

**The Western Region Urban Residential
and Institutional IPM Workgroup**
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Abstract

Prior to 2004, the Western Region lacked a group coordinating urban integrated pest management (IPM) strategies for residential and institutional settings. With the formation of the Western Region Urban Residential and Institutional IPM Workgroup, a foundation group now exists with representatives from Washington, Idaho, Colorado, Arizona, and California. The group has representatives from university extension and research, state regulatory agencies, pest management professionals, and owners/managers of multi-family/community dwellings.

The workgroup has made an assessment of the needs of IPM for multi-family dwellings, focusing on nuisance, health and structural pest management. The workgroup has identified three different target audiences for educational programming: landlord/property manager, resident or tenant, and the pest management professional. Lastly, several different funding opportunities have been identified to support future efforts in this segment of urban IPM.

Background

Urban residential/institutional pest management is typically handled by commercial pesticide application businesses or by public employees. Certified applicators that service residential and institutional clientele are typically called Pest Management Professionals (PMPs). PMPs manage nuisance, public health, and structural pests in a wide array of residential and institutional properties: homes, retirement facilities, hospitals, day cares, K-12 schools, public housing, etc. Often, pest management activities are made in close proximity to children, families, and business employees; thus, public safety and pesticide exposure are key concerns.

Having a PMP workforce trained in IPM principles and practices and who have access to quality decision-making resources is good for citizens throughout the Western Region. There is a regional need for a shift in the economic model toward an IPM practitioner who provides a valuable integrated pest management service with proven results, reduces pesticide inputs, and can be profitable for commercial pest management businesses.

Since it is often the property manager who makes the final pest management decision, having a knowledgeable administrator can lead to higher adoption of IPM. In return, this could lead to lowered pesticide exposure when compared to routine spray programs.

Additionally, consumers need to be armed with the proper decision-making tools which lead to a successful adoption of an IPM program. For example, consumers may participate in an IPM program by actively assisting the PMP through changing sanitation practices, pest identification and monitoring.

The workgroup was tasked with

- 1) establishing a multi-state, multi-organization workgroup to enhance communication and collaboration regarding Urban Residential/Institutional IPM (residential, multi-family residential, schools, day cares, hospitals, businesses, etc.),
- 2) identifying the needs and obstacles to IPM practice for PMPs in Urban Residential/Institutional pest control,
- 3) identifying the needs and obstacles to adoption for consumers, institutions, and businesses receiving pest management services, and
- 4) developing a regional plan, including funding, for moving toward identified and measurable short-term and long-term goals

Through this effort, the workgroup received input from a wide array of stakeholders extending resources and expertise beyond the border of a single state to the entire region.

The workgroup recognized early that Urban Residential/Institutional IPM encompasses a vast array of players. After thorough discussion and study the workgroup limited its initial scope to IPM in multi-family and community dwellings, apartment buildings, condominiums, nursing homes, and similar situations. This particular segment of residential and institutional pest management is underserved by IPM programs and in comparison to past and current efforts in K-12 schools, daycares and single family residences provides an excellent opportunity to achieve adoption.

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

- 1) PMPs servicing these accounts,
- 2) property managers, and
- 3) residents/tenants.

The workgroup focused on areas where the potential for human exposure to pesticides is high and where occupants have little or no participation in pest control decisions and pesticide selection or use. The workgroup focused on implementation of IPM for indoor and proximate adjacent exterior areas.

1) Establish a Western Region Urban Residential/Institutional IPM Workgroup

The chosen methodology was to identify key players and convene them as a workgroup to conduct a regional needs assessment of Urban Residential/Institutional IPM education and supporting resources.

Representatives from Washington, Idaho, Colorado, California, and Arizona agreed to participate in the workgroup for phase one of this new effort to develop an Urban Residential/Institutional IPM program. The workgroup and active stakeholders included key players engaged in the Urban Residential/Institutional IPM area, including university personnel, state regulators, PMPs, and consumers. The workgroup solicited input from others involved in Urban Residential/Institutional pest management who are located outside the Western Region such as, National Pest Management Association, International Urban IPM Association, and California consumer services.

The following Western Region Urban Residential and Institutional IPM Workgroup partners convened five times by conference call and actively communicated with stakeholders by email to facilitate enhanced communication.

- Dr. Art Antonelli, Washington State University (WSU)-Puyallup
- Bart Brandenburg, Bio-Integral Resource Center
- Robert Hays, Idaho State Department of Agriculture
- Rebecca Hines, WSU-Puyallup, Urban IPM
- Carl Martin, Arizona Structural Pest Control Commission
- Dr. Sandra McDonald, Colorado State University
- Carol Ramsay, WSU, Pesticide Safety
- Dr. Dan Suomi, Washington State Department of Agriculture

Additionally, on 10 May 2004, the workgroup held a face-to-face meeting in Spokane, WA in conjunction with the Western Region Pesticide Meeting. The following active stakeholders also attended this meeting.

- JoAnn Bryan, WSU, Housing and Conference Services
- Corey Chantry, All Seasons Pest Control, Spanaway, WA
- Carrie Foss, WSU, Urban IPM
- Shar Hidy, Spokane Housing Authority
- Gail Mahoney, self-employed property manager
- Scott Nielsen, Washington State Department of Agriculture
- John Reuland, Earth First Pest Control, Spokane, WA

2) Obstacles for Pest Management Professionals

In order to assess the need for any educational program targeting PMPs, the workgroup discussed obstacles that prevent IPM implementation and what educational resources are available during conference calls and the face-to-face meeting. The PMP stakeholders who participated in the face-to-face meeting covered a full range of practices and experiences and represented the large diverse group of PMPs throughout

the region. However, it is important to note that the comments and statements expressed by these stakeholders may not represent the pest control industry as a whole and are solely the views of the discussion participants.

The PMPs identify a general lack of knowledge about IPM and pest management by both property managers and tenants. Communication is the largest obstacle to overcome in order to practice IPM in multi-family dwellings.

Lack of knowledge about pesticides and pest control generally, and of IPM specifically, is a major communication obstacle. Property managers or tenants either have never heard of IPM, do not know what IPM is, and do not know that IPM can be very effective in managing pest populations; having heard of IPM they don't know what IPM really means. An example call the PMP saying, "I need IPM" without the understanding that IPM is a process and not an instant solution to a pest problem.

Technology has also changed the way PMPs practice pest control. With new tools, such as roach and ant baits, there has been a decrease in the use of pesticide sprays. Currently, there are only a handful of pesticides that can be used and new technology is further driving shifts in pest management practices. However this shift in pest management practices has not been effectively communicated to property managers or tenants. Many managers and tenants do not think a PMP has done anything to manage their pest unless the PMP has "sprayed something". With a shift to bait boxes and traps as IPM tools, this becomes a major hurdle to overcome for those who expect repeated sprays. There is an obvious need for educational materials to explain that with new pesticide baits, sprays are rarely necessary for many household pests.

The lack of direct communication between the PMP and the tenant is another obstacle to practicing IPM in multi-family dwellings. Typically, the tenant speaks with the property manager when a pest problem arises. The property manager then contacts the PMP. Usually, the PMP is not able to speak with the tenant regarding what type of pest problem or exact location of the pest problem. Often pest problems are best managed by improved sanitation teamed with other specific cultural and mechanical alterations. However, if the PMP is not able to speak with the tenant about sanitation, cultural, and mechanical strategies and cleanliness and how these impact pest populations, it is unlikely a lasting solution to the pest problem will occur. In order to have an effective IPM program, tenants need to be involved as a partner in the effort. This may require flexibility among both the PMPs and the tenants. The tenants need to be willing to change their environment by eliminating conditions conducive to pests. At the same time a PMP could change their role slightly, and work more as a consultant selling knowledge of pests and pest management. Opening the doors of communication will enable an IPM program to succeed, thus benefiting the tenants, landlords and the PMP.

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conducive to pests. It was also noted by one PMP stakeholder that some clients are willing to partner with the PMP to manage 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, and how to monitor and evaluate success.

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Financial returns on IPM must be considered a driving force in IPM implementation. As stated above, PMPs have the opportunity to offer consultations in pest management as an added service for which they can charge. It will take effort to develop promotional materials that ‘hit the nail on the head’ for clients willing to pay for this service. Entities writing bid requests for pest management services need to be educated in exactly how and what to request of a PMP to ensure reception of true IPM services. The bottom line is that any IPM program must be profitable for the PMP and cost effective and provide long-term control.

3) Obstacles for Property Managers

To help identify the pest control obstacles for multi-family/community dwellings, property managers were invited to attend the face-to-face meeting. There are a variety of property managers ranging from large private businesses, city and state governmental organizations, and local ‘mom and pop’ businesses. The property managers of multi-family dwellings are as diverse as are their residents. Local and national housing associations were invited to participate in this workgroup; however, getting participation proved to be difficult, which indicates challenges ahead. However, we had the representation of both city (Shar Hidy, Spokane Housing Authority) and state (JoAnne Bryan, WSU Housing) housing organizations and a small business (Gail Mahoney) at the 10 May meeting. The property management stakeholders who participated in the face-to-face meeting covered a full range of practices and experiences and represented the large diverse group of property managers throughout the region. However, it is important to note that the comments and statements expressed by these stakeholders may not represent the property management industry as a whole and are solely the views of the discussion participants.

One of the biggest obstacles to the adoption of an IPM program in multi-family dwellings is the lack of knowledge about IPM and pest management among property managers. It is impossible to adopt practices that one doesn’t know exists.

Most property managers hire a PMP for all pest problems or for routine maintenance. The property manager selects the PMP by sending out a request for services and accepting a single bid. The contracts with a PMP are typically for one year and vary depending on the type of service provided. For example, Spokane Housing Authority contracts with one PMP for all facilities and the contract is for monthly visits/pest control.

WSU Housing however, contracts with a PMP for a fixed amount of work per month and the PMP works on an on-call basis. There are also property managers who do all their own pest control and never contract with a PMP.

All of the property managers use essentially the same pest control decision-making process. The resident making a complaint initiates this process. Typically the property manager then contacts the PMP or self-action is undertaken to manage the pest. Property managers do not know if there is a problem until there is a complaint and often by the time the resident has complained, the pest problem is not easily solved. When following an IPM program, management measures would not be taken until a threshold of pest damage/presence is reached. In agriculture this threshold can be easily defined. However, in an urban environment, the action threshold or tolerance of a pest varies greatly from person to person and location to location. By the time the resident has called the property manager, the threshold has been reached and immediate corrective procedures are needed to eliminate the pest problem. This creates an obstacle to the adoption of an IPM program because both the tenant and the property manager want immediate corrective measures performed to get rid of the pest. With successful communication and cooperation, an existing control problem could develop into a long-term IPM program.

4) Educational Needs - IPM Awareness and IPM Tools

Targeted to tenants

- 1) Target kids - One major effort to move toward IPM is through education targeted at school age children. By changing the way children think about pests and pest management, the likelihood of long-term adoption of IPM increases as has been demonstrated by recycling programs. Pest identification, environmental awareness, and sanitation would be great topics for kids.
- 2) Pest identification (good vs bad bugs) - Build an educational tool kit with simple facts and "bug boxes" which could be used in schools, community and church organizations, and by property managers.
- 3) Sanitation, a key to a pest-free environment - Educational resources for tenants on how to maintain a pest-free living environment. Assist property managers in overcoming the common obstacle of cultural differences and tolerances to pests. Assess existing materials or develop some game and coloring books for creating a pest-free environment. Information should be on cleanliness and sanitation and available in multiple languages. The educational materials need to be short and simple. This material should include tip sheets on how to prevent pests and resources on where tenants can get quality information about common household pests and pest control options
- 4) IPM partnerships (roles for tenant, landlord, and PMP) – A brochure or pamphlet that property managers could distribute to tenants with their lease agreement packet or when pest problems arise would help to create a better property manager and tenant relationship. Develop simple fact sheets outlining the

important role the tenant plays in assisting with pest control. Property managers could offer pest-free bonuses or reduced fees.

- 5) Pestsense – a web site database of household nuisance and structural pests that includes images, pest biologies, monitoring strategies, pest thresholds, and control strategies. This would be similar to the WSU Hortsense web site for landscape plant problem weeds, insects, and diseases.

Targeted to property managers:

- 1) What IPM is and why traditional pest control fails – newsletter articles
- 2) IPM vs monthly/weekly spray program – newsletter and training seminar
- 3) Pest control expectations (identification, sanitation, sprays vs. baits) – training seminar or online course
- 4) How to partner with PMP or tenant - newsletter and training seminar, include success stories
- 5) Communication crisis between PMP and tenant – open dialogue
- 6) Bid requests – focus group or workshop with property managers to assess inadequacies and suggested contract language

Targeted for PMPs

- 1) How to sell IPM - showcase success stories in newsletters and annual meetings
- 2) Role as educator to property manager and tenant - site visits, lectures, newsletter articles
- 3) Initial pest control service followed by IPM service – Increasing communication and sales skills and selling IPM service
- 4) IPM education updates for PMPs – online and association meetings

5) Regional Planning and Funding

The workgroup has decided to move forward in the development of IPM educational materials listed here:

- Develop IPM educational training materials that can be presented across the Western Region to Property Managers (newsletter articles, PowerPoint presentation, fact sheets, etc.)
- Develop a list of resource material currently available for Safety Educators to disseminate quality Urban IPM information to both residents and property managers of multifamily dwellings.

There are a number of sources of educational material available targeting Urban IPM. EPA has developed material for both adults and children on controlling cockroaches. They have also prepared a pest control kit for apartment managers which is available free from the National Service Center for Environmental Publications. Other federal agencies have established programs to provide quality educational material to managers and tenants of multi-family dwellings. For example, the Healthy Homes and

Lead Hazard Control program from Housing and Urban Development (HUD) and Center for Disease Control (CDC). These materials will undergo assessment from user groups prior to drafting new materials.

The workgroup will assess the appropriateness of the following funding sources for the development of these resource materials and other future effort: Housing and Urban Development (HUD) and Center for Disease Control (CDC) lead prevention program, EPA funding focused on Protecting Older Adults, Communication, National Institute of Environmental Health Sciences' NIOSH Environmental Justice: Partnerships for Communication, Department of Health, National and Regional Pest Control Associations, Water Quality, Energy Assistance, WSU Norman Ehmann Fund, national and state pest management associations, Washington State Commission on Pesticide Registration, and US EPA Pesticide Environmental Stewardship.

WSU is willing to continue to lead the workgroup, but will need to again solicit commitments from workgroup members and active stakeholders since the original commitment was for only a single year.

For the short-term, educational resources targeting property managers should be pursued, especially newsletter articles and training meetings. Also, a call for current short and simple fact sheets will be sent out. If nothing of merit is found, the workgroup should focus on simple fact sheets targeted to tenants.

In the long-term, the workgroup should work with the PMP associations regarding their educational needs to shift to IPM applications.

The sustainability of this program will come from public service offerings. No segment of the stakeholder communities is requesting immediate assistance with tools for shifting to IPM; thus, one must move slowly and in a sustained way.