

Integrated Pest Management (IPM) Guiding Principles of Alameda County Vector Control Services District (ACVCSD)

What is IPM?

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment to reduce their “pest effect.” This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

The IPM approach can be applied to most settings, such as the home, gardens, businesses, and the workplace. IPM takes advantage of all appropriate pest management options including, but not limited to, the judicious use of pesticides.

How Do IPM Programs Work?

IPM is not a single pest control method but, rather, a series of pest management evaluations, decisions and controls. In practicing IPM, property managers who are aware of the potential for pest infestation follow a four-tiered approach. The four steps include:

Set Action Thresholds

Before taking any pest control action, first set an action threshold—a point at which pest populations or environmental conditions indicate that pest control action must be taken. Sighting a single potential pest does not always mean control is needed. The level at which pests will either become a health or economic threat is critical in guiding pest control decisions.

Monitor and Identify Pests

Not all insects, or other living organisms require control. Many organisms are innocuous, and some are beneficial. IPM programs work to monitor for pests and identify them accurately, so that appropriate control decisions can be made in conjunction with action thresholds. This monitoring and identification reduces the possibility that pesticides will be used when they are not really needed or that the wrong kind of pesticide is used.

Prevention

As a first line of pest control, IPM programs work to manage the property, or indoor space to prevent pests from becoming a threat. In your living area, this could mean pest-proofing of the exterior of the structure, as well as the interior. Sealing exterior openings and caulking of interior cracks and crevices can go a long way in keeping pests out, as well as removing harborage. These control methods can be very effective and cost-efficient and present little to no risk to people or the environment.

Control

Once monitoring, identification, and action thresholds indicate that pest control is required, and preventive methods are no longer effective or available, IPM programs then evaluate the proper control method both for

effectiveness and risk. Effective, less *risky* pest controls are chosen first, including highly targeted chemicals, or mechanical control, such as trapping. If further monitoring, identifications and action thresholds indicate that less risky controls are not working, then additional pest control methods would be employed, such as targeted spraying of pesticides. Broadcast spraying of non-specific pesticides is a last resort. Also, the cost of effective control is a key factor.

What Else?

Your pest control professional (PCP) is an expert in pest control, but never feel reluctant to seek a second opinion, or ask about alternative, yet effective pest control methodology. There are often several different methods to resolve a pest situation, and the key is selecting the most appropriate and environmentally friendly to match the situation.

Alameda County Vector Control Services District is part of the Alameda County Environmental Health Department, and we are keenly aware of the environmental challenges facing pest control, and the need for solid IPM practices.

How Does Alameda County Vector Control Services District Practice IPM?

As a District we do very little direct pest control, but we deliver a great amount of pest/vector control advice to the public. Annually, we receive 6,000 to 7,000 requests for service from Alameda County residents, who call with a wide variety of pest/vector related problems. All of these require an IPM approach.

An example is if someone calls who is experiencing a house mouse infestation in their home:

In this case the *action threshold* is usually when one mouse gains access to your home. Our first step is to make sure there is a mouse infestation that can be identified by telltale mouse feces, and some damage that they have done.

The next step is to identify how the mice entered the home and advise of pest-proofing practices that will exclude future invasions. After entries have been identified, we advise on denial of sustenance (food and water) for the mice, so our next step of control measures will be effective.

In advising on control, one of our objectives is to try to devise a program that does not rely on pesticides, and an indoor mouse problem is a situation where physical control is the best approach. The use of simple snap traps and their proper deployment is the tool most suitable for indoor mouse infestations. Rodenticides occasionally have a place in rodent control, but never in the interior of your home. In your home, besides the bait you put on your snap-trap, the other significant guidance is where and how to place the traps, and number of traps to expeditiously end the infestation.

Certainly, not all pest situations are straightforward, and each will need to be evaluated based on the components of the specific situation. It should be noted that we are a Division of the Alameda County Environmental Health Department and take our mission very seriously:

“The mission of the Vector Control Services District is to prevent the spread of vector-borne diseases, injury, and discomfort to the residents of the District by controlling insects, rodents, and other vectors and eliminating causal environmental conditions through education and integrated pest management practices.”