



Effective Pest Control

Pests can be a major food safety problem if left uncontrolled. Pests can contribute to potential biological, chemical and physical hazards to your raw materials, packaging and products. Pests can contaminate through their bodily fluids and excrement (e.g. urine, droppings, and saliva) and most often, pests are carriers of diseases and pathogens and can transmit these to your products and food contact surfaces. They can also contaminate your materials and product with whatever they've been walking through. The actual physical presence of the pest in your product is a source of foreign material. Pests can also cause a considerable amount of physical damage (e.g. gnawing) to your product, equipment and facilities and materials such as ingredients and packaging.

Whether they force you to replace materials, scrap your product or order a recall, pests can cost you money and potentially your brand's reputation. So it's important to be proactive and implement an effective pest control program.

Pest control programs may be carried out by in-house staff or by an outside service provider. If in-house resources are used, ensure that appropriate training has been completed and the necessary licenses are acquired. If a contract service company is used, ensure that the company is reputable and provides a copy of a business license, insurance coverage and certificates and well-documented pest control inspection reports. It is also important to establish a service agreement to specify the requirements of the service.

The following are key aspects of an effective pest control program:

- 1. Risk Assessment:** A risk assessment must be performed to determine actual and potential pest issues. Assess the perimeter of your property. Are there trees and debris growing close to your building that could serve as a nesting site for birds or rodents? Are pallets stored against the walls allowing rodents to hide? Pay close attention to your neighbours. Their activities may be attracting pests that you need to consider.
- 2. Knowledge of the Pest:** The best approach to controlling a pest problem is to have knowledge of the pest's habits and lifestyle and use it against them. For example, the best way to control flies is when they are not active i.e. when they are larvae. Knowing that larvae feed on wet organic matter such as in garbage cans, floors and in floor drains will allow you to take the appropriate actions. These include removing garbage regularly and storing it appropriately as well as performing regular and thorough cleaning of these areas.
- 3. Prevention and Control:** Pests need three elements to successfully take over your facility. An entry point, shelter and food/water. Denying pests these three elements will allow you to overcome any pest problem.

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Common methods of control and prevention:

- Exterior bait stations
- Traps
- Pesticides/insecticides
- Positive pressure airflow
- Screens on windows, vents and doors
- Effective sanitation program (e.g. cleaning floor drains regularly, timely removal and proper storage of waste)
- Effective preventive maintenance program (sealing cracks and crevices, removing debris around premises)

Despite your best efforts, pests do sometimes manage to enter and survive in your facility. If you happen to spot a pest in your facility:

- Isolate it and remove it from building
- After handling a pest, dispose of gloves, wash hands, clean clothes and sanitize boots
- Inspect and thoroughly clean the area
- Dispose of affected product, ingredient, and packaging
- Record all actions
- Investigate point of entry
- Contact the pest control service provider

- 4. Monitoring:** To catch a major pest problem before it occurs, it is important to constantly monitor controls in place as well as new evidence of pests. This includes monitoring incoming ingredients and materials and performing regular inspections of the facility, including traps and bait stations. Pay attention to any evidence of urine (using a UV light), droppings, gnawing, nests or musky smells.

- 5. Evaluate:** Periodically review your pest control program. Are the controls in place working? Is there a new pest problem that needs to be controlled through a different approach? Is there evidence that a particular time of year is particularly problematic and controls need to be increased at that time?
- 6. Documentation:** Document, Document, Document! Documents should indicate the individual responsible and a description of their responsibilities, a list of target pests, a map and ID # of each trap location and type, frequency of the inspection, monitoring and verification of the effectiveness of the program, corrective actions, a list of approved chemicals and concentrations (MSDS sheets for those chemicals) and trend analysis of pest activity.

Get to know your pest control provider; conduct inspections either with them or on your own. If you are conducting pest control activities on your own know when to call a pest control specialist for assistance to protect your product and your facility from potential infestation.

FOR MORE INFORMATION CONTACT:

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RESOURCES

Pfuntner, A, R. (2013). Risk Analysis: Pests Need It Too. *Food Safety Magazine*. Retrieved December 12, 2018 from <https://www.foodsafety magazine.com/magazine-archive1/augustseptember-2013/risk-analysis-pests-need-it-too/>

Swoyer, M. (2012). Integrated Pest Management in Foodservice Establishments. *Food Safety Magazine*, 18(5):10-13.