



CO-SPONSORED BY MD PESTICIDE EDUCATION NETWORK & BEYOND PESTICIDES

IPM in Health Care Facilities Project

Summer 2017

Director's Note

Welcome to the IPM in Health Care Facilities Project Newsletter. As many of you know, I joined the MPEN team this past November and look forward to sharing important IPM up-dates and innovations to support you and your staff as you continue to define IPM strategies and goals to support a positive impact on the health and wellness of your facilities employees, patients, visitors and surrounding community.

For the past eight months, I met with many participating healthcare facilities, participated in an IPM Facility Walk-through Assessment, offered educational presentations and spoke at an annual conference in Ocean City. I am impressed by the important IPM initiatives that are taking place throughout Maryland and the level of interest in advancing IPM training and education.

I look forward to sharing our new IPM Recognition Opportunities, Resources and Training Presentations. I'll be sending an **EVS Peer-to-Peer Connection invitation** out at the end of August for an October meet-up. Be sure to RSVP, as seating is limited. I'll host our first meet-up, 1209 N. Calvert Street, Baltimore 21202 and provide a fantastic breakfast. More details to come!

Take a few minutes to check out the redesigned newsletter and share your thoughts and ideas – this is **your** resource and I want to be sure to provide useful IPM information and resource links to support your IPM goals!

Don't hesitate to call me directly - **443-465-4845** – for any IPM needs. Here's to a great year!

Gina Navarro, Project Director
IPM in Health Care Facilities Project
gnavarro@beyondpesticides.org



LifeBridge Health Green Team
Reduction in Motion's team of sustainability professionals work on-site with LifeBridge Health's Green Team. May 5, 2017



A Winning Partnership

Springfield Hospital Center's Housekeeping Director, Jeff Belt and Solomon's Pest Control are one of 3 facilities that received a 2016 IPM Sustainable Pest Management Award. Congratulations on taking a smart, sensible and sustainable approach to pest management!

Why Focus on Health Care Facilities?

[Beyond Pesticides.org](http://BeyondPesticides.org)

There are 5,810 registered hospitals in the U.S. that see about 32 million inpatients, 83 million outpatients and 108 million emergency room patients per year. Thus a large number of individuals may be exposed to toxic pesticides in health care settings. Some hospital patients are especially vulnerable to the toxic effects of pesticides.

Hospitals have a special obligation to demonstrate leadership in instituting effective and safer pest management in keeping with the medical profession's basic tenet of "first, do no harm."

Fortunately, a method of pest control called Integrated Pest Management (IPM) eliminates or greatly reduces the need to respond to pests with hazardous pesticide products and helps ensure a healthier environment for hospital patients, staff, and visitors. The focus of IPM is to prevent pest problems by reducing or eliminating sources of pest food, water, and shelter in hospitals and on their grounds and by maintaining healthy lawns and landscapes.

The first approach to controlling a pest outbreak is improving sanitation, making structural repairs (such as fixing leaky pipes and caulking cracks), and using physical or mechanical controls such as screens, traps and weeders. A least hazardous chemical is used only when other strategies have failed. If a pesticide is used, the hospital community must be notified prior to the application in order to take necessary precautions.

IPM strategies are successfully being implemented at schools, parks, government facilities and hospitals nationwide.

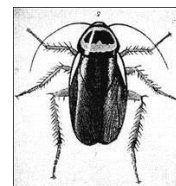
The 2003 report [Healthy Hospitals](#) by Beyond Pesticides and [Health Care Without Harm](#), along with the 1995 reports, A Failure to Protect by Beyond Pesticides and the New York Attorney's General report Pest Management in New York State Hospitals, adds to the data available on the types and amounts of pesticides used at health care facilities across the country. It confirms and elaborates on previous findings that hazardous pesticides are commonly used in U.S. hospitals.

How to Prevent that Bug?!



ants

Keep food and/or liquids in specified area and stored in tight-sealed containers. Report recurring ants, and do not use sprays!



roaches

Change corrugated cardboard for plastic bins. Eliminate clutter. Keep food and supplies in tight-sealed containers. Sanitize food area.



mice

Thoroughly clean and organize storage areas, shelves, etc. 2-3 times a year. Report droppings and holes $\geq \frac{3}{4}$ " around corners or doors; keep eating areas clean and food sealed.

IPM in Health Care Facilities
Project provides free pest control
log reviews to help you identify
pest conducive areas and safe pest
management alternatives

IPM QUARTERLY PEST LOG SCHEDULE

Q1 (Jan-Feb-March): Due April 3 2017
Q2 (April-May-June): Due July 3 2017
Q3 (July-Aug-Sept): Due Oct 2 2017
Q4 (Oct-Nov-Dec): Due Dec 18 2017

EMAIL – GNAVARRO@BEYONDPESTIDICES.ORG

IPM IS A COMMITMENT TO PRECAUTION

A successful IPM System is about learning and continuously finding solutions to change pest situations and problems.

The following list is MPEN's approved, *Least-Toxic Products* that should only be used, in small doses after all non-toxic options have been exhausted in your IPM Program.

The following list consist of least-toxic products, they are not non-toxic. Ongoing evaluation is an important aspect of your IPM program as new, information on a product, not previously available, may impact product acceptability. For an up-dated list or questions – go to www.beyondpesticides.org for a complete list.

Least Toxic List

Boric Acid/ Borates/Borax

Product Ants/Cockroaches/Termite

- BorAction
- Drax Liquidator Ant Bait
- Gourmet Ant Bail Gel
- Borid
- Niban-FG Fine Granular Bait
- Terro-PCO Liquid Ant Bait
- Safer Roach & Ant Killing Powder
- Hasta La Vista, Ant!
- MRF 2000
- Jecta Diffusible Boracide
- Boracide
- Intice Ant Gel
- Green Dragon

Diatomaceous Earth/Sillica Aerogels

Product Ants/Cockroaches/Termite

** Do Not allow exposure to powders or dusts**

- Safer Brand Ant & Crawling Insect Killer
- Diatomaceous Earth Crawling Insect Killer
- Mother Earth D

Least Toxic List

Essential Oil-based Pesticides

Product Ants/Cockroaches/Termite

- Cedarcide AMD Ant Mound Drench
- Orange Guard
- BUGS 'R' DONE – Orange Peel Extract
- Sharpshooter (Clove & Peppermint Oil)
- EcoEXEMPT IC Insecticide Concentrate
- EcoEXEMPT G Granular Insecticide
- Bioganic Safety Brands Crawling Insect Killer (Rosemary Oil)
- C-M PowderGard, Broad Range Organic Insecticide (Mint Oil)
- EcoEXEMPT IC-2 (Rosemary Oil)
- Victor Poisonfree Ant & Roach Killer
- Bioganic Home & Garden Insect Spray
- XT-2000 Orange Oil Termiticide
- Agent Gold (Cedar Oil)
- Focus Termite Attractant (Corn Oil)

Botanical (and essential oil)

Product Ants/Cockroaches

- ECOPCO ACU Contact Aerosol Insecticide (Propionic Acid)
- EcoEXEMPT KO Contact Insecticide (Eugenol)
- EcoPCO WP*X – Wettable Powder Insecticide (Pyrethrum, Thyme Oil)

Acids

Product Flies/Bed Bugs/Fruit Flies

- Vector 960 (Acetic Acid)
- EcoPCO ACU (2-Phenethyl Propionate)

Pheromone Lures, Traps

Note: Higher Threshold for use after least-toxic has proven to be ineffective

Baits (assuming used without

exposure, give specific formulations)

Product Cockroaches/Termite

- Cleary Roach Terminal
- Firstline GT Plus Termite Bait Station
- Firstline Termite Bail Station
- Advance Compressed Termite Bait Station

Baits (assuming used without exposure, give specific formulations)

Product Cockroaches/Termite

- Spectracide Terminate
- Termite Detection & Killing Stakes



Go to the Gateway

Beyond Pesticides created a database tool intended to provide decision and policy makers, practitioners, and activists with easier access to current and historical information on pesticide hazards and safe pest management.

The toxicological and environmental information presented in the Gateway for each chemical is sourced from a wide variety of U.S. and international resources and databases including information from U.S. regulatory documents, the National Institutes of Health, National Toxicology Program, International Agency for Research on Cancer (IARC), California's Proposition 65, University Extension Services, the European Union and others, including independent peer-reviewed scientific studies.

IPM CHECKLIST

The Integrated Pest Management (IPM) Checklist will help you inspect your facility and grounds for the presence of pests and conditions that provide them with food, water and shelter.

This IPM Checklist will also help you monitor your IPM program annually, semi-annually, or more frequently as needed.

IPM Checklist helps you remember to keep pests out and remove food, water and shelter that may attract pests. You may not be able to address all of the conditions you find right away. Start with easy-to-implement items and then address bigger challenges as you develop a sustainable IPM Plan and Policy.

IPM Checklist Interior

- ____1. Pest problems, pest sighting and pest-conducive conditions are being reported to the IPM Coordinator or their designee, and also to the pest sighting log located at the facility. These are minimal with no ongoing pest problems such as active mice infestations.
- ____2. Inspection aisles at least 4" wide are maintained between stored goods or appliances and walls, shelving units, etc. so that pest control and cleaning service providers can gain access for visual inspection and cleaning.
- ____3. Clutter is minimal including cardboard boxes, items not used for more than one year, etc., throughout the building including closets, cupboards, drawers, staff lockers.
- ____4. Potential pest food sources including snack food and craft materials are stored in tightly sealed containers, preferably plastic.
- ____5. Eating is limited to designated areas that can be thoroughly cleaned on a daily basis. Eating in rooms other than cafeterias and other designated areas is ok if necessary, but these eating areas should be limited within the room and receive special daily attention for cleaning.
- ____6. Toasters, refrigerators, ovens, microwaves, coffee pots and other food-related appliances and equipment are clean, including underneath, behind and on top.
- ____7. Surfaces in food preparation and serving areas are free of any grease deposits.

IPM Checklist

Interior - *continued*

- ___8. Empty food/beverage containers to be recycled are rinsed before storage, stored refrigerated or stored in pest-proof containers.
- ___9. Food-contaminated dishes, utensils, surfaces are cleaned at the end of each day.
- ___10. Indoor garbage is kept in lined, covered containers and emptied daily.
- ___11. Wiping cloths are disposable or laundered daily.
- ___12. Upholstered furniture, couches, chairs, pillows, bean bags, cushions, or furnishings that cannot be moved for cleaning are not present, especially in areas where food is served, or are clean inside and out.
- ___13. Plants in buildings are healthy and not over watered.
- ___14. Pets are healthy and cages, tanks, etc. are clean. Pet food is stored in tightly sealed containers, preferably plastic.

___15. Mops and mop buckets are properly stored (e.g., mops hung upside down, buckets empty).

Exterior

- ___1. Building foundations, eaves, walls and roofs are free of leaves, vines and debris, pest activity (including birds and squirrels), water puddling.
- ___2. Vegetation, shrubs and wood mulch are at least 12 inches away from exterior walls.
- ___3. Tree limbs and branches that might provide vertebrate pest access to structures are maintained at least 6 ft. away from structures (10 ft. if tree squirrels are a problem).
- ___4. Exterior doors throughout the building are kept shut when not in use.
- ___5. Window and vent screens are in good repair.
- ___6. Weather stripping and door sweeps on exterior doors are in good condition.

- ___7. Garbage cans, dumpsters and dumpster area are clean and in good condition, with lids that close, and are placed away from the building and building entranceway.
- ___8. Food waste from preparation and serving areas is in sealed plastic bags inside a dumpster or garbage can.



*Healthy Hospitals:
Controlling Pests Without Harmful Pesticides*

Bed Bugs –

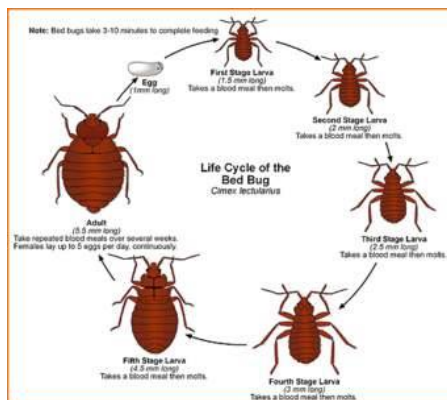
Bed bugs do not transmit disease and can be controlled without toxic pesticides

The recent bed bug resurgence across the U.S. has facilities taking desperate measures to eradicate these tenacious bloodsuckers, with some relying on dangerous pesticides and fly-by-night exterminators.

Even pesticides registered by the U.S. Environmental Protection Agency (EPA) for bed bug use are linked to acute poisoning, cancer, hormone disruption, asthma, neurotoxicity, organ damage, and more. These measures pose more dangers than any perceived short-term benefit..

Health care facilities experience a constant inflow of people and their belongings, and can expect bed bugs to be introduced from time to time.

While there is no magic bullet solution to bed bug eradication, there are many ways to effectively control them without the use of dangerous chemical pesticides.



If you have bed bugs in your facility, they can be effectively controlled through a comprehensive integrated pest management (IPM) approach, which includes methods such as vacuuming, steaming, and exposing the bugs to high heat can control an infestation without dangerous side effects. This approach, as well as taking steps such as sealing cracks and crevices, reducing clutter and encasing mattresses can also help to prevent an infestation in the first place.

For more information on how to implement an effective Bug Bug Protocol -- contact [IPM in Health Care Facilities Project](#)

Bed Bug – Quick Tips

If a bed bug infestation is suspected the following procedures are recommended and should be shared with all facility staff.

1. Close off the room or area from use, place appropriate signage, and immediately notify the facility office or individual responsible for pest management.
2. If possible, capture a bed bug and place it in a sealable container to assist facilities pest management in their assessment and identification.
3. Leave the room intact without cleaning or removal of items (e.g., linens, furniture) to facilitate determination of the extent of the infestation and to prevent the spread of bugs to other areas.
4. Conduct a detailed inspection of the area involving pest management personnel trained in bed bug control. The inspection needs to:
 - Verify any detected evidence of a bed bug infestation.
 - Estimate the magnitude of the infestation by examining all potential harborage. Rooms adjacent (horizontally and vertically) to the affected area need to be examined, as well.
5. A multifaceted integrated pest management approach to exterminate the infestation will be necessary given the variety of bed bug harborage and the varying susceptibility of bed bug life stages to different control measures.
6. Once control measures have been implemented, routine follow-up inspections are required to monitor the effectiveness of the treatments. Since bed bugs are well-adapted to hiding, repeated implementation of control measures and inspections are often necessary for complete eradication.

IPM in Health Care Facilities Project News

1209 N Calvert Street
Baltimore MD 21202

Interested in learning
how your facility can
participate in our IPM
in Health Care
Facilities Project?

Contact [Gina Navarro](mailto:gnavarro@beyondpesticides.org)
443-465-4845



Next Issue: Fall 2017
IPM Strategy Execution: Transforming Strategy to Sustainable Results

Gina Navarro, Project Director
IPM Resources, Tools, Training and Presentations

gnavarro@beyondpesticides.org * 443-465-4845