



PREVENTING WORK-RELATED INJURIES

WHAT IS THE PUBLIC HEALTH PROBLEM?

- Each day, an average of 15 U.S. workers die as a result of injuries at work, 200 are hospitalized, and 11,000 are treated in hospital emergency departments. Additional injuries are treated in physicians' offices, clinics, and at the worksite.
- The direct costs of occupational injuries and illnesses were estimated to be \$45.8 billion in 2001 (2003 Liberty Mutual Workplace Safety Index). The indirect costs were estimated to be an additional \$137.4 to \$229 billion.
- Leading causes of fatal occupational injuries are related to transportation, contact with objects and equipment (e.g., being struck by an object, striking against an object, or being caught in equipment), and violence.
- Leading causes of nonfatal occupational injuries include overexertion, contact with objects and equipment, and falls.
- Continuous change in technology and the design and organization of work, as well as persistent hazards, create constant demands for new research and information to protect workers from injury.

WHAT HAS NIOSH ACCOMPLISHED?

The National Institute for Occupational Safety and Health (NIOSH) conducts the Nation's principal research program for the prevention of work-related injuries. Through intramural and extramural programs, NIOSH scientists, as well as researchers and professionals at universities and state agencies throughout the United States, engage in all aspects of injury prevention. These scientists and professionals conduct a) injury surveillance to identify potential risk factors and monitor trends over time; b) engineering research to develop and improve workplace protections (e.g., safety systems for machinery and protective equipment for workers); c) intervention studies to evaluate the real-world effectiveness of protection strategies; and d) communication programs to ensure that employers, managers, workers, and safety and health professionals have ready access to the latest injury prevention information. The traumatic injury research program focuses on the leading causes of injury and death and on the highest risk industry sectors (i.e., agriculture, mining, and construction). Since 1980, this program has helped reduce the rate of fatal occupational injuries nationwide by 46%.

Example of program in action:

Through a unique partnership with a nursing home company, lifting equipment manufacturers, and academia, NIOSH developed and evaluated an injury prevention program for reducing the incidence, severity, and cost of back injuries, a persistent problem for nursing home workers. Research showed the program paid for itself in less than three years, by reducing injury frequency by 57%, injury rates by 61%, and workers' compensation expenses by 37%.

WHAT ARE THE NEXT STEPS?

Although traumatic injury rates are decreasing in many industry sectors and occupational groups, workplace injury still takes a huge toll on the American workforce. Research is needed to address persistent hazards (e.g., falls in construction and tractor rollovers in agriculture) as well as emerging hazards (e.g., highway construction work zones).

Additional information is available at www.cdc.gov/niosh/injury/trauma.html. For more information on other NIOSH programs, visit www.cdc.gov/niosh/docs/pib/.

