

# FLY CONTROL AROUND THE HOUSE

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Several species of flies may become pests around the home. The housefly is the most common pest, but the little housefly, latrine fly, flesh fly, blow fly and the stable fly are also troublesome. These flies are well known for buzzing around and annoying people endlessly. However, they can carry diseases such as dysentery, diarrhea, food poisoning and typhoid fever. Therefore, home fly control is an important to good sanitation and family health.

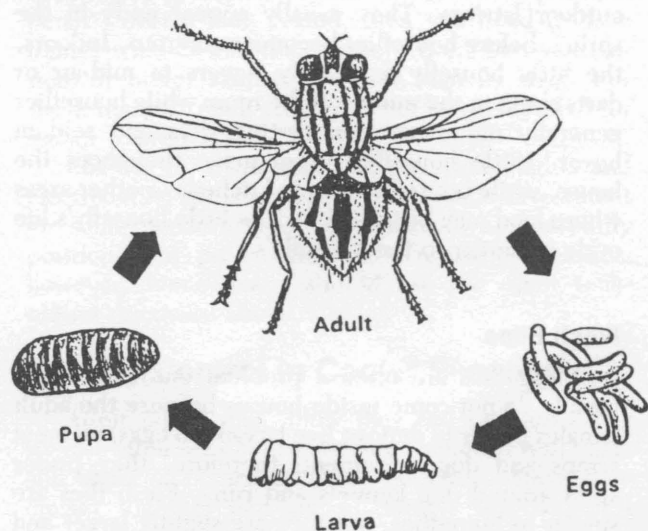
Fly problems around homes separate into two basic categories—summer or warm season problems and cool weather or overwintering fly problems. Even though the same fly species can be a problem in both warm and cool weather, control methods are different for these two seasons.

## Houseflies

Houseflies are the most common pests in and around homes. Houseflies are 1/5- to 1/3-inch long and grayish in color. There are four darker, blackish stripes behind the head and one of the wing veins is distinctly and sharply bent. These features are visible to the unaided eye, but a simple magnifying glass may be used in identification. Proper identification of any pest results in better pest control since specific control recommendations are available for most pest species.

Most adult houseflies travel within 1 mile of sites where eggs are laid and the greasy, cream-colored larvae (or maggots) develop. In heavily infested areas,

the larva breeding site(s) is almost certainly within 100 yards. Garbage cans, large commercial trash containers, poorly drained areas around garbage receptacles, compost piles, human and pet excrement, open dumps and unsanitary conditions around food processing or rendering plants are likely larval sites. Housefly maggots need a damp or semi-liquid medium in which to live since they can not chew dry food and are susceptible to desiccation. They feed on almost any man-made or naturally occurring moist or slimy vegetative or animal waste material such as household garbage. Keep these facts in mind when searching for fly breeding sites to clean up the area or apply insecticide.



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The housefly's life cycle requires about 2 to 3 weeks from egg deposition to adult emergence during warmer periods (70 to 90 degrees F.) but may take several weeks longer under cooler conditions. There may be as many as 10 to 12 generations in a summer. Adult flies feed primarily on sugar and protein-rich foods. They have sponging-lapping mouthparts, so they must either feed on liquids or regurgitate saliva onto dry foods, which is then liquified. They cannot bite people with this mouthpart.

Adult houseflies usually live only 2 to 3 days without food but can survive up to 50 days where food is available. Females deposit an average of 400 to 600 eggs each. This egg production and their short life cycle allow houseflies to develop large populations rapidly.

During daylight hours houseflies rest indoors on floors, walls and ceilings. They can be found outdoors on plants, the ground surface, fences and fence wires, garbage cans and other similar surfaces. At night they will rest indoors on ceilings, electrical wires and dangling light cords while they rest outdoors on fences, electric wires, edges of buildings and plants. In all situations they prefer corners and edges or thin objects such as wires and strings. Night resting places are usually 5 to 15 feet off the ground near daytime food sources. Knowing these typical resting sites is important when spraying surfaces with residual insecticides.

### **Little Houseflies and Latrine Flies**

These flies are smaller and more slender than the housefly, and they do not have the bent wing vein. The adult females prefer to lay eggs on decaying vegetable material and excrement. They frequently lay around chicken coops, horse and cow barns and outdoor latrines. They usually appear early in the spring, before houseflies become numerous. Indoors, the little housefly frequently hovers in mid-air or darts about in the middle of the room while houseflies generally move between resting sites and seldom hover. Little houseflies often move throughout the house, while houseflies stay in kitchens or other areas where food may be available. The little housefly's life cycle is similar to the housefly's.

### **Flesh Flies**

Flesh flies are often a problem outdoors. They usually do not come inside houses because the adult females prefer to deposit live larvae (no eggs) on meat scraps and dog excrement; therefore, they prefer areas around dog kennels and runs. Flesh flies are similar to houseflies, but they are slightly larger and have characteristic gray and black checkerboard markings on the abdomen or tail section.

### **Blow Flies or Blue, Bronze and Green Bottle Flies**

These flies breed in decaying flesh of dead animals and commonly swarm around animals killed on roads and highways. They are common in towns and cities, especially near slaughterhouses, meat-processing plants, garbage cans, dumps and landfills. Up to 30,000 flies per week may emerge from a single garbage can. Their presence inside a residence sometimes indicates that a rodent or bird has died in a crawl space, wall void, chimney flue or attic. They occasionally lay their eggs on decaying vegetative material when meat is not available.

Blow flies are larger than houseflies and have a shiny, metallic body texture. Some species are black, while others may be green, dark blue or bronze. Their life cycles are similar to the housefly's, which means that they can reproduce rapidly under favorable conditions (warmth and food). Blow flies are strongly attracted to odors of raw or cooked meat, poultry or fish. They are a nuisance indoors as they buzz around the room and bump into windows while trying to get outside.

### **Stable Flies or Biting House Flies**

Stable flies closely resemble houseflies. However, they distinguish themselves from houseflies when they use their bayonet-like mouthparts to bite and suck blood. They can easily deliver a painful bite through clothing, unlike houseflies and other species that have sponging-lapping mouthparts so they can not bite.

As the name implies, stable flies are most commonly found in neighborhoods that are near horse stables, dairy barns or cattle feeding operations. They usually place their larvae in stacks of wet straw and decaying hay, alfalfa, grain, onion, weeds, lawn clippings, (e.g., check the compost pile) or seashore vegetation. Stable flies can be a problem both indoors or out.

### **Drain Flies and Fruit Flies**

These flies are considerably smaller than any of the flies previously discussed. They are usually a problem indoors, either in drains or around wastebaskets which are not kept clean and dry inside. In the summer they become numerous around outdoor garbage cans or commercial trash facilities. See Extension publication L-2037 *Drain Flies*, for further information and control recommendations for these fly pests.

## **Fly Control in the Summer**

### **Outdoor Areas**

The first step to control any fly problem successfully is to determine where the fly maggots are breeding. This process, termed source reduction, is always the most efficient method of control.

If there are only a few flies around at any one time, then the breeding area may not be on your property. Since flies feed and lay eggs in areas such as garbage cans or dog kennels which are sources of food odors, cleaning these areas eliminates the problem.

Also control low fly numbers by using a *residual insecticide spray* to treat surfaces where flies usually rest. The discussions of fly identification and behavior given above can help you know where the flies might be coming from and where to apply insecticides for control. Take a few minutes to watch the flies to find out where they are resting or what seems to be attracting them. Choose one of the insecticides from Table 1 and apply it to fly resting areas according to label instructions.

For fast knockdown and killing flies, but no residual control, some *aerosol fly sprays* are available which contain synergized pyrethrins, tetramethrin or resmethrin (also called SBP-1382). These are appropriate for fast results and safe application around people, pets and food before or during picnics and outings. These insecticides sometimes temporarily repel other flies from the treated area.

There are also some insecticide *fly baits* available that can be put out in small, shallow trays (bait stations) in fly-infested areas. These are especially effective when they are used with the residual sprays and sanitation procedures. Many brands of electric *flying insect traps* are marketed. These generally use an ultraviolet light to attract flying insects and an electrocution grid to kill them. While these traps often seem to give their owners a satisfaction as they "zap" insects, they seldom significantly affect outdoor fly control.

Insecticide impregnated *resin strips* (e.g., those than contain dichlorvos) are also sold to control flies and other flying insects, but they are not effective in either outdoor areas or ventilated indoor areas. They effectively aid fly control if they are attached to the underside of a garbage can or dumpster lids that seal the container tightly. Do not expect them to work if they are hung outdoors or in breezeways.

If large numbers of flies are present in your yard, then there is probably a fly breeding site on your property or nearby. Look for areas where flies may be breeding; clean up these areas and make whatever changes necessary to prevent this condition from recurring. The residual insecticides listed in Table 1 can be sprayed into the areas where maggots breed after clean-up. This gives temporary protection against further maggot development.

If the source of the flies is not on your property, try to locate it and have the responsible persons help solve this problem. If cooperation can not be obtained from the other person, contact your municipal or state health department to seek their assistance. Do not suffer with a serious, persistent fly problem that results from someone else's neglect.

Table 1 lists insecticides recommended for residual spraying on fly resting surfaces such as fences, outside building walls, shrubs, garbage cans or dumpsters. Combining sanitation efforts, insecticide spraying and fly bait use should effectively control flies. However, if the fly source is not eliminated or is beyond your control, then insecticide sprays may have to be reapplied at 2 to 4 week intervals throughout the warmer season. Rains or lawn sprinklers wash residual insecticide off the fly resting surfaces, creating a need for retreatment. The cost in time and money for insecticide treatments emphasizes the efficiency and desirability of sanitation and elimination of maggot breeding sites.

### Indoor Areas

The invention of cheap, mass-produced fly screening was one of man's greatest achievements toward assuring healthful and comfortable homes and work places. Indoor fly control should be 99 percent exclusion, using screens, caulking, etc. When flies come inside as doors and windows are opened or while screens are in disrepair, use of an *insecticide aerosol* gives temporary relief. Push-button aerosols containing synergized pyrethrins or resmethrin (also called SBP-1382) and total release aerosols are effective. Be sure to read the product label and follow directions for best results.

*Fly paper* or other sticky traps are effective to a limited extent. Insecticide-impregnated *resin strips* claim 3 to 4 months of fly control indoors but are only effective if used at the correct rate (read the label) and where little or no ventilation exists. These strips are not to be used in food preparation areas or where infants, the elderly or people sensitive to insecticides sleep. Because flies are nearly always attracted to odors from kitchens, these strips can not be used where they are most needed. Also, if a fly problem persists over a long period, then you need to have tighter window and door screens (i.e., better exclusion) or better sanitation rather than fly strip. For these reasons, resin strips are not recommended for indoor living spaces.

*Electric fly traps* that use ultraviolet lights and electrocution grids may be a worthwhile investment for some restaurants or food plants when carefully positioned by professional pest control technicians; however, homeowners should use the other techniques discussed above.

### Fly Control in Cooler Seasons

Adult house flies, blow flies and perhaps other species often seek overwintering shelter in wall voids and attics of homes or other buildings. Here they cluster together and remain largely inactive until temperatures warm up in the spring. Flies also may enter rooms of the home from the attic or wall voids at different times during the winter. As with indoor fly

control during the summer, overwintering fly problems can be avoided by using careful exclusion techniques. Be sure that cracks and holes in the house siding and around windows or doors are well caulked. Be sure ventilation holes in the eaves are carefully screened. So called "weep holes" in the brick veneer of many Texas homes allow easy, direct access of flies and other insects to the wall voids. From there, they may enter the home directly or move to the attic. To make weep holes "insect proof", plug them with pieces of nylon or plastic scouring pads, such as those sold to scour "no stick" pots. Square pieces of window screening that are 4 to 5 inches wide also can be placed in weep holes to prevent pest access to wall voids. Do not caulk or totally seal weep holes because

they prevent excessive condensation from forming in wall voids.

Spray one of the residual insecticides listed in Table 1 around door and window casings, onto screens, under eaves or around any other likely fly entry points. Also apply this spray in the attic where the flies may be clustering. Total release aerosols containing dichlorvos are effective for controlling flies in attics. Be sure to read the label and use the proper number and size of these aerosols for the volume of attic space involved. Flies in attics or in wall voids can be controlled also with insecticide aerosols which contain synergized pyrethrins, tetramethrin or resmethrin directed at the flies or into their harborage areas.

**Table 1. Residual insecticides labeled for adult or larval fly control in and around the home. Read the product label for mixing and application instructions.**

Insecticide	How to Apply	Comments
propoxur (Baygon®)	Spray	Available in many aerosol sprays for home use.
dimethoate (Cygon®)	Spray	Probably gives the longest residual control; good against maggots.
dichlorvos (DDVP®)	Spray	Short residual (1 to 2 days) as a spray. Available in some total release aerosols.
dichlorvos (DDVP®)	Bait	Most effective when used in combination with a residual spray.
dichlorvos (DDVP®)	Resin strip	Recommended only for use inside garbage can lids.
diazinon	Spray	Available as homeowner aerosols and as a liquid concentrate to mix with water.
trichlorfon (Dipterex®)	Spray	Active ingredient available in some homeowner products.
trichlorfon (Dipterex®)	Bait	Most effective when combined with a residual spray.
chlorpyrifos (Dursban®)	Spray	Available as homeowner aerosols, ready-to-use spray, and liquid concentrate to mix with water.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

*We are indebted to John M. Owens, former Extension urban entomologist, for developing the original text.*

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