Welcome to the 2018 Summer Edition of the *IPM in Health Care Facilities Project Newsletter*. In this issue we share the Joint Commission's IPM Guidelines, successful IPM Tips from three of our Projects healthcare facilities, the latest on *bed bug trends* and help you proactively plan for *Fall pest activity* to protect your facility.

While each facility is different, and different environments feature hot spots with different pest issues, a defined IPM program is a more targeted and sustainable approach to pest management that focuses on *proactive, non-chemical pest management techniques* before employing least-toxic treatments only as a last resort. *IPM continues to* be the recommended strategy supported by Health Care Without Harm, Practice Greenhealth and *compliments many of* The Joint Commissions Environment of Care Standards under its Implementation of Hazardous Material Program (3.10)

The best defense against health care facility pest problems is to prevent the situation from occurring in the first place and why a tailored IPM plan is critical. Exclusion, sanitation, and conducting ongoing, comprehensive inspections to identify hidden dangers are the fundamental practices needed to ensure that your IPM plan prevents pests from entering your facility. *Ants, flies, roaches and bed bugs continued to be the top four most challenging pests* for health care facilities to prevent and manage. More than being a nuisance, these pests and the toxic chemicals used to eliminate them, can pose health dangers to patients, a population more vulnerable to toxic exposures. Be sure to review *Steps to Take to Prevent Pest Activity* on pages 8 and 9 for a list of diagnosis, symptoms, prevention tips and non-toxic treatments for pests that are prevalent in the Fall.

*We hope you enjoy reading our 2018 Summer Issue! For more information on how to participate in the IPM in Health Care Facilities Project, contact Gina Navarro, Project Director: 410-605-0095 or gnavarro@beyondpesticides.org*
JCAHO Defined IPM Alert

According to Joint Commission's definition of IPM, by implementing these EVIDENCE OF PERFORMANCE IMPROVEMENTS your facility will meet EOC Standard 3.10

IPM Quick List  Scroll down for complete list EOC 3.10 IPM Guidelines

Facility has plans on file, readily accessible by appropriate staff, for:
___ Implementing an Integrated Pest Management (IPM) program
___ Restricted pesticides not used

Facility has instituted Integrated Pest Management program with following elements:
___ Pesticide application used only as last resort
___ Only least toxic pesticides used
___ Primary focus of program: pest identification, monitoring
___ Non-chemical methods used for pest control (e.g. traps, barriers)
___ Staff training component, e.g. actions that help prevent pests on premises
___ Pesticide applicators licensed, trained by appropriate authorities
___ Communication to staff, patients, visitors when pesticide applied

___ Integrated Pest Management program in place
___ Pesticide applicator licenses no longer needed due to no pesticides being applied at facility

Consider sharing this checklist with your pest management company and start the conversation on meeting and exceeding JCAHO IPM Standards.

By participating in the IPM in Health Care Facilities Project you have access to IPM Resources, Training Tools and IPM Experts to help support your facility reach JCAHO IPM Standards.
Facilities' IPM Tips & Strategies

A successful pest prevention effort involves all health care employees and every part of the facility. While pest management is often outsourced in healthcare facilities, it is the environmental services department's responsibility to ensure implementation of a defined IPM Program so that the facility remains pest-free by focusing on non-chemical pest-prevention with only least-toxic pesticides used as a last resort in order to abide by the medical profession's commitment to 'first do no harm'.

Three of our participating health care facilities share the most successful common-sense solutions for treating and managing pests.

Mission:
The Johns Hopkins Bayview Medical Center, a member of Johns Hopkins Medicine, provides compassionate health care that is focused on the uniqueness and dignity of each person we serve.

"This time of the year ants seem to be plentiful - coming into areas looking for food sources and water...

For Natural Ant Control; Spray white vinegar near any visible ant trails to deter the insects. For larger surfaces, dip a sponge into a vinegar solution and wipe the area. Allow the vinegar to remain on the surface to dry. Remind staff and employees to keep all spills of food cleaned up to prevent attracting the pests. Rinse out those recyclables!"

Candy, also notes...“Just going through Joint Commission and CMS I can't stress enough the importance of implementing a good IPM Pest Management Program. They [JCAHO] look for positive practices, and to be honest it's easy to tell if you have a pest issue when you observe reactive measures versus proactive tools that support preventive strategies.”
Facilities' IPM Tips & Strategies

Mission:
University of Maryland Medical Center is the academic flagship of the University of Maryland Medical System. Its mission is to provide health care services on its two campuses for the Baltimore community, the State of Maryland and the nation.

"Focusing on finding the best and safest treatment for a pest problem, not merely the simplest" is the approach, Sustainability Manager Jill Ciotta takes as she assists in the development and maintenance of a safe environment by providing leadership in planning, scheduling, and monitoring of UMMC’s IPM Goals.

Jill recommends "First, have a licensed pest management professional conduct a comprehensive facility inspection. Next, remediate any existing pest activity and implement preventive measures based on the inspection. The third step is to create a collaborative program for an ongoing cycle of activities from regular, scheduled inspection to monitoring and documentation."

Wet Wednesdays Pilot
Assessing the ability to effectively interact with, and develop cohesiveness among departments to manage Cockroaches without Toxic-Chemicals

Cockroaches are a major health concern, as they can spread disease, contaminate food, trigger allergies and even cause asthma. These common pests enter facilities through cracks, crevices, vents, sewers and drain pipes and it is important to establish an effective and sustainable IPM practice as an investment in the health of patients and staff as well as an investment in maintaining a sound public reputation.

Working closely with UMMC’s pest management company, Home Paramount, Jill Ciotta learned that managing cockroaches can be as simple and toxic-free as proactively flushing the drains in patients’ rooms for 30 seconds once a week. "We decided as a team to stop reacting and put forth preventive steps to reduce the use of toxic-chemicals in treating cockroaches. It was a real team effort, however we have been successful in greatly reducing the use of toxic chemicals and have rolled out Wet Wednesdays to other buildings on campus."
Facilities' IPM Tips & Strategies

Mission:
To improve the health of the individuals and communities we serve through compassionate, high quality care.

"We take great pride in our work and just like the postman, neither rain, snow, heat or cold stop us from fulfilling our mission," says Odell Hall, Director of Facilities at Northwest Hospital. "Our job is to help employees do their jobs!"

Leadership in Sustainability and a Defined IPM System-Wide Policy

For almost a decade, LifeBridge Health has been committed to fostering a systemwide culture of sustainability. "Even in the cleanest facility, pests will appear from time to time, so you need a clear, written IPM Policy on how your facility will respond when they do. Our goal is to only use least-toxic chemicals as a last resort," reports Hall.

LifeBridge Health has developed a culture of compliance in its sustainable practices that has transformed it into a cleaner, greener organization. These green policies, such as the Environmentally Preferred Purchasing Policy and the Integrated Pest Management Policy, focus on finding sustainable, environmentally friendly, and toxic-free options to daily operations. "One thing we have learned is that it is crucial to be very clear on an approved materials list to ensure smart choices when least-toxic chemicals are applied."

Hall was quick to add when asked about the importance of monitoring their IPM program: While we still have goals to meet, LifeBridge green initiatives are 100% supported by LifeBridge Health Executive Leadership, this dedicated Green Team meets every month to discuss and evaluate green policies and procedures. This is one of the best ways to ensure system-wide sustainability!

The members of the Green Team include employees and executives from Sinai Hospital, Northwest Hospital, Carroll Hospital, and Levindale Hebrew Geriatric Center and Hospital. LifeBridge Health has achieved success in sustainability through the tireless efforts of its active employee base, its corporate partners, and its peers in the health care community. By enacting a comprehensive set of green policies, including a defined IPM Policy, that are carried out system-wide, it has been able to foster a robust culture of sustainability.
JOINT COMMISSION IPM GUIDELINES
An important reminder to all facility EVS and Sustainability directors regarding the Joint Commission’s IPM standards. These standards under Environment of Care Standards 3.10 were established over a decade ago and are still in place. They include the following IPM standards for compliance and performance improvement:

Environment of Care Standard 3.10:
The organization manages hazardous materials and waste risks.

Element of Performance 1: Hazardous Materials and Hazardous Waste Management Plan
The organization creates and maintains an inventory that identifies hazardous materials and waste used, stored or generated using criteria consistent with applicable law and regulation.

EVIDENCE OF COMPLIANCE
Facility has plans on file, readily accessible by appropriate staff, for pesticide:
Application:
___ Selecting chemicals used in grounds keeping
___ Ensuring restricted or prohibited pesticides not used
___ Ensuring pesticide applicators appropriately trained, licensed
___ Posting warning signs when pesticides applied
Disposal:
___ Managing waste pesticides as hazardous waste
___ Triple rinsing pesticide containers
___ Managing rinsate as hazardous waste if not used
___ Managing disinfectants and sterilants as pesticides

EVIDENCE OF PERFORMANCE IMPROVEMENT
Facility has plans on file, readily accessible by appropriate staff, for:
___ Implementing an Integrated Pest Management (IPM) program

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Element of Performance 2: Hazardous Materials and Hazardous Waste Inventory
Organization creates and maintains an inventory that identifies hazardous materials and waste used, using criteria consistent with applicable law and regulation.

EVIDENCE OF COMPLIANCE
___ Hazardous materials inventory contains accurate list of pesticides

EVIDENCE OF PERFORMANCE IMPROVEMENT
___ Quantity of hazardous materials (including pesticides) used over successive time periods tracked and documented
___ Size of hazardous materials inventory reduced

** IPM in Health Care Facilities Project provides FREE quarterly review of ** pest service logs and offers non and least-toxic alternatives!

Have you sent your detailed pest service logs recently?

** Up-date your files with the NEW **
IPM in Health Care Facilities Project
Facility Collaborative Form
to meet Evidence of Performance Improvement Standard!

Contact Gina Navarro for more details
gnavarro@beyondpesticides.org
410-605-0095 or 443-465-4845
Element of Performance 3: Implementation of Hazardous Material and Hazardous Waste Program
The organization establishes and implements processes for selecting, handling, storing, transporting, using and disposing of hazardous materials and wastes from receipt or generation through use and/or final disposal, including managing the following: chemicals, chemotherapeutic materials, pharmaceuticals, radioactive materials and infectious and regulated medical waste including sharps.

EVIDENCE OF COMPLIANCE
___ Pesticides classified for restricted use applied only by licensed applicators
___ Pesticide containers triple rinsed
___ Rinsate managed as hazardous waste if not used
___ Hazardous waste determination made, documented for pesticides being discarded
___ Warning signs posted, staff notified when pesticides applied

EVIDENCE OF PERFORMANCE IMPROVEMENT
___ Restricted pesticides not used
___ Facility has instituted Integrated Pest Management program with following elements:
___ Pesticide application used only as last resort
___ Only least toxic pesticides used
___ Primary focus of program: pest identification, monitoring
___ Non-chemical methods used for pest control (e.g. traps, barriers)
___ Staff training component, e.g. actions that help prevent pests on premises
___ Pesticide applicators licensed, trained by appropriate authorities
___ Communication to staff, patients, visitors when pesticide applied

Element of Performance 7: Hazardous Material and Hazardous Waste Documentation
The organization maintains documentation, including permits, licenses, and adherence to other regulations

EVIDENCE OF COMPLIANCE
___ Records indicate appropriate training for staff using disinfectants, cold sterilants, pesticides
___ Pesticide applicator licenses maintained or in pest management contract
___ Documentation maintained to ensure exposure monitoring, no restricted pesticides
___ For federal facility, documentation that Integrated Pest Management program in place

EVIDENCE OF PERFORMANCE IMPROVEMENT
___ Integrated Pest Management program in place
___ Pesticide applicator licenses no longer needed due to no pesticides being applied at facility

Participating in the IPM in Health Care Facilities Project will help your facility meet JCAHO Standards
"Regular IPM team meetings enable all parties to understand their roles and responsibilities"

-United States Environmental Protection Agency

**The Green Team: Building a Successful IPM Program**

The Green Team emphasizes the importance of communicating the initiatives to all departments, leadership, and staff and soliciting their ideas at every step. By working together and looking for creative solutions, organizations can have a significant impact on their own operations and the ecological health of the world.

**The Project's IPM Success Tip:**

Since the launch of the IPM Project, we have observed that recruiting a dedicated IPM Coordinator to join your facilities Green Team and help manage your IPM sustainability initiatives is a great way to help EVS Directors stretch limited resources. This decentralizes some of the responsibility to the departmental level, where it can be more efficiently and effectively implemented. Coordinators serve as point people to provide critical communication and operational links to all staff. This organizational structure offers the potential for substantial benefits, and it is relatively easy to implement by taking the following first step.

**STEP ONE:** Determine the role of the IPM Coordinator and develop a "task description".

**Sample IPM Coordinator Task Description:**

- **Serve as a resource on IPM** questions, environmentally preferable purchasing (EPP), or other initiatives.
- **Coordinate** e-mails, updates, and staff training to communicate IPM goals and efforts including successes and areas needing improvement.
- **Monitor** pest service logs for proper documentation, including a detailed description of pest conducive conditions and Action Steps per Department (IE: Housekeeping, Maintenance, Land Care...)

Departmental staff should know who the coordinator is and that he or she is the appropriate person to field their questions. This role can be expanded to oversee other IPM sustainability efforts from creating and monitoring an approved materials list to education on basic hazardous materials functions, including MSDS (Material Safety Data Sheets) management in the department.

**To help you get started in implementing an effective IPM program to share with your facilities Green Team, contact gnavarro@beyondpesticides.org or Call 410-605-0095**
Taking the Bite out of Bed Bugs

The United States bed bug population continues to grow, making it ever more likely that bed bugs will make an appearance in facilities around the country that have nothing to do with beds, including corporate buildings, healthcare facilities and schools.

FAIRFAX, VA (June 4, 2018)
The National Pest Management Association (NPMA) released the findings of its 2018 Bugs Without Borders research, which surveys pest control professionals on the prevalence of bed bugs here in the U.S. The survey reports that 97 percent of pest professionals treated for bed bugs in the past year and more than half say summer is the busiest time of year.

The top three places where pest professionals encounter bed bugs are single-family homes (91 percent), apartments/condominiums (89 percent), and hotels/motels (68 percent). However, bed bugs can be found in high numbers in a variety of other places:

- Nursing Homes – 59 %
- Hospital – 36%
- Schools & Day Care Centers – 47 %
- Office Buildings – 46 %
- College Dorms – 45 %
- Public Transportation – 19 %

Note: The IPM in Health Care Facilities Project supports facility pest-free goals by focusing on non-chemical pest prevention with only least-toxic pesticides used as a last resort.

IPM Bed Bug Response Plan

Train staff to identify bed bugs and the signs of bed bugs in the facility and patient’s items.
This may include actual insects, cast skins or images of excessive insect bites on a person.

Understand the difference between an “introduction” and an “infestation”. An infestation can be defined as having virtually all of the life-cycle present (eggs, nymph, & adults).
Finding bed bugs on patients will most likely be classified as an introduction into the facility as opposed to finding bed bugs in the environment (lobby, rooms, etc.)

Establish your facility Integrated Pest Management Plan with an emphasis on monitoring.

Ask your pest management company to provide bed bug training so that your department can respond promptly to bed bug complaints within the facility.

Discuss approved IPM Action Steps with your pest management company -- stressing least-toxic as a last defense.
THE IPM CHECKLIST:
A RESOURCE FOR HOUSEKEEPING, MAINTENANCE AND LANDSCAPING DEPARTMENTS

Exclusion. This encompasses basic measures that may keep pests from entering the facility.
• Install door sweeps and weather stripping around all doors and windows as well as window screens.
• Seal all cracks and crevices inside and outside of the facility.
• Seal all entry points around utility penetrations.
• Install double doors and air curtains for an added pest barrier.

Sanitation. This includes actions that prevent conditions where pests may thrive.
• Thoroughly clean, dust and sweep to remove dust and dirt buildup or cobwebs.
• Follow a strict daily sanitation regime and remove such clutter as cardboard boxes that offer shelter for pests.
• Remove all food and water spills immediately and store all food and garbage properly in sealed containers.
• Repair leaking faucets, water pipes and HVAC units.
• Get rid of standing water on/near the loading dock, parking garage and walk ways.

Landscaping. Various grounds-maintenance measures help to prevent infestations.
• Move plants away from the facility’s foundation.
• Remove excessive plant cover and wood mulch outdoors as well as trim overgrown branches and plants
• Install a 30-inch gravel strip around the perimeter of the facility to obstruct crawling pests and discourage pests that don't like being in the open, such as rodents.

Ongoing inspections. This involves a range of observations that can halt pest problems in their earliest stages.
• Inspect the facility’s exterior and interior for signs of a pest infestation or potential points of entry.
• Inspect items that are prone to pest activity, such as incoming shipments and cardboard materials.
• Manage pest populations that can lead to other pest problems like fly or spider infestations.

Continue to Next Page for:
Steps to Take to Prevent Pest Fall Activity
PROACTIVELY DIAGNOSE FALL PEST ACTIVITY

Use this list to learn what you must know to protect your facility from pests that are active in the Fall:

* Which pests are most active during Fall
* Signs that indicate pests are present
* Steps you can take to prevent pest activity
* Approved IPM treatments to review with your pest management provider

Remember that Integrated Pest Management’s (IPM) non-toxic chemical methods can help prevent pest presence, which can in turn help you protect your staff, patients and reputation from harm.

Ants:

**Diagnosis**
Ants are resilient for the following reasons: their diet habits change over time; their colonies can have massive populations; they can travel long distances to find food; and they go to great lengths to protect their colonies.

**Symptoms**
Inside, ants are often found nesting in walls or beneath the floor. They live in colonies, which can contain one or more queens with more than 100,000 workers, depending on the species.

**Prevention TIPS**
- Exclusion & Landscape
- IPM Treatments
- Baits, Pheromones & Residuals*
  * remain effective where they are applied for some length of time

Bed Bugs:

**Diagnosis**
Bed bugs feed on human and animal blood to survive. They reproduce and spread quickly, but they aren’t known to transmit human diseases.

**Symptoms**
Common signs of bed bugs include live or dead bed bugs, skins cast off during the molting process, small spots of reddish-black fecal material and tiny cream-colored eggs usually found in dark crevices.

**Prevention TIPS**
- Ongoing inspection
- IPM Treatments: Heat, Residuals

Birds:

**Diagnosis**
Pigeons, starlings and house sparrows are the three main pest birds. They can carry more than 60 diseases, and their feathers and droppings can lead to health threats, too.

**Symptoms**
Hot spots for birds include roofs, ledges and outdoor patios. They often gather to socialize with each other, feed on food and drink water, sleep, or breed and create nests. While seasonality differs depending on the type of bird, pigeons may be seen year round.

**Prevention TIPS**
- Exclusion & Sanitation
- IPM Treatments
- Netting, Spikes & Repellents

Cockroaches:

**Diagnosis**
Cockroaches are a major health concern, as they can spread disease, contaminate food, trigger allergies and even cause asthma.

**Symptoms**
Cockroaches can enter buildings through cracks, crevices, vents, sewers and drain pipes. These pests reproduce rapidly and are difficult to control.

**Prevention TIPS**
- Exclusion & Sanitation
- IPM Treatments
- Baits, Growth Regulators & Residuals
**Ladybugs:**
**Diagnosis**
Ladybugs occur in a wide spectrum of colors ranging from yellow to orange to red, and have a varying number of spots. Most prey on aphids, mealybugs and scale insects.

**Symptoms**
Ladybugs can gather in large numbers on light-colored buildings, finding holes to get inside healthcare facilities. They hibernate through the winter & become active in late winter and spring. In the fall, they are commonly seen on building exteriors.

**Prevention TIPS**
Exclusion

**IPM Treatments:**
Baits, Residuals

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**Crickets:**
**Diagnosis**
Crickets usually do not pose a health or structural damage threat, but they are a nuisance.

**Symptoms**
Crickets are often found around soil and under dead plants. They thrive in areas that offer humidity and moisture and plant cover.

**Prevention TIPS**
Exclusion & Landscape

**IPM Treatments:**
Baits, Residuals

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**Rodents:**
**Diagnosis**
Rodents are known carriers of deadly diseases. Rats can squeeze through an opening as small as a quarter, while a mouse can fit into a hole smaller than a dime.

**Symptoms**
Rodent infestations can prove extremely destructive. Signs may include droppings, rub marks or burrows. They tend to gather where food and water is readily available, such as in employee break rooms or foodservice areas.

**Prevention TIPS**
Exclusion, Sanitation & Landscape

**IPM Treatments:**
Baits, Traps & Sterilants

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**Spiders:**
**Diagnosis**
If you see spiders in your healthcare facility, it could mean you have a larger pest problem. Spiders live near their food sources, which are actually insects.

**Symptoms**
Depending on the type of spider found at a healthcare facility, evidence of their activity may vary. Spiders hide in numerous places and catch prey in three different ways: webbing, hunting and trapping. While spiders are still active during the winter, they are more active during spring, summer and fall.

**Prevention TIPS**
Exclusion & Sanitation

**IPM Treatments:**
Glue Board & Residuals

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**Termites:**
**Diagnosis**
Termites are called “silent destroyers” because they can be difficult to detect. These pests cause more than $5 billion in damage annually in the United States.

**Symptoms**
Warning signs of termite infestations may include temporary swarms of winged termites during the spring, discarded wings, cracked or bubbling paint, mud tubes on walls of the building and wood that sounds hollow when tapped.

**Prevention TIPS**
Ongoing Inspection & Sanitation

**IPM Treatments:**
Baits & Residuals
Is it Toxic?

Below is a list of commonly used pesticides & insecticides
Learn about their effects on Human Health & the Environment.

Delta Dust
Delta Dust, also known as Deltamethrin, is toxic! It is a documented neurotoxin, can cause kidney/liver damage. It is toxic to fish/aquatic organisms and bees.
This product is often used for bed bugs, carpenter ants, carpenter bees, cockroaches, spiders, chiggers, fleas, carpet beetles, and more.

DSV
DSV, a disinfectant, is toxic and is corrosive to the eyes, skin, gastrointestinal tract, and respiratory system. Vapor from this product can irritate the respiratory tract and even have effects on the central nervous system.

Final All-Weather Blox
Final All-Weather Blox contains the compound 'brodifacoum', a rodenticide and is toxic. This chemical is particularly risky if a human ingests it, causing potentially fatal hemorrhage. It can pose a risk to wildlife if they are contaminated by it, especially since it persists in the environment.

First Strike- Soft Bait
First Strike, or Difethialone, is toxic and can have minor symptoms if inhaled or from exposure to the skin. Serious risk if ingested. Symptoms may not occur until one or two days after contamination.
Is it Toxic?
For More Non-Toxic / Least Toxic Alternatives
Go To Beyond Pesticide's Gateway on Pesticide Hazards and Safe Pest Management

Boric Acid
Boric Acid is rated least-toxic and non-volatile meaning it does not emit any residues. When used as a dust, protective equipment must be used to prevent inhalation. Liquid formulations in seal containerized bait eliminate exposure, either direct or those off-gassing, which is common with most pesticides on the market. This compound may be used for bed bugs, carpenter ants, carpenter bees, centipedes, fleas, wasps and yellowjackets.

Insect Monitor Trap
Most Insect Monitor Traps are safe and non-toxic, even to insects. These are a great tool to assess the severity of an infestation, to determine if a costly treatment is necessary. This is a keystone of integrated pest management!

Pheromone Monitor
Similar to the trap, Pheromone Monitors are non-toxic. This is another great 'green' tool for monitoring the presence of pests

Desiccating Dusts
Desiccating dusts, such as diatomaceous earth and pure amorphous silica aerogel, are least-toxic. This is a great option for ant problems. It is important to use a dust mask and goggles when applying this.
Interested in learning how your facility can participate in our IPM in Health Care Facilities Project?

Contact Us!

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www.beyondpesticides.org

Be sure to call or email to submit your Facilities' IPM Tips & Strategies in our next Newsletter