



A Review of Farm Accident Data Sources and Research: Research Directions for the Future¹

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As this report indicates, additional research is needed on questions of farm safety. Some of the more readily apparent needs are discussed below.

National data sources do not sufficiently identify the number of farm accidents or describe their sources, causes, severity, and effects. Some of the reasons given for the shortcomings of national data are lack of scientific sampling techniques, focus on farms employing 11 or more people, and the limited amount of information provided by many of the methods of data collection.

Efforts are now underway to improve sampling techniques. The Modified Total Design Method will improve survey methodology. However, a scientifically selected sample population at risk will be required before meaningful data can be obtained. Multimethod approaches like the ones being done to prepare the *Census of Fatal Occupational Injuries* make up another attempt to improve the quality of national data. Finally, the *Census of Agriculture* will present accident data based on a national sample of farms.

Accurately assessing farm safety issues will require data on more than descriptive variables. First, the population at risk must be accurately identified. Little is known about the size of the U.S. farm workforce. Second, injury surveillance must provide "time of event, place of occurrence, demographic characteristics of the injured person, characteristics of the injury, agent causing the event,

source of the event, mechanism of the event, circumstances surrounding the injury event, medical/health care provided to the injured person, and health outcome of the event" (Gerberich and others, 1991, p. 165). Third, in addition to the above information about the victim and event, information on the characteristics of the farm, including the size, type, and location of the farm and the number of people who work there is required.

Finally, researchers are beginning to evaluate the chronic effects of long-term exposure to pesticides and other farm chemicals. Additional research in this area is needed. Other areas of neglected research concerning chemical, biological, physical, and environmental hazards are specifically identified in the comprehensive reports by the Public Health Service in this country and by the University of Saskatchewan (Centre for Agricultural Medicine, 1992; and U.S. Department of Health and Human Services, 1991b).

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