



# Overview of the School IPM Program in Texas

A brief background on the School Integrated Pest Management Program in Texas.

**What is School IPM?** Integrated pest management (IPM) is a biologically-oriented approach to prevent and control pest problems. Integrated pest management differs from traditional pest control by focusing on preventing pest problems rather than applying long-lasting pesticides to hallways, kitchens, bathrooms and classrooms. With IPM, pesticides are used when justified by pest problems that are revealed by an IPM inspection. In addition to looking for pest evidence, IPM inspectors report on building maintenance problems that can lead to pest invasion. Good record-keeping and ongoing communication with parents, teachers and staff are also essential parts of IPM.

**Why School IPM?** School IPM requirements were put in place by the 1991 Texas legislature in response to a pesticide misapplication that led to a closing of a rural school district. Texas was one of the first states to implement IPM in public schools and the Texas program is viewed as a model program by other states because of its success with schools and its commonsense approach to encouraging the use of safer pesticides without putting undue restrictions on school districts. Both the U.S. Environmental Protection Agency (EPA 1994) and the National Research Council (NRC 1993) have endorsed the IPM approach for schools because of its ability to deliver superior pest control with less risk of pesticide exposure to children. School IPM is widely believed to play an integral role in maintaining good indoor air quality, prolonging the useful life of buildings and preserving both staff morale and high attendance rates in schools.

**What are the requirements?** Each school board in Texas must adopt an IPM policy requiring the district to follow IPM principles and all legal requirements for pesticide use. Each district has an IPM coordinator whose job it is to ensure compliance with the school IPM requirements. Coordinators must receive six hours of training at the time of their appointment, and once every three years thereafter. Parents are notified once a year about school pest control activities, and pesticide treated areas must be clearly posted. IPM plans must be developed and kept on file, and lower risk pesticide use is encouraged. Unlike some cities and states that severely restrict which pesticides may be used in schools, Texas school districts are free to use any labeled pesticide deemed necessary. However, written justification of higher risk pesticides must be kept on file for periodic inspection by the Texas Department of Agriculture. Pesticide use on school grounds is limited to employees or contractors holding a valid pesticide applicator's license.

**What is the economic benefit?** Many schools adopting IPM find they reduce their overall, long term pest control costs. In a 2006 survey of school IPM coordinators conducted by the Texas A&M AgriLife Extension Service, 53% of schools indicated that the IPM requirements had reduced the long-term cost of pest management, while only 18% reported an increase in pest management costs. The costs incurred by schools for licensing and training are minimal, averaging about \$50 to \$100 per year.

**What are the benefits of School IPM?** The 2006 AgriLife Extension study found that 75% of coordinators felt that school IPM requirements had resulted in more effective pest control. These results are consistent with studies in other states that report that IPM results in pest complaint reductions of 78% to 90% (Gouge et al. 2006). In addition, IPM has been found to significantly benefit children's health by reducing allergens and asthma, increasing productivity, school attendance, and state funding (Chambers et al. 2011). And, IPM has reduced pesticide use and long-term pest management costs in many studies (Safer Pest Control Project Factsheet 1998, Washington State Dept. of Ecology 1999, Chambers et al. 2011, Forbes 1991, Moore 2010, Kubista-Hovis and Lame 2004).

\*For more information contact: Janet Hurley, Texas A&M AgriLife Extension Service, at [ja-hurley@ag.tamu.edu](mailto:ja-hurley@ag.tamu.edu)

TEXAS A&M  
AGRI LIFE  
EXTENSION

Janet Hurley, Michael Merchant, Charles Allen, Dean McCorkle, and Dan Hanselka,  
Texas A&M AgriLife Extension Service, February 2013.

**What are the relevant statutes?** Pesticide licenses are required for anyone engaging in the business of pest control under the Texas Occupations Code ([TOC Section 1951.003](#)). A pesticide applicator's license is required for anyone applying pesticides to schools, apartments, day-cares, hospitals, etc. under [TOC Section 1951.459](#). School IPM rules are found under [TOC Section 1951.212](#), and the corresponding school IPM regulations, promulgated by the Texas Department of Agriculture, are located in the Texas Administrative Code ([TAC Rule 7.150](#)). School IPM rules and regulations are enforced by the Structural Pest Control Service of the Texas Department of Agriculture.

**A model effort: the Spring ISD Integrated Pest Management Program.** Spring Independent School District (ISD) is an urban school district in Harris County. The district serves over 36,000 students on 40 campuses spread over 57 square miles. The district has three high schools, a career academy, and early college facility, seven middle schools, and 26 elementary schools.

In compliance with Texas' requirements, Spring ISD's staff set out in 2005 to create a safer, healthy healthier environment for the students, faculty and staff using an IPM approach to pest management in their schools. Using pest identification, action thresholds, inspection/monitoring, multiple control tactics and team work; Spring's pest control program was taken to a higher level. Key highlights of the Spring ISD Integrated Pest Management program include:

- The IPM program has encouraged staff to be proactive instead of reactive, and has cultivated a sense of pride for having an IPM Program that is based on science and training. As a result, pest-related work order requests have been reduced by 45% with no increase in the pest control budget since 2005.
- Chemical applications have been reduced by 70% and the district uses only green or environmentally friendly products virtually no indoor pesticide sprays are needed or used.
- Spring ISD was recognized in 2009 by the IPM Institute of North America with the *IPM in Childcare Facilities and Schools Award*, and in 2011 with IPM Star Certification.
- Finally, in March 2012, Spring ISD was given an *Award for Excellence* in a local IPM program at the 7<sup>th</sup> International IPM Symposium.

## References

- Chambers, K, T. Green, D. Gouge, J. Hurley, T. Stock, Z. Bruns, M. Shour, C. Foss, F. Graham, K. Murray, L. Braband, S. Glick, and M. Anderson. 2011. The Business Case for Integrated Pest Management in Schools: Cutting Costs and Increasing Benefits. The IPM Institute of North America, Inc. 8 pp. [www.ipminstitute.org/school\\_ipm\\_2015/ipm\\_business\\_case.pdf](http://www.ipminstitute.org/school_ipm_2015/ipm_business_case.pdf).
- Gouge, D.H., M.L. Lame and J.L. Snyder. 2006. Use of an implementation model and a diffusion process for establishing Integrated Pest Management in Arizona schools. *American Entomologist* 2006:190-196.
- Forbes, W. 1991. From Spray tanks to talk guns: Successful School IPM in Montgomery County, MD. *J. Pesticide Reform*. 10(4):9-11.
- Kubista-Hovis, K. and M.L. Lame. 2004. The economics of school integrated pest management: An analysis of the Monroe IPM Model in Bloomington, Indiana. *National Schools Update*. US EPA, BPPD 1(3):5-7.
- Moore, J.D. 2010. From Pest Treatment to Pest Prevention: A Case Study of Integrated Pest Management at the Metropolitan School District of Pike Township. *Improving Kids' Environments*. Indianapolis, IN. 25 pp.
- National Research Council [1993]. *Pesticides in the diets of infants and children*. Washington, DC: National Academy Press <http://www.nap.edu/catalog.php?record%20id=2126#toc>
- Safer Pest Control Project Factsheet: Cost of IPM in Schools. 1998. Safer Pest Control Project. Chicago, IL. 4pp.
- U.S. EPA. 1993. *Pest Control in the School Environment: Adopting Integrated Pest Management*. USEPA 735-F-93-012. 43 pp. [www.epa.gov/pesticides/ipm/brochure/](http://www.epa.gov/pesticides/ipm/brochure/)
- Washington State Department of Ecology. 1999. *Calculating the True Cost of Pest Control*. Washington State Department of Ecology. Publication No. 99-433. <http://www.ecy.wa.gov/pubs/99433.pdf>.