

# Don't get 'bugged': prevent pests with IPM

by Susan Cantrell, ELS

Controlling environmental pests in hospitals may not be the jazziest job ever undertaken, but it is one of the most critical. There's no place where cleanliness is more important than in a healthcare facility. Who would want to have their appendix taken out in a hospital where roaches run freely and rats share lunch with visitors and staff in the cafeteria? Evidence of environmental pests could definitely be a deal breaker.

## The three Cs of pest control

Eliminating pests is a monumental job, but it's not so daunting if the understanding can be conveyed to every department, to every individual, that they have a personal role and responsibility in keeping the facility pest-free. Environmental services professionals may be charged with shouldering the responsibility of a program for pest management, but each and every person in the facility must cooperate with the program for their efforts not to be in vain. The three Cs in eliminating environmental pests must be employed to be successful: communication, cooperation, and commitment. If you can communicate effectively to every worker as to why, where, and how cooperation is needed, commitment likely will follow.

Fortunately, it's not hard to do one's part in keeping the facility pest-free. Observation of some very simple essentials can prevent infestation. As we've all heard, an ounce of prevention is worth a pound of cure. Never is that more true than with vermin.

## Integrated pest management

### Be proactive not reactive

Consensus in recent history is that implementation of an integrated pest-management (IPM) program is unquestionably the way to go. It's absolutely more environmentally friendly. That's because prevention is the cornerstone of IPM. The prevailing viewpoint is that spraying with chemicals as a control measure is a last resort to be used only on areas that have been targeted as problems where other

measures are not working or cannot be used, not as a blanket treatment for what ails the facility.

Orkin's director of technical services and entomologist, Ron Harrison, PhD, explained the concept of IPM: "To carry out comprehensive pest control in highly sensitive environments, healthcare facilities are turning to IPM. This approach focuses on the reasons pests infest facilities in the first place, stressing prevention over remediation and emphasizing non-chemical solutions. Through proactive measures, such as sanitation, facility maintenance, staff training, and detailed documentation, IPM

reduces the need for pesticide applications and other reactive measures."

Harrison also emphasized communication and cooperation. "No IPM program is successful without a partnership between the pest-management provider and the facility's employees. Cooperation and education of staff members and thorough communication with employees is integral."

Patti Costello, executive director of the American Society for Healthcare Environmental Services (ASHES; Chicago, IL) outlined four points that are key to an IPM program:

**Communication:** All employees must understand the importance of the IPM program and have the tools to report evidence of pest activity immediately, so that IPM measures may be implemented to prevent infestations.

**Cooperation and commitment from all parties involved:** Involved parties include environmental services, facilities management, the infection control committee, and the contracted pest-management professional.

**Close attention to maintenance and sanitation:** Close observation and immediate reporting help to minimize the need for, and dependence upon, traditional chemical pesticide use.

**Knowledge of pest biology and behavior:** Proper training and information, current pest-control technologies and practices, facility layout, structural characteristics, and

staff behavior is essential to analyzing pest problems, their origins, and how to prevent new ones.

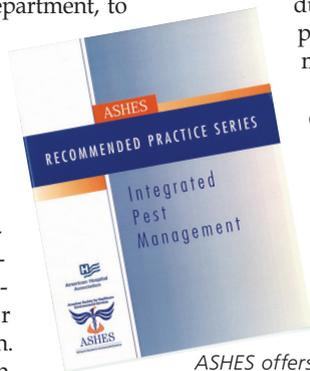
Costello went on to explain that an IPM program is based on a seven-step cycle: inspection; preventive action; identification; analysis; treatment selection, with non-chemical intervention as the first priority; monitoring; and documentation. "IPM is not an event but rather an ongoing cycle of repeating steps that will always address existing pest issues and help to prevent future ones by identifying the root causes, such as poor sanitation, landscaping that attracts various pests, foodservice kitchens and trash areas, receiving or loading docks, etc.," said Costello. "Removing the food source and keeping the area clean and free of debris will usually prevent an attractive 'home' for pest infestation."

## Send the pests packing

Pests have the same needs that humans do: food, water, shelter, comfortable temperatures. If people don't find these needs, usually they move on; it's the same with vermin. Diligent attention to sanitation and maintenance can make the environment less desirable to pests so that an infestation never gets started. An IPM program employs the same measures you take at home to prevent bugs from moving in, just on a larger scale, basically.

Harrison got more specific on measures taken to prevent an infestation using IPM: "Simple, proactive solutions can often reduce the need for traditional chemical treatments. Sanitation measures, such as immediately cleaning up spills and removing trash regularly, will help control the odors that attract pests. Proactive facility maintenance steps, like filling in cracks and crevices in your facility's façade, will make the property less accessible."

"With its emphasis on non-invasive prevention, Orkin's Gold Medal Protection for Health Care provides the highest level of thoroughness and safety. Employing strict notification protocols, Gold Medal Protection helps ensure that patients and staff aren't exposed to traditional chemical applications. When products must be used, Orkin selects low-risk, EPA-exempt solutions. Gold Medal Protection offers effective pest management while being one of



ASHES offers a publication on recommended practices for IPM.

# INFECTION CONNECTION



Photo courtesy Orkin, Inc.

An IPM program cannot succeed without a strong partnership between the pest-management provider and the facility's employees.

the most environmentally conscious programs available to healthcare providers. The program's rigorous IPM protocols are consistent with the recommendations of ASHES, Health Care Without Harm, and Practice Greenhealth."

Orkin Commercial Services offers a case study on IPM, based on the model recommended by Health Care Without Harm. It is posted on the American Hospital Association Quality Center website. Check it out at <http://tinyurl.com/yldxsvj>

## Tailor-made

A pest-management professional can help to formulate a program tailored to the facility's needs. Logically, every pest-management program begins with an inspection of the facility. Stoy Hedges, entomologist and director of technical services at Terminix International Company L.P., Memphis, TN, advised: "Pest management starts with a comprehensive inspection to determine where pests may be active and whether there are any conditions that are conducive to their presence. A plan can then be addressed with the facility to correct conducive conditions and to control any existing infestations. Certain areas, such as boiler rooms, storerooms, and the exterior, will receive regular inspections and possibly preventive treatments. Patient areas, labs, and other areas will be inspected periodically and control measures used only when activity is discovered. Communication between the pest provider and the facility staff is very important to the overall program."

Hedges also touted IPM as a more environmentally friendly approach to pest management, noting that non-chemical methods are the first choice. "The primary approach for pest management is to have the healthcare facility correct conditions that are creating or contributing to a pest infestation. Non-

chemical methods are then commonly used to eliminate the pests that remain. For example, if cockroaches are living within hospital beds or furniture, those items may be moved to another area to be treated and then cleaned before being replaced. Cockroach populations can be radically reduced by flushing them out using hot air and vacuuming. Cockroach baits can then be placed in cracks and voids to control the remaining insects. Pharaoh ants in labs or patient rooms can be treated by placing ant baits inside wall outlet boxes where they are out of sight but easily reached by ants. Ants foraging in an ICU unit can be controlled by wiping away foraging trails with soap and water then baiting the ants in a secure location outside the ICU."

A pesty little problem that's been getting no small amount of attention recently is bed bugs. They travel to hospitals and long-term-care facilities in luggage, clothing, shoes, boxes, and other things. The website of the National Pest Management Association Inc., International, said that bed bugs, which are active at night, hide in small cracks and crevices near humans such as baseboards, wallpaper, upholstery, and furniture. It also stated that, whereas bed bugs don't transmit disease, they do leave red, itchy bites where they've sucked their victim's blood.

The bed-bug problem has become big enough that, this past April, the EPA hosted the National Bed Bug Summit in Washington, DC. Its purpose was to share information on topics including the expanding impact of bed bugs on the housing, hospitality, and other sectors; factors contributing to the growing problem; and the response of the public health community and government agencies. Participants also identified ideas and options for bed-bug prevention, control, and management; created strategies for outreach and education; and developed recommendations for action.

Harrison, Orkin, attended the summit and is working on a white paper about how to identify evidence of bed bugs and how to control bed bugs in the healthcare environment, using both chemical and green methods.

## Cost benefit

Another bit of good news about environmentally friendly methods of pest control is that they can be cost-effective. Harrison noted: "Facilities implementing environmentally conscious pest-control techniques spend less on product-based treatments that

only offer a short-term fix, investing instead in long-term solutions. Plus, you can't put a price tag on a facility's reputation for delivering quality care. Keeping pests out is in the best interest of patients, visitors, and staff, and it reduces the chances of negative press or expensive litigation."

## For more information

As with any program being implemented, understanding what you're approaching is a vital first step. A good place to start gathering information is from the professionals themselves.

Hedges described Terminix's role in educating customers: "Terminix provides many of its customers with training for its staff members upon request. These sessions are based on the facility's concerns and needs and range from pest identification to how facility practices affect pest activity."

ASHES collaborated with Orkin and Western Pest Services to develop an excellent publication on the topic, *Recommended Practice: Integrated Pest Management*. To order it, go to [http://www.ashes.org/ashes/learn/tools\\_and\\_resources/publications.shtml](http://www.ashes.org/ashes/learn/tools_and_resources/publications.shtml). Better yet, there's a way to get this \$45 publication for free. Go to a new website launched by ASHES and Orkin, HealthcarePestControl.com (<http://healthcarepestcontrol.com>). Harrison described this website as "an interactive online handbook that provides free training resources on smarter pest-control practices in healthcare settings." Take the self-assessment test; when you've finished, you can request a free copy of *Recommended Practice: Integrated Pest Management*. Don't miss the section on IPM training resources while you're at the website. Also, you'll want to visit Orkin University Online at <http://www.orkincommercial.com/about/university.aspx>. **HPN**



Photo courtesy Orkin, Inc.

HealthcarePestControl.com is an interactive online handbook that provides free training resources on smarter pest-control practices in healthcare settings.