

National Center for Environmental Health
Division of Emergency and Environmental Health Services

What Is Integrated Pest Management?

Integrated pest management (IPM) is a science-based, common-sense approach for managing insects, rodents, or other vectors. IPM uses a variety of pest management techniques that focus on pest prevention, pest reduction, and the elimination of conditions that lead to pest infestations. IPM manages pests and disease vectors by managing the environment to eliminate their food, water, and shelter. IPM programs also rely heavily on resident education and pest monitoring.



Inspection of rat burrows

For IPM to succeed, environmental health specialists must take into account the behavior and ecology of the target pest, the environment in which it is active, changes that occur in the environment, and the activities of people who share the environment. An IPM approach works best when used with techniques that actively involve the residents in addressing issues that may contribute to pest infestations, such as home maintenance, sanitation, and housekeeping.

Components

Although IPM includes some standard pest control techniques, the four components of IPM clearly separate it from typical pest-control practices that rely exclusively on trapping and poisoning. Those four components are

- **Inspection:** examination of indoor and outdoor areas to identify what, where, and why pests are active. A major inspection is done at the start of an IPM program; minor inspections occur throughout an IPM program.
- **Monitoring:** verification of pest presence or absence. Monitoring includes direct observation of pests; indirect observation of pest droppings, stains, damage, etc.; and collection of pests in traps.
- **Treatment:** corrective actions or interventions to reduce the number of pests. Education to change people's behavior is the most important part of an effective IPM program. Cleaning, sanitation, and keeping pests out are effective over the long term.
- **Evaluation:** follow-up to determine whether treatments are successful and what should be done next. Evaluation is one of the most critical components of an IPM plan.

Advantages

IPM is a comprehensive, systems-based approach to pest management with the goal of providing the safest, most effective, most economical, and sustained remedy to pest infestations. IPM reduces the risk from pests while also reducing the risk from the overuse or inappropriate use of hazardous chemical pest-control products.

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What Is IPM?, Continued

For More Information About IPM

- CDC Environmental Health Services Rodents topic Web page (<http://www.cdc.gov/nceh/ehs/Topics/rodents.htm>)
- CDC Rodent Control Web page (<http://www.cdc.gov/rodents>)
- U.S. Environmental Protection Agency IPM in Schools Web page (<http://www.epa.gov/pesticides/ipm>)

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