Risky Business: Determining Risk Factors for Farm Work

The Need: Agriculture can be hazardous. Young people can be injured while working on the farm, while farm vehicles can be involved in accidents on public highways. Although official highway statistics rate farm vehicle public road crashes as relatively rare, they concern farmers, who must maneuver heavy and often slow-moving farm equipment along ever-more-crowded rural highways, putting themselves, expensive equipment and the motoring public at risk. Research was needed to determine what could lessen the chances of on- and off-farm accidents to youth and other farm workers.

Serving the Need: Dr. Michael Schulman, Alumni Distinguished Graduate Professor in the College of Agriculture and Life Sciences, investigates the hazards and injuries experienced by youth who work on North Carolina farms, helping develop a national surveillance system for childhood agricultural injuries and guidelines for youth farm work. At the same time, North Carolina Cooperative Extension’s Farm Safety Program sponsors annual statewide farm safety camps in rural areas. The camps are designed to teach youngsters safety measures to take around hazards such as farm machinery, chemicals, severe weather, electricity, railroads and snakes. Farm safety also is taught in the College of Agriculture and Life Sciences’ Agricultural Institute.

To study farm vehicle accidents on public roads, Schulman compared North Carolina farms reporting a farm vehicle public road crash with farms that had not experienced an incident from 1992 to 2003. The study’s results highlighted several characteristics associated with increased odds of being in a crash: non-English speaking drivers; non-family hired-help drivers; many urban commuters on the roads; non-farm vehicle public road use; farm injury history and younger farm vehicle drivers.

Study results indicate the need for a multifaceted approach to farm vehicle public road safety. Helpful approaches would include:

- Increased attention to safety training for hired help and non-English speaking help who drive farm vehicles on public roads;
- slow-moving vehicle and turn lanes;
- improved road signage;
- speed limit enforcement;
- and non-farm vehicle driver education.

Impact beyond North Carolina: This work calls attention to the need for measures that will make farms safer for farm workers and for the public.

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