

ARE THOSE WHO PRACTICE IPM MORE SAFETY CONSCIOUS?

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Introduction

Integrated Pest Management (IPM) and Pesticide Safety Education (PSE) programs emphasize the reduction of exposure to pesticides to the applicator as well as the environment. IPM emphasizes the reduction of pesticide use by scouting, correct identification of pests and proper selection and use of practices, techniques and /or chemicals. PSE programs concentrate on safe application and handling practices of pesticides. Many of those who participate in IPM education programs are also trained in pesticide application safety. Participants attending 2005 Kentucky IPM Training Programs were surveyed for the following safety-related information:

- Safety-related items kept in their work vehicle
- Had they felt ill following a pesticide application
- If they felt ill following an application did they seek medical assistance
- Had they experienced a fitting or valve break and if so, did they have tools needed to make the repair
- Satisfaction of their knowledge of pesticides used regularly.

Method

Participants in three IPM Trainings were asked to complete a detailed survey. Twelve questions were used to score individuals on their use of IPM practices. The PAMS (Prevention, Avoidance, Monitoring and Suppression) approach was used to develop the questions and to score participants on their utilization of IPM. (See poster *Measuring IPM Utilization in Production Agriculture Using PAMS and the IPM Road Map*, Douglas W. Johnson, University of Kentucky). Based on their responses to the twelve PAMS related questions, individuals were divided into two groups, those meeting the minimum definition of IPM and those not. The responses of the two groups of participants to the pesticide safety questions were then compared in an attempt to detect any relationship between the utilization of IPM and safety practices.



Results & Summary

This study served as a guide for a statewide survey being conducted in cooperation with the Great Lakes Center for Agricultural Safety and Health Fellows Program. A total of 111 participated in the survey. Of the total, 92 answered all of the IPM compliance questions and were able to be scored as IPM compliant or not compliant. Eighty-seven percent (80 of the 92 total) were scored as being compliant in IPM practices.

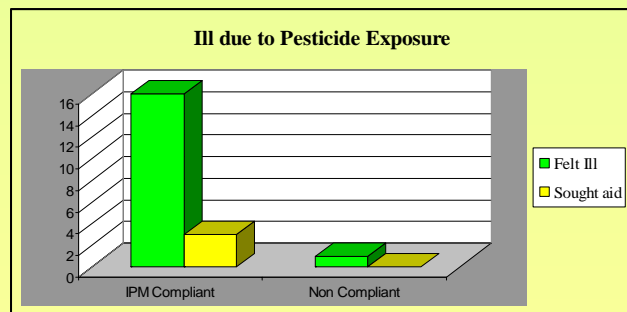
Due to the small sample size of non-IPM compliant respondents, the differences or lack of difference may not be real. However, we did notice those who scored non-IPM compliant answered fewer questions.

- Items of interest from this study included **safety items kept in work vehicles**. The greatest percentage differences was between those who kept MSDS sheets, emergency numbers, Sta-Dri, eye wash and towels.

Percent of Sample with Item in Their Vehicle

Item in Vehicle	% Non-IPM Compliant	% IPM Compliant
Pesticide Labels	42	49
MSDS sheets	0	19
Emergency numbers	25	61
Shovel	58	55
Sta-Dri	0	9
Hand soap	50	56
Eye wash	17	29
Towels	92	76
First aid kit	58	56
Cell phone	92	95

- Twenty one percent (16 of 76) IPM compliant answered that they had felt ill after a pesticide application. Only twenty percent (3) sought medical assistance. Of the non-compliant eight percent (1 of 12) indicated they held felt ill but did not seek medical attention.



- Of the non-IPM compliant who had experienced a **valve break**, 92% had the tools needed to make a repair versus 94% of those who scored IPM compliant.

- Participants were also asked about their **knowledge of the pesticides** they use on a regular basis. Less than 1% of all the participants said they lacked knowledge relating to how to use, health and safety and mixing instructions. Four percent indicated they needed more knowledge on clean up.