

INTEGRATED PEST MANAGEMENT IN HEALTH CARE FACILITIES



WINTER 2009 NEWSLETTER

Welcome to the Winter 2009 edition of the *Integrated Pest Management in Health Care Facilities Newsletter*, published by the **Integrated Pest Management in Health Care Facilities Project**, a partnership of the Maryland Pesticide Network and Beyond Pesticides in collaboration with Maryland Hospitals for a Healthy Environment for transition to safer, least-toxic pest management in Maryland's health care sector. The IPM Project's thirteen pilot partners agree that defined integrated pest management (IPM) that minimizes risks to human health and the environment through pest prevention and non-chemical intervention with least toxic pesticides only used as a last resort is a key greening strategy for their facilities.

With spring coming, this edition of the newsletter focuses on **IPM and Ants**, plus news items covering the Baltimore City Health Department's endorsement of the IPM in Health Care Facilities Project and adoption of defined, least-toxic IPM in the *Green Guide to Health Care*.

Green Guide for Health Care Adopts Least-Toxic IPM

After consultation with the IPM in Health Care Facilities Project, a significant revision to the Operations Section of the *Green Guide for Health Care* ties facility credits for integrated pest management to the defined, least-toxic IPM program endorsed by the IPM in Health Care Facilities Project.

The *Green Guide for Health Care*, co-sponsored by the Center for Maximum Potential Building Systems and Health Care Without Harm, is the first voluntary best practices green building and operations toolkit customized for the health care sector.

The new Operations Section of the *Green Guide* now ties facility credit for IPM to a least-toxic program that prioritizes nonchemical strategies. The *Green Guide* also now recognizes that pesticides that disrupt the endocrine system represent a serious health risk.

The IPM credit also covers designation of a Facility IPM Coordinator and training for all staff on the risks of pests and pesticides and the staff role in IPM. Only pest control and lawncare contractors that meet 100% of program elements should be considered.

The *Green Guide for Health Care* can be found at www.gghc.org

Spring is (Almost) in the Air: IPM Planning for Ant Control in the Coming Year

Ants are one of the most common pests. Apart from the nuisance they present, particularly when they contaminate food sources, ants are potential vectors for food-borne illnesses such as salmonella. Also, some ant species bite or sting, and can cause serious allergic reactions in sensitive people.

Although ants are indoor pests, it is important to recognize that ants play an important role in the outdoor environment. Many ants are natural predators and help control other pests, including fly larvae, crickets, and termites. Some species of ants are important for improving soil quality by aerating the soil and recycling dead organic material. The key, then, for your IPM program for ants is prevention of structural infestations through physical exclusion, sanitation, and maintenance.

With spring around the bend, now is a good time to prepare for the upcoming ant season. In this edition of the *IPM in Health Care Facilities Newsletter* are some tips and guidelines for ant prevention without pesticides.

Step One: Exclusion

As with other pests, exclusion strategies for preventing entry and access to food, water, and other conducive conditions are the foundation of IPM for ants. The best way to accomplish this is through sanitation and maintenance practices that prevent entry and infestations, providing long-term, safe, and cost-effective control without pesticides. Below are some of the most effective methods of ant prevention:



1. Trim trees and bushes away from the structure. Trimming is particularly helpful in the management of carpenter ants because branches that touch the building offer a bridge that ants can use to gain access to a structure.
2. Keep grass, plants, and mulch six to twelve inches away from the foundation of the building. Ants prefer nesting in these areas because mulch and ground cover retain moisture better than barren soil or concrete.
3. Repair dripping pipes, leaky faucets, etc., to deny water sources.
4. Caulk holes and cracks that can allow ants and other pests entry into structures.
5. Maintain door sweeps and weatherstripping around windows and doors to prevent entry.
6. Store food in sealed containers and store the containers in clean, dry areas. Do not use cardboard boxes for food inventory storage.
7. Keep food containers off the floor and maintain inspection spaces around storage racks.
8. As part of routine housekeeping, keep hard to reach areas clean, including corners, behind and under equipment and storage racks, and along walls and baseboards.
9. Remove all garbage daily from inside the structure.
10. Clean all recyclable materials with soapy water and store outside the structure if possible.
11. Minimize clutter to prevent harborage.

Step Two: Monitoring and Inspection

Monitoring and inspection are the keys to managing ant problems. "Ant awareness" is everyone's responsibility: staff should be alert to what they can do to prevent ants as well as report the presence of ants and conducive conditions. When inspecting for ants, look for:

1. Holes and cracks that allow ants entrance to structures.
2. Likely food sources such as kitchens, garbage bins, food storage areas, and break rooms where ants may find dependable food sources.
3. Likely water sources such as bathrooms, kitchens, leaky pipes, sinks, and open drains where ants find dependable water sources.
4. Mulched landscapes near entry points -- ants often nest in mulch around the foundation then forage indoors.
5. Indoor plants with soil that provides a moist, protected environment for ants to nest.

If an ant nest is found, do not agitate it, as some ant species will move or split a disturbed nest.

Step Three: Least Toxic Control Methods

Physical Removal

Physical removal in conjunction with preventive techniques will solve most ant problems. Ants can be physically removed by:

1. Vacuuming up long trails of ants. The dust in the vacuum will usually kill the ants. However, to be sure the ants are killed, vacuum up a small amount of talc or baby powder in order to suffocate the ants inside the vacuum.
2. Squashing "lone ants." Lone ants are scouts finding food for a colony.
3. Taking an ant-infested plant outdoors before replacing the soil. Inspect plants brought into a facility for ants and nests.

Least Toxic Treatment Options

1. For emergency situations, detergent mixed with water will immobilize ants for cleanup. Soap and water also remove "ant trails" to food and water sources.
2. Diatomaceous earth or boric acid placed within dry cracks and crevices where ants enter the structure provide long-term residual effectiveness with minimal exposure risk.
3. Ant baits are another tool for nest eradication.

Ant baits are only used for active infestations. Boric acid baits are preferred because they do not give off any detectable ambient air residues, while most of the other commercial baits can volatilize. Baits can be placed near the target ant colony, ant foraging trails, or structural entryways. Baits should be monitored as colonies may switch their bait preference. Do not disturb the foraging trails of ants feeding on baits, and do not use other types of pesticides around the bait stations. Bait stations are removed when a target ant population is under control.

IPM in Health Care Facilities Project Endorsed by Baltimore City Health Department

CITY OF BALTIMORE

SHEILA DIXON, Mayor



HEALTH DEPARTMENT

JOSHUA M. SHARFSTEIN, M.D., Commissioner
210 Guilford Avenue
Baltimore, MD 21202

January 13, 2009

Mike Boeck
Project Director
IPM in Health Care Facilities
A Joint Project of the Maryland Pesticide Network & Beyond Pesticides
1209 N. Calvert St.
Baltimore, MD 21202

Dear Mr. Boeck:

The Baltimore City Health Department shares the concerns and supports the mission and goals of the Integrated Pest Management (IPM) in Health Care Facilities Project for the protection of patient and worker health at Baltimore health care facilities through adoption of defined, least-toxic IPM. As these institutions serve some of our most vulnerable populations -- especially the newborn, children, the elderly, the ill, and the recovering -- it simply makes sense that these people should not be exposed to unnecessary health risks at the very institutions responsible for their care. Patient, resident, and worker health protection through reduction, minimization, and elimination of the health and environmental risks of pesticide exposure is an important public health objective, and the "prevention first" pest management strategy under the Project offers a cost effective path to that objective.

We commend the Project's sponsors and collaborators, including the Maryland Pesticide Network, Beyond Pesticides, Maryland Hospitals for a Healthy Environment, and the IPM Institute of North America, for their success to date; and we encourage health care institutions in Baltimore to improve patient and worker safety and health protection by working with the Project and adopting their IPM program. Since 2005, the Project's partner facilities, including Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, the University of Maryland Medical Center, and Sheppard and Enoch Pratt Hospital, have achieved better pest control and health protection through their participation in the Project.

We hope that other institutions will follow suit and contact you to take advantage of the Project's IPM program. We wish you continued success.

Sincerely,

Joshua M. Sharfstein, M.D.
Commissioner of Health