Health and Safety Hazards Associated With Farming

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griculture is ranked, along with mining and construction, among the three most hazardous industries (U.S. Department of Labor, 1989). Advancements in mechanization of the farm has increased many hazards (Popendorf, 1991). Farm hazards claim as many as 1,300 lives and cause 120,000 injuries annually (National Safety Council, 1989). An estimated 23,000 injuries and 300 fatalities on farms involve children in the United States annually (Rivara, 1985).

Data from the U.S. Bureau of Labor Statistics on injuries and fatalities in agriculture may be underestimated because work sites with fewer than 10 workers are excluded (U.S. Department of Labor, 1989). In addition, workers' compensation data do not reflect the many farm workers who are not covered by workers' compensation.

Farm work includes a wide variety of tasks performed by families on small, family owned farms and by farmworkers employed as full time, seasonal, and/or migrant workers on both family

ABOUT THE AUTHORS:

Ms. Ehlers and Ms. Connon are occupational health nurses, Ms. Themann is an audiologist, Mr. Myers is a mathematical statistician, and Dr. Ballard is an epidemiologist, US Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, Cincinnati, OH. and corporate farms. For many, farming is an inherited lifestyle that involves children, spouses, and parents working together. People choose to farm for many reasons including the lifestyle, creativity, diversity, independence, and the opportunity to work outdoors close to nature (Coughenour, 1986; Kramer, 1987).

Despite these attractions, there are many hazards for farmers, farmworkers, and farm families. Frequently, work and home environments overlap, exposing adults and children to these occupationally related hazards during working and non-working hours. Agricultural workers are not afforded the same protection under Occupational Safety and Health Administration (OSHA) regulations or child labor laws as workers in other industries (U.S. Department of Labor, 1989).

Because of the unique features in agriculture, creative assessment techniques and prevention strategies are needed to reduce farm related injuries and illnesses. Occupational health nurses are in a strategic position to help identify farm related illnesses and provide expertise in prevention of injuries and illnesses for workers in their companies who are also part time farmers. Farmers are independent, creative owner/operators who may choose to initiate or bypass safe work practices and engineering controls, such as machine guards, for perceived expediency.

This article is an overview of some of the many hazards and methods of hazard prevention associated with farming.

NOISE

An estimated 10% of full time farmers in the United States are exposed to average daily noise levels in excess of the 85 dB(A) "action" level at which hearing conservation programs are man-

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