



Fatal Injuries to Civilian Workers in the United States, 1980-1995



National and State Profiles

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health



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(National and State Profiles)

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National Institute for Occupational Safety and Health

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Foreword

The Occupational Safety and Health Act of 1970 was enacted “to assure so far as possible every working man and woman in the Nation safe and healthful working conditions.” However, deaths from injuries at work continue to be a major public health problem. On average, 16 workers die each day in this country. These workers die simply trying to earn a living. Through the National Traumatic Occupational Fatalities surveillance system, NIOSH continues to help fill the gap in the knowledge of traumatic work-related injury deaths.

This document provides an update to data published in the 1993 publication, *Fatal Injuries to Workers in the United States, 1980-1989: A Decade of Surveillance*. The current document includes 16 years of data from the National Traumatic Occupational Fatalities surveillance system for the years 1980 through 1995. Occupational injury mortality statistics on over 93,000 deaths are provided by demographic and injury characteristics. These data illuminate the nature and magnitude of work-related injury death for the United States and comprise the most comprehensive summary available in one document.

Although fatal occupational injuries have decreased over the years, the burden remains high. The data presented in this report provide the basis for developing strategies to prevent traumatic work-related injury deaths by profiling high-risk industries, occupations, and causes of fatal injuries. It is our hope that the information contained in this document will serve as a comprehensive resource for federal, state and local agencies, safety and health professionals, researchers, and others who can affect the prevention of occupational fatalities.

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Public Health Summary

What are the hazards?

Over 93,000 workers were fatally injured while working in the United States from 1980 through 1995. Each day an average of 16 people died—simply by doing their jobs. These deaths result from exposure to many different hazards on the job. Leading causes of traumatic occupational fatalities include motor vehicles, homicides, machines, falls, electrocutions, and falling objects.

How can a worker be exposed or put at risk?

Workers are at risk of fatal injury in many different ways. Workers who operate motor vehicles or machines risk injury due to overturns or collisions. Taxicab drivers risk being killed during robbery attempts while construction workers risk fatal falls while working from heights. Electrical linemen risk electrocution while repairing power lines and loggers risk being struck by a falling tree during tree harvesting operations. These scenarios highlight some of the risks that are a daily presence in many of the industries and occupations in the United States. These jobs are frequently noted as being the jobs with the highest fatal injury rates. However, the potential for work-related injury exists in any job where injury risks are present and not controlled.

What recommendations has the federal government made to protect workers' safety and health?

Several federal agencies promulgate standards and regulations for worker safety. Agencies with specific regulatory authority for worker protection include the Occupational Safety and Health Administration, Federal Railroad Administration, Mine Safety and Health Administration, Federal Highway Administration, and the Employment Standards Administration. NIOSH, however, is the only federal agency responsible for conducting research and making recommendations for the prevention of work-related illnesses and injuries. NIOSH conducts research programs that improve understanding of injury and disease risks, identify populations at risk, and evaluate prevention strategies. For example, prevention recommendations are developed for specific risks through the Fatality Assessment and Control Evaluation program and the Health Hazard Evaluation program. Additional recommendations are developed through the funding of individual research projects, both within NIOSH and with extramural partners. As a result of these efforts NIOSH creates and disseminates scientifically valid recommendations for preventing work-related disease, injury, and disability.

Where can more information be found?

The references and additional readings contained in this document identify sources that provide additional information on fatal occupational injuries. Additional information on worker safety and health may be obtained from NIOSH through

1-800-35-NIOSH (800-356-4674) or at www.cdc.gov/niosh

Executive Summary

The National Institute for Occupational Safety and Health collects and automates death certificates from the 52 vital statistics reporting units in the 50 States, New York City, and the District of Columbia for workers 16 years of age or older who die as a result of a work-related injury. Analysis of occupational injury deaths, such as those gathered through the National Traumatic Occupational Fatalities (NTOF) surveillance system, facilitates identification of high risk worker groups and potential injury risk factors by demographic, employment, and injury characteristics. This promotes the effective use of resources aimed at preventing injuries in the workplace. In reviewing these data, it is important to note the distinction between the number of deaths and fatality rates. The number of deaths indicates the magnitude of a problem and fatality rates depict the risk faced by workers. Fatal occupational injury data for 1980 through 1995 are provided for the U.S. and for each State.

Major findings from this study:

- There were 93,338 civilian workers who died from injuries sustained while working in the U.S., 1980 through 1995 (Table US-1).
- The average annual occupational fatality rate for the U.S. civilian workforce was 5.2 per 100,000 workers for 1980 through 1995 (Table US-1).
- Civilian fatal occupational injuries decreased 28%, from 7,343 fatalities in 1980 to 5,314 in 1995 (Table US-1).
- The average annual fatality rate per 100,000 civilian workers decreased, from 7.4 in 1980 to 4.3 in 1995 – a 42% decrease (Table US-1).
- The greatest number of fatal occupational injuries occurred in California (9,670), Texas (9,423), Florida (5,596), Illinois (4,169), and Pennsylvania (3,926) (Table US-2).
- The States with the highest occupational injury fatality rates per 100,000 workers were Alaska (24.3), Wyoming (16.7), Montana (12.4), Idaho (10.7), West Virginia (10.4), and Mississippi (10.1) (Table US-2).
- The fatality rate for males (8.8 per 100,000 workers) was 11 times higher than the rate for females (0.8 per 100,000 workers) (Table US-3).
- Eighty-five percent of civilian workers who died were white and 11% were black (Table US-3).
- Black workers had the highest fatality rate per 100,000 workers (5.8), followed by whites (5.1) (Table US-3).
- The age group with the largest number of occupational injury fatalities was the 25-34 year old age group (26%) followed closely by the 35-44 year old age group (22%) (Table US-3).

- Workers 65 years and older had the highest fatality rate of all age groups (13.6 deaths per 100,000 workers) in every industry and occupation division (Tables US-3, US-17, US-27).
- The leading causes of occupational injury death in the U.S. were motor vehicle crashes (23%), homicides (14%), machine-related incidents (13%), falls (10%), electrocutions (7%), and being struck by falling objects (6%) (Table US-7).
- The highest rates by cause of death varied by gender: the highest rate for females was homicide (0.3 per 100,000 workers), while motor vehicle crashes (2.0 per 100,000 workers) were the cause of death with the highest rate among males (Table US-7).
- While the rate of motor vehicle-related fatalities decreased 36% between 1980 and 1995 (from 1.7 per 100,000 workers to 1.1), motor vehicles continued to have the highest rate through 1995. Machines had the second highest rate per 100,000 workers until 1990, when they were surpassed by homicides (Table US-9).
- The highest rates by cause of death varied by race: the highest rate for whites was motor vehicle crashes (1.2 per 100,000 workers), while the highest rate by cause of death for blacks was homicide (1.4 per 100,000 workers) (Table US-10).
- The industry divisions with the greatest proportion of fatalities were construction (18%), transportation/communication/public utilities (17%), manufacturing (15%), and agriculture/forestry/fishing (12%) (Table US-13).
- The mining industry had the highest average annual fatality rate per 100,000 workers (30.4), followed by agriculture/forestry/fishing (19.6), construction (15.3), and transportation/communication/public utilities (12.6) (Table US-13).
- The highest rates by cause of death varied by industry: the highest rate in the agriculture/forestry/fishing industry was for machinery-related incidents (6.6 per 100,000 workers), while the highest rate by cause of death in the retail trade industry was for homicides (1.7) (Table US-16).
- The occupation divisions with the greatest proportion of fatalities were precision production/craft/repairers (21%), transportation/material movers (17%), farmers/foresters/fishers (13%), and laborers (11%) (Table US-23).
- The occupation division of farmers/foresters/fishers had the highest average annual fatality rate per 100,000 workers (21.9), followed by transportation/material movers (21.6), laborers (13.7), and precision production/craft/repairers (9.2) (Table US-23).
- The highest rates by cause of death varied by occupation: the highest rate among executives/administrators/managers was for homicides (0.8 per 100,000 workers), while machinery-related incident rates were highest among farmers/foresters/fishers (7.0) (Table US-26).



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