

# NIOSH

## National Institute for Occupational Safety and Health

Delivering on the Nation's Promise: Safety and Health at Work for All People...through Prevention

On January 28, 1986, at 11:39 a.m., the world witnessed the most horrifying disaster in the history of the American space program as the Space Shuttle Challenger exploded into flames over Cape Canaveral, killing six astronauts and a high-school teacher.

On that same day, at least 16 other Americans lost their lives while doing exactly what the astronauts were doing: earning a living. These other workers included a retail manager, a manager of a

manufacturing plant, a president of a drilling company, a lineman, two plasterers, a driller, a farm worker, a teacher, two truckers, three loggers, a miner, and a special investigator. January 28 was not an unusual day in the work life of America.

***It is estimated that 17 American workers die every day in this country while trying to earn a living.***

According to the most current statistics, every day an average of 17 workers leave home for work, never to return. Moreover, even the most conservative estimates find that about 137 additional workers die each day from workplace diseases.

According to a 1991 study conducted by the RAND corporation, the cost to the U.S. economy for work injuries alone exceeds \$83 billion annually. The time has come to protect our most valuable resource: the American worker.

### What is NIOSH?

The National Institute for Occupational Safety and Health (NIOSH) was established by the Occupational Safety and Health Act of 1970. NIOSH is part of the Centers for Disease Control and Prevention (CDC) and is the federal Institute responsible for conducting research and making recommendations for the prevention of work-related illnesses and injuries. The Institute's responsibilities include:

- Investigating potentially hazardous working conditions as requested by employers or employees
- Evaluating hazards in the workplace, ranging from chemicals to machinery
- Creating and disseminating methods for preventing disease, injury, and disability
- Conducting research and providing scientifically valid recommendations for protecting workers
- Providing education and training to individuals preparing for or actively working in the field of occupational safety and health

### How Does NIOSH Differ from OSHA?

Although NIOSH and OSHA were created by the same Act of Congress, they are two distinct agencies with separate responsibilities. OSHA is in the Department of Labor and is responsible for creating and enforcing workplace safety and health regulations. NIOSH is in the Department of Health and Human Services and is a research agency.

NIOSH identifies the causes of work-related diseases and injuries and the potential hazards of new work technologies and practices. With this information, NIOSH determines new and effective ways to protect workers from chemicals, machinery, and hazardous working conditions. Creating new ways to *PREVENT* workplace hazards is the job of NIOSH. With today's economic, health care, and worker's compensation crises challenging our country, *PREVENTION* is an approach whose time has come.

More information about NIOSH and the prevention of occupational diseases and injuries is available by calling the NIOSH toll-free number:

**1-800-35-NIOSH (1-800-356-4674)**



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention

National Institute for Occupational Safety and Health



# NIOSH RESEARCH

"Delivering on the Nation's Promise: Safety and Health at Work for all People... Through Prevention:" This NIOSH vision is all-inclusive. NIOSH is therefore responsible for researching the full scope of occupational injury and disease, ranging from the prevention of lung disease among sandblasters to the prevention of workplace stress in the office environment. Because it would be impossible to list all areas of NIOSH research, we have described only a few areas of recent concern. If you need more detailed information on these or other occupational safety and health issues, call the NIOSH toll-free information service: **1-800-35-NIOSH**

## Cumulative Trauma Disorders

Disability resulting from carpal tunnel syndrome and other "cumulative trauma disorders," also known as "repetitive strain injuries," is the single fastest growing public health problem among American workers. This type of disability comprised more than half of all the occupational illness reported by employers in 1992. NIOSH is conducting research and field testing methods to prevent this problem across the wide span of industries where it is occurring, such as meatpacking, poultry, agriculture, construction, retail, publishing, automotive repair, and data processing.

## Disability Among Farmers and Construction Workers

According to NIOSH research, agriculture and construction are among the most dangerous industries for work-related injuries and diseases. NIOSH has initiated national programs in both industries to identify and prevent the leading hazards that cause disability. To help achieve this goal, NIOSH is building a broad coalition including federal resources, land grant universities, state and local health departments, voluntary associations and nonprofit organizations, and health care providers.

## Indoor Environmental Quality

During the last decade, concerns associated with the quality of the non-industrial indoor environment have escalated in the American workplace. NIOSH researchers have completed over 1000 evaluations related to indoor environmental quality (IEQ) since the late 1970s. NIOSH has identified a number of factors which contribute to IEQ complaints including poor air quality due to ventilation system deficiencies, comfort problems due to improper temperature and relative humidity, adverse ergonomic conditions, and job-related psychosocial stressors. NIOSH and the Environmental Protection Agency (EPA) have collaborated in the development and distribution of a guidance document, Building Air Quality, designed to help building owners, facility managers, and building occupants prevent and resolve IEQ problems. NIOSH continues to collaborate with EPA and other federal and state agencies to further understand this complex problem.

## Lead Poisoning

It is widely recognized that lead poisoning is a critical public health problem among children, particularly of low-income families. Even small amounts of lead exposure can be detrimental to a child's learning potential. However, few realize that there is a second population at risk of lead poisoning. Workers in the construction, scrap metal, and battery recycling industries are also at risk of lead poisoning, which can result in neurologic and reproductive disability. In addition, these workers may take lead contamination home on their clothes and in their cars, exposing their families. NIOSH is working with state health departments to identify workers at risk, evaluate the problem of lead contamination being carried home from work, and develop economical methods of preventing worker exposure.

## Stress

Worker compensation claims for job stress have doubled in the last decade and now account for 11 percent of all worker disease claims. In response to this growing epidemic, NIOSH is actively identifying causes, health effects, and means of preventing job stress.

## Violence Against Workers

NIOSH researchers identified homicide as the third leading cause of injury death for all workers, and the leading cause for women in the United States. NIOSH published an "Alert" warning workers of the risk of homicide and proposing prevention strategies. Workers at greatest risk include taxi drivers, law enforcement officers, security guards, and employees of retail trades such as liquor stores, gas stations, food stores, restaurants, and bars. NIOSH has begun an evaluation of crime prevention measures used in convenience stores which may be applicable in other workplaces.

## Work-Related Infectious Disease

The increasing incidence of AIDS, hepatitis B and C, and tuberculosis, coupled with the rapid growth of health care occupations, creates a considerable risk for workplace exposure to infectious disease. The Institute has responded to a number of requests to investigate outbreaks of infectious disease. NIOSH is also collaborating with university researchers and other parts of CDC to prevent the continuing spread of these diseases among workers.