29. Risks of Fatal Injuries to Farm Workers 55-Years of Age and Older

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Agricultural production (i.e., farming) has been identified as one of the most hazardous industries in the United States, as well as in Canada, Australia, and parts of Europe. One of the highest risk groups identified in U.S. farming is workers 55-years of age and older. The objective of this study is to examine work-related farming deaths to these older workers that have occurred in the U.S. for the years 1990 through 1995 using two national occupational mortality surveillance systems: the National Traumatic Occupational Fatalities (NTOF, 1990–1993), and Census of Fatal Occupational Injuries (CFOI, 1992–1995). Based on these two surveillance systems, workers 55-years of age and older accounted for between 47% (NTOF data) to 51% (CFOI data) of all work-related farm injury deaths in the U.S., while accounting for approximately 38% of the farm workforce. The average annual fatality rate for this age group ranged from 33 to 46.4 deaths per 100,000 workers based on the NTOF and CFOI respectively. Males accounted for approximately 98% of these fatalities and had fatality rates of between 39.2 to 57.8 deaths per 100,000 workers for the NTOF and CFOI respectively. Female rates were in the range of 3 to 4 deaths per 100,000 workers for both surveillance systems. While female workers accounted for fewer deaths and had fatality rates dramatically lower than males, female farm workers 55-years of age and older had fatality rates approximately 2 times higher than female farm workers under 55-years of age. The most common source of injury to these older workers were farm tractors (37% for the NTOF to 45% for the CFOI), trucks (7% for the NTOF to 8% for the CFOI), and agricultural harvesting machines (4% of the deaths for both surveillance systems). Overturns accounted for nearly 53% of the tractor-related deaths in both surveillance systems. Fatalities involving trucks were primarily highway incidents (33% for the NTOF and 52% for the CFOI), while death associated with harvesting equipment involved the older worker becoming entangled in the running machinery (32% for the CFOI and 34% for the NTOF). These results indicate that farm workers 55-years of age and older are at very high risk for fatal occupational injuries from specific sources of injury. It is clear from this study that any reductions in the overall occupational fatality rate for farming in the U.S. will require a concentrated effort on reducing the risk of tractor overturns, highway crashes, and machinery deaths to these older workers. Public health efforts are needed to reduce these risks, both in terms of educational programs and the development, or use of known engineering interventions. Educational programs must be tailored to these older workers, while engineering interventions

will require engineers to work with these older farm workers in the design process to ensure their acceptance by these workers.

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