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# Delivering Health Education Messages for Part-Time Farmers Through Local Employers

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**ABSTRACT.** Fifty-nine percent of principal farm operators in Kentucky work at jobs off the farm. These job settings can be a conduit for dissemination of health education and injury prevention messages. The Community Partners for Healthy Farming Project initiated a tractor Roll Over Protective Structure (ROPS) promotion campaign and through employers disseminated materials on the risks of tractor overturns and benefits of ROPS. Eight businesses participated in this effort. A case report describes one employer's activities in detail. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <http://www.HaworthPress.com> © 2001 by The Haworth Press, Inc. All rights reserved.]*

**KEYWORDS.** Tractor, employer, safety, ROPS, dissemination, injury prevention

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## INTRODUCTION

Fifty-nine percent of Kentucky's 82,273 principal farm operators have jobs off the farm! Frequently this is to supplement household income and obtain health insurance at a reasonable cost. Ninety percent of Kentucky principal operators are male. The average net income from farming in the state in 1997 was \$11,909.<sup>1</sup> The hazards of farming have been well documented<sup>2-4</sup> and working two jobs may place farm workers at increased risk. This paper will describe how a community based intervention project worked with employers of these bi-vocational farmers to implement a Roll over Protective Structure (ROPS) promotion campaign. A ROPS is an upright steel structure attached to the tractor axle housing which creates a frame of safety in the event of an overturn. A ROPS and a seatbelt are used to prevent the operator from being crushed.

The majority of Kentucky farmers are their own health and safety managers. Rarely, if ever, are they instructed in techniques to prevent injury while farming, possibly the most hazardous job they will ever hold. A typical Kentucky farmer may work an average of eight hours a day at an off-farm job, then return to the farm to work additional hours thus increasing the chance he/she may be injured or not attend to his/her own health and safety needs. In this case "Illness may often be ignored or suffered in ways that are very uncomfortable and perhaps even dangerous."<sup>5</sup>

Reaching Kentucky farm workers with health and safety information is a difficult task because they often work independently and are geographically dispersed. Private companies employing farmers often provide employee education programs and materials related to occupational safety and health at the work site. General health education messages delivered in the workplace for the hard-to-reach farmer may be an ideal example of public health and private industry working together to promote healthy behavior, which may lead to a reduction in injury and an increase in productivity at both work sites.

Green and Kreuter<sup>6</sup> note four reasons for the rapid growth of work site health promotion since the late 1970's. First, more persons than ever before spend more of their time at organized work sites, which have to a large degree replaced the traditional community neighborhood as primary reference friendships and social groups. Ongoing health education programs aimed toward adults often find no other place at which so many persons can and will participate. Second, there is a great concern for rising insurance premiums, medical costs, and lost

productivity of unhealthy workers. Business and industry have carried far more of the share of workers' insurance premiums and medical costs. Third, beginning around 1980, business managers began to promote health and wellness programs within their companies, often because their personal experiences in such programs taught them to value such efforts. Later, executives themselves became convinced of the potential of wellness programs to lower insurance and medical costs while contributing to increased worker productivity. Fourth, studies confirmed that workplace health and fitness programs could, in deed, help contain medical costs and lost work time while increasing worker productivity, morale, and perceived quality of life.

The Community Partners for Healthy Farming (CPHF) Project, a National Institute for Occupational Safety and Health (NIOSH) funded program, was a 3 year project aimed at promoting the use of ROPS and seatbelts on farm tractors. Two rural Kentucky counties were selected as treatment counties where the project was implemented. The project focused on developing educational messages, community education materials, activities, and finding effective means for disseminating these materials. The CPHF Project approach to dissemination was multi-agency, multi-modal, and included community groups such as farm safety coalitions, health care providers, agri-businesses, schools, media (television, radio and newspaper), agricultural extension services, and local private employers. Because of the high percentage of farmers who also work at jobs off the farm, an emphasis was placed on disseminating materials through local employers.

### ***METHODS OF MESSAGE DISSEMINATION***

Manufacturing employers in two intervention counties were identified in the Kentucky Directory of Manufacturers.<sup>7</sup> Relationships with local hospitals had been developed through a companion CPHF injury surveillance project. Company executives at seven industries, representing the largest manufacturing employers and hospitals in the two counties, were contacted and invited to participate (see Table 1). Initially, CPHF Staff met with each company representative to describe the goals and objectives of the ROPS Project. A set of ROPS Project materials was given to company executives describing the problem of tractor overturns in Kentucky and the value of ROPS and seatbelts. These materials addressed several issues, including (a) the assessment of long-term risk of tractor overturn injury, (b) a comparison of the cost of a ROPS to the cost

TABLE 1. Companies Participating in Distribution of Safety Pay check Stuffers and Posters

Company	Type Industry	Total Number of Employees	Estimated Farmers/ Farm Family Members
Eaton/Dana Corporation	Axle and Brake/Manufacturing	900	500
SKF	Bearings/Manufacturing	550	300
TJ Samson Hospital	Health Care/Hospital	900	200
Green Tree	Saw Mill/Forest Products	50	35
Textron	Auto Trim/Manufacturing	115	70
Flemingsburg Hospital	Health Care/Hospital	160	80
Span Tech	Conveyor Systems	48	30

of a catastrophic injury, (c) identifying barriers to ROPS retrofitting, (d) developing personalized strategies to overcome these barriers to obtain ROPS-equipped tractors, (e) developing habits of consistent and proper use of seatbelts on ROPS-equipped tractors, and (f) developing strategies to disseminate the materials to farm-family members.

After the initial meeting at the company site, materials were developed to meet the needs and size of each company. Copies of the materials were then duplicated and hand-delivered. Materials included posters for display on bulletin boards and walls, summaries of articles for company newsletters, and message stuffers for each employee's pay check. A 6-minute video about ROPS and seatbelt use was given to one employer at their request in stead of pay check stuffers.

## RESULTS

During the first year of the project, six employers in the treatment counties distributed four different pay check stuffers. The stuffers were on 3 inch x 8 inch colored paper with messages about farm tractor overturns taken from Kentucky injury and fatality surveillance data. The back side of these stuffers included the names, addresses and phone numbers of local equipment dealers. Some stuffers included short nar-

rative descriptions of actual fatal events, while others provided cost effectiveness and risk assessment information. Posters for public display were given to the same employers. Companies also printed three tractor-over turn fatality stories in three different editions of their company newsletters and distributed these to all employees. The video was shown on one company's closed circuit television in employee areas. A series of three pay check stuffers (totaling 3,000) were delivered to tobacco warehouses in the two counties where they were distributed to farmers when they received their checks during tobacco sales.

In the first year of the project, 5,216 pay check stuffers were distributed to employees at these employer settings. In addition, in year two, 4,335 countertop messages were distributed.

Additional messages were simultaneously delivered through other methods such as radio and television public service announcements, community presentations and displays, and articles in local newspapers.

Between January 1, 1997 and September 30, 1999 (31 months), 70 ROPS were sold in the two treatment counties. In the year prior to the community education campaign, a total of four ROPS retrofits were sold, according to farm equipment dealers (almost a seven-fold improvement).

### ***A CASE STUDY: EDUCATIONAL MESSAGES AT ONE EMPLOYER SITE***

During the first year of the project, when the dissemination idea was introduced to companies, the ROPS campaign had been in progress for a few months and awareness about farm safety in the treatment counties had increased. In one county, the local chapter of Farm Safety 4 Just Kids (FS4JK) served as a conduit for many of the CPHF Project activities and this led to a significant intervention that took place within a company. The chapter assisted in Farm Rescue Training Programs for EMS and fire departments and advertised in a newspaper the need for old farm equipment to demonstrate extrication techniques. Consequently, an employee of a local printing company, who had seen some of the project materials, offered assistance with the CPHF Project. Subsequently, while the project was in progress, the employee's 13-year-old son was involved in a tractor over turn. The boy was not wearing a seatbelt and was thrown from the tractor. Fortunately, the ROPS prevented the tractor from a complete over turn; it came to rest on its side. The boy's legs were pinned under the tractor, but the ROPS clearly

saved his life by stopping the overturning tractor, which would have rolled over him. After talking with the CPHF Project Nurse, the employee discussed the need for a ROPS intervention program with his employer. His personal experience motivated the company to develop its own intervention to promote ROPS.

Photos taken during the rescue of the overturned tractor, with his son underneath, were broadcast on closed circuit TV along with other materials provided by the ROPS project. The materials about ROPS and seatbelts were shown over a 2 week period, 6-8 times per day. During lunch and breaks, all 1200 of the company employees had a chance to view their co-worker's son trapped underneath a ROPS equipped tractor and see the ROPS as a life-saving device. A story in the company newsletter described the case and highlighted the value of ROPS by telling the experience of a couple, both employees at the company, who had purchased a ROPS for one tractor and were considering purchasing another ROPS for a second tractor.

This intervention also led to additional wellness programs at the company. Programs on outdoor grilling and safe holiday lighting have been offered since the ROPS promotion effort. The company executive said the ROPS Project motivated this change. The company plans to continue the ROPS promotion for their employees and in addition, they suggested involving the equipment dealers in a newspaper advertisement to promote ROPS during Christmas and Father's Day. The company has since given a donation to the local chapter of Farm Safety 4 Just Kids program for farm safety initiatives.

Because this company cared about employees' well-being outside normal working hours, it relayed a critical health education message to its employees. The messages may have increased employees' sense of well-being and their productivity, and may promote safety behaviors that prevent tractor-related injuries among the part-time farmers, their family members, and others in the community. The company executive summarized the purpose of the intervention: "We have employee safety at the plant, but another message is for them to be safe, period."

This community-based ROPS promotion campaign was successful, based on the number of ROPS sold. However, because of the multi-agency, multi-modal nature of the project and the many communication channels used, it was not possible to attribute success to one particular message or source. A detailed follow-up evaluation at each company involved is needed to determine the impact of the messages on employee attitudes.

## DISCUSSION

Using the workplace to disseminate health information has been identified as a method to reach at-risk populations. In this case, because of the geographic dispersion of the farmers and because many work at other jobs, providing educational messages about the risks of farm work through local employers is an efficient method for reaching farmers in a rural community.

By helping to disseminate these farm safety and health messages, the companies involved are accomplishing several things. They are performing a community public service that promotes good public relations. They are working to keep their employees (many of whom are farmers or members of farm families) healthy and well, which makes good economic sense for the company. By becoming involved in farm safety and health outreach to their workers, these employers are also serving as role models for other employers.

There are other health and safety programs that could be directed to part-time farmers who work off the farm. Programs such as the Centers for Disease Control and Prevention's (CDC) SafeUSA Program which includes Safe at Home, Safe on the Move, and Safe at Work concepts could be adopted by local business and industry wellness coordinators or human resource departments. Information on this program is available on the CDC website.<sup>8</sup> Topics other than farm safety are also addressed including bicycle, car, motorcycle, pedestrian, fire, falls, poisoning, drowning, violence, and workplace safety. When companies become involved in health and safety activities like those described in this paper, they protect their investment in their workers and promote public health within their communities. Others interested in serving this hard-to-reach population of farmers may be able to learn from and implement employer outreach activities similar to those described here.

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