

# IPM

## (Intergrated Pest Management)

Pesticide Control Program  
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Environmental Protection  
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### What is IPM (Intergrated Pest Management)?

IPM is an approach to pest control that uses regular monitoring to determine if and when treatments are necessary, employing physical, mechanical, cultural and biological methods to reduce and maintain low pest population levels. The goal of IPM is to manage pests while balancing costs, benefits of control, public health and environmental quality.

In IPM programs, treatments are not made according to a predetermined schedule. Control measures are instituted when and if monitoring has indicated a pest will cause unacceptable economic, medical or aesthetic damage. The control measures chosen for treatment are timed to be most effective and least disruptive to natural pest controls.

IPM does not aim to totally eradicate an individual pest but only to reduce it to acceptable levels. It is usually beneficial to allow some portion of the pest population to survive so the population of natural enemies is preserved as well. Chemical pesticides, too, are not eliminated in the IPM process, but used with discrimination rather than the only alternative.

The IPM process usually employs the following components:

**MONITORING:** Observations and records of problems or potential problems are made at a site at regular intervals. This usually involves pest population numbers but can include conditions such as climate changes also.

**INJURY LEVELS:** The problem is determined to be serious enough to require action. This determination is comprised of two values: 1) Amount of economic, medical or aesthetic damage that can be tolerated, and 2) the population size of the pest that creates unacceptable damage.

**LEAST TOXIC TREATMENT:** The control strategies selected are the least disruptive to natural controls, least hazardous to human health, least toxic to non-target organisms, least damaging to the environment, most likely to control the problem pest, and most cost-effective in both the short and long term.

**RECORDKEEPING:** Records are kept from year to year of observations, what actions were taken and the decision process behind them, and the results obtained.

**EVALUATION:** The control measures employed are evaluated for effectiveness. Modifications, if necessary, are prepared for the next growing season.

IPM control methods other than conventional chemical pesticides are numerous. A general list is provided below.

- **Sanitation** – removal of food sources and safe harborages for pests.
- **Cultural controls** – mowing, drainage, pruning, use of pest resistant plant varieties, dense groundcovers, proper watering and fertilization, variation of planting dates.
- **Physical controls** – handpicking, barriers, vacuuming, row covers, shallow cultivation, mulching, light and pheromone traps.
- **Biological controls** – natural predators and parasites such as nematodes, ladybugs, lacewings, praying mantids, predatory mites, braconid wasps, bats, toads.
- **Least Toxic Chemical Methods** – microbial pesticide formulations such as *Bacillus thuringensis* and milky spore, insecticidal soaps, diatomaceous earth.

**Please contact the following if you need more information:**

**NJDEP Pesticide Control Program**

General information: 609-984-6507

To report a pesticide misuse: 609-984-6568

Website: [www.pcpnj.org](http://www.pcpnj.org)

**National Pesticide Telecommunications Network**

For questions on possible health effects: 1-800-858-7378

**New Jersey Poison Information System**

For emergency situations involving pesticide exposure or poisoning:

1-800-222-1222