



Pests and Pesticides in Child-serving Facilities: An IPM Newsletter

Need IPM training?

Pest management programs in schools need to reduce and balance children's exposure to pests and pesticides. Integrated Pest Management (IPM) can help accomplish this goal. IPM is defined further in the *Green Schools* article on page 2. An IPM in Schools Program was initiated in the spring of 1996 as a joint



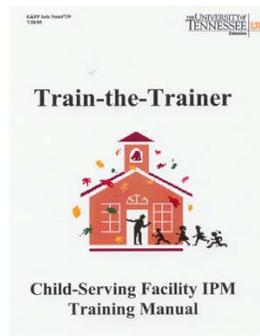
venture between The University of Tennessee and The Tennessee Department of Agriculture, Division of Regulatory Services. Our IPM in Schools Program was expanded in 2001 to include all child-serving facilities and a new team was formed, UT YEAH (youth, environment and health). In 1997, survey results suggested that 11.7%

of Tennessee schools were using IPM. During the next five years, training was provided to pest management professionals, school superintendents, teachers, environmental educators, parents and environmental advocates. Based on 2002 survey results, we estimated that about 25% of the school systems were using IPM. While the adoption is slow, we have more than doubled the number of school systems using IPM.

Because voluntary adoption of school IPM has been slower than anticipated, another strategy was embarked upon. In 2004 we were awarded an USDA Southern Region IPM grant to reduce risk associated with pests and pesticides in Tennessee's schools and licensed child care centers. School pest management decision-makers were trained in child-serving facility IPM as were 46

county Extension agents. In 2006, these trained Extension agents from 21 counties provided 150 IPM workshops to child care workers and school pest management decision-makers resulting in 2149 contacts.

We have experienced trainers. If your school or district would like to receive child-serving facility IPM training please contact your [local Extension office](#) or one of the UT YEAH team members listed on the back page of this newsletter.



UT Online School Pest Management Survey

This year we are conducting an online interactive survey. We invite you, as the individual in your school district most responsible for pest management decisions, to participate in this study of current pest management policy and practices in Tennessee's schools. The results of this questionnaire will direct our efforts to further educate and support Tennessee child-serving facilities in pest management practices that

reduce and balance children's exposure to pests and pesticides. Based on the information you provide on your questionnaire, facilities will receive a rating of "no", "low", "medium", or "high" IPM use. Those facilities rating "low", "medium" or "high" IPM will receive a certificate and be listed on the UT YEAH web site with the facility's name and rating. This will let your families know that you are working to

reduce exposure to pests and pesticides. Each district's pest management decision-maker will receive an e-mail explaining the details of the survey and will be provided a unique logon identifier. Should you fail to receive your logon identifier information, please contact Karen Vail. Duplicate surveys cannot be entered for any school within the same school year.

Special points of interest:

- > Need IPM training?
- > Help needed with ONLINE IPM Survey
- > Green Schools
- > UT YEAH Contact Information

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“Green” Schools

Wayne Walker

Pest manager for campus housing at the University of Florida



IPM Tools

“Our contracted pest control company has a Technician and Management Intervention program. The technician meets with me and provides information on sanitation, exclusion, and other items that we, as a facility, need to address.” **Vicki Copeland, SMU**



Monitoring for pests

A variety of “green,” or environmentally safer products are in use everywhere, including pest management products at educational institutions. The presidents of 284 higher education institutions around the country have signed pledges that their colleges and universities will be committed to greener campuses through a “climate neutral” initiative. Your school district may be considering a similar pledge.

Green pest control products are found in grocery stores, hardware stores, home improvement stores, and large retail stores. Just about any store that sells traditional pest control supplies is now offering a selection of green products. In fact, the world’s largest retailer, Wal-Mart, declared that they and their suppliers are “going green.” Suppliers to the pest management industry are also offering more green products. Some of the new green pest control products are made from substances such as plant oil extracts, citrus oil, spices, and natural earth minerals. Many include easily recognized botanical spices and extracts such as rosemary, thyme, clove oil, peppermint, and wintergreen. There are a variety of everyday household cleaning products that are very effective at killing insects on contact.

The application of green pest control products is only a small part of an overall green pest control program. In most instances, the application of products is the last step in the process. The green pest control process is also known as Integrated Pest Management (IPM). IPM is a process where pest management becomes an integrated program involving a variety of techniques that enlist the cooperation of residents, maintenance staff, administration, and the pest management professional. The basis of the IPM program is to reduce the use of chemicals as a means of preventing or controlling pests. Dr. Faith Oi, Director of the Florida School IPM program, states that “IPM is a process for balancing the risks between pests and pesticides to achieve long term pest suppression. Control strategies in an IPM program extend beyond the application of pesticides to include structural and procedural modifications that reduce the food, water, harborage, and access used by pests.” If pests can be excluded with maintenance to doors, windows, and structural penetrations, the ultimate goal of reduced chemical applications will be reached. Insects and rodents live naturally in the outdoor environment and only become pests when they find an avenue into the living space of residences and workplaces.

Another perspective on the same theme is offered by Eugene Macario, University of Michigan. He states that “IPM is a planned pest control program in which various methods are integrated and used to keep pests from causing economic, health related or aesthetic injury.” Mr. Macario further states that an IPM system typically “will have eight non-chemical treatment methods preferred in the pest control industry that are: sanitation, (inspection), exclusion, harborage removal, habitat modification, trapping, monitoring, and vacuuming.” Simply stated, the IPM process is designed to keep pests out. If pests do gain entry, deny them food and shelter.

“Green” Schools Cont’d.

The first attempts at eliminating pests are mechanical removal and then monitoring. The IPM process is not the monthly spraying of areas to prevent pests. The most often utilized tool of the IPM practitioner is the sticky glue board monitor. A scheduled inspection of well-placed glue board monitors will provide the information that is needed for proper pest management. These inspections provide early indications of insect activity prior to potential problems or infestation. An additional element of the IPM process is the coordination and cooperation between the pest management professional and the client. A great example of this is provided by Vicki Copeland, Assistant Director of Residence Life University at Southern Mississippi University. She said, “Our contracted pest control company has a Technician and Management Intervention program. The technician meets with me and provides information on sanitation, exclusion, and other items that we, as a facility, need to address.” Together they stay on top of the issues that help keep pests to a minimum and ultimately reduce the need for chemical applications.

Creating an IPM program is challenging yet rewarding and attainable for all. The challenge for institutions with in-house pest management services are far less than for those institutions that use outside contractors for this service. Both need to designate IPM coordinators.

For institutions that provide in-house pest services this may be a full time position. At other institutions that contract for pest control services, this may be an additional duty for a staff member. The success of the IPM program depends on the knowledge and dedication of the IPM coordinator. Most of the information necessary to become an informed IPM coordinator is available online or through the campus entomology department.

Now is the time for all institutions to examine pest control programs and begin the greening process. Significant factors are aligning that will assist in this process. The pest management industry is poised to be a partner in the process, manufacturers are providing more green products each year, and institutional leaders are eager to proceed toward a greener campus. Take the step and designate an IPM coordinator and start the education process of creating an IPM program. Teachers, staff, students and the environment will all benefit from a greener program.

Credit: Walker, Wayne. 2008. Green Schools. *Pest Press* January/February. University of Florida IFAS.

Resources: UT YEAH and Child-serving Facility IPM Web sites

We have many valuable resources to help you adopt IPM in your schools. Most of these can be found at either the UT YEAH, <http://utyeah.utk.edu> or the child-serving facility IPM, http://eppserver.ag.utk.edu/sch_ipm.htm web sites. The UT YEAH web site has a broader application and contains information pertaining to environmental health as affected by indoor air quality, lead, mercury, mold, pesticides and radon. The child-serving facility IPM web site is specific to managing pests in child-serving facilities and includes more pest management details.



No idle zone.

“IPM is a process for balancing the risks between pests and pesticides to achieve long term pest suppression. Control strategies in an IPM program extend beyond the application of pesticides to include structural and procedural modifications that reduce the food, water, harborage, and access used by pests.” Faith Qi, UF



Remove garbage daily, tightly close dumpsters and store away from the facility.

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**Comments or questions on this newsletter?
Contact kvail@utk.edu**

For more information about IPM in Tennessee schools and other facilities, or to view past issues of *Pests and Pesticides in Child-serving Facilities*, please visit eppserver.ag.utk.edu/sch_ipm.htm or utyeah.utk.edu

National IPM INFORMATION

National School IPM
schoolipm.ifas.ufl.edu/

IPM in Schools Texas
schoolipm.tamu.edu/resources.htm

IPM Institute of North America
www.ipminstitute.org/

National Pest Management Association
IPM site
www.whatisipm.org/

EPA schools
www.epa.gov/pesticides/ipm/schoolipm/index.html

For further information about the IPM program at your school or in your county, contact your county Extension Agent or the school IPM Coordinator. For county agent contact information, please visit www.agriculture.utk.edu/personnel/districts_counties/default.asp

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.

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