
Occupational Injury Prevention — Contributors—

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Occupational Injury Prevention Executive Summary

Acute injury that occurs in association with work is a tragedy of enormous proportions. Every year in the United States —

- Between 7,000 and 11,000 workers die because of job-related injuries. Most of these workers are in the prime of their lives.
- 88,000 workers are hospitalized.
- Almost 2 million injuries result in disability.
- 75 million days of work are lost.
- About 250,000 potential productive years of life are lost because of premature death.

The overall cost of work-related injuries incurred in 1989 has been estimated by the National Safety Council at greater than \$48 billion. This figure is less than the true cost because not all workers are included and intentional injuries are not counted. Even these statistics cannot convey the personal hardships that workers and their families undergo as a result of occupational injury and the tremendous cost to our society that these injuries impose.

Most occupational incidents that result in injury to the worker are avoidable and could be prevented if known strategies were implemented widely. Strategies to reduce the number of injuries must be aggressive, directed, and supported by all who have a responsibility or interest in protecting workers, including workers themselves. Interdisciplinary action is crucial; government, industry, labor, universities, workers, and the public must focus attention on this problem and coordinate their efforts to solve it.

Costs often play a significant role in decisions affecting occupational safety, both in public policy and at the individual company level. The costs of injury prevention are often given greater weight than the money that would be saved through reduced medical costs and increased productivity. In "selling" the prevention of occupational injuries, we need to stress the economic benefits as well as the human benefits.

There is currently no standard definition of a work-related injury. Although some countries count injuries sustained by bystanders resulting from actions of others at work or injuries sustained by workers commuting to or from work, in the United States such injuries are not included in any definition of occupational injury. In the United States, a work-related injury is one that is attributable to work activities, which are defined as those duties or tasks that produce a product or result or are done in exchange for money, goods, services, profit, or advantage.

Lack of commitment to injury prevention could well be at the heart of the occupational injury problem in the United States. At present, there is no multidisciplinary, multiorganizational approach to preventing occupational injury. Funds for research and training programs are scarce, and the lack of well-trained people in injury epidemiology and safety engineering is a real problem. When employers and employees are united in their commitment to workplace safety, the number of work-related injuries decreases. We must convince organizations of the benefits of this commitment.

The Year 2000 Health Objectives developed by the Public Health Service of the U.S. Department of Health and Human Services call for (a) reducing the number of deaths resulting from work-related injury; (b) reducing the incidence of injuries that result in medical treatment, time lost from work, or restricted work activity; and (c) implementing plans for state-based identification and prevention programs, increased worksite programs, consultation and assistance to small business, and increased awareness and attention by health care providers. However, the Year 2000 Objectives reflect the limitations of the data upon which they are based (e.g., the data on injuries to members of some high-risk occupational groups, such as the self-employed and most farm workers, are excluded). Improvements in surveillance will affect the reported numbers and rates of injuries and will, therefore, make it difficult to evaluate true change. Success of these objectives should take into account improvements in baseline data.

Efforts to reach the Year 2000 Objectives must be augmented with complementary strategies and incorporated into a national plan to prevent work-related injuries. This plan must include comprehensive and coordinated action steps in education, research, surveillance, and prevention. The catalyst for the success of national prevention strategies will be public consensus that injuries in the workplace are unacceptable. This change in awareness and attitude can be accomplished by developing a grass-roots initiative to broaden public appreciation and understanding, by educating the nation's youth from grammar school through college and postgraduate levels about the prevention of occupational injury, and by training researchers and practitioners in disciplines that have a positive impact on injury control. Above all, workers must be informed about risks and prevention measures and given the power and knowledge to report specific hazards and aid in their mitigation.

Surveillance of occupational injuries should be enhanced to improve the timeliness, accuracy, and completeness of reporting at all levels, from the plant or company level through the national level, at which trends are monitored and research priorities established.

Research must be conducted to describe the extent of the occupational injury problem in the United States, improve and standardize occupational injury surveillance systems, and develop and test hypotheses aimed at identifying risk factors through the study of specific injury problems in special populations. The most compelling problem areas warrant examination of workplace components to identify the circumstances under which injuries occur, potential causal mechanisms, opportunities for intervention, and prevention

strategies. Research efforts should emphasize "passive" or automatic protection in which hazards are designed out in preference to "active" prevention measures requiring frequent action on the part of the worker. Evaluation research should be used to test the effectiveness of preventive strategies under variable workplace conditions.

Although surveillance and research provide future directions for occupational injury control, these activities cannot override the importance of doing something now. Known prevention strategies can and must be implemented at all U.S. worksites. Compliance with standards should be strictly enforced. The mandates of the Occupational Safety and Health Administration (OSHA) should be broadened to include workers not now covered. Information about model programs should be developed into a broad communications system that provides a framework for sharing information and providing assistance, particularly for companies or organizations with few resources.

Responsibilities within these broad categories can be identified for all the major participants in preventing occupational injury.

Recommendations:

Congress should —

- Extend Department of Labor responsibility and authority to cover all public sector and agricultural workers.
- Expand worker empowerment and involvement under the Occupational Safety and Health (OSH) Act.
- Make injury prevention a factor in awarding contracts, loans, and grants.
- Set an example by protecting all federal employees.
- Expand criminal prosecution for willful acts that endanger workers' lives.
- Increase resources for occupational injury prevention programs and research.

The National Institute for Occupational Safety and Health (NIOSH) should —

- Design a model injury surveillance system, including sample forms for recording injuries.
- Evaluate the effectiveness of intervention strategies.
- Work with the Bureau of Labor Statistics and the Bureau of Census to improve worker population estimates, including those of minority, self-employed, migrant, and other neglected workers.

- Study injuries in high-risk or poorly understood worker populations (e.g., agricultural workers, the self-employed, adolescents, migrants, public sector employees, and employees in small companies).
- Develop the laboratory capacity to develop worker protection systems.
- Communicate to employers and workers information on hazards and hazard reduction strategies.
- Work to improve fatality reporting and to establish data on work-related injuries requiring hospitalization.
- Assist states in developing occupational injury control programs.

OSHA and the Mine Safety and Health Administration (MSHA) with NIOSH should —

- Evaluate the effectiveness of standards.
- Determine which inspection strategies work best in what circumstances.
- Promulgate new and improved standards.
- Develop the capacity to acquire and use injury data to set rulemaking priorities.
- Significantly expand enforcement capability through the states.

The Bureau of Labor Statistics should —

- Continue to develop its Census of Fatal Occupational Injuries program and establish its revised Occupational Safety and Health Survey.

The National Center for Health Statistics (NCHS) should —

- Expand efforts to encourage and develop guidelines for work-related injuries to be reported on death certificates and for occupation and industry coding.

The Department of Agriculture should —

- Coordinate with NIOSH in its outreach effort to improve safety and health in agriculture and rural small businesses.

Unions and employees should —

- Identify and report potential hazards.
- Work with employers to establish injury surveillance systems.
- Include safety demands in collective bargaining.
- Ensure that employers implement and evaluate injury prevention programs for workers.

- Participate with government agencies in developing injury prevention programs for workers.
- Use workers' rights fully to promote safe workplaces.
- Comply with established procedures for occupational safety.

Employers should —

- Implement injury prevention programs for workers, with an emphasis on engineering controls and other passive countermeasures.
- Apply effective, state-of-the-art injury prevention measures.
- Encourage workers to identify and report hazards.
- Make safety and health a "bottom line" component of all company activities.
- Communicate information on injury experience and injury control programs in annual reports and other external communications.
- Incorporate safe workplace design and practices in procurement, contracts, and acquisitions.
- Build training programs around job hazard analyses.
- Identify, record, and report all injuries resulting in death, hospitalization, other medical attention, or lost time from usual job, separately, and use this information for injury prevention strategies.
- Incorporate injury surveillance and prevention in business organization or practice.
- Determine safety consequences of new technologies.
- Implement rehabilitation programs that help injured workers regain full-life function and that comply with the Americans with Disabilities Act.
- Share their prevention experience with other employers, especially employers in small companies with limited resources.

State agencies should —

- Designate a lead agency to coordinate occupational injury prevention and control activities involving all relevant state agencies, including health, labor, workers' compensation, transportation, emergency medical service, vital statistics, law enforcement, and agriculture.
- Coordinate occupational injury control activities with other injury control activities at the state and local level.

- Investigate deaths due to on-site work injuries (especially those not investigated by OSHA, MSHA, or the National Transportation Safety Board) through appropriate designated state agencies, including the health department.
 - Encourage local prosecuting attorneys and law enforcement officials to investigate serious work-related injuries and deaths and pursue criminal prosecution of employers where appropriate.
 - Include worker injury prevention considerations in requirements for state and local permits and licenses.
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- Encourage the collaboration of workers' compensation programs and insurance companies to develop injury surveillance data.
 - Require that injuries at work be reported on death certificates.
 - Develop injury prevention programs for public workers in conjunction with cities and counties.
 - Adopt requirements for including an injury-at-work code on hospital discharge data.

Insurance companies should —

- Provide policy holders with information on economic incentives for developing injury control programs.
- Provide technical assistance in injury prevention to client employers.
- Cooperate with other organizations in developing injury surveillance data.
- Require, as appropriate, injury prevention programs for workers.

Academic and research centers should —

- Conduct research on occupational hazards, injury occurrence, and injury prevention.
- Develop and evaluate injury prevention and control strategies in collaboration with federal and state agencies and representatives of the private sector, including employers, workers, and advocacy groups.
- Work with NIOSH, NCHS, the Bureau of Labor Statistics, and other relevant agencies to develop model forms and surveillance systems.
- Help to develop a standard definition of work injury.
- Work with management and labor to develop surveillance systems for specific companies.

- Stimulate the incorporation of injury prevention principles in all curricula and related educational materials for professionals in business, architecture, engineering, public health, nursing, medicine, and agriculture.
- Develop injury prevention curricula for elementary and high school students.
- Develop and evaluate rehabilitation programs.

Advocacy groups should —

- Promote legislation, regulations, and initiatives that protect workers.
- Educate the public regarding occupational injury.
- Advocate injury control as a high priority.

The news and entertainment media should —

- Improve reporting of the circumstances, costs, and preventability of occupational injury.
- Run public service announcements on injury hazards and controls.
- Reduce the portrayal of unsafe practices and portray behaviors that enhance injury prevention.

Private foundations should —

- Give priority to funding research and evaluation regarding occupational injury.
- Increase communication with governmental agencies regarding occupational injury prevention.

Professional societies should —

- Provide their members with continuing education in injury prevention.

Occupational injury is a public health crisis that demands immediate attention. Although it is important that improved surveillance establishes an accurate count of injuries and deaths and that research and timely reporting result in new prevention strategies, it is absolutely essential that prevention strategies available now be used to protect workers today. The recommendations proposed in this position paper provide the plan to help us achieve these goals.