

Educational Needs Assessment for IPM in Multi-Family and Community Dwellings

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Abstract

A western region workgroup was formed to conduct a needs assessment for IPM and pesticide safety education in Multi-Family/Community Dwellings; the focus was on nuisance, health and structural pests. Representatives from university extension and research programs, state regulatory agencies, pest management professionals, and owners/managers of Multi-Family/Community Dwellings participated. Three target audiences were identified for educational programming in IPM and pesticide safety: landlord/property managers, residents/tenants, and pest management professionals. To support future efforts in this segment of urban IPM, specific educational needs were identified, a listing of reasonable education opportunities was compiled for each audience and several funding sources were identified.

Keywords: urban, IPM, assessment, pesticide, safety, educational, needs, family, community, dwellings

Introduction

Pest management in Multi-Family/Community Dwellings (MFCD) is typically handled by commercial pesticide applicators, private owners, or public employees. Certified applicators that service MFCD clientele are typically called Pest Management Professionals (PMPs) and are a trained workforce in pesticide safety, and to a limited extent, in integrated pest management (IPM). PMPs manage nuisance, public health, and structural pests in a wide array of residential and institutional properties: homes, retirement facilities, hospitals, daycare facilities, K-12 schools, public housing, etc. Often, these pest management activities are conducted in close proximity to children, families, and

business employees; thus, public safety and pesticide exposure are key concerns.

In order to initiate a western regional effort toward adoption of urban IPM in MFCDs, a workgroup was formed to characterize the clientele that need to be reached and to identify obstacles that prevent adoption of IPM. Representatives from Washington, Idaho, Colorado, California, and Arizona participated in the workgroup. The workgroup included key players and active stakeholders engaged in the urban IPM arena (university personnel, state regulators, PMPs, property managers, and consumers).

Educational needs to facilitate the adoption of IPM were assessed during conference calls, personal calls, and face-to-face meetings. Through this effort, the workgroup received input from a wide array of stakeholders; thus, extending resources and expertise beyond state borders to encompass the entire region.

The workgroup limited its scope to IPM for indoor and proximate adjacent exterior areas in MFCDs, which include public housing, apartment buildings, condominiums, and similar living accommodations. This particular segment of residential and institutional pest management is underserved by IPM and pesticide safety education programs and it provides an excellent opportunity to pursue adoption of IPM programs. The workgroup focused on residential areas where a large number of people have the potential to be exposed to pesticides and where residents have little or no participation in pest control decisions including proper pesticide selection or use.

Three Clientele Groups Identified

When focusing on multi-family or community dwellings, three audiences were identified as clientele for targeted IPM educational efforts:

- 1) Pest management professionals servicing these dwellings
- 2) property managers, and
- 3) residents/tenants.

Pest management professionals trained in IPM principles, practices, and pesticide safety, and who have access to quality decision-making resources benefit the whole community. In MFCDs it is often the property manager who makes the final pest management

decision. Therefore, in order to increase IPM adoption, it is necessary that the property manager be knowledgeable about pest management. In return, adopting an IPM program could reduce pesticide exposure when compared to standard pesticide spray programs. For an MFCD IPM program to be successful, the residents/tenants must also be involved in the program and be made aware of IPM strategies.

PMPs: Obstacles to IPM Adoption and Identification of Educational Needs

To discuss the obstacles that prevent IPM implementation in MFCDs, and identify educational resources which are available and are needed by PMPs, the workgroup met by conference calls and in one face-to-face meeting. PMP stakeholders participated in the workgroup and were a diverse group, possessed a wide range of experience in pest management and utilized a variety of practices. While these stakeholders did not formally represent the entire pest control industry, the workgroup found their comments representative and very valuable. The PMPs were represented by owner/operators of pest management firms and industry representatives that support PMPs.

The largest obstacle to overcome in order to practice IPM in MFCD is ineffective communication. Also, the PMPs in the workgroup identified a general lack of knowledge about IPM and pest management by both property managers and tenants. Most property managers and tenants either have not heard of IPM, or do not know that IPM can be very effective in managing pest populations with reduced pesticide use and exposure. If they have heard of

IPM, many do not know what IPM really means. For example, a request from consumers heard by some PMPs is: "I need IPM." However, the individual making the request has little or no understanding that IPM is a process and not an instant solution to a pest problem.

Technology has changed the way PMPs practice pest control, yet many managers and residents/tenants do not think a PMP has done their job unless the PMP has "sprayed something." With new tools, such as ant and cockroach baits, there has been a decrease in the use of pesticide sprays. Currently, there are only a handful of pesticides available and new technology is further driving shifts in pest management practices. The shift to bait boxes and traps has become a major hurdle to overcome for those who expect repeated sprays. There is an obvious need for education to explain that with new bait systems, pesticide sprays are rarely necessary for most common household pests.

The lack of direct communication between PMPs and tenants is another obstacle to PMPs practicing IPM in a MFCD. Typically, a tenant speaks with the property manager when a pest problem arises. The property manager then contacts a PMP. Usually, the PMP does not speak directly with the tenant regarding the type or exact location of the pest problem. Tenants are typically unaware of sanitation and other cultural and physical changes that may reduce or control pest problems. When the PMP is unable to speak with the tenant about the impact of sanitation, cultural, and physical strategies and how these impact pest populations, it is unlikely a lasting solution will occur.

Education needs include methods or materials to help PMPs educate residents/tenants on how to change their environment by eliminating conditions conducive to pests. In order to have an effective IPM program, residents/tenants need to be involved as a partner in the effort. Therefore, educational materials that the PMP can provide to the resident/tenant are essential.

Another need is to demonstrate to PMPs how they could change their role slightly, working more as a consultant, to sell knowledge of pests and pest management. One PMP stakeholder noted that certain clients are willing to partner with the PMP to manage their pests. Within the PMP-tenant or PMP-manager partnership, the PMP takes the initiative to educate the client on when and where to place traps and bait stations, how to service them, and how to monitor and evaluate success. Information on how to open the doors of communication to enable an IPM program to succeed was identified as an educational need.

The bottom line is that any IPM program must be profitable for PMPs and provide long-term pest control for recipients. PMPs can offer IPM consultations as an added billable service to increase revenues. It will take effort on the part of the PMP to develop promotional materials that sell an IPM program to clients willing to invest in this management style.

Property Managers: Obstacles to IPM Adoption and Identification of Educational Needs

To help identify pest management obstacles for MFCDs, property managers attended the face-to-face

workgroup meeting. MFCD property managers are as diverse as their residents, ranging from large private businesses, city and state governmental agencies, to local “mom and pop” operations. Local and national housing associations were invited to participate in this workgroup; however, getting participation proved to be difficult, which by itself describes an obstacle. We had the representation of city (Spokane Housing Authority) and state (Washington State University (WSU) Housing) housing organizations, as well as a small business at the 10 May 2004 assessment meeting. The property management stakeholders who participated covered a full range of practices and experiences and although they did not formally represent the property management industry as a whole, the workgroup felt their input was very valuable in voicing issues and possible remedies.

One of the biggest obstacles to the adoption of an IPM program in a MFCD was identified by this group as a lack of knowledge about pest management among property managers. It is impossible to adopt practices that one does not know exist. It was determined that property managers need education on clearly writing bids for pest management professionals to make certain that true IPM services are received.

Although the majority of property managers contract with PMPs for regular service visits, some hire them only for specific pest problems. The property manager selects a PMP by sending out a request for services and accepting a single bid. Typically, contracts with a PMP are for one year and vary depending on the service provided. For example, the Spokane

Housing Authority contracts for a fixed number of visits for either assessment or pest control. Although WSU Housing contracts with a PMP for a fixed monthly base rate and set workload, they reserve the option to hire the PMP for additional work. There are also property managers who do all their own pest control and never hire a PMP.

Essentially all of the property managers that participated in the workgroup use the same pest control decision-making process. The process starts when the resident/tenant files a complaint. Typically the property manager then either contacts a PMP or takes “in-house” action to manage the pest. Usually property managers are not aware a pest problem exists until a resident/tenant complains, and often by this time the pest problem may necessitate the use of pesticides. Early identification of pest problems, and use of the least toxic practices first, may minimize the likelihood that a threshold of pest damage/presence is reached and the use of more toxic options are required for control. In an urban environment these thresholds or pest tolerance levels vary greatly from resident to resident and location to location. By the time the resident has called their property manager this tolerance threshold may already have been reached. This creates an obstacle to adoption of IPM because both resident/tenant and property manager want immediate corrective measures performed. However, if there is effective communication and cooperation in these situations, the property manager can use this as an opportunity to be educated by the PMP about adoption and implementation of IPM practices leading to a successful long-term IPM program.

Educational Strategies to Address IPM Awareness and IPM Tools

Following are listings of possible strategies to increase IPM awareness and create educational tools. These efforts are critical to reduce unnecessary pesticide exposures.

Opportunities Directed Towards PMPs

- 1) Provide newsletters, symposia or workshops at professional meetings showcasing success stories to help the PMP market and sell IPM services. Such information/training should also show PMPs how to increase communication with property managers on available IPM services.
- 2) Conduct site visits, offer lectures, and provide newsletter articles to help PMPs understand their role as an IPM educator to both property manager and resident/tenant.
- 3) Provide IPM education updates for PMPs through association meetings and online delivery methods.

Opportunities Directed Towards Property Managers

- 1) Provide training seminars, online courses, or newsletter/trade journal articles on topics such as:
 - a. The difference between IPM and traditional pest control approaches
 - b. IPM versus monthly/weekly spray program

- c. Pest control expectations: pest identification, sanitation, sprays vs. baits
 - d. How to partner with PMPs and residents/tenants to implement and maintain a successful IPM program
 - e. IPM success stories
 - f. How to maintain an open dialogue with PMPs and residents/tenants and avoid a communication crisis
- 2) Create a focus group or workshop with property managers to assess needs and provide bid and contract language templates they could use with PMPs to ensure an IPM program is implemented.

Opportunities Directed Towards Residents/Tenants

- 1) Include children in educational efforts because changing the way children think about pests and pest management increases the likelihood of long-term adoption of IPM. The relative success of this type of outreach effort has been demonstrated by recycling programs. Pest identification, environmental awareness, insect behavior, and the importance of sanitation would be great topics for kids; knowledge in these areas would allow them to understand IPM and find ways in which they and their family can participate.
- 2) Develop and distribute tool kits and bug boxes that could be used in schools, community and church organizations, and by

property managers to educate residents on harmless vs. harmful bugs. An educational tool kit with simple facts and “bug boxes” containing common household pests could assist in pest recognition.

- 3) Assess existing materials and/or develop short, simple materials on how to maintain a pest-free living environment through sanitary living conditions written in multiple languages, and suitable for distribution to clientele of various cultural backgrounds. Included in this material should be simple tip sheets on preventing pests and reviewed resources on common household pests and pest management options, especially newer technologies.
- 4) Develop a brochure or pamphlet for property managers to distribute to residents/tenants outlining the role of tenants, landlords, and PMPs in a successful IPM program. Property managers could attach this brochure with their lease agreement packet (similar to the way Lead Poisoning Prevention information is currently distributed), or distribute to all residents/tenants when pest problems occur. A brochure of this nature also would increase communication between property managers and tenants.
- 5) Develop *PestSense*, a database available on the World Wide Web, of household nuisance and structural pests. Images and information on pest biology, monitoring, pest thresholds, and

control strategies should all be included. Washington State University has developed a similar and very successful web site, *HortSense* (<http://pep.wsu.edu/hortsense/>), for landscape plant problem weeds, insects, and diseases. *PestSense* should be modeled after *HortSense* which is used by both consultants to educate the consumer and directly by the general consumer.

Potential Funding Sources

The workgroup identified the following potential funding sources that may support the development of outreach/resource materials and future educational efforts in local, regional or national areas.

- US Housing and Urban Development
- Center for Disease Control and Prevention, Lead Prevention Program
- US Environmental Protection Agency, Protecting Older Adults
- US Environmental Protection Agency, Pesticide Environmental Stewardship Program
- US Environmental Protection Agency, Office of Pesticide Programs – Communications Office
- National Institute of Environmental Health Sciences
- National Institute for Occupational Safety and Health, Environmental Justice: Partnerships for Communication
- State Departments of Health

- National, regional, and state pest control associations
- Water quality agencies and associations
- Energy assistance offices
- Washington State Commission on Pesticide Registration

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