



A variety of fly species exist and while these insects are all considered a nuisance, certain types are responsible for spreading diseases. To decrease disease risk, it is important to understand where flies live and breed and control methods available.

Life Cycle

Fly prevention and control involves a basic understanding of their life cycle.

- A fly life cycle has 4 stages: egg, larva (maggots), pupa, and adult
 - This cycle can take less than 2 weeks in warm weather for some species
- Adult flies lay their eggs in wet organic matter, such as animal waste and decaying material
 - Moisture is needed to prevent the eggs, larvae and pupae from drying out
 - Bacteria and viruses that may cause disease are picked up from these sources
- Adult flies can carrying disease organisms on their legs and mouthparts
 - Some flies are biting species and can transmit bloodborne pathogens in this manner

Fly Control Measures

- Integrated pest management is the best approach to controlling flies
 - It combines prevention and non-chemical control methods with the wise use of the least harmful pesticides possible
 - It involves monitoring and environmental control
- The environment must be managed to decrease the areas where flies can lay their eggs
 - Control moisture and remove materials where larvae develop (e.g., feces) to break the life cycle and prevent development of adult flies
 - Fecal material in outdoor areas should be picked up and disposed of on a daily basis
 - Garbage cans should have tight fitting lids to deter entry by flies
 - Organic debris (e.g. rotten vegetation and leaf litter) should also be disturbed once a week to prevent fly eggs from hatching

Area sprays (knockdown) are fine mist insecticides that kill adult flies on contact

- These products can be used in areas of high fly concentration; they do not last long (1-2 hours)
- Due to evaporation, these products should not be used at temperatures over 90°F; they are not effective at low temperatures (below 65°F)
- Residual sprays are insecticides that can be applied to shaded surfaces
 - The flies are killed when they contact the product while resting
 - Treat places such as walls, ceiling, and rafters
 - Water (e.g., cleaning) will wash off the insecticide
 - To avoid insecticide resistance, alternate between area and residual sprays
- Baits and fly traps can be used in areas where the use and safety of chemical sprays are prohibited
 - These products should NOT be placed in areas where they could contaminate food or water or where animals will have access to them
- With any fly control product, always read and follow all label directions carefully

It is a violation of state and federal law to use a pesticide in any manner that differs from the product label. Use only according to label directions to avoid environmental damage and animal or human injury.

For More Information

- Flies. University of California, Agriculture and Natural Resources. Publication 7457. April 2004. Available at: www.ipm.ucdavis.edu/PDF/PEST-NOTES/pnfiles.pdf
- Fly control around the house. Texas Agricultural Extension Service. Available at: http://cipm.ncsu.edu/ent/Southern_Region/RIPM/CHAP6/ flies.htm
- Integrated pest management (IPM): In and around the home. Ohio State University Extension. June 1994. Available at: http://ohioline.osu.edu/ hyg-fact/2000/2159.html