Musca autumnalis</i>	Seal homes in late summer before periods when flies enter to overwinter. Try to limit sources of cattle manure in pastures, particularly in late summer. Treatment with insecticides of exterior walls around openings can further limit movement into homes during late summer.
Little house flies	<i>Fannia</i> species	Limit breeding sources from around the home, such as decaying vegetable materials and, particularly, manures. Keep window and door screens intact.
Cluster flies	<i>Pollenia rudis</i>	Seal the home (particularly upper stories of south and west sides) before periods when flies enter in late August and September.
	<i>Pollenia pseudorudis</i>	Exterior treatment of house walls with effective insecticides can further limit entrance.
Picture-winged flies	<i>Otitidae</i> species	Picture-winged flies are harmless, minor nuisance pests that overwinter in homes. Control is generally not needed. They move into homes during late summer and fall; preventive practices which restrict other flies from entering homes will help control this fly.
Fungus gnats	<i>Bradysia</i> species	Reduce watering of house plants to allow increased drying and limit development of fungi in the soil on which larval stages feed. Discard rotting bulbs or parts of house plants that are decaying. Apply houseplant insecticides to the plants and soil surface at frequent (2-4 day) intervals for 2-3 weeks to kill a generation of adult insects.
Fruit/Vinegar flies	<i>Drosophila</i> species	Remove sources of breeding, which include overripe fruit and fermenting materials (e.g., stale beer or soft drinks).
Drain flies	<i>Psychoda</i> species	Correct problems with plumbing that produce conditions favorable to fly breeding.