



Implementing Integrated Pest Management in Missouri Schools

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Introduction

The Missouri Department of Agriculture and the Missouri Center for Safe Schools were awarded a grant from the Environmental Protection Agency (EPA) to implement IPM in Missouri schools. The objectives of the grant were to establish a Missouri School IPM Workgroup, assess the current status of IPM in Missouri schools, develop appropriate training material, conduct training with school district safety coordinators and plan a pilot program for an urban, suburban and rural school district setting. The cooperative effort of all supporting agencies has provided a venue to begin education of implementing IPM in Missouri schools.

Procedures

Members of the IPM Workgroup represent key organizations and agencies including:

- ☞ Missouri Department of Agriculture
- ☞ Missouri Center for Safe Schools
- ☞ Missouri Association of Rural Educators
- ☞ Missouri Department of Elementary & Secondary Education
- ☞ Missouri Pest Management Association
- ☞ Missouri PTA
- ☞ Missouri School Boards' Association
- ☞ Missouri School Districts represented by:
 - Carthage R-9
 - Nixa R-II
 - Parkway
 - Warrensburg
- ☞ Missouri Safer Management of Pests and Landscapes
- ☞ Missouri School Plant Managers Association
- ☞ Missouri United School Insurance Council
- ☞ University of Missouri, College of Agriculture Food & Natural Resources

The IPM Workgroup has been advising the project leaders for each phase of the grant as well as acting as resource providers for their organizations. This structure has allowed for information dissemination beyond the targeted school district safety training coordinators.



Results

To assess the current status of IPM implementation in Missouri schools, a preliminary survey was sent to the district safety training coordinator in each school district (524 total). A research survey also using school districts conducted by one of the IPM Workgroup members was used as a reference. A third survey of Missouri Pest Management Professionals provided additional information. Some Survey Results included:

Major Target Pests - Cockroaches, ants, mice/rats, spiders,
Majority of indoor pesticide applications are applied by private contractors,
Majority of pesticide applications performed on a fixed schedule,
Majority of pesticide applications applied on weekday evenings,
Majority of schools do not use a notification policy,
Majority of applications are not posted.

Based upon these results the IPM Workgroup proposed to develop an IPM policy, develop suggested protocols for the most frequently treated pests, provide a listing of pest control information, and listing of least toxic treatments, outline maintenance procedures, develop notification protocols and highlight cost savings of IPM implementation to schools districts. To provide resources to assist with information transfer about IPM policies and procedures, IPM Workgroup members contributed to a variety of outreach methods.

Trainings:

Aug-Oct 05 - Introduction to IPM regional training for 512 school district safety coordinators
Jun-Jul 05 - IPM was included as part of the regional school custodial workshops at 5 locations throughout Missouri
Sep 05 - IPM was included as part of the regional school nurse workshops at 6 locations throughout Missouri for 247 public school districts and 58 private schools.
Jan 06 - IPM in Missouri Schools included in Pesticide Applicator Training

Presentations:

Apr 05 - IPM in Missouri Schools presentation at the Missouri Association of School Business Officers conference
Sep 05 - IPM in Missouri Schools poster presentation at the annual Missouri Plant Managers Association Conference, as well as a 45 minute conference presentation.
Oct 05 - IPM in Missouri Schools poster presentation at the annual Missouri PTA Conference.
Feb 06 - IPM in Missouri Schools presentation at the Missouri Association of Rural Education Conference.

Publications:

May 05 - the Missouri Center for Safe Schools posted on the center's website example school IPM procedures (based on the Nixa School District procedures) and an example of IPM contract specifications (adapted from the General Services Administration document produced by Albert Greene)
Jul 05 - *The Advocate*, newsletter of the Missouri Pest Management Association, Volume 6 Issue 3, included the article "Pest Management Practices in Missouri Schools" which publicized the results of our February 2005 survey of pest management professionals.
Aug 05 - *Missouri Safe Schools Newsletter* article entitled "Example Pest Management Contract Specifications"
Aug 05 - developed logo IPM in Missouri Schools logo to be used with all publications
Aug 05 - developed IPM in Missouri Schools brochure
Jan 06 - Missouri School Boards' Association IPM policy was finalized and sent to member school districts.
Feb 06 - Missouri School Boards' Association Educator's *Guide to Handling Hot School Issues*, which is published annually, includes a section on IPM for schools.

Websites:

Missouri Department of Agriculture www.mda.mo.gov/Pest/ign.htm
Missouri Center for Safe Schools education.umkc.edu/Safe-School/downloads/index.asp
Missouri PTA www.mopsta.org



Conclusion

The cooperative efforts of the Missouri Department of Agriculture and the Missouri Center for Safe Schools along with IPM Workgroup members, has increased awareness of IPM in Missouri schools. The IPM Workgroup has been able to reach several different target audiences within the state including plant managers and janitors, school nurses, district safety coordinators, school boards, and pest management professionals.

The IPM Workgroup will continue as an information outlet for questions regarding implementation of IPM in Missouri Schools and will assist schools developing an IPM policy.

Future Goals of the IPM Workgroup are:

- ♦ Video development for use in local training
- ♦ Integrate this initiative with existing Indoor Air Quality Initiatives
- ♦ School liability reduction through risk management
- ♦ Pilot project for implementation of IPM in specific school in rural, suburban & urban districts