## **SCHOOL INTEGRATED PEST MANAGEMENT (IPM)**

## What Is the Role of the Plant Manager?

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Children can spend long hours at school — seven or more hours a day — and therefore have an increased risk of pesticide exposure if pesticides have been applied in a manner incompatible with integrated pest management (IPM). Children are physiologically more vulnerable to harm — their inhalation rate is more than that of adults; developing cells are more likely to be damaged; toxins concentrate more quickly in smaller bodies; their enzyme detoxification systems are not completely developed; and their behavior, such as hand-to-mouth activity and sitting on floors, increases their chances of ingesting or otherwise being exposed to toxins.

IPM aims to reduce and balance exposure to pests and pesticides and is a process that extends beyond the application of pesticides to include reduction of food, water, shelter and in-building access used by pests. In an IPM program, pest populations are prevented; pesticides are used only when needed; the least hazardous pesticide that effectively manages the targeted pests is selected; and pesticides are directed to areas not contacted or accessible to children, staff members, parents or other building occupants.

Integrating IPM into schools is an essential strategy for limiting exposure to pests and pesticides, yet this strategy does not reach children who may be at the greatest risk physiologically. A fall 2005 phone assessment of school systems indicated that 31 percent of respondents were using IPM; and results from an online survey conducted in 2008, although this had a low response rate, indicated 54 percent of schools were using IPM. We are making progress.

So how can the school plant manager help with the adoption of IPM? What is your role in this process? Plant managers will have the biggest impact on reducing the pests' access to food, water and shelter (i.e., your

school buildings). Oversight of repairs to buildings to deny pests access is essential to an effective IPM program. Exclude pests with tight-fitting doors, windows and sealed walls. Large gaps around doors may require door sweeps or a new threshold where gaps are larger than a quarter of an inch. Mice can enter openings of about a quarter of an inch, while rats need a half-inch hole. If you are unsure whether a door fits tightly, observe the door from inside when it is bright outdoors. If light is seen around the edges of the door, then you don't have a good seal. Caulk openings in window frames and the edges of door thresholds, if needed. Seal cracks, crevices and holes in the foundation, outside walls, eaves and other external surfaces. Many pests use wires, pipes, tree limbs and other guidelines to help them move from one area to another. Voids around pipes should be sealed. For recommendations on sealing materials to use, see an article I wrote for our school IPM newsletter, "Pest Proofing: Caulks, Sealants, Foams, Metal Products or Door Sweeps?" at http://schoolipm.utk.edu/SchoolIPMsite/wwwroot/School%20Sample%20Site/Pests%20and%20Pesticides%20vol%203%20issue%20 1%20August%202009.pdf.

Also, the Environmental Protection Agency has recently released best management practices pertaining to using expandable foams: http://schoolipm.utk.edu/SchoolIPMsite/wwwroot/School%20Sample%20Site/Pests%20and%20Pesticides%20vol%203%20issue%208%20June%202010.pdf.

Most of you should be receiving an electronic version of our newsletter, *Pests and Pesticides in Child-Serving Facilities: An IPM Newsletter*, via e-mail. If not, you can access it and other school IPM information online at schoolipm.utk.edu under the Resources button. If you would like this newsletter e-mailed to you, please contact me at kvail@utk.edu and make your request. I've enjoyed meeting you at association meetings and look forward to future interactions about school IPM. We hope that every child-serving facility in the state understands the importance of using IPM in their facility, and we ask you to encourage this adoption.

## Thomas Hatfield Named 2010 National School Plant Manager of the Year!

Thomas Hatfield, Metro Schools Director of Plant Operations and Maintenance, has been selected as the 2010 National School Plant Manager of the Year by The National School Plant Management Association (NSPMA). Hatfield was very humble when he received the award at the NSPMA annual convention and accepted the award on behalf of the facilities team, city of Nashville, state of Tennessee and Metro Nashville Public School students.

Tommy Hatfield has been an advocate for school IPM for almost two decades and we'd like to thank him for his efforts. By the way, we understand that Mr. Hatfield was also a recipient of the TN School Plant Manager of the Year Award too!