



PROGRESS REVIEW

Occupational Safety and Health

DEPARTMENT OF HEALTH & HUMAN SERVICES ■ PUBLIC HEALTH SERVICE ■ November 17, 1999

The Principal Deputy Assistant Secretary for Health chaired the third and final review of progress in achieving Healthy People 2000 objectives for Occupational Safety and Health. The review was organized by the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC), the lead agency for this Healthy People priority area. The discussion addressed three principal topics: 1) the changing nature of work and the workforce; 2) work-related musculoskeletal disorders (MSDs); and 3) health care workers. Of the 20 objectives in this priority area, six have met their targets, eleven have moved in the right direction, and three have moved away from the targets. The overview and discussion focused on the following objectives in priority area 10 of Healthy People 2000:

10.1 The rate of deaths from work-related injuries decreased from 6.0 per 100,000 full-time workers in 1983-87 to 4.5 in 1998. The year 2000 target is 4.0 per 100,000. Over the same time period, workers in three out of four high-risk occupations also experienced declines in work-related injury death rates, as follows: for mine workers, from 30.3 per 100,000 in 1983-87 to 23.6 in 1997 (target, 21); for construction workers, from 25.0 to 14.6 (target, 17); and for transportation workers, from 15.2 to 11.8 (target, 10). For farm workers, the rate increased from 14.0 per 100,000 in 1983-87 to 24.1 in 1997 (target, 9.5).

10.2 The rate of nonfatal work-related injuries and illnesses resulting in medical treatment, lost time from work, or restricted work activity decreased from 7.7 per 100 workers in 1983-87 to 6.6 in 1997. The year 2000 target is 6. The injury/illness rate for workers in four high-risk occupations also decreased over the same time period, as follows: for construction workers, 14.9 nonfatal injuries/illnesses per 100 workers to 9.3, surpassing the target of 10; for farm workers, from 12.4 to 8.7 (target, 8); for transportation workers, from 8.3 to 7.9 (target, 6); and for mine workers, from 8.3 to 5.7, surpassing the target of 6. However, for nursing and personal care workers, the rate of nonfatal injuries/illnesses increased from 12.7 per 100 workers in 1983-87 to 15.9 in 1997 (target, 9).

10.3 The incidence of cumulative trauma disorders increased from 100 per 100,000 full-time workers in 1987 to 320 in 1997. The year 2000 target is 60 per 100,000. Among select segments of the workforce, the incidence for manufacturing industry workers increased from 355 per 100,000 full-time workers in 1987 to 1,061 in 1997 (target, 150), and for meat product workers, from 3,920 in 1987 to 6,860 in 1997 (target, 2,000).

10.4 The incidence of occupational skin disorders increased from 64

per 100,000 full-time workers in 1983-87 to 82 in 1992 and declined to 67 in 1997. The year 2000 target is 55 per 100,000.

10.5 See chart

10.9 The proportion of occupationally-exposed health care workers who had received immunizations against hepatitis B increased from 37% in 1989 to 67% in 1994. The year 2000 target is 90%.

10.13 The proportion of work-sites with 50 or more employees that offer back injury prevention and rehabilitation programs increased from 28.6% in 1985 to 53% in 1999, surpassing the year 2000 target of 50%.

10.15 Only nurse practitioners reported in sufficient numbers to provide reliable estimates for updating the 1992 baseline for this objective on clinician assessment of occupational health exposure. In 1997, 14% of nurse practitioners inquired of their patients (≥ 16 years) about health risks, the same proportion as in 1992. The proportion that provided counseling about health risks was 12% in 1997, compared with 10% in 1992. The year 2000 target is for 75% of clinicians to inquire and counsel about risks.

10.16 Work-related homicides decreased from 0.7 per 100,000 full-time workers in 1980-89 to 0.5 in 1998, equaling the year 2000 target.

10.17 With the decrease from 3,644 pneumoconiosis deaths among people aged 15 and older in 1990 to 3,114 in 1996, the U.S. came close to achieving the target of no more than 3,000 deaths per year.

10.18 The proportion of workplaces with 50 or more employees that have a formal policy prohibiting or severely restricting smoking on site increased from 27% in 1985 to 79% in 1999. The year 2000 target is 100%.

DEVELOPMENTS

- The cost of workplace illness and injury in the U.S. is estimated to be \$171 billion annually. Each day, an average of 9,000 workers sustain disabling injuries on the job, 17 workers die from an injury sustained at work, and 137 workers die from work-related diseases.
- In April 1996, with input from some 500 organizations and individuals, NIOSH and its partners embarked on the National Occupational Research Agenda (NORA™), a framework to guide occupational safety and health research in the next decade. NORA's 21 research priority areas address 16 out of the 20 Healthy People 2000 objectives for occupational safety and health. In the first three years of NORA implementation, NORA generated funding and research activities in the 21 priority areas.
- Americans now spend 8 percent more time on the job than they did 20 years ago—47 hours a week on average. Downsizing and job insecurity, the number of contingent and low wage workers, and shift-work are increasing. Recent studies suggest that, in addition to job stress and psychological strain, work organization may have a broad influence on worker safety and health and may contribute to occupational injury, work-related MSDs and cardiovascular disease.

10.3 - Reduce cumulative trauma disorders to an incidence of no more than 60 cases per 100,000 full-time workers



Source: Annual Survey of Occupational Injuries and Illnesses (DOL, BLS)

10.5 - Reduce hepatitis B infection among occupationally-exposed workers to an incidence of no more than 623 cases



Source: National Notifiable Disease Surveillance System (CDC, EPO); Sentinel Counties Surveillance of Acute Viral Hepatitis, Viral Hepatitis Surveillance System (CDC, NCID)

DEVELOPMENTS (Cont'd)

- Work-related MSDs remain one of the most serious problems facing the American workforce. Scientific studies have shown that there is a clear relationship between work factors and MSDs in a variety of workplaces. The occupations most affected by MSDs tend to be lower wage jobs that employ high numbers of minority workers and women. More than 620,000 workers suffered lost workdays due to overexertion or repetitive trauma in 1997, the last year for which detailed data are complete.
- Over 10 million workers are employed in the health care sector, which is growing at twice the rate of the overall economy. Nearly 80 percent of the health care workforce is female. Occupational injuries and illnesses are actually rising in this sector, in contrast to the workforce as a whole. In health care settings, workers face a variety of occupational hazards, such as: MSDs, latex allergy, exposure to bloodborne pathogens through needlestick injuries, tuberculosis, exposure to nitrous oxide and other chemicals, violence, and stress.

FOLLOW-UP

- Over the last decade, significant mortality decreases have occurred in the mining, agriculture, and construction industries. Additional efforts are needed to improve on this trend and expand it to the health care industry. More focus is also needed on morbidity and occupational diseases in all industries.
- Improve surveillance of occupational illnesses and injuries for the general population and for racial, ethnic, age, and gender groups. Capture data on changing trends in the workforce and the organization of work, with a focus on the economic shift from manufacturing to service, increased employment of temporary workers, the move toward working at home, the downsizing of businesses, and the increasing intensity and speed of work.
- Explore the collection of longitudinal data on the workforce with a capability for tracking workers who change jobs, retire, or experience spells of unemployment. Extend the reach of these data to agricultural workers, including migrant workers.
- Target additional research to the etiology of workplace injuries and illnesses and to their consequences for workers and their families. Explore why workers develop MSDs and what happens to them in the short and long term. Initiate research and prevention efforts to reduce health care workers' risk from occupational hazards.
- Explore the role of the workplace in fostering depression and violence.

- Apply actions that are effective in protecting workers employed by large businesses to small-employer settings.
- Increase awareness of occupational safety and health data and challenges in the public health community and among legislators empowered to enact laws to protect the workforce.
- Design programs that carry out comprehensive intervention plans using multiple strategies of education, community involvement, research, and surveillance. Re-examine the role of health departments in occupational safety and health to increase the use of traditional public health models.
- Expand training programs to provide general and advanced occupational safety and health training for workers across all industries. Of special interest is cross-cutting training that workers can take with them as they change jobs.

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