

Occupational Injuries Among North Carolina Migrant Farmworkers

ABSTRACT

A population-based cross-sectional study of occupational injuries among a random sample of 287 migrant farmworkers demonstrated frequent obstacles to health care; 65% (11/17) of the more seriously injured subjects did not receive prompt care or never received care. Subjects not receiving prompt care were twice as likely to have incomplete recovery. Employers covered medical expenses for only 5/13 (38%) of the injured workers, and only 3/15 were compensated for lost work. This study indicates that comprehensive Workers' Compensation coverage is urgently needed in North Carolina. (*Am J Public Health.* 1991;81:926-927)

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Introduction

Although agriculture is the most hazardous occupation in the United States,^{1,2} information about occupational injuries among migrant farmworkers is limited.^{3,4} Injury is recognized as a leading cause of morbidity and mortality;^{3,4} one survey reported that 44.5% of farmworker households have a disabled individual.⁵ Hospital and clinic data may underestimate incidence or miss significant aspects of the epidemiology of injury because of the obstacles to health care facing farmworkers. Thus, population-based studies are needed. We report the results of such a study conducted in North Carolina, the largest farmworker state without comprehensive Workers' Compensation insurance for farmworkers.

Methods

A cross-sectional study of occupational injuries among migrant farmworkers was conducted from June to October 1989 in eastern North Carolina. All workers in randomly selected migrant camps were eligible subjects. After informed consent had been obtained, pretested questionnaires in English and Spanish were verbally administered. Data were collected on demographics and the type, cause, and treatment of injuries occurring within 3 years of the study. The data analysis consisted of descriptive statistics, Chi-square tests, Fisher's exact tests, and Student's *t* tests.

Results

A total of 287 farmworkers (70% Latino, 24% US-born black, 6% Haitian) in 22 migrant camps in seven eastern NC counties participated. Nonresponse was roughly 20%. The mean age was 30 years, 85% were male, and mean years in farmwork was 6. Of 287 workers, 24 (8.4%) reported an occupational injury during the previous 3 years. Although 4/69 (5.8%) of US-born blacks reported an occupational injury vs. 20/201 (9.3%) of foreign-born workers, this difference was not significant ($P = .36$, chi-square test). Injured workers had a mean of 4.5 years in farm-

work vs. 6.1 for the uninjured, a difference of borderline significance ($P = .07$, *t* test); 19/24 (80%) injuries were reported by those with 4 years or less in farmwork. Broken bones, sprains, and cuts accounted for 19/24 (80%) of the injuries. Vehicles or machinery caused 5/24 of the injuries and more often resulted in lost work (4/5 vs 12/18 injuries not caused by machinery). Most subjects had worked in tobacco, with 19.6% reporting nausea and 18.6% dizziness. None reported this illness as injury.

Of the 17 injured workers who considered medical attention necessary, 7/17 (41%) did not receive treatment within 24 hours, and 4/17 (24%) never received medical care. Crew leader refusal or lack of transportation prevented 4/17 (24%) from receiving care within 24 hours and 5/12 (42%) from keeping follow-up appointments. Thirty-six percent (4/11) returned to work before advised by health providers. Eight subjects (33%) felt that they did not receive adequate medical care. Of those receiving care within 24 hours, 75% (6/8) reported complete recovery vs. only 53% (8/15) of those who did not (not a significant difference: $P = .40$, Fisher's two-tailed exact test). Eleven of 14 (79%) with complete recovery received the medical attention they considered necessary vs. 3/7 (43%) of those with incomplete recovery. However, this difference was not significant ($P = .156$, Fisher's exact test).

The grower or crew leader covered medical expenses for 5/13 (38%) of the injured workers. Fifteen of twenty-four (63%) lost more than 1 day's work (mean = 22), but only 3 (20%) received compensation (none from Workers' Compensation). Thirty-six percent of those who lost work reported diminished work capacity upon returning to work, and 6/21 of those

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who had returned to work reported continued incomplete recovery.

Discussion

The relatively small number of reported injuries limits the interpretation of the results. Subjects reported injuries by many different agents, ranging from rattlesnakes to falling trees. However, the incidence of injury (8.4% for a 3-year period) is probably underestimated (the national annual rate for agricultural workers is 11.7%).⁶ Recall bias, the use of recall rather than recognition strategies, and the exclusion of injured workers from the work force may have contributed to this underestimation. A more important factor may be the social and economic ramifications of injury in farmwork. For example, the expectation that supervisors will not provide legally required transportation for treatment may prevent physical damage regarded as injury in other occupations from achieving that status in farmwork. Thus, one subject who thought his arm had been broken did not request transportation from the crew leader, who would not, he believed, have regarded the event as "important." Fear of retribution may make workers hesitant to report injuries or assert their legal rights: one subject was fired as a result of his occupational injury. Without Workers' Compensation economic constraints lead workers to minimize injury: "having to work" was often given as a reason for not seeking care or follow-up.

North Carolina is the largest farmworker state without comprehensive Workers' Compensation coverage for

farmworkers. There is no doubt that this forces injured workers to bear the financial hardships of work loss, but the results suggest also that injured workers may return to work before recovery or continue working without seeking medical care. One quarter of injured subjects who thought medical care was needed never received care, and a larger number did not receive care promptly. Although the low number of injured subjects limits the power of statistical tests, the results indicate that long-term health effects may result from barriers to care because twice as many of the subjects who did not receive care promptly reported incomplete recovery. Apparently, the crew leader is a major obstacle, and more conscientious enforcement of existing laws could do much to protect the health of farmworkers.

It is a striking paradox that workers in the most hazardous occupation are least protected by Workers' Compensation. Although opponents of Workers' Compensation maintain that such coverage is too expensive, the agricultural industry in the largest farmworker states (Florida, California, and Texas) has provided reasonably comprehensive coverage without compromising profitability. The North Carolina Farm Bureau estimated the cost of Workers' Compensation as only 3.87% of payroll (oral communication with Jack Carpenter, 10/12/90). At present the treatment cost of those farmworkers who do receive care is borne ultimately by the taxpayers. The economic hardships borne by the injured worker can be substantial because the mean days of work lost in this study was 22.

More population-based research is necessary to fully characterize the nature and frequency of occupational injuries in this population. Despite the limited power of the statistical analysis, the results of this study indicate that farmworkers may be denied access to care for occupational injuries, can be penalized for being injured, and rarely receive compensation for lost work. In addition, persons who work when injured or whose medical care is compromised because of obstacles may sustain continued impairment. All of these problems can be at least partially remedied if Workers' Compensation coverage is provided to farmworkers. □

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