



## PROGRESS REPORT FOR: Occupational Safety and Health

**On March 9, 1995**, the Public Health Service (PHS) conducted a review of progress on HEALTHY PEOPLE 2000 objectives for occupational safety and health. The lead agency for this priority area is the Centers for Disease Control and Prevention. Representatives of the Health Resources and Services Administration and the National Institutes of Health were joined for the review by representatives from Organization Resources Counselors, Inc.; California Medical Center; New York State Department of Health; the University of Iowa College of Medicine; and the AFL/CIO. Other Federal participants included staff from the Departments of Labor and Energy, and the Environmental Protection Agency.

The Director of the National Institute for Occupational Safety and Health (NIOSH) began by emphasizing that occupational injury and disease cause needless human suffering, burden health care resources, and drain U.S. productivity. In 1994, employers reported 6.3 million disabling work injuries and 514,700 cases of occupational illnesses. In that year, an average of 18 American workers died each day from injuries on the job. An average of 137 workers died each day from workplace diseases. In 1994, work injuries cost \$121 billion in medical care, lost productivity, and wages. Medical payments under workers' compensation rose to almost \$17 billion in 1991 with a total of more than \$40 billion paid in workers' compensation claims.

The number of fatal occupational injuries in the United States has been declining. For 1994, the Bureau of Labor Statistics reported 5 deaths from work-related injuries per 100,000 full-time workers. The 1983-87 baseline was 6 per 100,000. Mortality rates in mining (including oil and gas extraction), construction, transportation, communication, public utilities, agriculture, forestry, and fishing are consistently higher than in all other industries. Rates decreased in nearly every demographic and employment sector, with greater declines among men, African Americans, and younger workers.

National Traumatic Occupational Fatality (NTOF) data show that homicide is the third leading cause of traumatic occupational fatalities and that convenience store workers and taxicab drivers are among those employed in the highest risk occupations. Because of these findings, a new objective is included in *Healthy People 2000 Midcourse Review and 1995 Revisions* to reduce deaths from work-related homicides to no more than 0.5 per 100,000 full-time workers from an average of 0.7 per 100,000 during 1980-89.

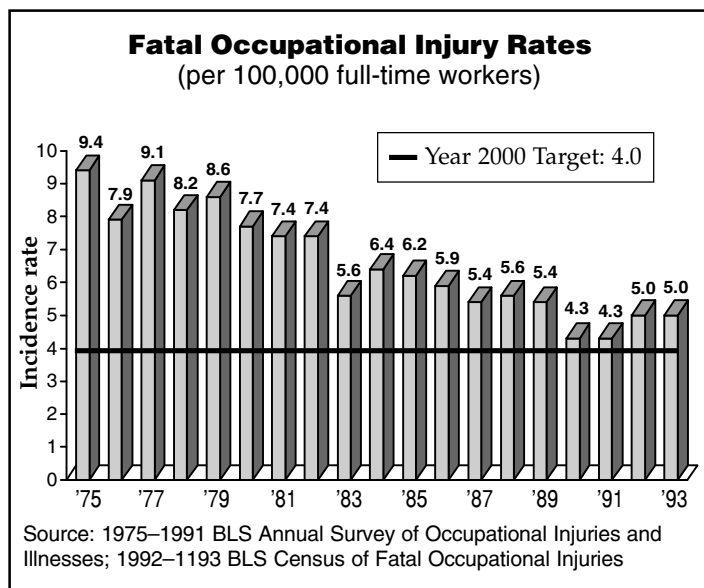
Rates of work-related nonfatal injuries have increased during the past 6 years. Compared with the baseline of 7.7 injuries per 100 full-time workers (an average for the years

1983-87), there were 8.4 cases in 1994. Risks to construction and mine workers have decreased while on-the-job injury increased among nursing and personal care workers. It is possible that part of this increase is due to greater awareness and reporting of injuries such as needle sticks.

A NIOSH study shows that each year 22,000 youths are injured or develop work-related illnesses, and 64,000 are treated in emergency rooms. About 70 youths suffer fatal occupational injuries each year. A new HEALTHY PEOPLE 2000 special population target is to reduce injury rates among a dolescent workers to 3.8 per 100 from a baseline of 5.8 per 100 in 1992.

New cases of cumulative trauma disorders have increased from 100 cases per 100,000 workers in 1987 to a high of 383 cases per 100,000 workers in 1993. Disorders resulting from repeated motion, noise-induced hearing loss, and vibration injuries are included, but lower back disorders are not. Increases in reported cumulative trauma disorders may be due to heightened awareness and better reporting, but also to changes in work design, such as increased automation and job specialization, both of which increase the amount of repetition performed by the worker.

Occupant protection reduces injury in automobile crashes. Data from 1980-89 indicate that the leading cause of worker fatality was trauma sustained in motor vehicle crashes (23 percent), ranking ahead of machine-related incidents (14



## Occupational Injury and Disease Burden

### Every day

↳ 900 workers sustain disabling injuries on the job

↳ 17 workers die from work-related injuries

↳ 137 workers die from work-related diseases

In 1994, work injuries alone cost \$121 billion in medical expenses and lost productivity and wages.

Source: Bureau of Labor Statistics, NIOSH Traumatic Occupational Fatalities Surveillance System, National Safety Council

percent), homicides (12 percent), falls (10 percent), electrocutions (7 percent), and falling objects (7 percent). The 1992 *National Survey of Worksite Health Promotion Activities* indicated that 82 percent of all worksites with 50 or more employees require use of occupant protection. Hence, the year 2000 target was increased from 75 percent to 95 percent.

Depending on data sources, there has been little change over the past 20 years in the rate of employees who are exposed to damaging levels of noise. Between 1989 and 1993, the U.S. Air Force Hearing Conservation Database indicates an increase from 16 to nearly 20 percent of workers exposed to average noise levels above 85 decibels. Comprehensive noise and hearing data are currently being analyzed by the U.S. Army and the United Auto Workers.

In 1994, 12,137 individuals were reported with blood lead levels greater than 25 micrograms/deciliter. This lead exposure was attributed to the workplace and represents a 7 percent increase over 1993. This increase could be the result of adding two States, North Carolina and Oklahoma, to the surveillance system (bringing the number of States to 23), or it could be a reporting artifact representing increased awareness and consequent improved reporting. When extrapolated to the entire United States, this suggests there are as many as 30,000 individuals with blood lead levels in that range. The incidence of hepatitis B is decreasing; immunizations among occupationally exposed workers are increasing.

Federal standards were established in 1969 and 1970 for occupational exposure to airborne asbestos fibers (which cause asbestosis), cotton dust (which causes byssinosis), coal mine dust (which causes coal workers' pneumoconiosis), and silica dust (which causes silicosis). Because these standards apply to all 50 States and U.S. Territories, this objective is considered to be accomplished. A new objective for tracking mortality from occupational exposures has been added.

According to the Worksite Health Promotion Survey, 63.8 percent of worksites provide education on job hazards and injury prevention. The occupational safety and health programs covered most often at worksites included lifting/back injury (54 percent), machinery/equipment hazard (37 percent), and general risk/safety management (30 percent). Despite numerous studies to identify the causes of back injury over the last decade, little is known of the etiology of low back pain. In the majority of back pain complaints, no specific, verifiable pathology can be identified with current clinical methods. The inability to clearly identify and understand the risk factors for low back pain hampers prevention efforts

and the ability to minimize disability. The worksite survey indicates that 32.5 percent of worksites offer prevention and rehabilitation programs.

Follow-up items from the progress review fall into the three general areas of surveillance, services and communication. CDC was asked to suggest ways to improve surveillance systems to detect and monitor emerging problems such as workplace violence and homicide, safety and health of working children, and occupational asthma. The Health Care Financing Administration claims data could be used to track injuries and improve occupational safety and health surveillance. Collaboration among HHS laboratories and those of other departments should be initiated. CDC should also develop a plan for new epidemiologic research strategies to assess and confront new occupational safety and health issues specific to the evolving service sector economy.

To enhance occupational health services, we also need to address the national shortage of occupational health clinicians and integrate occupational health clinical practices with primary health care and managed care. The Agency for Health Care Policy and Research should assess the potential for clinical practice guidelines or protocols to assist primary care providers in assessing occupational health effects. IHS and HRSA-funded clinics should be staffed and equipped to do occupational health assessments.

As for communication strategies, there is a need for publicizing more effectively such success stories as the beneficial impact of regulations and guidelines on occupational safety and health. Finally, joint partnership opportunities with State, Tribal and local governmental entities, private sector businesses, unions and medical professionals should be identified for information sharing and dissemination.

### Public Health Service Agencies

Agency for Health Care Policy and Research (AHCPH)  
Agency for Toxic Substances and Disease Registry (ATSDR)  
Centers for Disease Control and Prevention (CDC)  
Food and Drug Administration (FDA)  
Health Resources and Services Administration (HRSA)  
Indian Health Service (IHS)  
National Institutes of Health (NIH)  
Substance Abuse and Mental Health  
Services Administration (SAMHSA)  
Office of the Surgeon General (OSG)

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