

Predictors of Work-Related Injuries in Farmworker Families

Cooper SP, Burau KE, Frankowski R, Shipp EM, Del Junco DJ, Whitworth RE, Sweeney AM, MacNaughton N, Weller NF, Hanis CL. A Cohort Study of Injuries in Migrant Farm Worker Families in South Texas. *Annals of Epidemiology* 16:313-320, 2006.

Calculating injury rates among farmworkers is complicated by numerous factors including the difficulty in tracking a cohort of migrants over time. To address this problem, researchers in Texas developed and implemented a system for tracking farmworkers based on school records maintained by the Migrant Education Program. After initial enrollment in the study, participants could be tracked and located for follow-up rounds of data collection. This approach has the advantage of allowing the collection of prospective data rather than relying on retrospective data.

Over a two-year period, three sets of data were collected (initial and two follow-ups) from 267 migratory farmworker families. The mother was asked to respond for herself as well as for her husband and oldest child. Questions covered a range of work-related activities as well as transportation to and from the worksite. Twenty-five work-related injuries were reported over the two-year study period with an injury rate of 12.5 injuries per 100 full-time-equivalent (FTE, based on a 2,000 hour work year). Nine of the 25 reported injuries resulted in time lost from work. Six workers indicated they did not receive medical care because they had to continue working, lacked money, or did not have access to facilities.

The primary predictors of injury included the type of employer, general use of seat belts, and number of farm jobs held. Individuals employed by contractors rather than owners/growers were nearly seven times as likely to suffer an injury. General seat belt use dramatically decreased the risk of injury (hazard ratio = 0.02, confidence interval is 0.01 to 0.09). Surprisingly, individuals who held a greater number of farm jobs also experienced a lower injury rate (hazard ratio = 0.4, confidence interval = 0.23 to 0.69). Mothers were more likely than fathers or children to be injured.

This study demonstrates the substantial risk farmworkers face for on-the-job injuries. These results also may understate the actual incidence of injury for several reasons: one person reporting for the whole family; differing definitions of "injury"; exclusion of injuries with chronic sequelae from the study design, e.g., back pain; and increasing memory lapses, as the length of time since the injury increased. The fact that the predictors were systemic, rather than crop- or task-specific indicates that interventions to improve overall working conditions and enforcement of existing regulations may have the best chance of reducing injuries to farmworkers.

From *Farmworker Justice's EyeOpener*, an electronic newsletter covering important recent developments in research and regulation on issues affecting the health and safety of migrant farmworkers. It is a joint project of Farmworker Justice and the Migrant Clinicians Network, supported by the Health Resources and Services Administration's Bureau of Primary Health Care.
