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Integrated Pest Management for Rodent Control

A rodent control plan protects your reputation, saves money and time.

So, why do so many commercial kitchen managers and owners take a wait-and-see approach?

Reactive Rodent Control in Restaurants and Commercial Kitchens

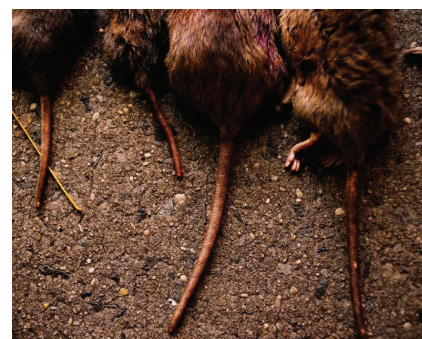
Rodent related issues are a leading cause of why restaurants fail health inspections. It has been reported that one in four restaurants in the USA use rodenticides on an as needed basis¹, and only 53% have a proactive plan with Pest Management Professionals (PMPs) that visit more than once a month to manage and control rodents¹. And, more than 70% of restaurants and commercial kitchens are not engaged with and do not provide basic information or direction to PMPs about rodent activity². It is no secret rodents cause significant health and property damage, yet many food handling establishments would rather be reactive when controlling rodents. Consider the business reputation and loss of customers if someone were to post a video of a rodent sighting on social media. The viral spread of the video may cost the restaurant or commercial kitchen substantial revenue taking months, if not, years to recover. The business reputation may even suffer irreparable damage. This scenario can be avoided if a proactive rodent control plan is put in place.

Diseases Rodents Carry

Rodents have been reported to harbor and spread as many as 200 human pathogens, including murine typhus, the plague, rat-bite fever, Weil's disease, Chagas disease, rickettsialpox, tularemia, Lassa fever, leptospirosis, salmonellosis, lymphocytic choriomeningitis and rabies. According to the Center of Disease Control and Prevention (CDC) many diseases can be spread to humans directly, through contact with rodent feces, urine or rodent bites. Diseases carried by rodents can also be spread to humans indirectly, through ticks, mites or fleas that have fed on an infected rodent.

Benefits of Integrated Pest Management

Integrated Pest Management (IPM) is a preventive pest management system that combines multiple methods to keep pests below levels that may cause damage and loss of profit. The "I" in IPM stands for integrated, meaning various parts or aspects are linked. The "P" stands for pest, meaning a destructive insect or animal that can cause harm, damage, filth, contamination, disease or death. The "M" in IPM stands for management, meaning the process of dealing with or controlling things. Unfortunately, IPM for rodent control is under-utilized; primarily due to a lack of understanding and resources available, according to Dr. Ted Granovsky, an internationally renowned IPM expert and President of Granovsky Associates, Inc. Rodent control is complex and dynamic; requiring a high level of knowledge, skills and thinking while benefitting from experience.



It's estimated that rat-borne diseases have killed more humans in the last 10 centuries than the casualties of all wars and revolutions combined.

source: www.fws.gov/pacificislands/publications/Ratsfactsheet.pdf

below:

To keep your facility rodent free, routine inspection is a key component of a proactive integrated pest management program.



Rodent control is as good as the service professional providing the service.

Typical IPM consists of inspecting the site for rodent activity, monitoring the rodent population, determining acceptable thresholds (zero target pests), applying strategies and tactics, evaluating and adjusting controls, and finally communicating those actions to customers and others involved.

The IPM process begins with inspection of the affected area to identify the conducive conditions and the rodent's habits and characteristics. Then, introducing non-chemical tactics to deny physical access and to reduce the conducive conditions necessary for rodent populations.

Examples of this are:

- Removing harborages
- Removing water and competing food sources
- Using mechanical rodent traps

IPM may also employ chemical tactics using rodenticides but these should not be first-choice tactics. When using rodenticides, always read and follow the label instructions, assuring compliance to the law and maximizing product effectiveness.

Developing a Proactive IPM Plan for Your Restaurant or Commercial Kitchen

An IPM plan will consist of using all tactics available to keep pests below levels that may cause harm, damage, filth, contamination, disease or death. The plan should consist of:

- Inspection/identification of the pest(s)
- Education of all involved
- Exclusion of the pest(s)
- Administrative support to provide sufficient resources
- Pest trapping to monitor activity
- Sanitation to remove competing food and water sources
- Maintenance to provide necessary repairs
- Physical modification to make the environment unsuitable for pest activity
- Service technician support to deliver the right tactic, at the right place, at the right time
- Properly selected and applied pesticides
- Quality assurances to provide checks/balances for sustainability
- Documentation to describe the IPM program and service to customer, regulators and auditors

An IPM plan can be compared to a large toolbox full of tactics; with some tactics used simultaneously and other tactics used sequentially much like a mechanic using tools.



above:

Use mechanical rodent traps as part of the IPM process.



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Site hygiene should ensure that stored food areas be cleaned regularly; with spillage and waste removed and all ingredient bins, bags and boxes adequately sealed.



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Encourage the kitchen manager to keep a log of rodent activity and communicate the incidents with your PMP on a routine basis.

The Best Rodent Control Strategy

Pests are symptoms that something is not right with the current pest management program. The best strategy is to keep the rats and mice outside. Exclusion is an important IPM tactic. Rodents found on the inside come from the outside. Control the outside rodent population and you control the inside rodent population. Good building design and landscape maintenance is critical to denying rodent access. Doors left open or door sweeps not in good repair allow rodents access. Sanitation is also an important IPM tactic. A pest, whether rodent, insect or bird, requires food, water and shelter to survive. The outside area must eliminate the conducive conditions pests need to live. Rodenticides will compete with nearby food sources and must be durable, palatable and used safely. An IPM plan consists of numerous tactics initiated strategically depending upon the assessed need. Control is the result of intelligent effort following individual plans designed for specific identified pests. IPM is effective in the field approach which integrates a group of selected tactics into a strategized program for a specific pest to meet an agreed upon sustainable threshold.

Summary

An IPM plan is an effective and sustainable pest management approach with a dependence upon pest knowledge. Chemicals should be used in a manner that protects public health and the natural environment. Using an IPM plan helps to develop a proactive list of needed tactics. IPM has withstood the test of time, applicable from the board room to the field and is essential for effective pest control efforts. Sharing knowledge is key to mutual success and the more we know the more effective we will all be.

Source

¹ Ole Dosland, author.

² Kline & Company "Pest Control in Food Handling Establishments 2014: U.S. Market Analysis and Opportunities" (page 11)

Cintas Corporation Website, <http://www.cintas.com/managed-solutions/press-releases/five-scenarios-that-could-close-your-store-this-year>

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An Overview of the Real Health Risks Posed by Mice and Rat Infestations, *PestWorld*: <http://www.pestworld.org/news-hub/pest-health-hub/overview-of-the-real-health-risks-posed-by-mice-and-rat-infestations/>



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The late Ole Dosland, President of Quality Centered Consulting Services, Kansas City, MO has 40+ years' experience in the quality assurance, food safety and pest control aspects of the food industry. Uniquely credentialed by working the education, pet food, human food and pest control industries, he offers practical solutions with a long term impact. He is a columnist (Practical QA Solutions) for 10 + years for the Quality Assurance & Food Safety www.qualityassurancemag.com magazine and along with PCT articles has written over 100 publications.

About BASF's Crop Protection division

With sales of more than €5.8 billion in 2015, BASF's Crop Protection division provides innovative solutions for agriculture, turf and ornamental plants, pest control and public health. Our broad portfolio of active ingredients, seed treatments, biological controls, formulations and services optimizes efficient production of high quality food and protects against post-harvest loss, damage to buildings and the transmission of disease. By delivering new technologies and know-how, BASF Crop Protection supports the effort of growers and pest management professionals to make a better life for themselves and society. Further information can be found on the web at www.agro.basf.com or on our social media channels.

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