



Creating Sustainable Community-Based IPM Groups

The Michigan Model



Written by:

Sherlyn Bienvenida

Department of Resource Development
Michigan State University

Erica Jenkins

Pesticide Education Program
Michigan State University

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This resource and links can be found on the internet at: www.pested.msu.edu



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Introduction

A Bit of Background: The Urban Pesticide Misuse Problem

The presence of pests in the home is an issue of major concern in many communities throughout the country. The stigma associated with having pests in the home, and the dislike and fear of pests, has contributed to the use of desperate measures by homeowners in an attempt to control pests. In some cases homeowners and their families have been at risk from the misuse of pesticides and potentially dangerous exposure to pesticide residues.

The U.S. Environmental Protection Agency (EPA) began its Urban Initiative after widespread misuse of agricultural pesticides for indoor pest control. In the late 1990s, millions of dollars in federal and state funds were used to remediate contaminated homes and businesses, and to prosecute illegal applicators. After these efforts, the Urban Initiative Program was started to support educational activities in target communities to prevent illegal pesticide misuse and to provide residents with information on safer means to manage pests.

As part of this EPA Urban Initiative Program, the MSU Pesticide Education Program received a grant from EPA Region 5 through the Michigan Department of Agriculture (MDA) in 1999 to work with the the Community Pesticide Education Program (CPEP). In collaboration with CPEP, the purpose of this grant was to work in low-income areas in Lansing, Saginaw, and Detroit in order to develop a model of sustainable community-based integrated pest management education programs.

About This Resource

We believe that a lack of economic resources and information on safer means of pest control, as well as a mistrust of state regulatory agencies, contributed to the use of illegal pesticide in urban areas. Consequently, we believe that one effective way to eliminate the misuse of pesticides and reduce the risks of pests and pesticides in homes is to teach community members about safe pest management. Education programs that residents help design can empower residents to deal with pest management concerns in their communities.

The problem of illegal packaging and distribution of agricultural insecticides for use in controlling indoor pests will not be totally solved by passing laws on the federal or state level, nor will it be solved by one organization or group of people. “Prevention starts at home” or, in the case of this project, prevention starts with engaging a community and gathering groups of people to communicate and give input to solve a problem.

This guide provides a model for creating community-based pesticide education groups that has been used successfully in Michigan. We hope that other organizations and state agencies can learn from our experiences and adapt our model to meet the goals of their states and communities.

A Note About Terminology

For simplicity, we use the term “agency” in this guide to refer to the parties interested in starting community-based IPM groups. The “agency” may be a state lead agency (ie. Michigan Department of Agriculture), a university, cooperative extension, a community or environmental organization, a school district, a health department, or other group.

Creating Sustainable Community-Based IPM Groups

The Michigan Model



The Michigan Model of creating community-based IPM education programs is based on the following assumptions:

- The state level stakeholder group and the state-community linkages help identify and launch the local community groups.
- The local community group will be given the responsibility to run the community programs. For long-term sustainability, the local community group is expected to take ownership of the program and let the program change as the needs of the community change over time.

The formation of a community-based group has three components: establishment of the state level stakeholder group, identification and utilization of state-community linkages, and establishment of the local community IPM group. The following pages will introduce and explain these three stages.

Establishment of The State Level Stakeholder Group

The state level stakeholder group is the coordinating body of the IPM program. These are the steps that were followed in Michigan in setting up this group.

1. Assemble Stakeholders

Possible stakeholders may include:

- state pesticide regulatory agencies
- cooperative extension
- community action and environmental groups
- state pest management association
- university
- state community and environmental health agencies
- community advocates

2. Identify Responsibilities

This group may:

- set statewide goals.
- identify target regions for education programs.
- formulate overall educational mission/message.
- identify state-community linkages.
- sell program to potential community groups.
- obtain and create materials to assist local groups.
- serve as resource/guidance/troubleshooter for local groups.
- assess and evaluate local group needs.
- evaluate and assist in recruiting different local group members if needed.
- identify additional sources of funds.
- administer and provide oversight of funds to the local level.

The Community Pesticide Education Program (CPEP)

A State Level Stakeholder Group

In 1995 and 1996 the Michigan Department of Agriculture was involved in an investigation that uncovered the illegal sale and application of methyl parathion, a highly toxic pesticide used on cotton, in the City of Detroit. Residents were buying and applying this product to control cockroaches and other indoor pests. One resident said, “I’m not giving mine up, it controls roaches for 10 years.” Over 1.7 million dollars was spent on the investigation and remediation of several buildings in Detroit including a homeless shelter.

As a result of these incidents, a coalition was formed in Detroit to address pest and pesticide educational needs of low-income communities in Detroit. This group, called the Urban Pesticide Education Program (UPEP), was made up of representatives from Michigan Department of Agriculture, Michigan State University Pesticide Education Program, the East Michigan Environmental Action Council, Michigan Nursery and Landscape Association, Michigan Pest Control Association, and MSU Extension. This group produced four educational brochures for a lower-literacy audience on safer pest management that were widely distributed throughout Detroit.

Now called the Community Pesticide Education Program, CPEP serves as a state-wide coordinating group for community pesticide education and community-based IPM groups in Michigan. CPEP is coordinated by the Community Program Manager of the Pesticide Division of the Michigan Department of Agriculture. CPEP meets several times a year to provide oversight to community IPM groups, select new communities or audiences to focus outreach efforts with, determines the priorities of educational material development, and seeks new sources of funding. CPEP also hosts an annual in-service training for all local Michigan School and Community IPM groups to receive training, share successes, troubleshoot, and network. In-services allow local community groups to learn from other groups and help energize and keep groups in focus of their goals.

Identification and Utilization of State-Community Linkages

It is often impossible for a state-level person to know local communities intimately. In this stage we use one or several key community or regional contacts to help identify target communities who will benefit from the program, and identify possible leaders who will be supportive of the program.

This stage may be skipped if the state-level person is also a member a the possible target community, or s/he knows of a particular community who may benefit the program. Unlike the state-level group, this group does not continue after the initial identification of target communities and community leaders. For this reason, this is often a good place to utilize the knowledge of influential local leaders who are unable to provide the time commitment of joining or leading a local community IPM group.

Identifying the Target Community

Under EPA's Urban Initiative, the City of Saginaw met the EPA's criteria of a "low-income, urban" area. One active community action organization, the Growth and Afrocentric Program (G.A.P.) was already active in the community and the school district. This group was identified to form the core of the Saginaw Community IPM group. CPEP learned of G.A.P.'s innovative programs and successes in the community in educational, anti-drug, and anti-gang activities, and approached the group about collaborating to address pesticide and pest management issues in the community. CPEP informed the G.A.P. leaders about the concepts of IPM, the need for educating community members about the practice of IPM in the home, how the IPM program can help improve the quality of life of the families in the community, and how IPM program can help improve the learning environment of the children. Since G.A.P.'s focus included improving the quality of life and educational experiences and achievements of its community, this was a good fit.

Establishment of The Local Community IPM Group

This stage is where most of the action takes place. The local group is responsible for:

- setting the objectives of the group.
- deciding on the activities and programs to implement.
- implementing the activities at the community level.
- promoting the programs and recruiting participants.
- evaluating and responding to changing community needs.

The community leader's responsibilities may include:

- identifying and recruiting members of the core group.
- serving as the head of the board.
- serving as a link between the different members of the group.
- providing the glue that keeps the group on track and facilitates open communication.

Characteristics of the Group and the Leader

G.A.P., Growth and Afrocentric Program, was developed in Saginaw, Michigan to help teachers and students improve the delivery of instruction and the acceptance of instruction by the students. This helps raise student test scores, improves the behavior of the students, and expands their broad base of knowledge of life. In partnership with the School District of the City of Saginaw, the G.A.P. program accomplishes this mission with a wide range of school and community outreach programs that touch on all aspects of residents' lives including, health and safety, natural resources and the environment, research and technology, citizenship, community awareness, and race relations and empowerment.

CPEP identified G.A.P. as a good candidate to implement the community-based urban IPM program in Saginaw because 1) the group was already established and organized; 2) the group was visible and successful with outreach efforts in the community and schools; 3) the group had a leader with access to resources and the ability mobilize volunteers. The founder of G.A.P. was asked to be the Chairperson of the stakeholders group for the IPM program in Saginaw.



Identifying the Members of the Local Group

With assistance from CPEP, the Chair identified different stakeholders, that is, people who might benefit from the IPM program and who can get things done. The Chair invited the G.A.P.'s program manager, the director of community services for the city, the deputy director of the county health department, several representatives from the local neighborhood association, AmeriCorps VISTA volunteers assigned to G.A.P., a school principal, teachers, G.A.P. educators and other interested residents. The stakeholder group is indeed very diverse in terms of interests and representation. This is an important aspect in putting together a stakeholder group, making sure that the different interests and needs of the community are addressed.



School Activities

The elementary school principal invited to join the stakeholder group was very supportive of the urban IPM program. The stakeholder group started with his elementary school to implement the School IPM component. The neighborhood served by this school was chosen as the neighborhood for the community IPM component.



The Saginaw Community IPM program kicked off its activities by starting with the school component. The concept of the school IPM component was to first reach out to the elementary school children, teach them about IPM practices, then have the students “take home” their knowledge. The school component started with developing an IPM curriculum for the fourth grade, with the idea that the science behind IPM will also help fourth graders prepare for their science MEAP (a statewide assessment tool). Modeled after existing G.A.P. classrooms, the IPM classroom involved facilitated activities and lessons once a week in both 4th grade classrooms for the entire academic year. An academic specialist from MSU, also a member of CPEP, co-taught the IPM class with the two fourth grade teachers, and a G.A.P. educator.

The educational program was integrated with implementation of a comprehensive School IPM program coordinated by the IPM manager, the head custodian for the building. IPM awareness training was held for all teachers, food service workers, and custodians to get them on board.

Identifying the Target Community Needs

Before the community training sessions were launched, the outreach committee of the Saginaw Community IPM group conducted a short community survey to target their future programming and educational efforts to the specific needs of the community. The purpose of the survey was to identify what the community knew about pests, pesticides, and pest management, and also to learn what pests were most prevalent in the community. In addition, the survey was a way to acquaint community members with the Saginaw Community IPM program, to gain trust of the community members, and to increase their participation in upcoming education and outreach programs. The survey was written by an MSU graduate student with input from the Outreach committee.



Volunteers practiced interviewing before they went out into the community.

AmeriCorps VISTA volunteers, who were members of the outreach committee, conducted the survey. After identifying addresses (randomly), the volunteers went door to door to interview community members. *

The stakeholder group in Lansing identified cockroaches as the most common pest problem in their neighborhood. In this case, the group opted not to do a community survey because the members of the board live within that community and they know first hand what the common pest problems were.

*Footnote: If you want to know more about the survey procedures and results, please see our website: www.pested.msu.edu/CommunitySchoolIpm/community.htm. If you want to know more about conducting simple surveys, please refer to: Salant, P., & Dillman, D. (1994). *How to Conduct Your Own Survey*. New York: John Wiley and Sons, Inc.*

Community Outreach Activities

In connection with the fourth grade program, Community Clean-Up Days were initiated in the school's neighborhood. The clean-up days were a chance to eliminate trash in the neighborhood that contributes to pest problems. The fourth and fifth graders, neighborhood volunteers and members of the Community IPM Group participated in the first community clean-up in November 2000. The outreach committee contacted the city for assistance, and the city placed several dumpsters in different blocks of the neighborhood. Another Community Clean-Up Day was done in Spring 2001, in conjunction with an IPM parade and picnic. The object of the parade was to create awareness and to encourage participation within the neighborhood for the Clean-Up. The fourth graders made up their own costumes and were dressed up as bugs in the parade. The local media was also there to cover this activity.



In conjunction with teaching the two fourth grade IPM classrooms, the program also conducted IPM community training sessions for parents and other community residents. The training sessions focused on managing cockroaches in the home using IPM methods and the dangers of illegal pesticides and pesticide misuse, topics identified during the community survey. During the training sessions, the Community IPM program provided dinner to the participants to encourage participation. The fourth grade teachers helped recruit the parents of their students to attend. One of the hurdles in recruiting participants for training sessions was “shame” or embarrassment. As one of



the board members mentioned, “When you start talking about pests in their homes, they get embarrassed and they shy away from that.” The Saginaw stakeholders realized that they can gain more trust from the community members by getting to know them personally. As one community volunteer said that they just have to let the community members know that they are “not there to make them look bad.”

Responding to Changing Community Needs

When the volunteers conducted the face-to-face survey in the neighborhood, they saw a number of abandoned houses that were eyesores, sources of community pests, and places where drug activities and other unauthorized use was occurring. The Outreach committee of the Saginaw Community IPM program decided to address this issue. A city official that was a member of the Community IPM group informed the group that the city could help the community get rid of these abandoned houses if they knew the addresses. Members of the Outreach committee walked through the neighborhood to identify the addresses of the abandoned homes. With the help of the City official, some of the abandoned homes were “boarded-up” or torn down. Through cooperation between the group and the city, they plan to tear down all the abandoned homes in that neighborhood. They plan to build community gardens on these lots in the future.

The program has also pursued outside sources of funding to hire an outreach worker from the community. This individual will assist in school and community outreach efforts and will be a consistent resource for the residents.

Keys to a Successful and Sustainable Group

The Saginaw Community IPM program initiated by CPEP now stands on its own. The group took ownership of the program and is now planning to expand its services. For the coming school year, the group plans to expand the IPM classroom to Saginaw High School. They will focus on using high school students to help implement a comprehensive school IPM program. This project will focus on hands-on implementation, research and problem-solving. With the help of different agencies in the city, the program plans to “perfect” the model of starting with the school first and then reaching to the community. They plan to eventually implement the same or similar model in other elementary schools in the city. The group also plans to increase the number of neighborhood clean-ups within the same neighborhood in the coming year.

The Saginaw Community IPM group attributes their achievements to their partnerships with the city and other community agencies. With this collaborative effort, they were able to mobilize different resources to better implement their activities and programs. Prior to the formation of the Saginaw Community IPM program, the city, the County Health Department and the other community organizations tried to independently remove pests and rehabilitate the communities. With the formation of the Saginaw Community IPM program, the different agencies now have a forum to pool their resources together. As the Chair said, “With all the [different] hands working together, we can start to affect change in community.”

The Saginaw Community IPM group also attributes their accomplishment to the fact they took ownership of the program. It was important for the management of the group to move from CPEP to the local group. According to the Saginaw Community IPM program members, if they own the program, they will nurture it and take care of it. The program’s survival will depend on their actions – “if we wanted to do this, we have to act to get things done”.

This group also emphasizes that promises they have made to the other members of the group or to the community should be kept. As one member said, “Make sure events happen when you say they are going to take place.”

Educational Resources for a Community IPM Program

Many resources are available to use in a community IPM educational program. Our approach is to help prevent illegal pesticide use and pesticide misuse by providing residents with the knowledge to manage pests successfully and safely. The educational materials we use fit into this approach. For links to these and other resources, check our website at www.pested.msu.edu.



Free Publications Available From the US EPA National Service Center

phone: 1-800-490-9198, or order online: www.epa.gov/ncepihom/ordering.htm

- Citizens Guide to Pest Control and Pesticide Safety (EPA 730-K-95-001), 1995
- Roaches (EPA 735-F-98-015). 2000
- Help! It's a Roach (EPA 735-F-98-016). 1999, *for kids*
- Socorro! Una Cucaracha (EPA 735-F-01-004). 2001, *for kids, Spanish*
- Read the Label *First!* (www.epa.gov/opptintr/labeling/campaign.htm)
 - Protect Your Kids (EPA 740-F-00-001)
 - Protect Your Pet (EPA 740-F-00-002)
 - Protect Your Garden (EPA 740-F-00-003)
 - Protect Your Household (EPA 740-F-00-004)
 - Use These Products Safely (poster) (EPA 735-H-00-001)

Publications to Download from the Internet or Order

Michigan State University Pesticide Education Program

<http://www.pested.msu.edu>

Publications on reading a label, choosing a pest control company, choosing a lawn care company, IPM in the home, and more.

Minnesota Department of Agriculture Publications

<http://www.mda.state.mn.us/IPM/IPMPubs.html>

Includes factsheets on many household pests as well as an excellent IPM activity book for kids. All resources are in pdf format.

Safer Pest Control Project

<http://www.spcpweb.org/index.html>

Publications on pests, pesticides and IPM (check out the IPM in Homes page) including information on ordering their IPM comic books *Pest Invasion* and *Pest Invasion II*.

Home PEST: Wisconsin Pesticide Education Series for Homeowners

<http://ipcm.wisc.edu/pat/homepest/brochure.htm>

Excellent brochure series for homeowners on topics including what is a pesticide, IPM in the home, calibrating spreaders and sprayers and hiring professionals.

University of Nebraska Pesticide Education

<http://pested.unl.edu/>

Includes links to many resources including the Cockroach Control Manual, an excellent resource for cockroach IPM.

Powerpoint presentations from Community IPM programs in EPA, Region V will be available on our website. www.pested.msu.edu