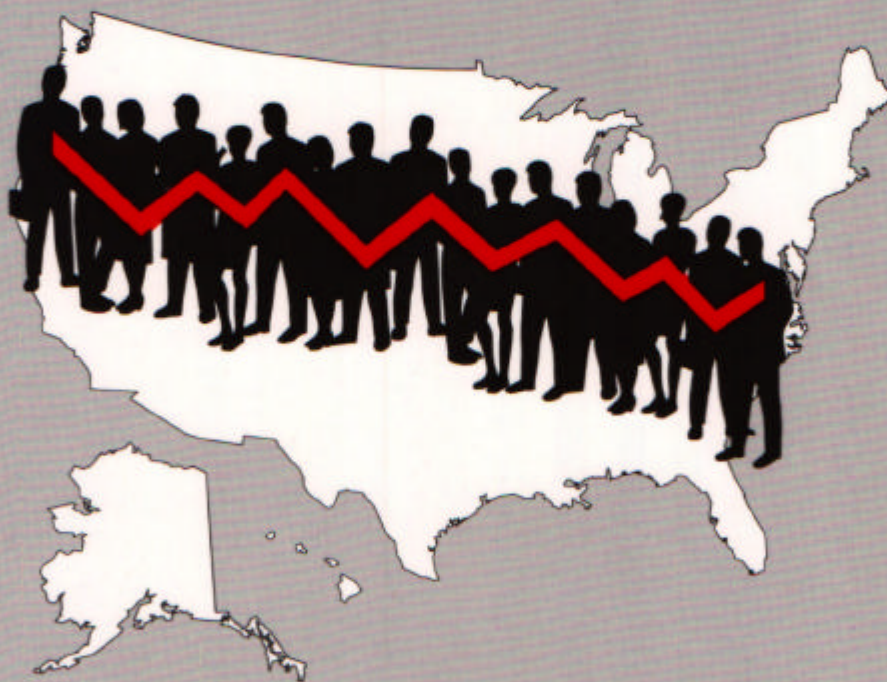


Fatal Injuries to Workers in the United States, 1980-1989: A Decade of Surveillance



National and State Profiles



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

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August 1993

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FOREWORD

We dedicate this report to the faces behind the numbers...to the individuals who have lost their lives at work and to the families and friends left behind. If you see only the numbers in this book, you have missed the point. Each number, each death counted, represents a life, the life of an American worker, a life cut short while simply trying to earn a living.

Death on the job is a problem that affects us all. It is a mainstream public health problem that rarely receives mainstream public attention. We must recognize that every father, mother, every young man and young woman killed at work is a loss to our community and to our future as a nation. A child grows up without a parent, parents grow old without children, neighbors live on without a friend, and on and on.

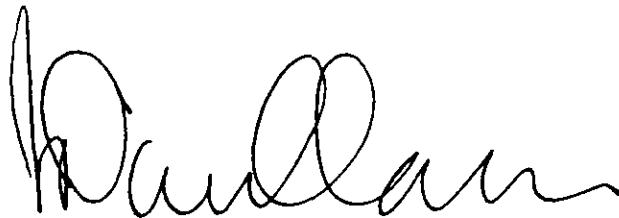
On average, 17 American workers die each day in this country; as a nation, we have come to accept this as a matter of course. Each day the stories of work-related fatalities are buried along with the victims. Incidents are reported as "horrible accidents" with no mention of prevention, no recognition of the work-relatedness, and no sense of outrage that they occurred. The most visible occupational fatalities in history occurred on January 28, 1986, as the Space Shuttle Challenger exploded in flames over Cape Canaveral. Six astronauts and a high-school teacher were killed...earning a living, doing their job. The nation was shocked and horrified.

On that same day, January 28, 1986, at least 16 other Americans lost their lives while doing the same thing—simply earning a living, doing their job. Where was the horror? Where was the outrage?

During the course of that day, a retail manager and a special investigator were shot to death, the manager of a manufacturing plant and the president of a drilling company died of burns from explosions, a lineman was electrocuted, two plasterers fell to their deaths from a scaffold, a driller died of asphyxiation after falling into an oil well, two loggers were killed falling from a rigging cable, another logger died of a skull fracture after being pinned by a log against his truck, a coal miner was crushed by falling rock, and two truckers, a farm laborer and a teacher died in separate motor vehicle crashes. These workers, ranging in age from 16 to 81 years old, all went to work that day and died as a result of it...simply trying to earn a living.

Why weren't we shocked? When the Challenger exploded, it was a totally unexpected occurrence. We, as a nation, became accustomed to men and women soaring smoothly through space and coming home safely. Astronauts are not supposed to die doing their job. Other workers are not supposed to die either.

While we can do nothing to bring back the dead, we can act vigorously to protect the living. Prevention calls for a focus on the *living*. As you look at the data in this book, remember each worker who died, and mourn his or her death. But remembering is not enough. We must take the knowledge presented here and act! In almost every instance reported, the fatal "accident" could have been readily prevented. The years of life lost were wasted. Working together *now*, we can assure that the children of these workers do not have to die...simply trying to earn a living.



J. Donald Millar, M.D., D.T.P.H. (Lond.)
Assistant Surgeon General
Director, National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention

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The success of the National Traumatic Occupational Fatalities (NTOF) surveillance system is due in large part to the help and cooperation of state vital records offices. We are grateful to the state vital registrars and their staffs for providing these valuable data.

EXECUTIVE SUMMARY

Death from work-related injuries is a major public health problem. 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 died as a result of a work-related injury. Analysis of occupational injury deaths by demographic, employment, and injury characteristics facilitates effective use of resources aimed at preventing injuries in the workplace. In looking at these data, it is important to note the distinction between rates and actual number of deaths. Rates depict the risk faced by workers, and numbers indicate the magnitude of the problem or the number of lives that would be saved if these injuries had been prevented.

- From 1980 through 1989, 63,589 workers died from injuries sustained while working: 62,289 (98%) were workers in the civilian labor force.
- For 1980 through 1989, the average annual occupational fatality rate for the U.S. civilian work force was 7.0 per 100,000 workers.
- The leading causes of occupational injury death in the United States were motor vehicle crashes (23%), machine-related incidents (14%), homicides (12%), falls (10%), electrocutions (7%), and being struck by falling objects (7%).
- Leading causes of death vary by gender: the leading cause of death for females was homicide (41%), while homicide accounted for 10% of the occupational injury deaths among males.
- 80% of those who died from occupational injury were White, 11% were Black, 6% were Hispanic, 2% were Asian and Pacific Islanders, less than 1% were American Indians/Alaska Natives, and 1% of the cases were of other or unknown race/ethnicity.
- Black workers had the highest fatality rate per 100,000 workers (6.5), followed by Whites (5.8) and workers of Other races (4.9).
- The age group with the largest number of occupational injury fatalities was the 25-29 year old age group (14%); followed by the 30-34 year old age group (13%), and the 20-24 year old age group (12%).
- Workers 65 years and older had the highest fatality rate of all age groups, with 14.6 deaths per 100,000 workers. Workers 65 years and older also had the highest rates of work-related injury death in every occupation division and in every industry division except mining.
- The fatality rate for males (9.8 per 100,000 workers) was 12 times higher than for females (0.8 per 100,000 workers).
- Civilian fatal occupational injuries decreased 23%; from 7,405 in 1980 to 5,714 in 1989.

- The average annual fatality rate per 100,000 civilian workers also decreased, from 8.9 in 1980 to 5.6 in 1989—a 37% decrease.
- The largest number of fatalities occurred in the construction (18%), transportation/communication/public utilities (18%), manufacturing (14%), and agriculture/forestry/fishing (12%) industry divisions.
- The mining industry had the highest average annual fatality rate per 100,000 workers (31.9); followed by construction (25.6), transportation/communication/public utilities (23.3), and agriculture/forestry/fishing (18.3).
- The occupation divisions with the largest number of fatalities were precision production/craft/repair (19%), transportation/material movers (19%), laborers (13%), and farmers foresters/fishers (12%).
- The occupation division of transportation/material movers had the highest average annual fatality rate per 100,000 workers (25.6); followed by farmers/foresters/fishers (21.3), laborers (17.2), and precision production/craft/repair occupations (9.3).
- The greatest number of fatal occupational injuries occurred in Texas (6,664), California (6,623), Florida (3,681), Illinois (2,853), and Pennsylvania (2,564).
- The states with the highest occupational injury fatality rates for the private sector were Alaska (34.8), Wyoming (29.0), Montana (20.9), Idaho (16.7), and West Virginia (15.7).

Surveillance data such as those gathered through the National Traumatic Occupational Fatalities system, allow the description of the nature and magnitude of the occupational injury problem in the U.S., the identification of potential risk factors, the generation of hypotheses for further research, and the setting of research and prevention priorities. These data provide the foundation for the next decade of research and prevention efforts aimed at reducing fatal injuries to workers in the U.S.

Fatal Injuries to Workers in the United States, 1980-1989: A Decade of Surveillance

INTRODUCTION

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."¹ Death from injuries at work is a major public health problem. A number of studies have estimated the extent of occupational injury deaths occurring in the U.S. each year.²⁻⁵ The results have varied widely and have provided limited information about the injuries or their circumstances. The National Traumatic Occupational Fatalities (NTOF) surveillance system was developed by the National Institute for Occupational Safety and Health (NIOSH), to fill gaps in the knowledge of work-related injury deaths in the U.S. by providing a census of occupational injury deaths for all U.S. workers.

Analysis of occupational injury deaths by demographic, employment, and injury characteristics facilitates effective use of resources aimed at preventing injuries in the workplace. Surveillance data such as those gathered through the NTOF system allow the description of the nature and magnitude of the occupational injury problem in the U.S., the identification of potential risk factors, the generation of hypotheses for further research, and the setting of research and prevention priorities. Ongoing surveillance systems also enable the monitoring of trends over time and offer the potential to evaluate prevention efforts. A report on occupational injury mortality in the U.S. for the years 1980-1985, based on data collected by the NTOF system, has previously been

published.⁶ The present document extends the period of analysis to a decade, and provides a more comprehensive summary of fatal occupational injuries for the U.S., as a whole; and examines for the first time, the patterns of work-related injury fatalities in every state.

METHODS

Death Certificates

Information in the NTOF surveillance system is taken directly from death certificates. To gather data for the system, NIOSH 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 for whom an external cause of death (International Classification of Diseases, Ninth Revision;⁷ E800-E999) was noted, and for whom the certifier entered a positive response to the "Injury at Work?" item.

The NTOF data contain variables useful for describing characteristics of victims as well as injury circumstances—including demographic, employment, and cause of death variables. In addition to coded data, narrative text from the death certificate for industry, occupation, causes of death, and injury description is entered and maintained.

Death certificates were utilized for this surveillance system because they are available for all workers who died during the period, regardless of size or nature of employment, coverage by workers' compensation

systems, or other jurisdictional restrictions. State-based studies show that death certificates identify a greater proportion of occupational trauma fatalities than any other single source. Although these studies did not include NTOF per se, they indicate that death certificates capture 67% to 90% of all fatal work injuries.⁸

The limitations of death certificates as a source of occupational injury fatality surveillance have been discussed by several authors.^{2,6,9,10} The primary issues of concern in the use of death certificates are the ability to identify and to retrieve the certificates that meet the study criteria. Studies indicate that motor vehicle crashes and homicides are the external causes of death most likely to be missed in death certificate surveillance of occupational injuries.^{9,10} For the period 1980 through 1984, data on work-related homicides and suicides were not available from four states—Louisiana, Nebraska, New York, and Oklahoma. In subsequent years, data were obtained from those states as procedures were altered to allow retrieval of this information. All tables and figures reflect actual data obtained from the states; denominator data were not adjusted to reflect years for which some data were missing.

Each vital statistics reporting unit is responsible for identifying and providing cases that meet the NTOF criteria. For the period of data analyzed in this report, there were no standardized guidelines for the completion of the “Injury at Work?” item on the death certificate. Thus, this item on the death certificate, which is one of the three criteria for inclusion in the NTOF surveillance system, was subject to certifier interpretation. Although the lack of standardized reporting of this item may result in both false positives—if a liberal definition of injury “at work” was used—and false negatives—if a very restrictive definition was used or the item was left blank, the numbers reported here are apt to represent the minimum number of work-related deaths that occurred in

the U.S. during the period.

To improve the quality of occupational injury fatality reporting, national guidelines for completing the “Injury at Work?” item were developed and disseminated in 1992 by the Association for Vital Records and Health Statistics, NIOSH, the National Center for Health Statistics, and the National Center for Environmental Health. These guidelines have been distributed nationally to medical examiners and coroners through state Vital Registrars and should improve future death certificate surveillance of fatal occupational injuries (See Appendix I).

Occupation, Industry, and Cause of Death Coding

Employment information was coded from the usual industry and occupation narratives from the death certificate using software developed by NIOSH; cases which could not be assigned a code by the software were hand-coded by the Bureau of the Census. Occupation narratives were coded into 11 major divisions of occupation according to the 1980 Bureau of the Census classification scheme;¹¹ industry narratives were coded into the 10 standard industrial divisions according to the Standard Industrial Classification Manual, 1987.¹² Death certificates for which no occupation or industry entry was present or for which the entry was too vague were coded into the “not classified” group. Certificates which had entries such as “housewife” or “student” were also coded into the “not classified” group. Appendix II provides explanations of the abbreviations for occupation and industry divisions on figures and tables.

Death certificates query for the “usual” occupation and industry of the person who died, which may not necessarily reflect the occupation or industry engaged in at the time of the fatal injury. Studies comparing death certificate entries for usual occu-

pation and industry to employment information for occupation and industry at the time of death, found agreement for occupation to be 64% to 74% of the cases,¹³⁻¹⁸ and for industry to be 60% to 76% of the cases.¹³⁻¹⁸ Though the query on death certificates is for “usual” occupation and industry, some studies indicate that the death certificate entries may actually better reflect occupation or industry at time of death than usual, lifetime employment.¹⁶⁻¹⁸

Cause of death codes are assigned based upon the ICD-9 supplementary chapter for the classification of external causes of injury and poisoning.⁷ The codes from this chapter, denoted with a preceding “E,” cover the spectrum of unintentional and intentional causes of death. The grouping of the E-Codes for these analyses followed the rubrics established in the ICD-9. A table which provides the actual E-code rubrics included in each of the groupings is shown in Appendix III.

Employment Data

Because no single source of employment data provides information by state, industry, occupation, and demographic characteristics, employment estimates used in calculating occupational injury fatality rates were derived from several sources. Employment data used to calculate rates for the total civilian workforce, by industry division, by cause, by state, and by year were taken from County Business Patterns (CBP), an establishment-based census of employers.¹⁹ CBP data do not include agricultural production, public administration, the self-employed, or workers in managerial occupations. The employment data for agricultural production were derived from the 1982 Census of Agriculture, Bureau of the Census,²⁰ and the data for public administration from annual average employment data from the Bureau of Labor Statistics (BLS) household surveys.²¹ Denominators for the calculation of rates by occupation divisions, age, race, and gender were also taken from the BLS annual average employment data from house-

hold surveys. Rates for occupation divisions by age groups are presented for 1983 through 1989 only, due to the availability of comparable denominator data.

Fatality rates were calculated as average annual deaths per 100,000 workers. Rates were not calculated for cells with less than three cases due to the instability of rates based on small numbers. Frequencies and rates are presented for the civilian workforce only, because denominator data were not available for military personnel. State-specific rates were calculated for private sector employment only; public administration as well as the military were excluded due to the lack of comparable denominator data.

The numbers and rates presented here are based on data that are consistent across the U.S., to facilitate comparisons between states. These numbers may differ from numbers generated by other surveillance or data collection systems. Within states, workers’ compensation systems, departments of employment security, medical examiners’ offices, or other agencies may collect occupational injury information or employment information which may result in different rate calculations or tabulations for causes of work-related injury deaths and other demographic and employment characteristics. Within the present analysis, rates calculated using establishment-based employment data will differ from those generated using employment data from household surveys.

Mapping

To map geographic distributions of work-related fatality rates for the U.S., for high-risk industries, and for the leading causes of death, the fatality rates for the 50 states and the District of Columbia were grouped into five categories based on the population standard deviation of the overall U.S. occupational fatality rate (or the rate for that industry or cause of death):

Very high—fatality rates more than two standard deviations (s.d.) above the average rate;

High—fatality rates greater than one s.d., but less than two s.d. above the average;

Moderately high—fatality rates greater than the average rate but less than one s.d. above the average;

Moderately low—fatality rates less than the average rate but less than one s.d. below the average;

Low—fatality rates more than one s.d. below the average rate but greater than zero.

Rates for the 51 reporting entities generally do not exhibit distributions that are normal and do not constitute a sample. Therefore, implications based on the probabilities of the standard normal distribution are not valid for these five categories. For mapping purposes, this method of categorizing states identifies those states with extreme values better than defining categories based on percentiles.

It should be noted that all tabulations and calculations by state are provided for state of death, and therefore may not represent either state of residence, state of employment, or state where the injury occurred.

Years of Potential Life Lost

The years of potential life lost (YPLL) before age 65 were calculated for the 10-year period. Although several methods are available for calculating YPLL,²² the method used in this report is based on years of potential employment. The YPLL for each fatal case was determined by subtracting the victim's age at the time of death from potential retirement age of 65 years. The YPLL rates for 1980 through 1989 were calculated as the sum of the YPLL for a given year divided by the sum of the workers for that year, then multiplied by 100,000. YPLL rates were calculated only for civilian workers.

RESULTS

For the 10-year period from 1980 through 1989, 63,589 workers died from injuries sustained at work: an average of 6,359 deaths per year. Of the total, 62,289 (98%) occupational injury deaths involved workers in the civilian labor force. The average annual occupational fatality rate for the U.S. civilian work force was 7.0 per 100,000 workers.

During the decade, the number of civilian fatal occupational injuries decreased, although not consistently, from a high of 7,405 in 1980 to 5,714 in 1989 (**Figure US-1**); this represents a 23% decrease in the number of occupational deaths over the 10-year period. The annual fatality rate per 100,000 civilian workers (**Figure US-1**) also decreased from the maximum in 1980 (8.9 per 100,000 workers) to a minimum in 1989 (5.6 per 100,000 workers)—a 37% decrease.

The civilian YPLL rates decreased from the maximum of 231.2 per 100,000 workers in 1980, to a minimum of 135.8 per 100,000 workers in 1989, representing a 41% decrease (**Figure US-2**).

Gender, Race and Age Groups

Although males accounted for 56% of the civilian workforce for the period,²¹ males accounted for 94% of the fatal occupational injuries reported in NTOF. The fatality rate for males (9.8 per 100,000 workers) was 12 times higher than for females (0.8 per 100,000 workers). Unintentional injuries, defined as all deaths with external cause of death codes E800 through E949, accounted for 85% of the male injury deaths and 53% of female injury deaths. In contrast, the proportion of injury deaths by homicide (E960-E969) and suicide (E950-E959) were higher for females, with homicide accounting for 41% and suicide for 4% of the female injury deaths, compared to homicide (10%) and suicide (3%) for males. However, as

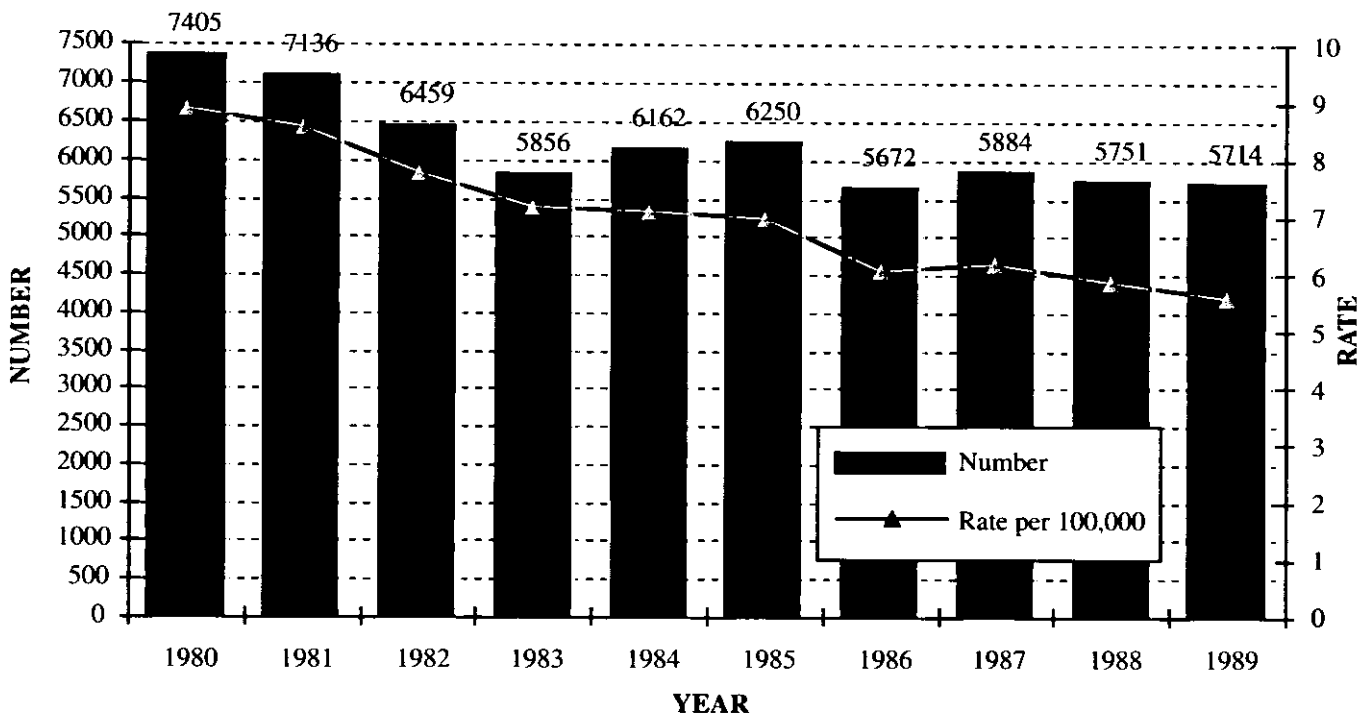


Figure US-1. Distribution and Rate of Traumatic Occupational Fatalities by Year, US, 1980-1989.

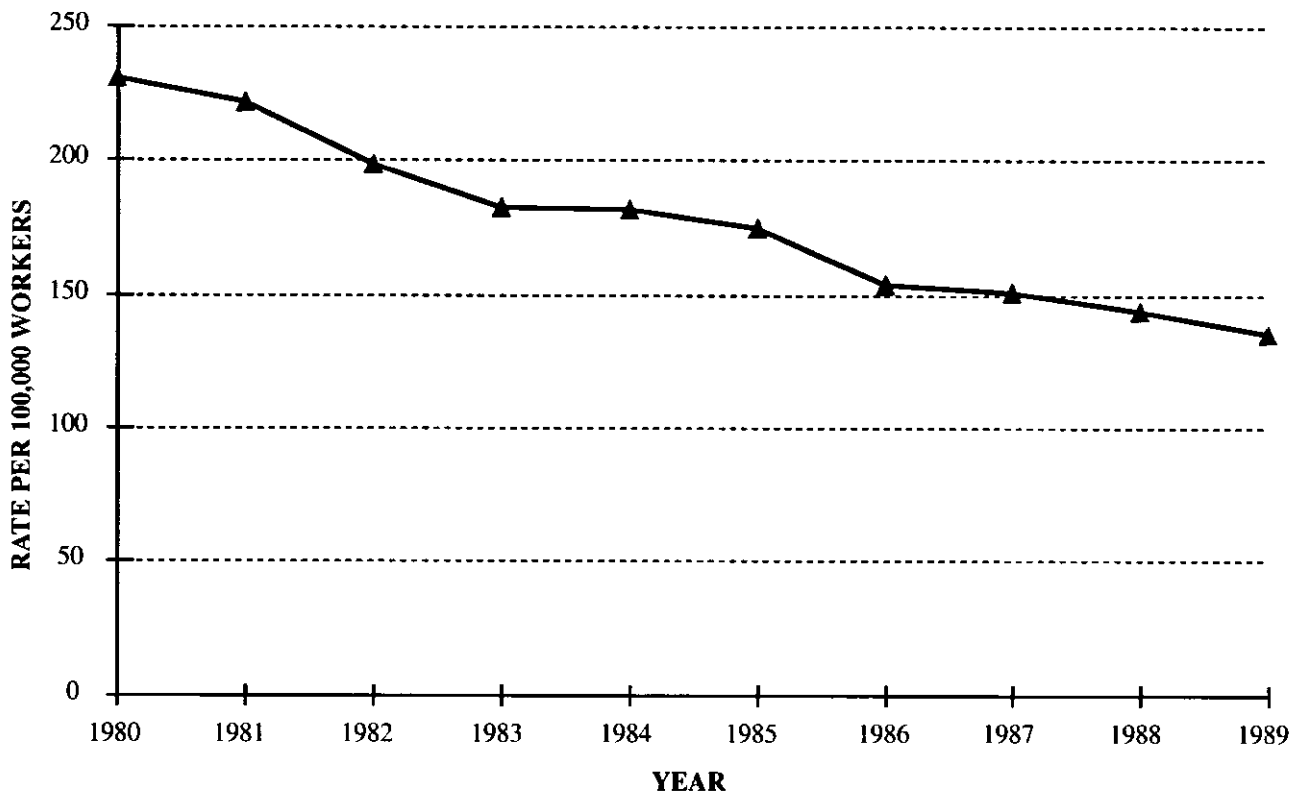


Figure US-2. Rate of Years of Potential Life Lost (YPLL) to Traumatic Occupational Fatalities by Year, US, 1980-1989.

can be seen in **Table US-1**, males had higher fatality rates for all three manners of death.

Table US-1. Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Manner of Death and Gender, US, 1980-1989.

Manner of Death	Male	Female
Unintentional	8.34	0.43
Homicide	1.02	0.33
Suicide	0.30	0.04

The distribution of occupational injury deaths by **race/ethnicity** indicates that 49,837 were White (80%), 6,739 were Black (11%), 3,830 were Hispanic (6%), 919 were Asian and Pacific Islanders (2%), 307 were American Indians/Alaska Natives (0.5%), and 654 of the cases were of other or unknown race/ethnicity (1%) (**Figure US-3**). Fatality rates were calculated

for the race categories, White (including Hispanics), Black, and Other, for which corresponding denominator data were available. The highest fatality rate by race was for Blacks (6.5 per 100,000 workers), followed by Whites (5.8 per 100,000 workers), and workers of Other races (4.9 per 100,000 workers).

Workers of Other races had the highest homicide rate (1.6 per 100,000 workers), followed by Blacks (1.4 per 100,000 workers), and Whites (0.6 per 100,000 workers). Blacks had the lowest suicide rate at 0.1 per 100,000 workers, which was nearly half the rate of the other two race categories.

Figure US-4 shows the average annual rate of occupational injury deaths by year and race category. The rate of occupational injury deaths per 100,000 workers generally decreased over the period of the study, with rates for Black workers consistently higher than the rates for Whites and workers of Other races.

The frequency and rate of occupational injury deaths by **age group** is presented in **Figure US-5**. The age group that accounted for the largest number of occupational fatalities was the 25-29 year old age group (14%), followed by the 30-34 year old age group (13%), and the 20-24 year old age group (12%). The age group 65 years and older had the highest fatality rate with 14.6 deaths per 100,000 workers, followed by the 60-64 year old age group (7.9 per 100,000 workers), and the 55-59 year old age group (7.3 per 100,000 workers). In comparison, the 16-19 year old age group had the lowest fatality rate with 3.9 per 100,000 workers.

As with the overall fatality rate, the rates for homicide and suicide increased with age. The highest homicide and suicide rates per 100,000 workers were reported for the age group 65 years and older (2.0 for homicide and 0.4 for suicide); followed by the 60-64 year old age group for homicide (1.0) and the 55-59 year old age group for suicide (0.3).

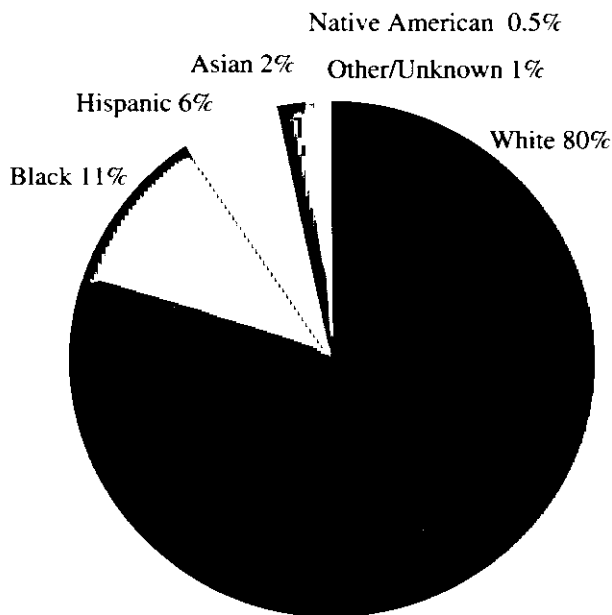


Figure US-3. Distribution of Traumatic Occupational Fatalities by Race/Ethnicity, US, 1980-1989.

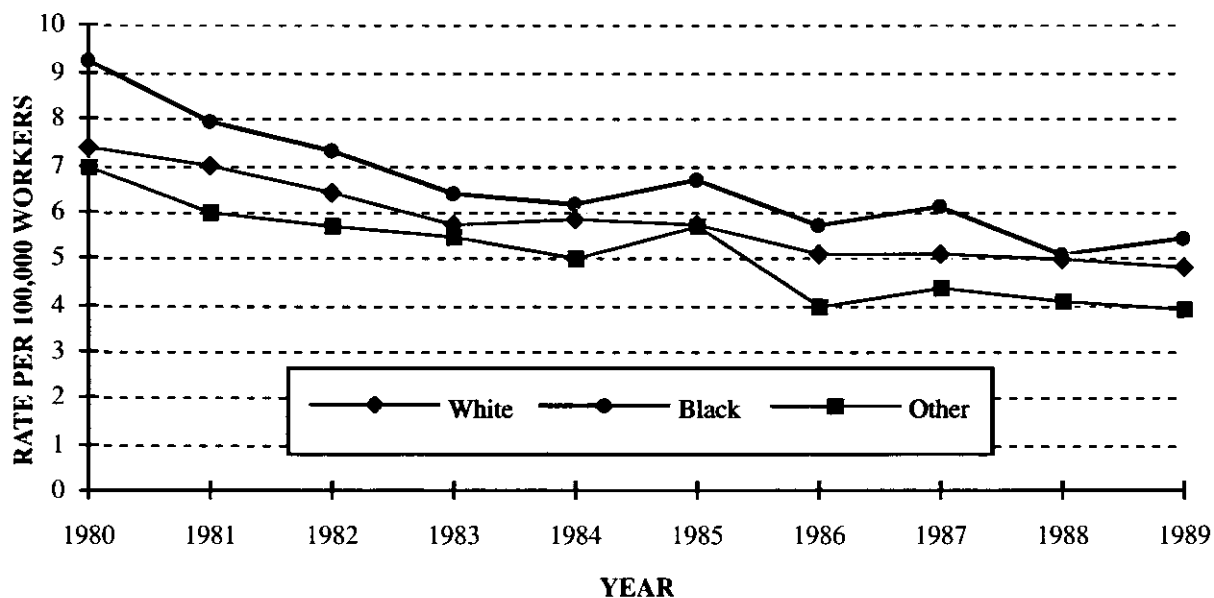


Figure US-4. Rate of Traumatic Occupational Fatalities by Race and Year, US, 1980-1989.

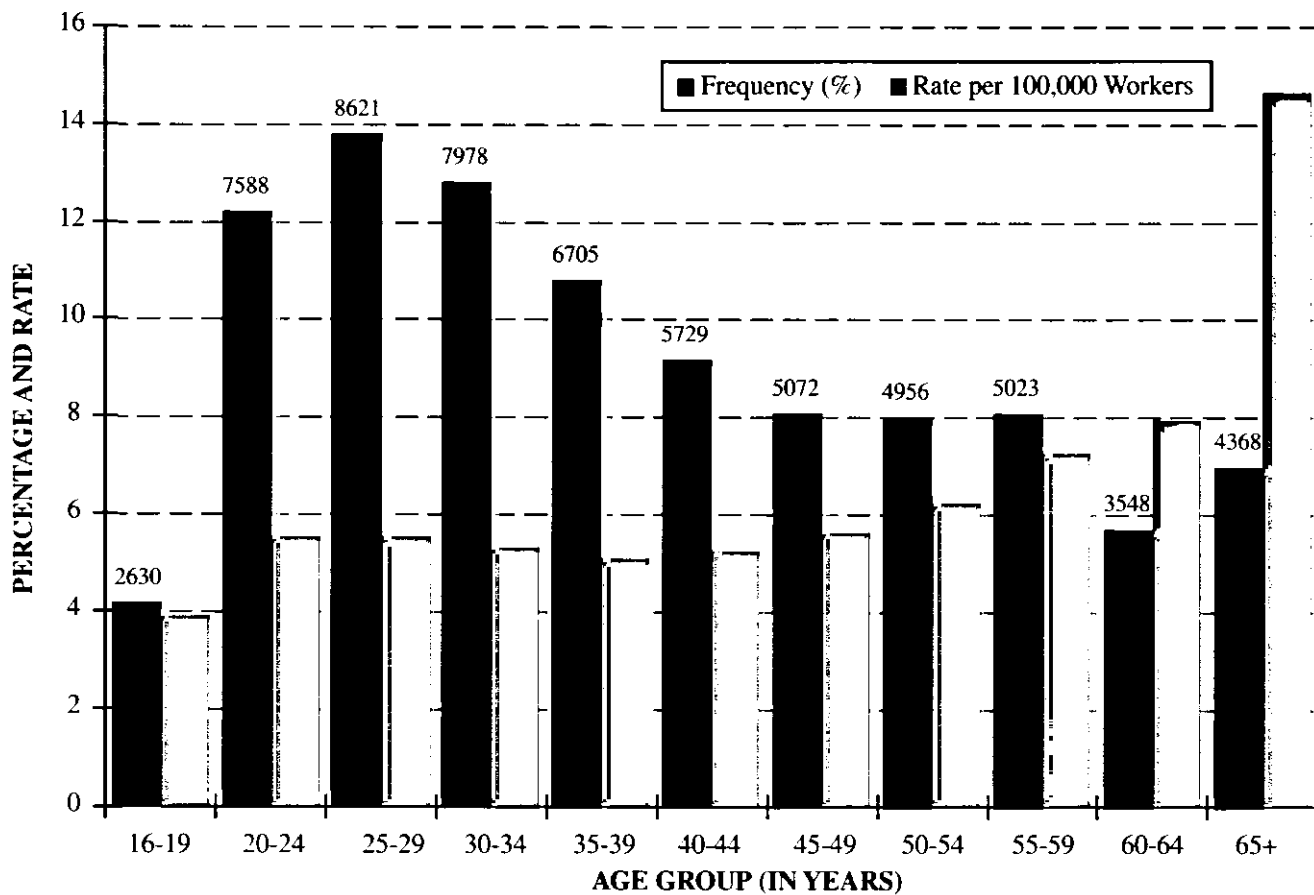


Figure US-5. Distribution and Average Annual Rate of Traumatic Occupational Fatalities by Age Group, US, 1980-1989.

Age group-specific rates for males and females are shown in **Figure US-6**. Males have consistently higher rates than females in every age group. The highest fatality rates occur in the age group 65 years and older for both males and females.

Figure US-7 shows the average annual rate of occupational injury death by year and age group. Rates were consistently highest for workers aged 65 years and older. The rates generally decreased over time, although the pattern is not as clear for workers in the age groups 55-64 years and 65 years and older.

Cause of Death

The leading causes of occupational injury death in the United States were motor vehicle crashes (23%), machine-related incidents (14%), homicides (12%), falls (10%), electrocutions (7%) and being struck by falling objects (7%).

To calculate the fatality rates by cause of death, the same denominator was used for all causes of death—the total employed civilian population; therefore, the relative magnitude of the fatality rates is the same as

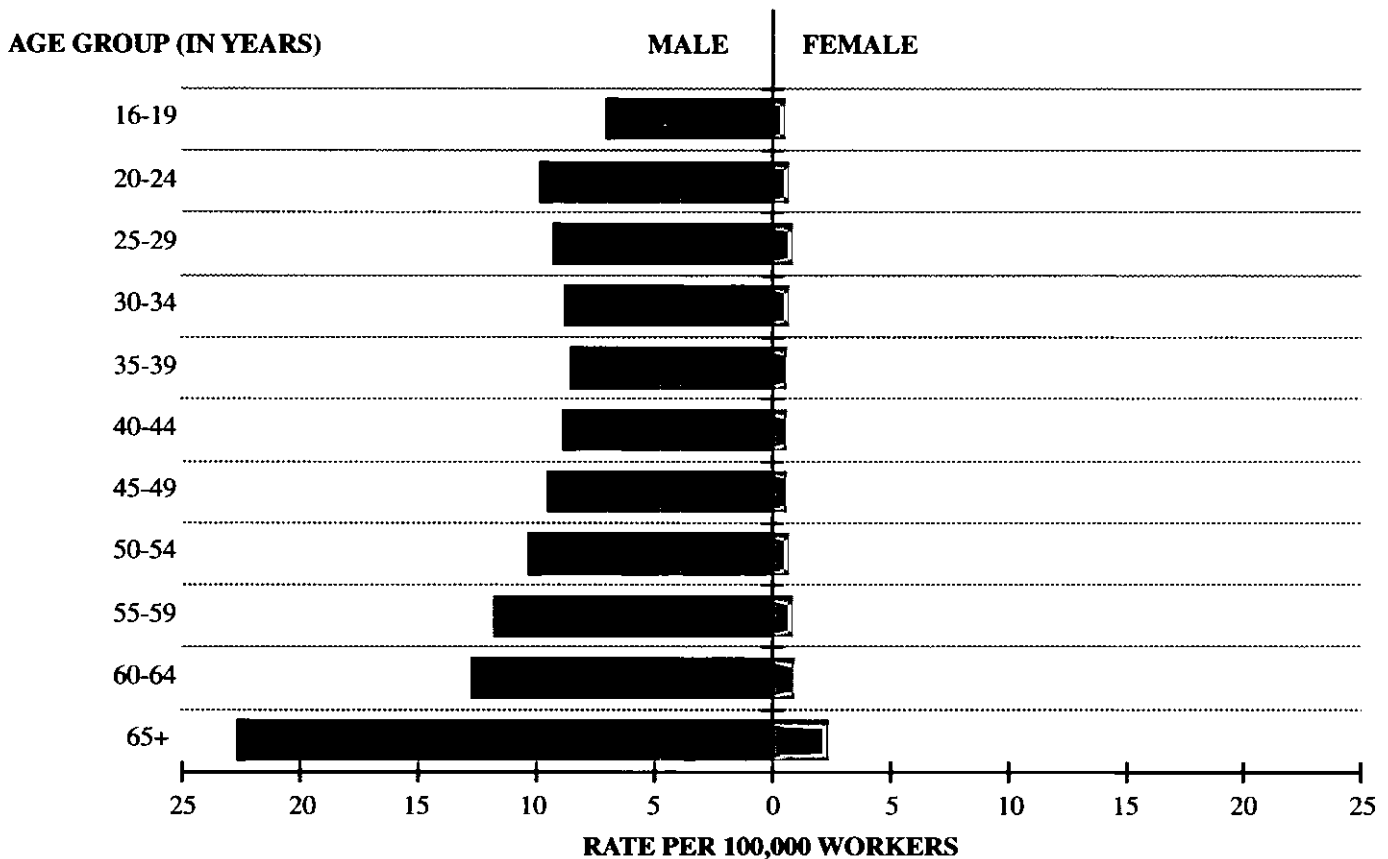


Figure US-6. Average Annual Rate of Traumatic Occupational Fatalities by Age Group and Gender, US, 1980-1989.

RATE PER 100,000 WORKERS

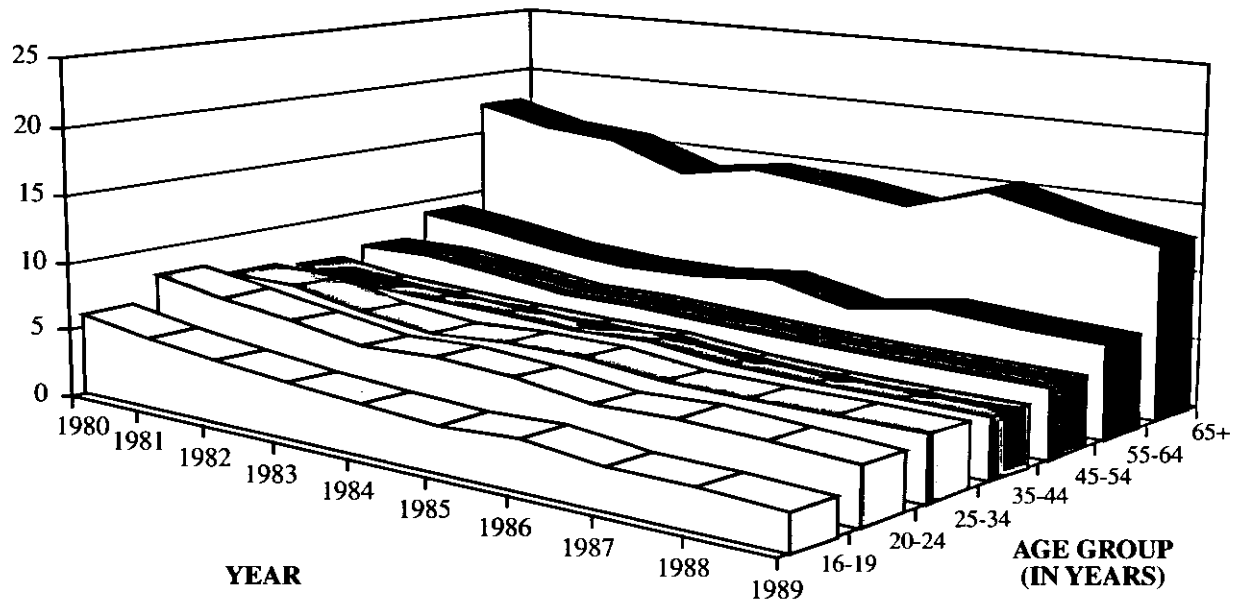


Figure US-7. Rate of Traumatic Occupational Fatalities by Age Group and Year, US, 1980-1989.

that for the distribution (percent of total) of fatalities by cause of death. **Table US-2** depicts the average annual rate of fatalities by cause of death and industry division. The fatality rates per 100,000 workers for the six leading causes of death were: motor vehicle-related incidents, 1.6; machine-related incidents, 1.0; homicides, 0.9; falls, 0.7; electrocutions, 0.5; and struck by falling object incidents, 0.5.

Fatality rates for each of the leading causes of work-related injury death were examined by state of death. **Figures US-8 through US-13** show the geographic distribution (by state) of rates for work-related motor vehicle deaths, machine-related deaths, homicides, fatal falls, electrocution fatalities, and deaths as a result of being struck by a falling object, respectively.

Industry Divisions

Figure US-14 shows both the proportion and rate of

work-related injury deaths by industry division. The industry divisions in the U.S. with the largest number of fatalities were construction (18%), transportation/communication/public utilities (18%), manufacturing (14%), and agriculture/forestry/fishing (12%). The mining industry had the highest average annual fatality rate per 100,000 workers at 31.9; this was followed by construction (25.6), transportation/communication/public utilities (23.3), and agriculture/forestry/fishing (18.3).

Motor vehicle-related incidents accounted for the highest fatality rate per 100,000 workers in three industry divisions (**Table US-2**): transportation/communication/public utilities (11.4), public administration (1.9), and wholesale trade (0.9). Homicide was one of the four leading causes of death for each of these industry divisions.

Machine-related incidents accounted for the highest rate per 100,000 workers in three industry divisions: mining (7.4), agriculture/forestry/fishing (6.3), and

Table US-2. Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Cause of Death and Industry Division,* US, 1980-1989.

CAUSE OF DEATH	TOTAL*	AG/FOR/ FISH	MINING	CONSTRUC- TION	MANUFAC- TURING	TRANS/ COMM/PU	WHOLESALE TRADE	RETAIL TRADE	FINANCE/ INSUR/RE	SERVICE	PUBLIC ADMIN
Motor Vehicle (E810-E829,E846-E849)	1.61	2.88	5.27	3.72	0.62	11.44	0.93	0.39	0.30	0.54	1.87
Machine (E919)	0.95	6.28	7.39	3.50	0.85	1.24	0.26	0.09	0.10	0.19	0.28
Homicide (E960-E969)†	0.85	0.57	0.48	0.65	0.27	1.47	0.19	1.66	0.39	0.61	1.54
Fall (E880-E888)	0.67	0.90	1.89	6.56	0.36	0.85	0.17	0.11	0.13	0.26	0.27
Electrocution (E925)	0.50	1.20	2.27	3.99	0.25	1.45	0.09	0.05	0.03	0.14	0.16
Struck by Falling Object (E916)	0.46	1.32	4.33	1.95	0.64	0.70	0.10	0.06	0.02	0.13	0.13
Air Transport (E840-E845)	0.29	0.44	0.66	0.18	0.08	2.00	0.07	0.03	0.10	0.15	1.06
Suicide (E950-E959)	0.22	0.41	0.15	0.36	0.12	0.29	0.09	0.18	0.15	0.23	0.28
Explosion (E923,E921)	0.19	0.15	2.46	0.53	0.25	0.36	0.09	0.04	0.008	0.09	0.09
Other	0.17	0.36	0.45	0.51	0.17	0.34	0.04	0.07	0.04	0.07	0.30
Flying Object/Caught In (E917-E918)	0.17	0.34	1.36	0.72	0.21	0.45	0.05	0.02	0.02	0.05	0.05
Nature/Environment (E900-E909,E928)	0.17	0.92	1.42	0.59	0.14	0.31	0.03	0.02	0.01	0.05	0.10
Suffocation (E911-E913)	0.14	0.34	0.83	1.12	0.08	0.16	0.08	0.01	0.01	0.03	0.05
Water Transport (E830-E838)	0.14	1.19	0.42	0.17	0.03	0.68	0.02	0.03	--	0.03	0.12
Fire (E890-E899)	0.13	0.21	0.89	0.33	0.15	0.17	0.05	0.05	0.01	0.07	0.19
Poisoning (E850-E858,E860-E869)	0.11	0.21	0.78	0.30	0.10	0.26	0.04	0.03	0.01	0.08	0.06
Drowning (E910)	0.10	0.47	0.55	0.29	0.04	0.26	0.02	0.01	0.01	0.07	0.11
Rail Transport (E800-E807)	0.05	0.03	0.13	0.05	0.02	0.73	0.01	0.002	--	0.004	--
Unknown/Under (E980-E989,BLANK)	0.05	0.11	0.17	0.10	0.02	0.14	0.01	0.03	0.01	0.02	0.07
TOTAL	6.98	18.33	31.91	25.61	4.39	23.30	2.36	2.89	1.37	2.81	6.73

*Totals include cases for which industry could not be classified (7%).

†Homicide data for New York, Oklahoma, Louisiana and Nebraska were not available for earlier years.

--Rates were not calculated for cells with <3 cases due to instability of rates based on small numbers.

Shading denotes the leading causes of death in each industry group.

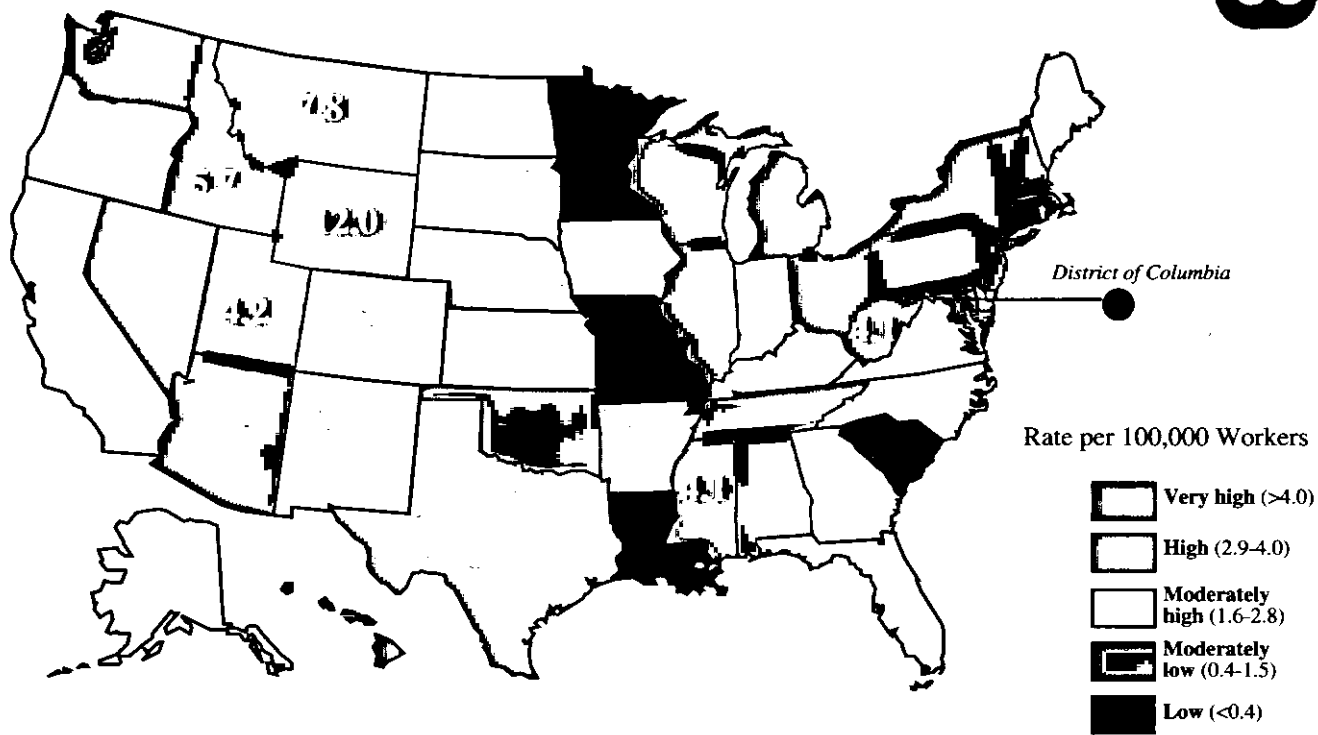


Figure US-8. Average Annual Rate of Motor-Vehicle-Related Traumatic Occupational Fatalities by State, US, 1980-1989.

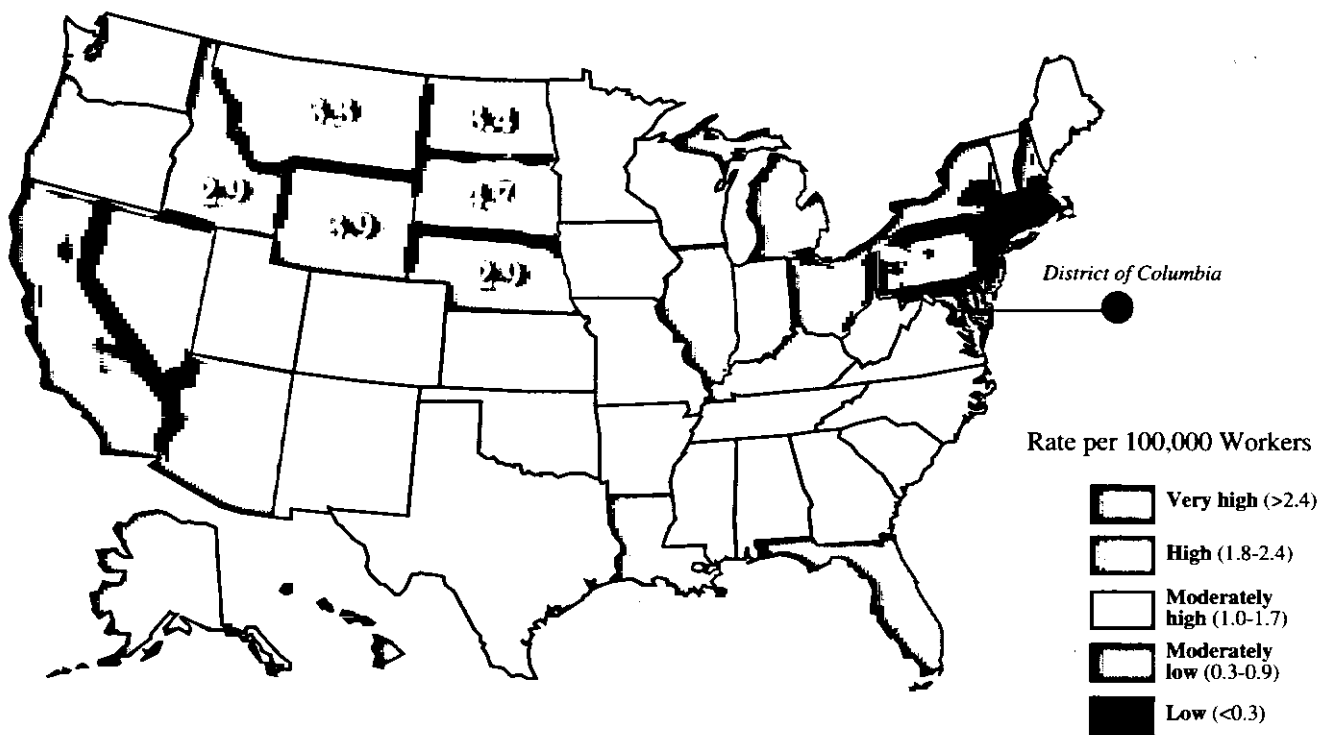


Figure US-9. Average Annual Rate of Machine-Related Traumatic Occupational Fatalities by State, US, 1980-1989.

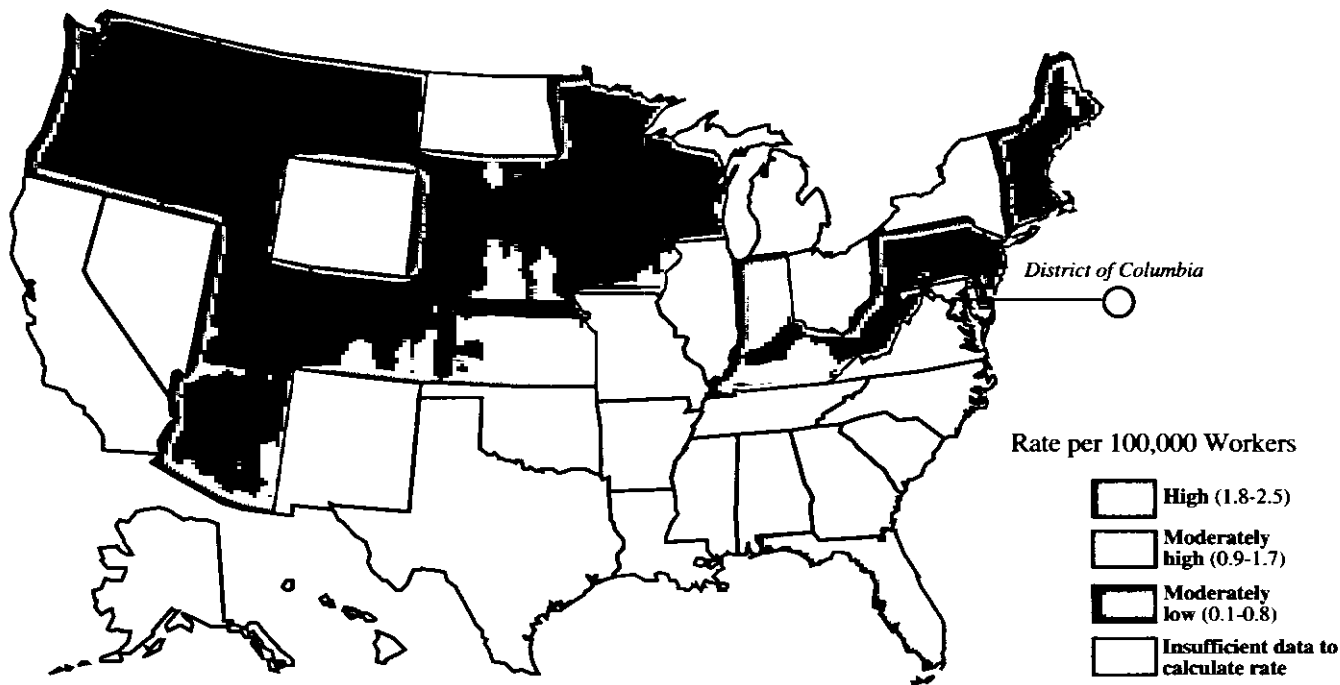


Figure US-10. Average Annual Rate of Traumatic Occupational Fatalities due to Homicide by State, US, 1980-1989.

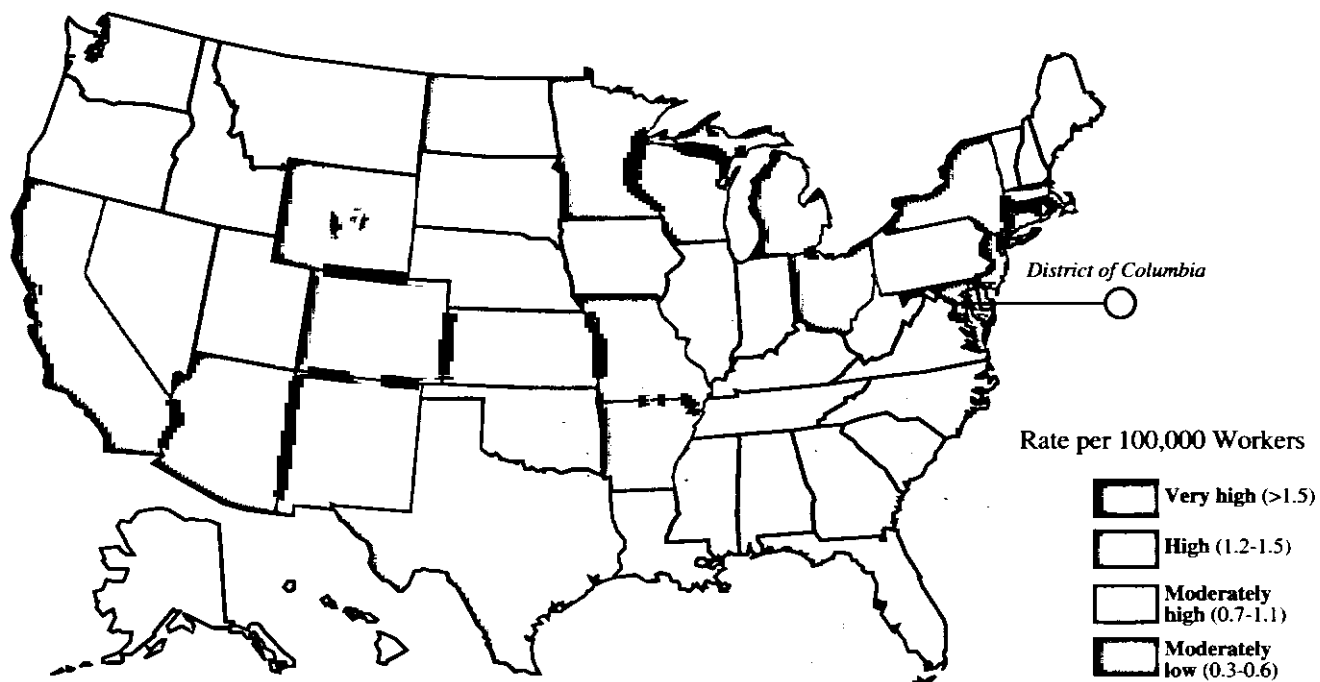


Figure US-11. Average Annual Rate of Fall-Related Traumatic Occupational Fatalities by State, US, 1980-1989.

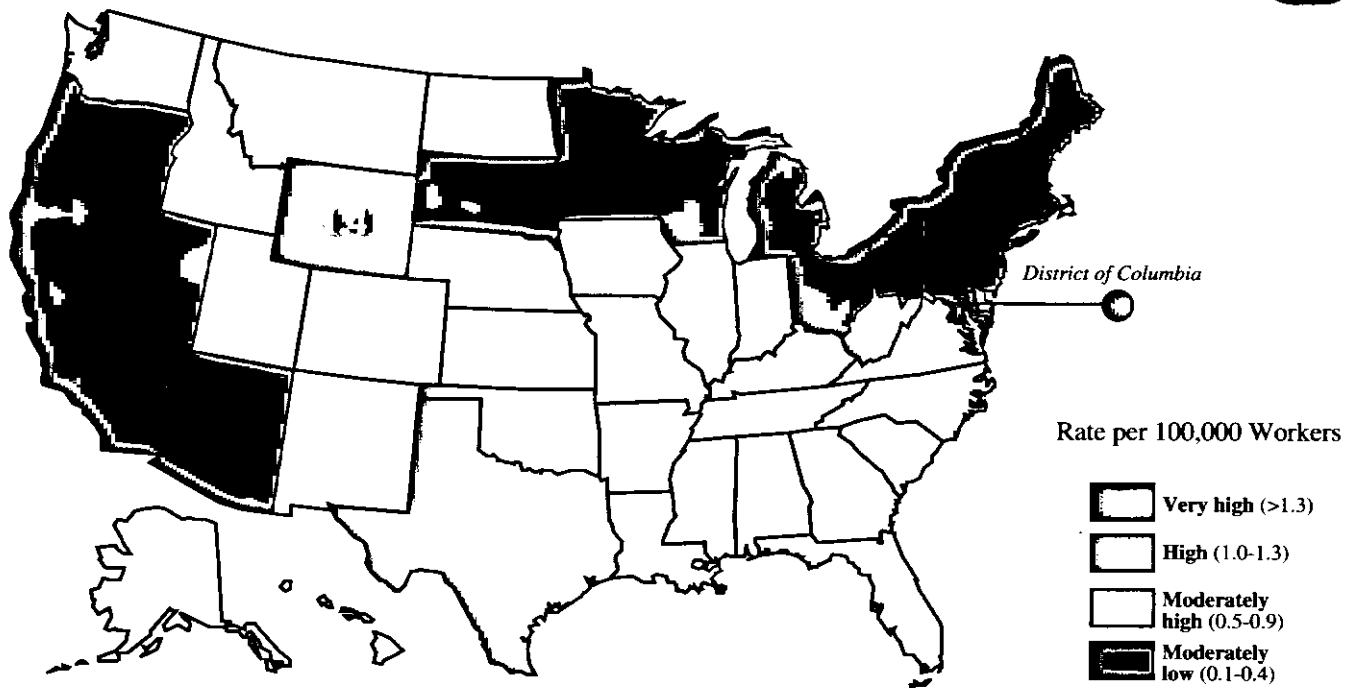


Figure US-12. Average Annual Rate of Traumatic Occupational Fatalities due to Electrocution by State, US, 1980-1989.

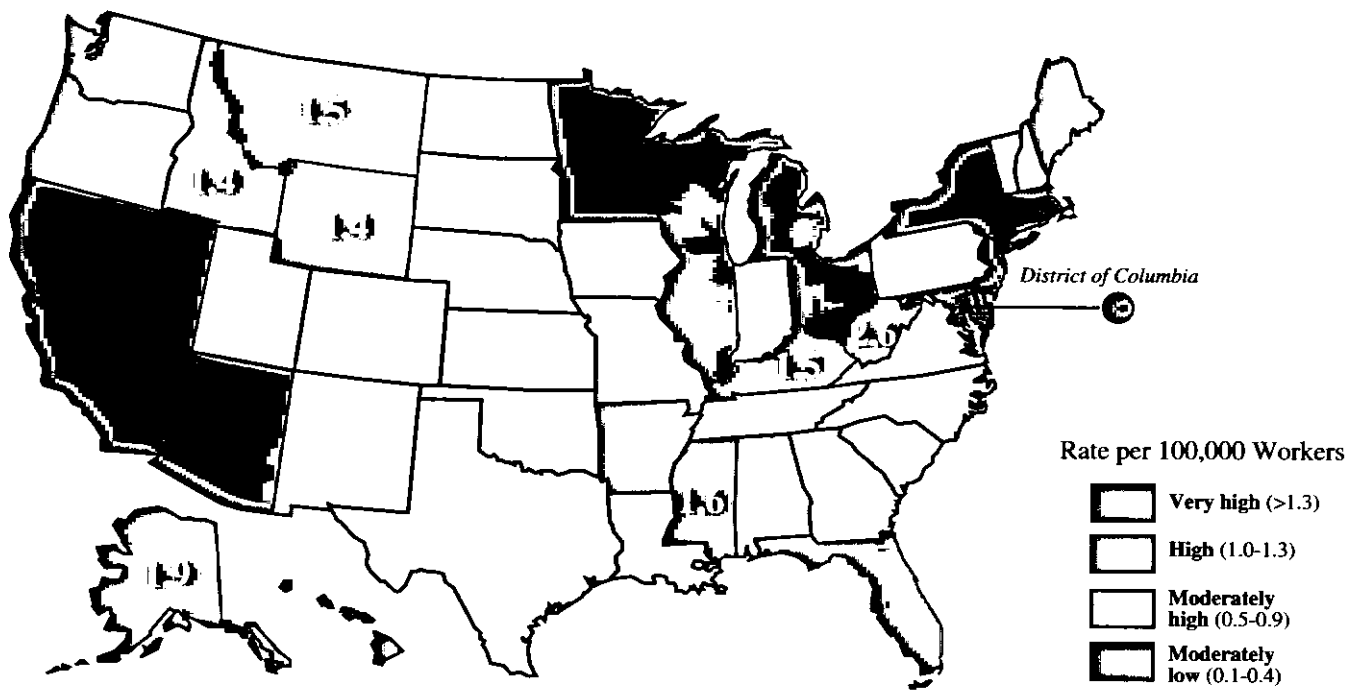


Figure US-13. Average Annual Rate of Traumatic Occupational Fatalities due to being Struck by Falling Object by State, US, 1980-1989.

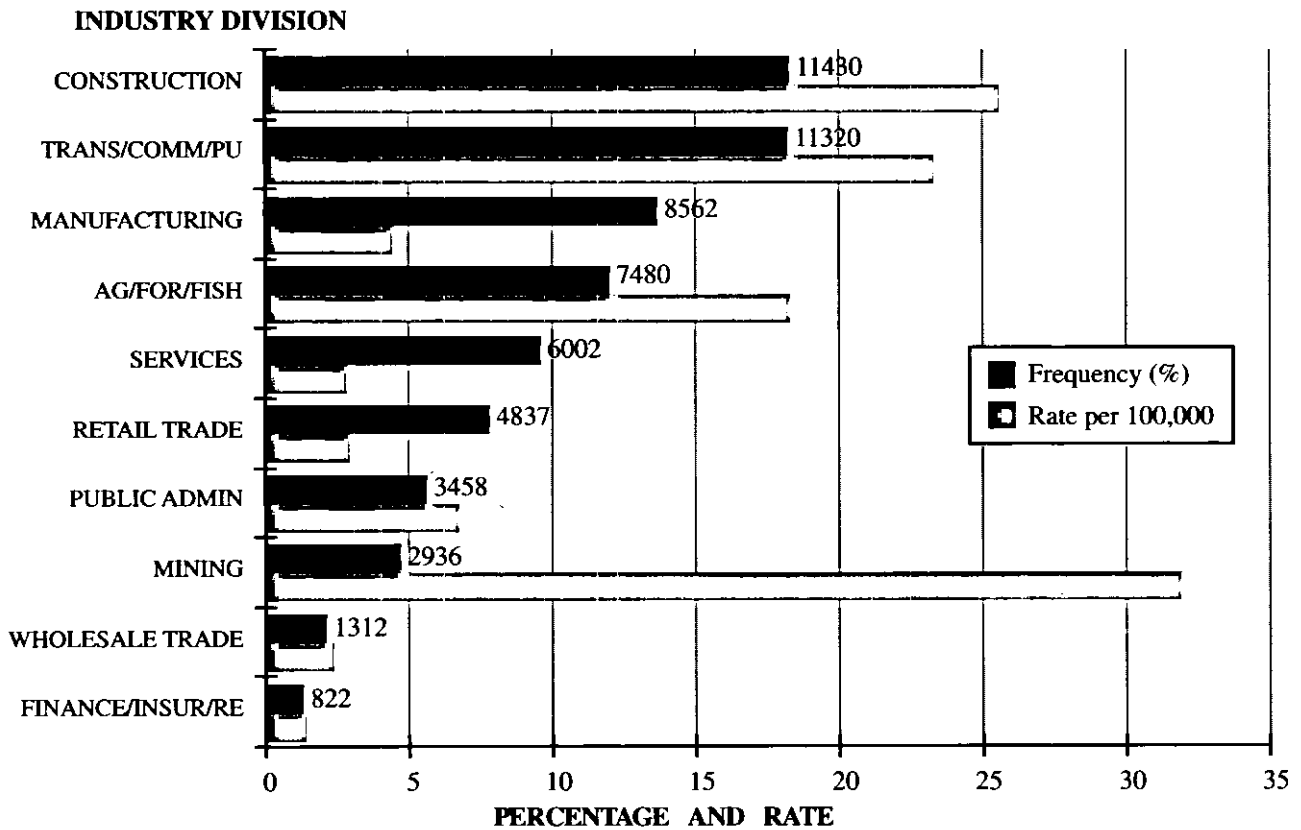


Figure US-14. Distribution and Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US, 1980-1989.

manufacturing (0.9). Motor vehicle-related incidents accounted for the second or third highest fatality rate in these industries.

Homicide and motor vehicle-related incidents, respectively, accounted for the two highest fatality rates per 100,000 workers in three industry divisions: retail trade (1.7 and 0.4), services (0.6 and 0.5), and finance/insurance/real estate (0.4 and 0.3). Fatality rates for suicide and fall incidents were the third and fourth highest rates in these industries.

Fall incidents accounted for the highest fatality rate in the construction industry (6.6). This fatality rate was followed by the fatality rates for electrocution, motor vehicle-related, and machine-related incidents.

Age group-specific rates by industry division are shown in Table US-3. Workers 65 years of age or

older had the highest rates of occupational injury death in every industry division except mining. In mining, workers 16 to 19 years, and 20 to 24 years and those 65 years and older, experienced high rates of work-related fatalities.

Fatality rates for each of the highest risk industry divisions are examined by state of death. Figures US-15 through US-18 show the geographic distribution of rates for occupational injury deaths in the four highest risk industry divisions: mining, construction, transportation/communication/public utilities, and agriculture/forestry/fishing.

The rate of occupational injury death for each of the industry divisions is shown by year in Figure US-19. The four highest risk industries—mining, construction, transportation/communication/public utilities, and agriculture/forestry/fishing—are notably

Table US-3. Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Age Group, US, 1980-1989.

INDUSTRY DIVISION	AGE GROUP (IN YEARS)						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
AG/FOR/FISH	8.5	18.9	17.9	17.4	21.5	26.5	52.3
MINING	72.9	50.3	32.1	26.0	26.8	26.5	60.8
CONSTRUCTION	14.4	16.6	15.3	15.5	17.5	22.6	38.5
MANUFACTURING	3.9	4.0	3.5	3.5	4.1	5.3	15.4
TRANS/COMM/PU	13.6	15.6	14.6	14.0	15.7	18.9	40.4
WHOLESALE TRADE	3.4	3.3	3.0	2.2	3.1	3.9	5.1
RETAIL TRADE	0.7	1.7	2.6	3.2	3.8	5.4	8.8
FINANCE/INSUR/RE	0.6	0.6	0.9	1.1	1.4	2.1	3.6
SERVICES	1.3	1.8	1.6	1.6	1.9	2.4	4.1
PUBLIC ADMIN	9.4	11.1	7.7	5.6	4.8	6.1	12.1

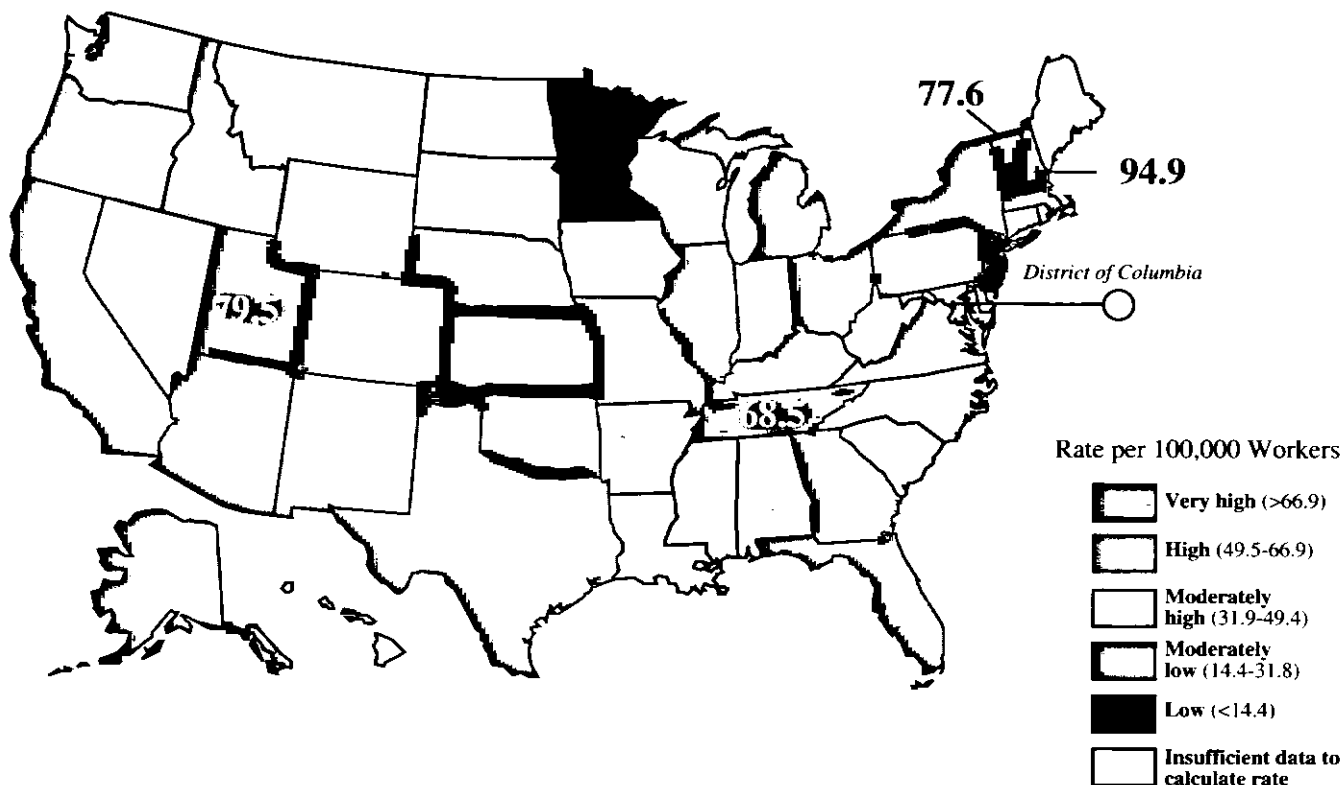


Figure US-15. Average Annual Rate of Traumatic Occupational Fatalities in the Mining Industry by State, US, 1980-1989.

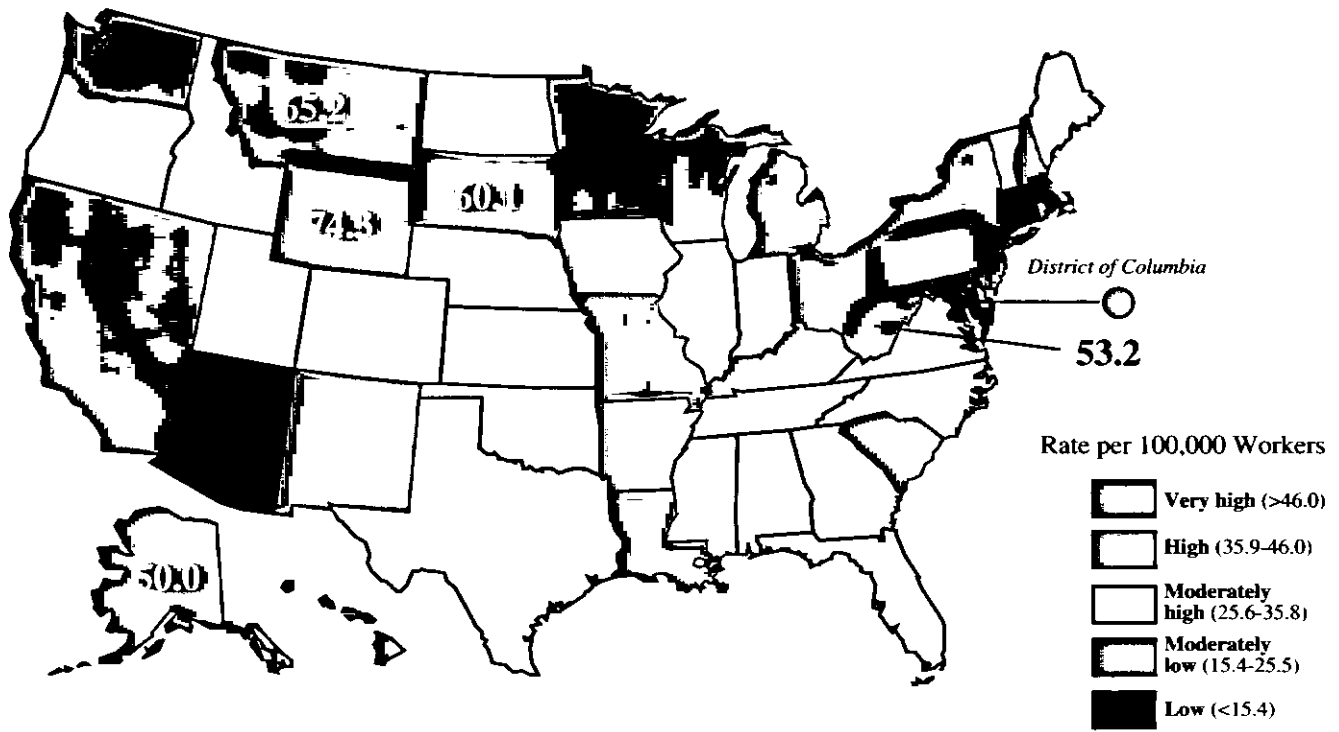


Figure US-16. Average Annual Rate of Traumatic Occupational Fatalities in the Construction Industry by State, US, 1980-1989.

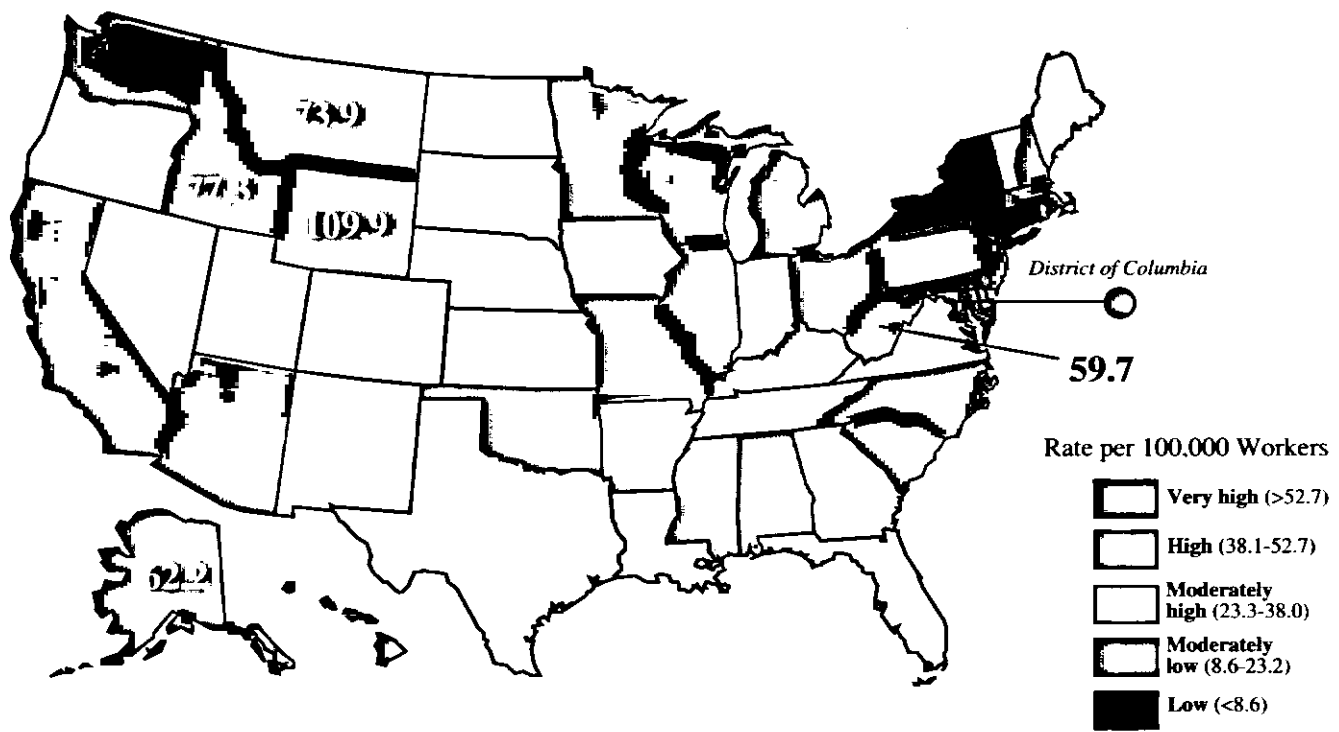


Figure US-17. Average Annual Rate of Traumatic Occupational Fatalities in the Transportation/Communications/Public Utilities Industry by State, US, 1980-1989.

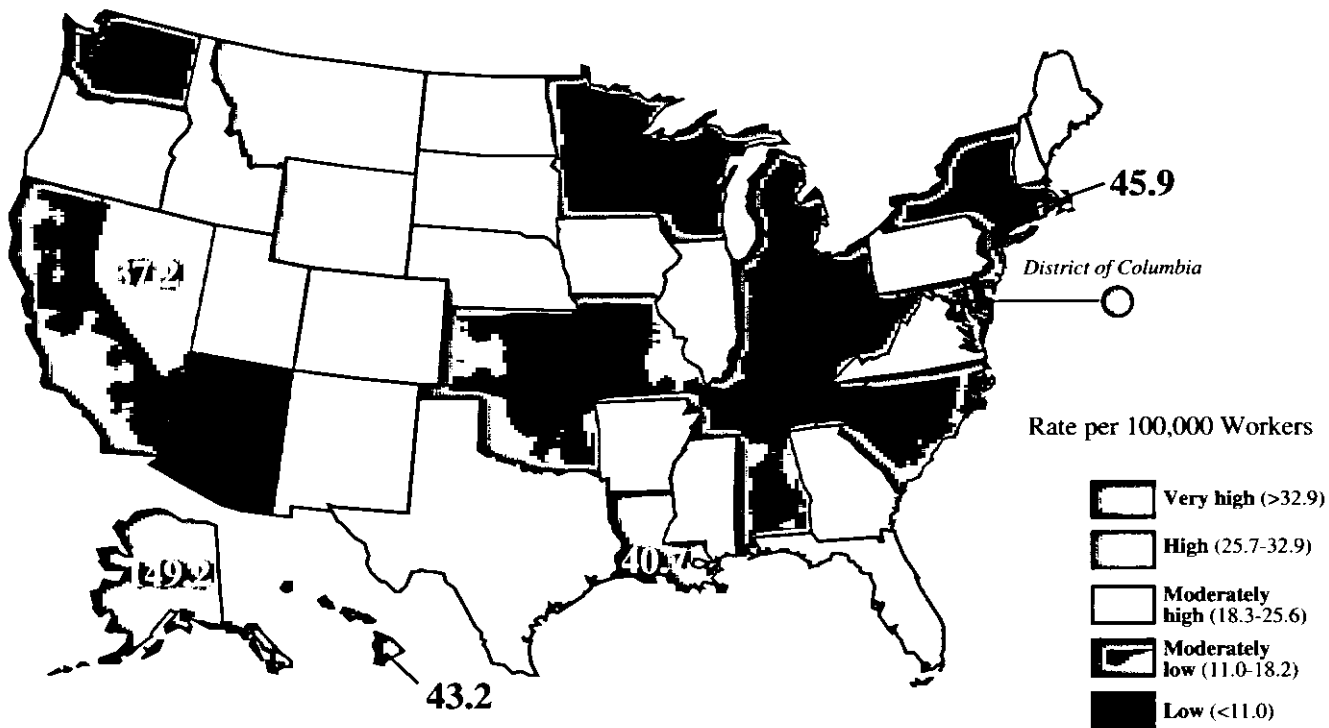


Figure US-18. Average Annual Rate of Traumatic Occupational Fatalities in the Agriculture/Forestry/Fishing Industry by State, US, 1980-1989.

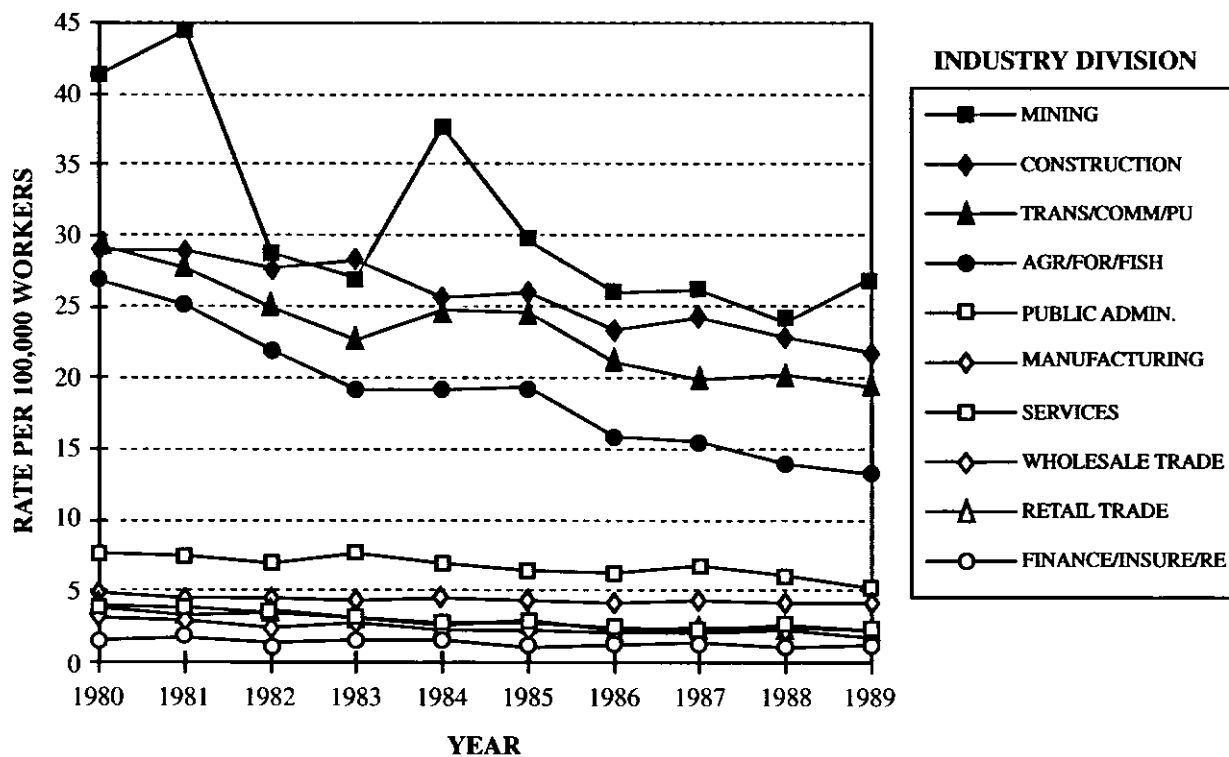


Figure US-19. Rate of Traumatic Occupational Fatalities by Industry Division and Year, US, 1980-1989.

and consistently higher than all other industry divisions. Note that most industries show a slight but relatively consistent decline in fatal injuries over the decade. The erratic pattern of fatalities in the mining industry is due in part to annual differences in the number of multiple-fatality events. In 1980, 1981, and 1984, there were substantially more incidents that resulted in three or more deaths than there were in other years during the decade. For example, a single mining disaster, which killed 27 workers, contributed to the high mining rate in 1984.

Occupation Divisions

Figure US-20 shows both the proportion and rate of work-related injury deaths by occupation division. The occupation divisions in the U.S. with the largest number of fatalities were precision production/craft/

repair (crafts) (19%), transportation/material movers (19%), laborers (13%), and farmers/foresters/fishers (12%). The occupation division of transportation/material movers had the highest average annual fatality rate per 100,000 workers with 25.6, followed by farmers/foresters/fishers (21.3), laborers (17.2), and precision production/craft/repair occupations (9.3).

Table US-4 presents the average annual rate of work-related injury deaths by occupation division and cause of death. Motor vehicle-related incidents accounted for the highest fatality rate per 100,000 workers in the occupation divisions of transportation/material movers (14.2), laborers (2.8), and professional specialties (0.4). Machine-related incidents accounted for the second highest fatality rate in transportation/material movers and laborers while

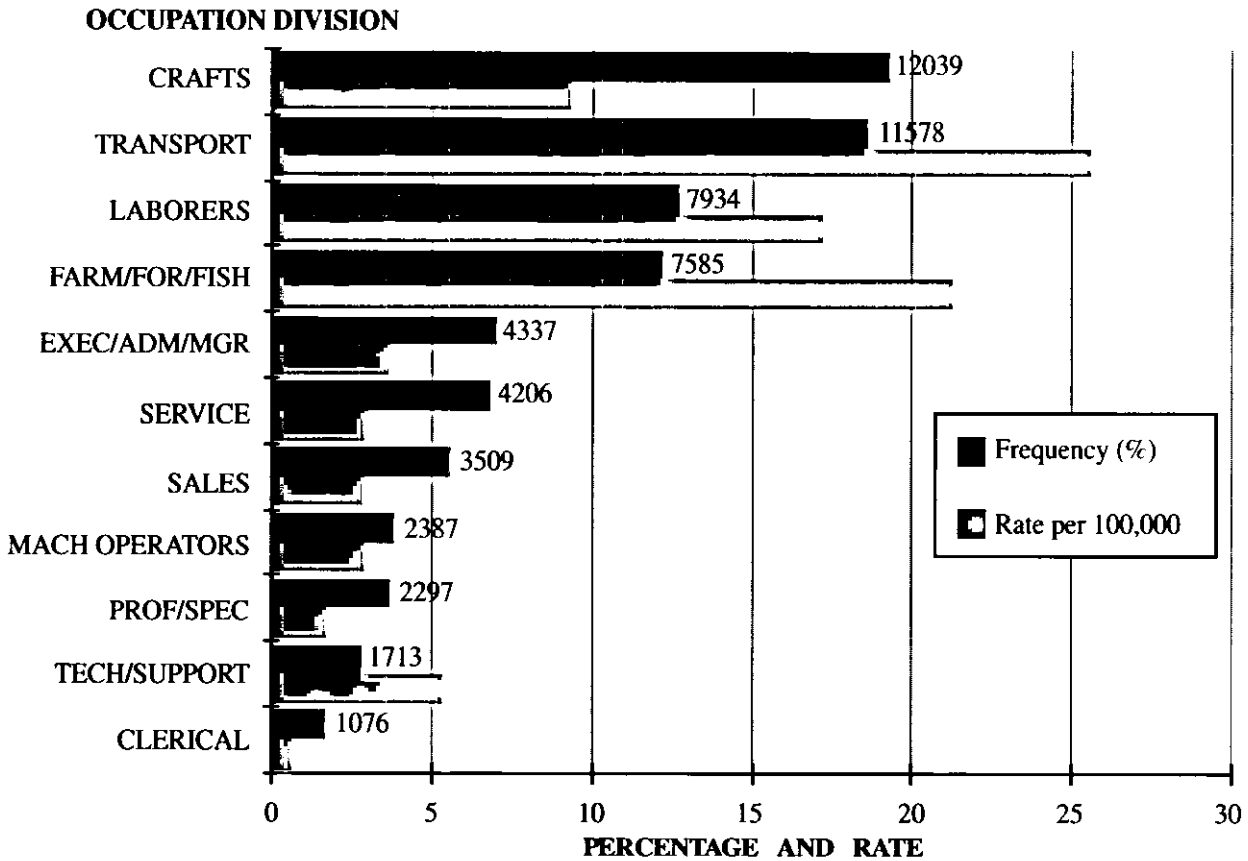


Figure US-20. Distribution and Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US, 1980-1989.

Table US-4. Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Cause of Death and Occupation Division, * US, 1980-1989.

CAUSE OF DEATH	EXEC/ADM/ MGR	PROF/SPEC	TECH/ SUPPORT	SALES	CLERICAL	SERVICE	FARM/FOR/ FISH	CRAFTS	MACH OPERATORS	TRANSPORT	LABORERS
Motor Vehicle (E810-E829, E846-E849)	0.63	0.36	0.59	0.59	0.18	0.60	2.71	1.08	0.27	14.16	2.82
Machine (E919)	0.33	0.10	0.19	0.10	0.04	0.14	7.18	1.18	0.56	2.92	2.72
Homicide (E960-E969)†	0.90	0.26	0.12	1.36	0.18	0.97	0.49	0.42	0.20	1.50	1.48
Fall (E880-E888)	0.32	0.14	0.19	0.10	0.05	0.26	1.00	1.98	0.35	0.66	2.16
Electrocution (E925)	0.18	0.07	0.20	0.04	0.01	0.09	1.19	1.53	0.22	0.84	1.54
Struck by Falling Object (E916)	0.17	0.04	0.07	0.05	0.01	0.06	3.19	0.79	0.24	0.97	1.57
Air Transport (E840-E845)	0.23	0.24	3.26	0.09	0.02	0.09	0.17	0.13	0.03	0.16	0.10
Suicide (E950-E959)	0.24	0.13	0.10	0.23	0.04	0.16	0.42	0.21	0.06	0.27	0.25
Explosion (E923, E921)	0.10	0.04	0.14	0.03	0.01	0.05	0.18	0.40	0.27	0.44	0.54
Other	0.08	0.04	0.08	0.05	0.02	0.12	0.43	0.24	0.13	0.41	0.45
Flying Object/Caught In (E917-E918)	0.06	0.02	0.02	0.02	0.01	0.04	0.65	0.29	0.14	0.49	0.66
Nature/Environment (E900-E909, E928)	0.05	0.04	0.05	0.03	0.02	0.04	1.10	0.22	0.09	0.41	0.52
Suffocation (E911-E913)	0.06	0.02	0.04	0.02	0.003	0.03	0.36	0.17	0.07	0.26	0.88
Water Transport (E830-E838)	0.02	0.05	0.07	0.01	0.002	0.03	1.16	0.07	0.04	0.78	0.25
Fire (E890-E899)	0.07	0.02	0.04	0.04	0.01	0.11	0.21	0.21	0.12	0.23	0.34
Poisoning (E850-E858, E860-E869)	0.06	0.04	0.08	0.03	0.01	0.05	0.23	0.20	0.07	0.25	0.30
Drowning (E910)	0.03	0.05	0.05	0.01	0.01	0.06	0.48	0.09	0.04	0.20	0.37
Rail Transport (E800-E807)	0.02	0.03	0.01	--	0.003	0.02	0.02	0.04	0.02	0.46	0.16
Unknown/Undet (E980-E989, BLANK)	0.03	0.01	0.03	0.02	0.01	0.03	0.11	0.05	0.01	0.15	0.12
TOTAL	3.59	1.70	5.33	2.81	0.62	2.94	21.28	9.30	2.94	25.58	17.22

*Unclassified occupations were not included in calculating overall rates.

†Homicide data for New York, Oklahoma, Louisiana, and Nebraska were not available for earlier years.

--Rates were not calculated for cells with <3 cases due to instability of rates based on small numbers.

Shading denotes the leading causes of death in each occupation group.

the second highest fatality rate for professional specialties was homicide.

Machine-related incidents were the leading cause of work-related death in the farmers/foresters/fishers occupation division, with a rate of 7.2 per 100,000 workers, followed by struck by falling object incidents and motor vehicle incidents. Machine-related incidents were also the leading cause of death for the machine operators division with a rate of 0.6 per 100,000 workers, followed by falls, motor vehicle incidents, and explosions.

Homicide incidents accounted for the highest fatality rate per 100,000 workers in the occupation divisions sales (1.4), service (1.0), and executives/administrators/managers (0.9). Motor vehicle incidents accounted for the second highest fatality rate in these occupation divisions, and fall incidents accounted for the third or fourth highest fatality rate. Homicides

and motor vehicle incidents each accounted for a rate of 0.2 per 100,000 workers in the clerical workers division.

In the occupation division precision production/craft/repair, fall incidents accounted for the highest fatality rate (2.0); this was followed by electrocutions, machine-related, and motor vehicle-related incidents. In the occupation division technicians/related support, air transport incidents accounted for the highest fatality rate (3.3), followed by motor vehicle-related incidents, electrocutions, machine-related incidents, and falls.

Age group-specific rates by occupation division for 1983 through 1989 are shown in **Table US-5**. Workers 65 years of age or older had the highest rates of occupational injury death in every occupation division. Note the extraordinary rates for workers 65 years of age and older working as farmers/foresters/

Table US-5. Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division and Age Group, US, 1983-1989.

OCCUPATION DIVISION	AGE GROUP (IN YEARS)						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
EXEC/ADM/MGR	4.0	2.6	2.6	2.5	3.5	5.3	10.0
PROF/SPEC	2.4	1.7	1.3	1.2	1.5	2.4	5.5
TECH/SUPPORT	3.7	3.6	4.2	6.0	5.9	6.5	10.3
SALES	0.5	1.6	2.1	2.5	3.0	4.1	7.6
CLERICAL	0.3	0.5	0.6	0.5	0.5	0.9	1.8
SERVICE	0.4	2.1	3.3	3.4	3.0	3.4	4.3
FARM/FOR/FISH	5.8	16.2	17.9	19.6	22.1	25.4	49.1
CRAFTS	6.1	8.1	7.7	7.9	8.2	10.9	22.7
MACH OPERATORS	2.1	2.5	2.5	2.5	2.7	3.4	7.8
TRANSPORT	11.9	19.5	23.4	24.1	25.7	30.3	40.6
LABORERS	6.2	13.7	18.5	19.6	21.4	24.0	28.4

fishers, transportation/material movers, laborers, and in precision production/craft/repair occupations.

The rate of occupational injury deaths for each occupation division by year is shown in **Figure US-21**. While more dispersed than the distribution of fatality rates by industry divisions, three occupational groups—transportation/material movers, farmers/foresters/fishers, and laborers—have consistently higher rates than other occupation divisions.

Distribution and Fatality Rates by State

The greatest number of fatal occupational injuries occurred in Texas (6,664), California (6,623), Florida (3,681), Illinois (2,853) and Pennsylvania (2,564) (**Table US-6**). The lowest number of work-related deaths occurred in Rhode Island (125), Vermont

(135), Delaware (146), New Hampshire (181) and the District of Columbia (191).

The states with the highest occupational injury fatality rates for the private sector were Alaska (34.8), Wyoming (29.0), Montana (20.9), Idaho (16.7), and West Virginia (15.7) (**Figure US-22**). The lowest occupational injury fatality rates were reported in Connecticut (1.8), Massachusetts (2.3), and New York (2.6).

The average annual years of potential life lost (YPLL) and YPLL rate for each state are presented in **Table US-7**. The overall YPLL rate for the U.S. civilian workforce was 175.6 years per 100,000 workers. Alaska had the highest private sector YPLL rate (1013.8 years per 100,000 workers) and Connecticut had the lowest (43.1 years per 100,000 workers).

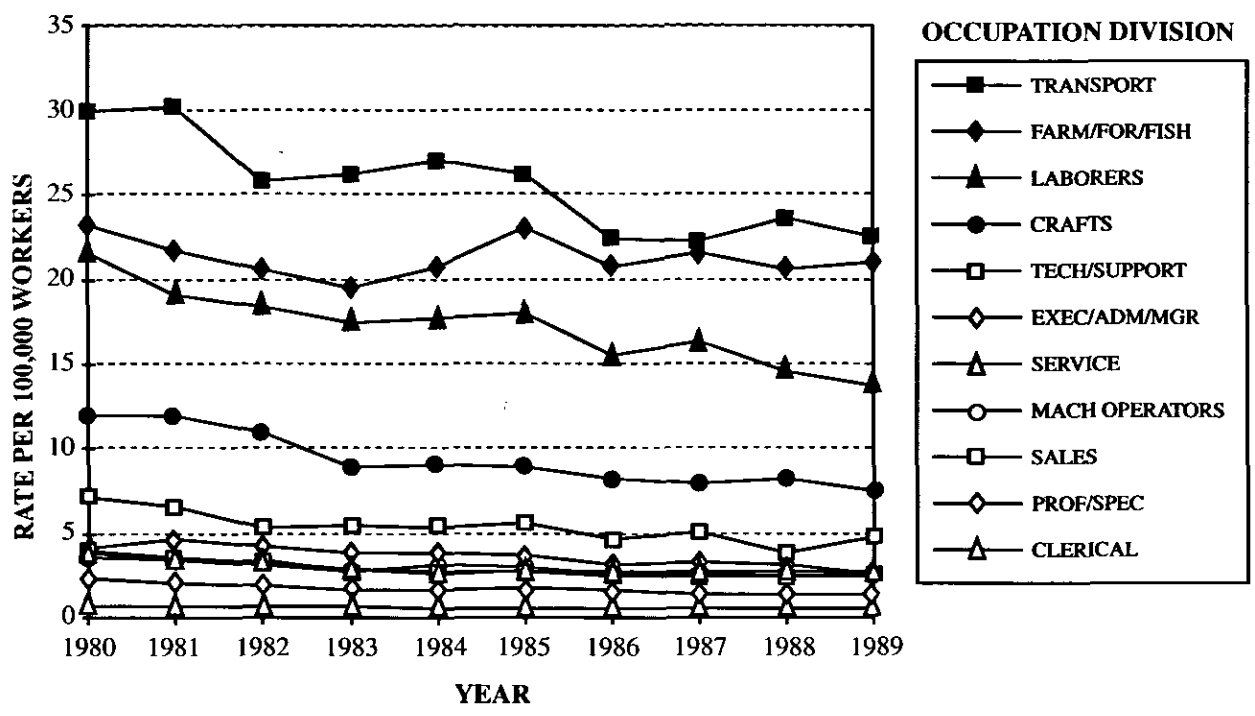


Figure US-21. Rate of Traumatic Occupational Fatalities by Occupation Division and Year, US, 1980-1989.

Table US-6. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by State of Death, US, 1980-1989.

STATE	DEATHS	RATE
ALABAMA	1,143	9.2
ALASKA	561	34.8
ARIZONA	398	3.7
ARKANSAS	874	12.0
CALIFORNIA	6,623	6.3
COLORADO	1,110	8.9
CONNECTICUT	255	1.8
DELAWARE	146	5.6
DIST COLUMBIA	191	4.5
FLORIDA	3,681	9.1
GEORGIA	2,176	9.6
HAWAII	235	6.1
IDAHO	520	16.7
ILLINOIS	2,853	6.3
INDIANA	1,509	7.4
IOWA	962	9.0
KANSAS	784	8.6
KENTUCKY	1,392	11.6
LOUISIANA	1,438	11.0
MAINE	302	7.6
MARYLAND	862	5.3
MASSACHUSETTS	645	2.3
MICHIGAN	1,627	5.1
MINNESOTA	719	4.1
MISSISSIPPI	1,064	14.5
MISSOURI	1,052	5.3

STATE	DEATHS	RATE
MONTANA	525	20.9
NEBRASKA	653	10.9
NEVADA	504	10.8
NEW HAMPSHIRE	181	4.4
NEW JERSEY	1,009	3.3
NEW MEXICO	498	11.8
NEW YORK	1,783	2.6
NORTH CAROLINA	1,749	7.0
NORTH DAKOTA	304	13.5
OHIO	1,841	4.6
OKLAHOMA	894	8.6
OREGON	1,050	10.9
PENNSYLVANIA	2,564	5.9
RHODE ISLAND	125	3.3
SOUTH CAROLINA	784	6.8
SOUTH DAKOTA	331	14.2
TENNESSEE	1,392	7.8
TEXAS	6,664	11.3
UTAH	647	12.3
VERMONT	135	6.7
VIRGINIA	1,942	9.4
WASHINGTON	1,212	7.5
WEST VIRGINIA	770	15.7
WISCONSIN	1,156	6.2
WYOMING	454	29.0
TOTAL (CIVILIAN)	62,289	7.0

DISCUSSION

NTOF data for the decade, 1980 through 1989, provide valuable information for identifying specific worker groups at high-risk of traumatic occupational fatalities. Prevention efforts and resources should be targeted on specific, high-risk groups based on gender, age, race, industry, or occupation. Information on the leading causes of traumatic occupational fatalities and on the geographic and demographic dis-

tribution of these deaths facilitates the identification of risk factors for workplace injury deaths. Trends of fatal injuries over time, particularly within employment sectors and states, are useful in setting research and prevention priorities, for generating hypotheses for further research, and for monitoring progress. The rate of occupational injury deaths as well as the absolute number of events are important in the interpretation of these surveillance data; the rates depict the risk faced by workers and the numbers indicate

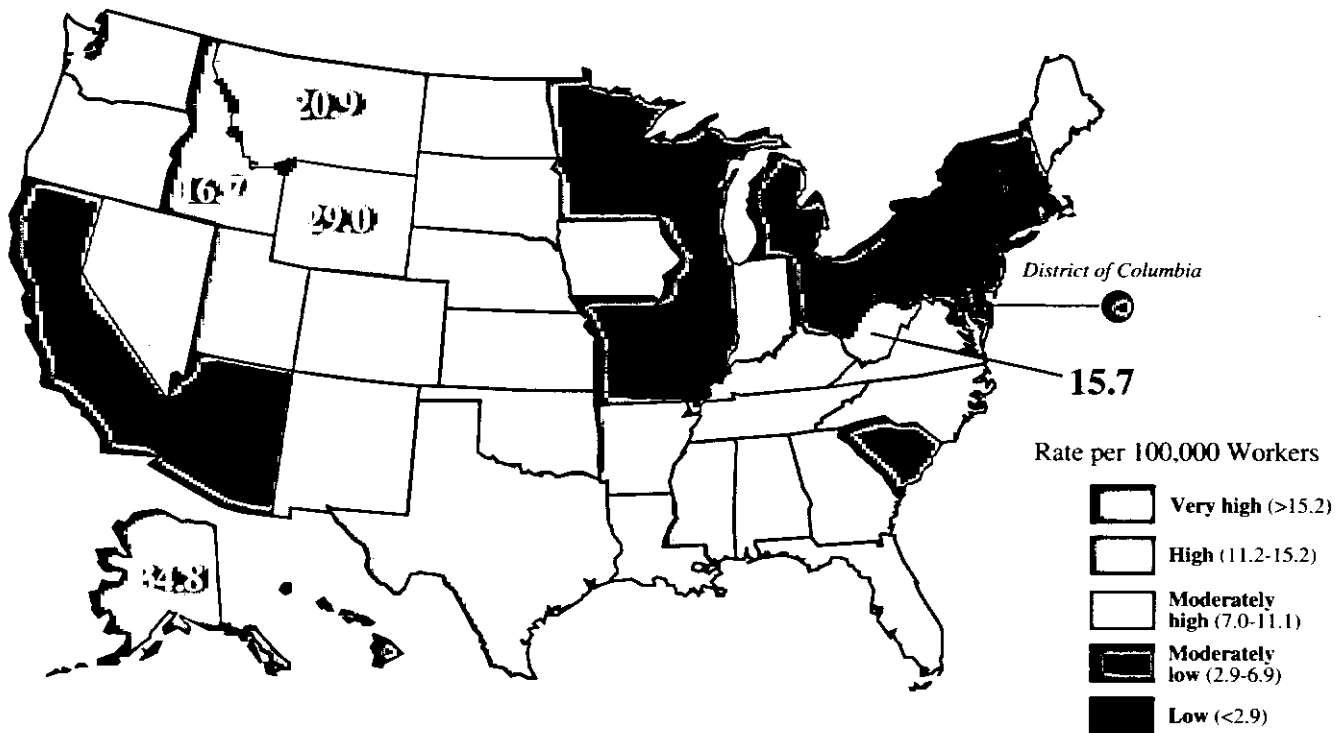


Figure US-22. Average Annual Rate of Traumatic Occupational Fatalities by State, US, 1980-1989.

the magnitude of the problem or the number of lives that would have been saved if these injuries had been prevented.

Consistent with previous findings,^{2,6} NTOF results for 1980 through 1989 indicate that males are at much higher risk than females of traumatic occupational fatality. The rates for homicide are three times as high for males compared to females, but females are more likely to be killed as the result of a homicide in the workplace than from any other cause. Rates for Black workers are consistently higher than rates for Whites and workers of Other races throughout the 10-year period. Interpreting fatal injury risk by race requires quantifying risk by racial/ethnic groups within specific industries and occupations. These efforts would be enhanced by improved employment data for racial/ethnic groups.

As previous studies have reported,^{2,6} workers aged 65 years and older have higher rates of occupational injury death than workers of other ages. The current analysis further examines age group-specific rates by gender, by industry division, by occupation division, and over time. Workers aged 65 years and older experience higher rates of traumatic occupational fatalities than other age groups for both males and females, for each of the 11 occupation divisions and in 9 of the 10 industry divisions. This disparity by age may be due, at least in part, to decreased ability to survive injury. Other factors, including reporting variations in employment data, may also play a role in the calculation of rates. Older workers are more likely to be working part time—52% of workers 65 years and older versus 17% of workers 25-64 years old are part time employees.²¹ The use of employment data

Table US-7. Distribution and Average Annual Rate (per 100,000 workers) of Years of Potential Life Lost (YPLL) due to Traumatic Occupational Fatalities by State of Death, US, 1980-1989.

STATE	YPLL	RATE
ALABAMA	27735	222.9
ALASKA	16473	1013.8
ARIZONA	10736	98.6
ARKANSAS	22046	302.5
CALIFORNIA	173089	162.6
COLORADO	30753	245.6
CONNECTICUT	6294	43.1
DELAWARE	3531	136.9
DIST COLUMBIA	4790	114.3
FLORIDA	92330	227.8
GEORGIA	54052	235.5
HAWAII	5751	152.0
IDAHO	13181	423.1
ILLINOIS	65964	145.5
INDIANA	36787	181.3
IOWA	21250	197.9
KANSAS	19483	213.5
KENTUCKY	35114	292.8
LOUISIANA	42724	326.2
MAINE	8106	202.1
MARYLAND	22113	135.1
MASSACHUSETTS	16277	59.1
MICHIGAN	40563	125.8
MINNESOTA	16296	93.7
MISSISSIPPI	25574	343.8
MISSOURI	22127	110.6

STATE	YPLL	RATE
MONTANA	12621	499.6
NEBRASKA	14616	244.7
NEVADA	13272	276.1
NEW HAMPSHIRE	4745	115.7
NEW JERSEY	23389	77.6
NEW MEXICO	12979	303.7
NEW YORK	42664	61.9
NORTH CAROLINA	42108	167.2
NORTH DAKOTA	7183	316.1
OHIO	44833	112.1
OKLAHOMA	24195	235.7
OREGON	26642	277.6
PENNSYLVANIA	59617	136.4
RHODE ISLAND	3060	80.6
SOUTH CAROLINA	19688	170.7
SOUTH DAKOTA	7295	310.9
TENNESSEE	33260	185.2
TEXAS	182815	311.6
UTAH	18136	345.8
VERMONT	3487	175.8
VIRGINIA	47772	227.9
WASHINGTON	31415	190.4
WEST VIRGINIA	20180	409.5
WISCONSIN	26002	138.5
WYOMING	12643	809.5
TOTAL (CIVILIAN)	1567756	175.6

which count each worker, without regard to the number of hours worked, may introduce bias in the calculation of age-specific rates resulting in artificially low rates. On the other hand, older workers, particularly part-time workers, may be undercounted in labor force data resulting in artificially high rates. Future research should incorporate the use of em-

ployment data based on actual hours of exposure.

Over the decade, mortality rates decreased within industry divisions, although patterns varied by industry. For example, rates for the mining industry showed peaks in years in which there were greater frequencies of multiple-fatality incidents. Rates for

the four highest risk industries—mining, construction, transportation/communication/public utilities, and agriculture/forestry/fishing—remained notably and consistently higher than rates for other industry divisions. Further research is needed to determine the reasons for the decreasing numbers and rates of occupational injury death in the United States. Economic conditions, distribution of the workforce, and changes in work practices and environments are important considerations. Changes in case ascertainment and data collection procedures, of both fatality and employment data, may have also contributed to declining mortality rates and are areas for further research.

Information on the causes of occupational injury death is essential to developing and implementing prevention programs. Motor vehicle incidents account for the largest proportion of fatal occupational injuries, with over 40% more cases than any other external causes of death. Moreover, occupational motor vehicle deaths are likely undercounted. Motor vehicle deaths rank within the three leading causes of occupational injury death within every industry division and in 10 of the 11 occupation divisions and should be considered high priority when targeting injury prevention efforts. Machinery-related deaths are the leading cause of death in two of the highest risk industries, mining and agriculture/forestry/fishing. Homicides are the leading cause of death in retail trade, services, and finance/insurance/real estate. Falls, electrocutions, and being struck by falling object incidents are other leading causes of occupational injury death.

The relative importance of each cause varies by industry and occupation division and research and prevention efforts should be focused using the infor-

mation on the leading causes of death within industry and occupation divisions. Analytic epidemiologic studies are needed to determine causative factors and to elucidate the actual circumstances at the time of worker injury.

Studies designed to evaluate the effectiveness of intervention strategies in reducing occupational injury fatalities in specific industries and from specific causes are essential for effectively preventing future deaths. Rigorous evaluations of existing technology for the design of motor vehicles and machines to prevent crashes, entanglements, and other problems which occur at the human-machine interface are required to reduce the frequency and rate of these events. Evaluations of fall protection technologies, and of personal protective equipment and work practices that may reduce exposure to electrical energy are also required. Deaths due to being struck by falling objects are due in large part (at least 30%) to falling trees. Research and prevention efforts should focus on these leading causes of death. The implementation of effective prevention strategies for fatal occupational injury will likewise have a positive impact on the prevention of non-fatal injuries.

On average, more than 17 workers die each day from an injury at work. The data presented here provide a starting point for targeting public health efforts and resources toward workers at high risk of dying from an injury on the job. Efforts to improve surveillance data and to design, implement, and evaluate intervention strategies are urgently needed. As long as families are deprived of mothers, fathers, brothers, sisters, sons, and daughters as a result of occupational injury deaths, we must work together in a concentrated effort to provide a safe and healthful working environment for every working man and woman of this country.

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STATE-SPECIFIC ANALYSES

METHODS

The state-specific analyses which follow were conducted using data from the National Traumatic Occupational Fatalities (NTOF) surveillance system. Please see the METHODS section of the U.S. summary (page 1-4) for a discussion of death certificates, employment data, industry and occupation coding, and calculation of Years of Potential Life Lost (YPLL). Methodological issues of special concern for the state-specific analyses are described below.

As in the U.S. summary, industry and occupation divisions follow standardized coding protocols laid out in the *Standard Industrial Classification Manual, 1987* for industry divisions and in the Bureau of the Census *1980 Alphanumeric Index of Industries and Occupations* for occupation divisions.

Overall average annual fatality rates and YPLL rates by state are based solely on private sector employment; U.S. rates include all civilian workers. Employment data for public administration are not reported by state. Numbers, rates, and percentage distributions by industry divisions, occupation divisions, and gender are based on deaths to civilian workers. Employment data for the calculation of fatality rates by gender and occupation division for each state were taken from the annual averages reported in the yearly publication, *Geographic Profile of Employment and Unemployment*.* As in the U.S. summary analyses, employment data by industry division were taken from County Business Patterns.†

Numbers for occupation divisions are provided for the 10-year period, 1980 through 1989, but due to the availability of comparable denominator data, rates for occupation divisions are provided for the 7-year period, 1983 through 1989.

In the presentation of fatalities by Race/Ethnicity (Table 1 in each of the state sections), the "Other" category includes workers of other racial/ethnic groups and workers for whom race/ethnicity was unknown. For the presentation of State of Residence (Table 2 in each of the state sections) the "Other"

category includes other states, foreign countries, and cases for which state of residence was unknown.

As discussed previously, work-related homicide data were not available from four states prior to 1985. Homicide estimates were generated for New York, Oklahoma, and Louisiana using data on work-related homicides from other states in the NTOF system applied to data on homicide in the general population of those states for which data were not available for the entire period of analysis. The proportion of work-related homicides out of all homicides was used to generate the estimates and the confidence intervals for the estimates. A range for the confidence intervals values is provided in the text. These estimates were not included in any totals reported for these states. Estimates were not generated for Nebraska due to administrative inconsistencies between work-related homicide data reported prior to 1986 and subsequent years.

For all tables and figures, data were suppressed for any category where there were less than three cases. If a state-specific rate could not be calculated for an industry division (Figure 3. in each of the state sections) or for an occupation division (Figure 4. in each of the state sections), the U.S. rate was not presented. On bar charts, rates or numbers smaller than 0.20 may not be discernible.

*U.S. Bureau of Labor Statistics: *Geographic Profile of Employment and Unemployment*. Washington, D.C.: 1980-1989: Bulletins 2111, 2156, 2170, 2216, 2234, 2266, 2279, 2305, 2327, 2361.

†U.S. Department of Commerce: *County Business Patterns [state files and public use data tapes]*. Washington, D.C.: Bureau of the Census, 1980-1988.

State of Alabama

Average Annual Fatal Injuries: **115**

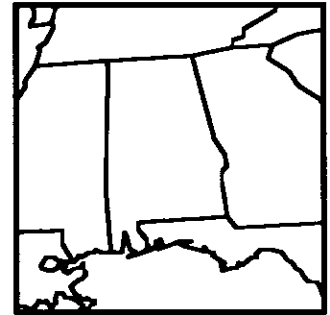
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **9.2**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Manufacturing (282)**
Rate: **Mining (36.5)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (234)**
Rate: **Farmers/Foresters/Fishers (20.8)**



The State of Alabama had 1,149 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,143 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 9.2 for Alabama compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 222.9 per 100,000 workers for Alabama compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Alabama and had a fatality rate of 11.8 per 100,000 workers compared to 1.0 for females. The fatality distribution by **race/ethnicity** for the State of Alabama shows that Whites accounted for 74% of the total fatalities and Blacks for 25% as shown in **Table AL-1**. As shown in **Figure AL-1**, workers aged 30 to 34 years old accounted for the

Table AL-1. Traumatic Occupational Fatalities by Race/Ethnicity, Alabama, 1980-1989.

Race/Ethnicity	Number	Percent
White	853	74.2
Black	290	25.2
Other	6	0.5

largest number of fatalities (13%). Of all Alabama occupational fatality victims, 90% were Alabama residents (**Table AL-2**).

Figure AL-2 presents the distribution of fatalities by external cause of death for the State of Alabama and for the U.S. The three leading causes of death among employees in Alabama were homicides (18%), machine-related incidents (15%), and motor vehicle incidents (13%).

In Alabama, the **industry divisions** in which the largest number of fatalities occurred were manufacturing (25%), construction (19%), transportation/communication/public utilities (13%), and retail trade (12%). The mining industry had the highest fatality rate at 36.5 per 100,000 workers, followed by construction (27.6), and transportation/communication/public utilities (20.5) (**Figure AL-3**). **Table AL-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Alabama with the largest number of fatalities were precision production/craft/repair (21%), laborers (16%), and transportation/material movers (15%). The occupations with

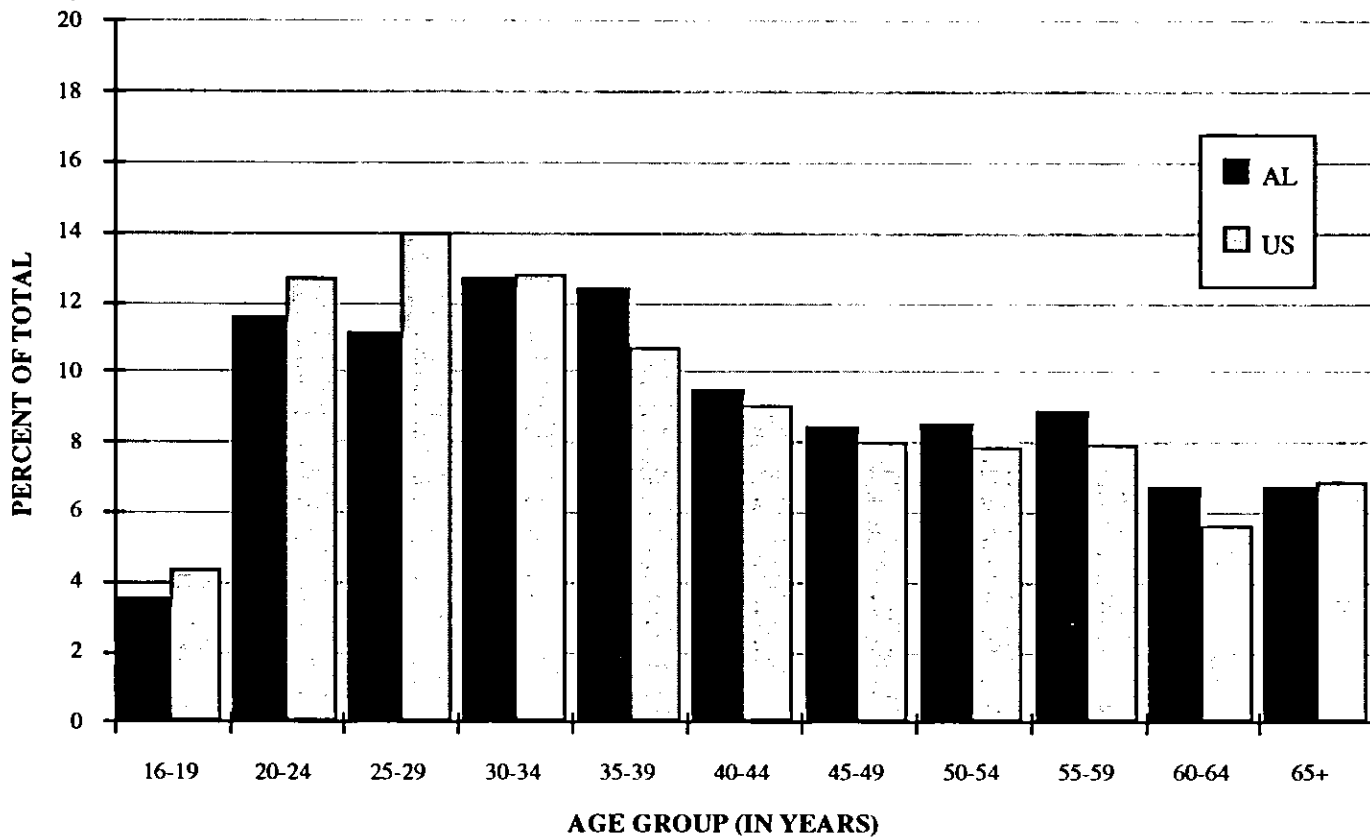


Figure AL-1. Traumatic Occupational Fatalities by Age Group, US and Alabama, 1980-1989.

Table AL-2. Traumatic Occupational Fatalities by State of Residence, Alabama, 1980-1989.

State	Number	Percent
Alabama	1039	90.4
Mississippi	31	2.7
Georgia	23	2.0
Florida	12	1.0
Tennessee	12	1.0
Louisiana	7	0.6
Texas	4	0.3
Ohio	3	0.3
Other	18	1.6

the highest rates were farmers/foresters/fishers (20.8 deaths per 100,000 workers), transportation/material movers (20.1), and laborers (18.9) (Figure AL-4). Table AL-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Alabama decreased 6%, from a high of 11.2 in 1980 to 10.5 in 1989. A low of 7.3 deaths per 100,000 workers was reported in 1984 and 1985 (Figure AL-5).

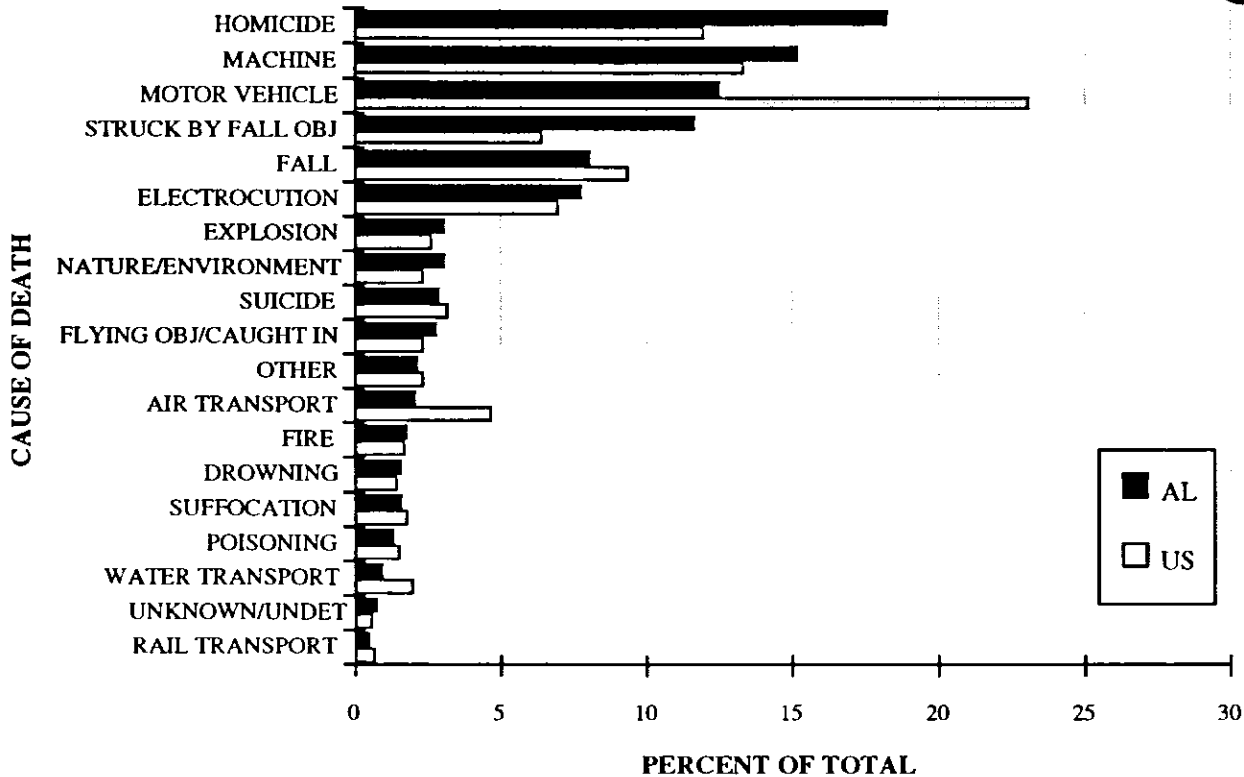


Figure AL-2. Traumatic Occupational Fatalities by Cause of Death, US and Alabama, 1980-1989.

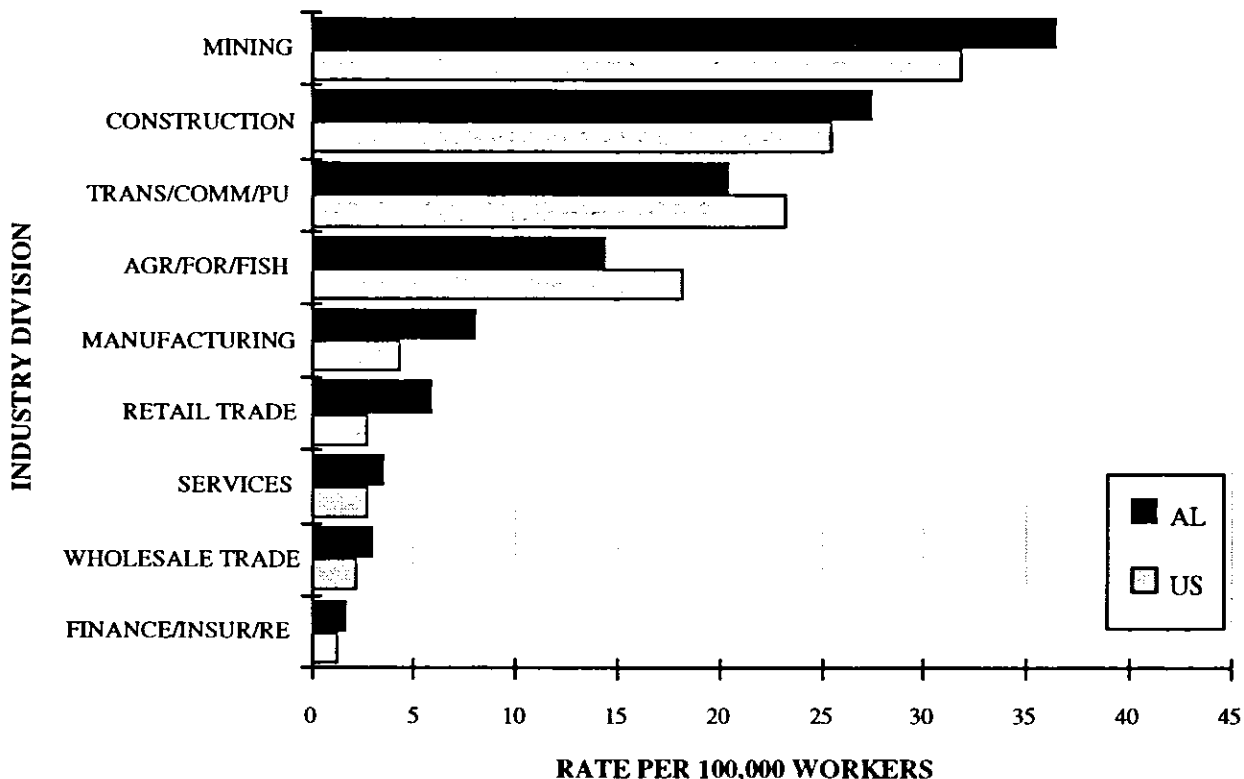


Figure AL-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Alabama, 1980-1989.

Table AL-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Alabama, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	6	7	6	3	4	5	6	6	5	3	51	36.5
CONSTRUCTION	25	19	11	19	17	20	31	21	29	22	214	27.6
TRANS/COMM/PU	13	6	7	10	6	9	23	20	22	29	145	20.5
AGR/FOR/FISH	13	8	8	5	5	8	11	10	8	13	89	14.4
MANUFACTURING	34	30	17	23	26	26	25	30	32	39	282	8.1
RETAIL TRADE	15	15	17	11	10	11	11	14	15	16	135	6.0
SERVICES	13	8	4	4	6	4	12	10	9	15	85	3.6
WHOLESALE TRADE	--	--	--	--	5	--	4	3	--	3	23	3.1
FINANCE/INSUR/RE	--	--	--	--	--	--	3	--	--	--	12	1.8
PUBLIC ADMIN	7	5	4	--	4	4	12	11	7	5	61	N/A
NOT CLASSIFIED	8	8	7	3	--	--	4	7	--	3	46	N/A
STATE	134	108	85	83	87	90	142	133	132	149	1143	9.2

NOTE: Dashes denote categories with fewer than three cases.

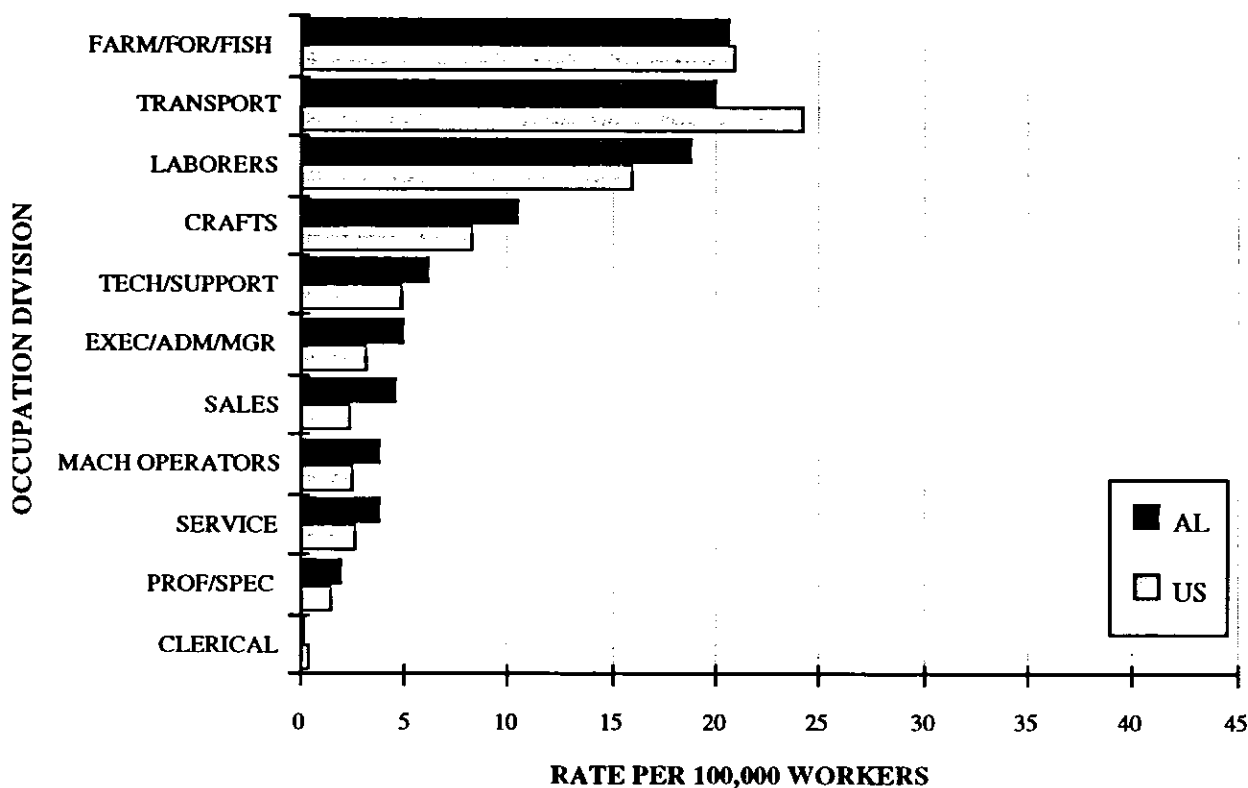


Figure AL-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Alabama, 1983-1989.

Table AL-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Alabama.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	126	20.8
TRANSPORT	166	20.1
LABORERS	184	18.9
CRAFTS	234	10.6
TECH/SUPPORT	23	6.4
EXEC/ADM/MGR	75	5.2
SALES	89	4.8
MACH OPERATORS	75	4.0
SERVICE	88	4.0
PROF/SPEC	36	2.1
CLERICAL	11	0.4
NOT CLASSIFIED	36	N/A

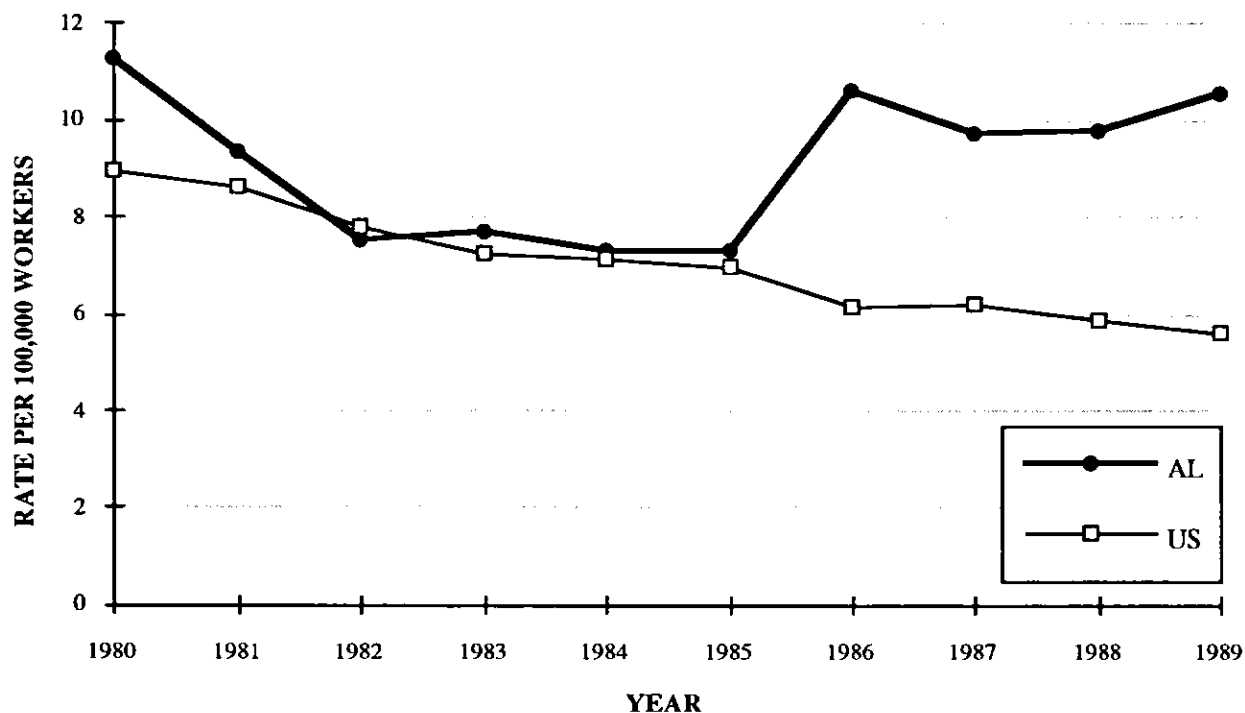


Figure AL-5. Rate of Traumatic Occupational Fatalities by Year, US and Alabama, 1980-1989.

State of Alaska

Average Annual Fatal Injuries: **58**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **34.8**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (176)**
Rate: **Agriculture/Forestry/Fishing (149.2)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (159)**
Rate: **Farmers/Foresters/Fishers (330.7)**



The State of Alaska had 583 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 561 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 34.8 for Alaska compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 1,013.8 per 100,000 workers for Alaska compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Alaska and had a fatality rate of 46.8 per 100,000 workers compared to 2.2 for females. The fatality distribution by **race/ethnicity** for

Table AK-1. Traumatic Occupational Fatalities by Race/Ethnicity, Alaska, 1980-1989.

Race/Ethnicity	Number	Percent
White	466	79.9
Native American	55	9.4
Asian	34	5.8
Hispanic	8	1.4
Black	7	1.2
Other	13	2.2

the State of Alaska shows that Whites accounted for 80% of the total fatalities, Native Americans for 9%, and Asians for 6% as shown in **Table AK-1**. As shown in **Figure AK-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (19%). Of all Alaska occupational fatality victims, 68% were Alaska residents (**Table AK-2**).

Figure AK-2 presents the distribution of fatalities by external cause of death for the State of Alaska and for the U. S. The three leading causes of death among employees in Alaska were water transportation (29%), air transportation (22%), and motor vehicle incidents (8%).

In Alaska, the **industry divisions** in which the largest number of fatalities occurred were agriculture/forestry/fishing (31%), transportation/communication/public utilities (18%), construction (11%), and public administration (11%). The agriculture/forestry/fishing industry had the highest fatality rate at 149.2 per 100,000 workers, followed by transportation/communication/public utilities (62.2), and manufacturing (53.8) (**Figure AK-3**). **Table AK-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

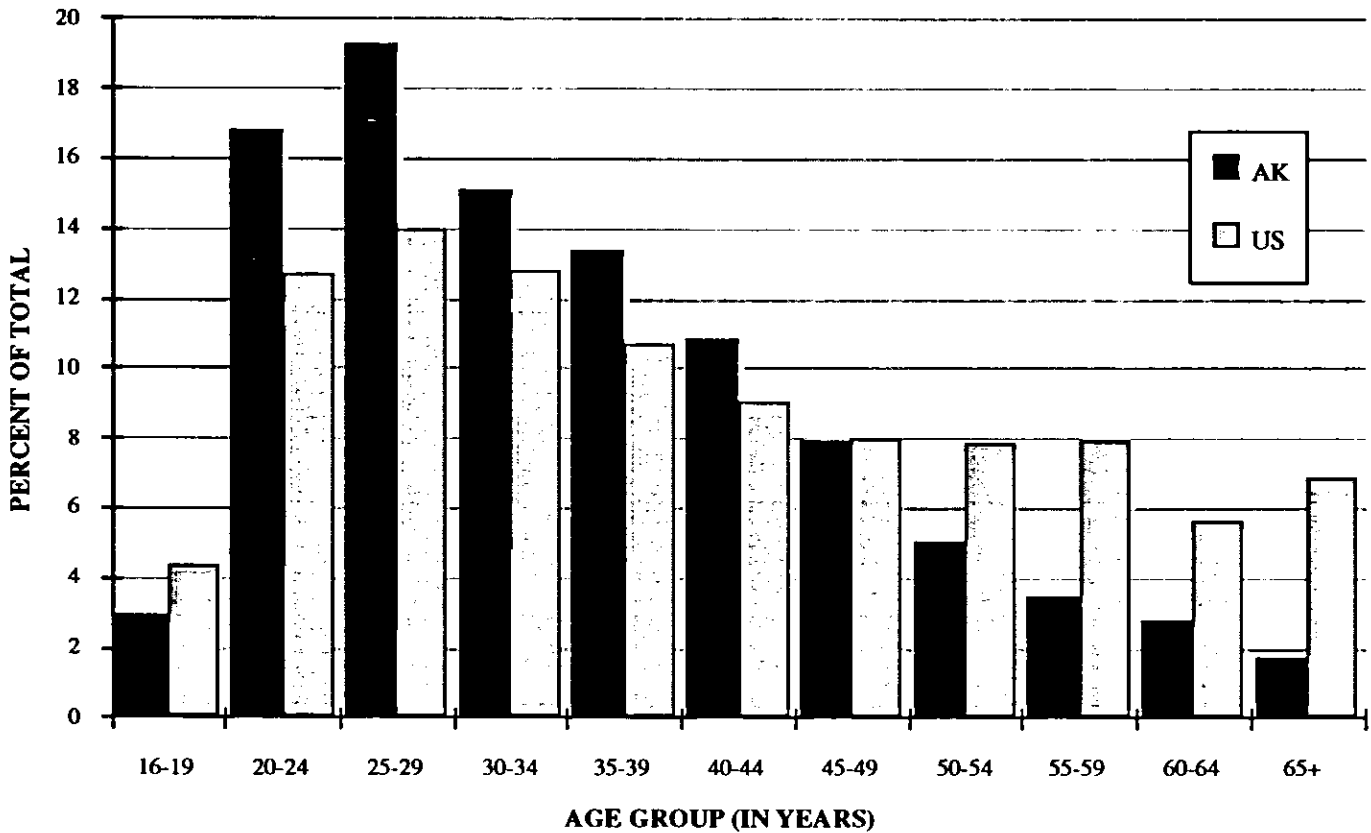


Figure AK-1. Traumatic Occupational Fatalities by Age Group, US and Alaska, 1980-1989.

Table AK-2. Traumatic Occupational Fatalities by State of Residence, Alaska, 1980-1989.

State	Number	Percent
Alaska	396	67.9
Washington	57	9.8
Oregon	16	2.7
California	10	1.7
Louisiana	5	0.9
Virginia	5	0.9
Alabama	3	0.5
Florida	3	0.5
Texas	3	0.5
Other	85	14.6

The occupation divisions in Alaska with the largest number of fatalities were farmers/foresters/fishers (28%), technicians/related support (13%), and transportation/material movers (12%). The occupations with the highest rates were farmers/foresters/fishers (330.7 deaths per 100,000 workers), technicians/related support (92.8), and transportation/material movers (83.6)(Figure AK-4). Table AK-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Alaska increased 25%, from 39.8 in 1980 to 49.9 in 1989. A high of 56.9 and a low of 19.0 deaths per 100,000 workers were reported in 1985 and 1983, respectively (Figure AK-5).

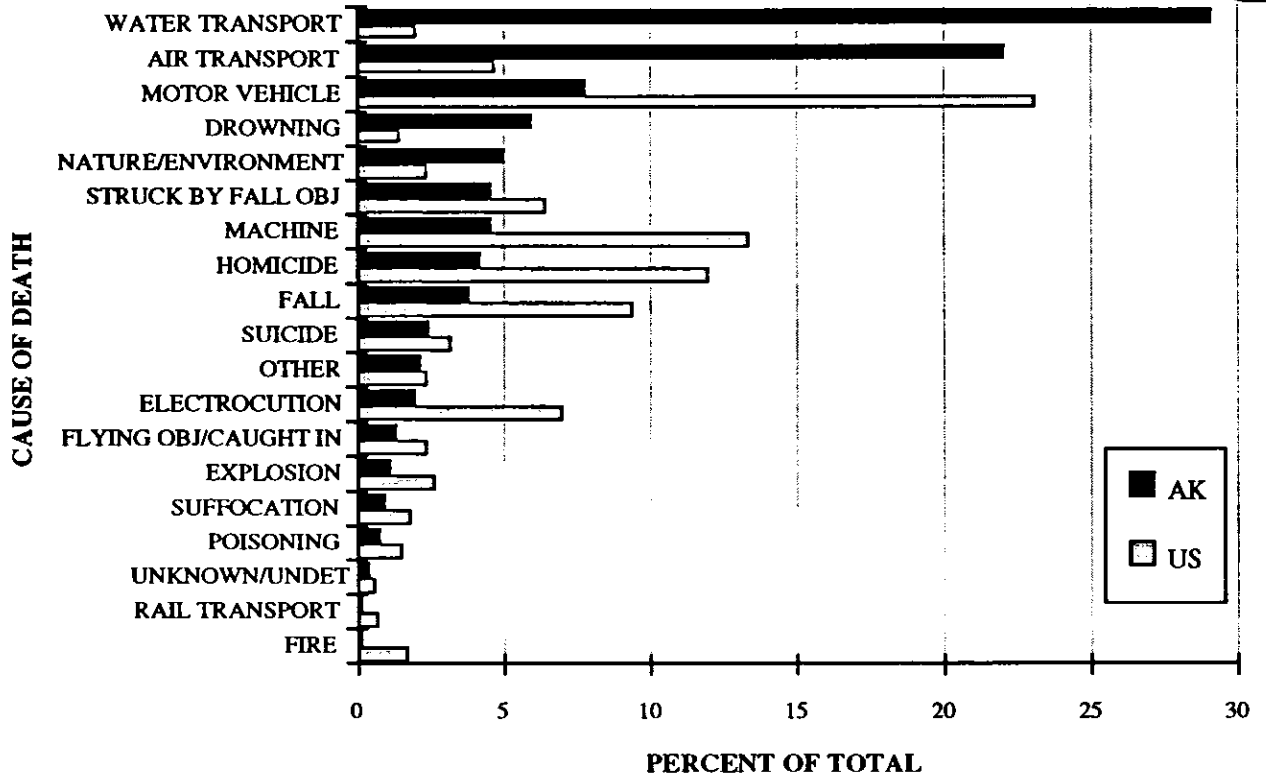


Figure AK-2. Traumatic Occupational Fatalities by Cause of Death, US and Alaska, 1980-1989.

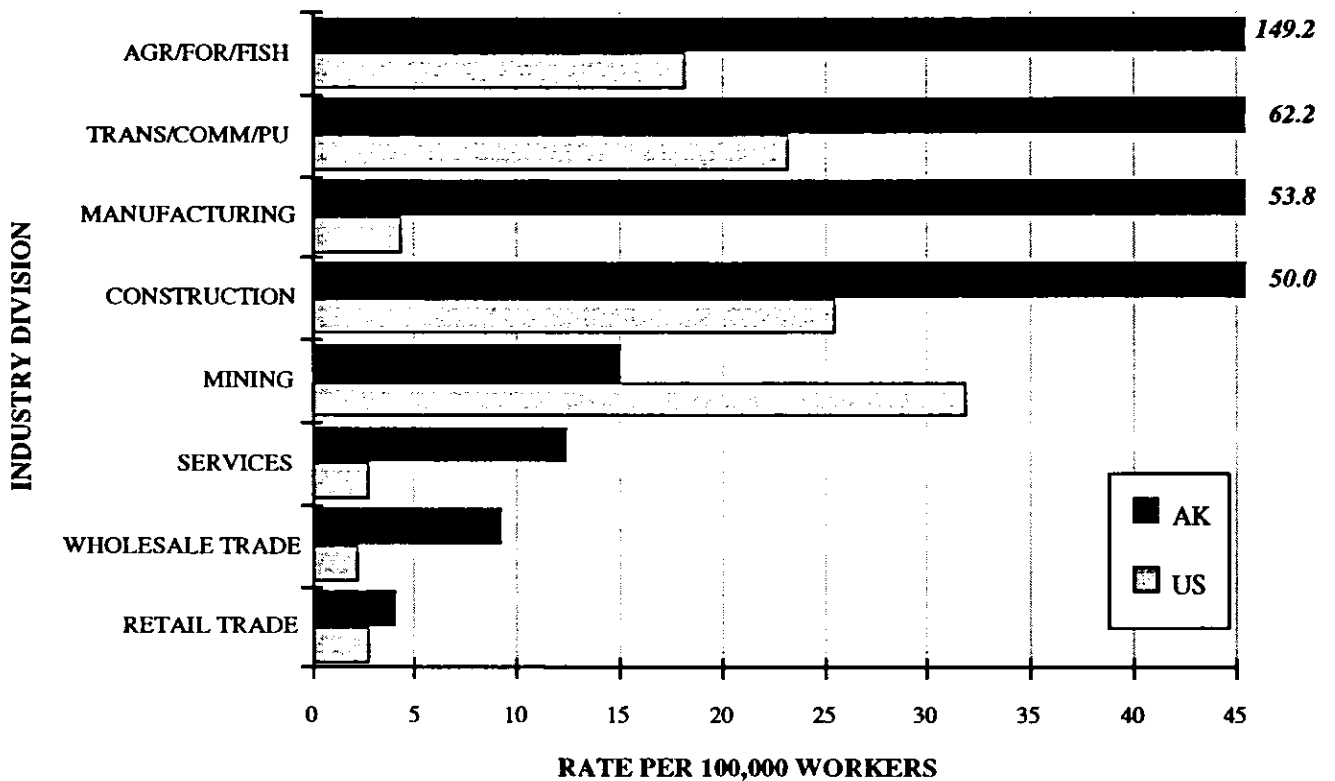


Figure AK-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Alaska, 1980-1989.

Table AK-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Alaska, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
AGR/FOR/FISH	12	13	5	8	19	30	5	17	23	44	176	149.2
TRANS/COMM/PU	9	15	5	4	6	20	5	10	14	11	99	62.2
MANUFACTURING	--	--	--	--	--	8	5	11	7	7	47	53.8
CONSTRUCTION	8	3	6	3	3	12	8	10	4	4	61	50.0
MINING	--	--	--	--	--	--	3	--	--	--	13	15.2
SERVICES	4	--	3	4	--	9	5	5	5	6	45	12.4
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	7	9.3
RETAIL TRADE	--	--	--	--	--	--	--	--	--	3	13	4.1
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	6	7	6	4	--	5	12	8	6	4	59	N/A
NOT CLASSIFIED	6	6	--	--	--	9	--	6	--	4	39	N/A
STATE	50	50	32	31	36	96	46	70	65	85	561	34.8

NOTE: Dashes denote categories with fewer than three cases.

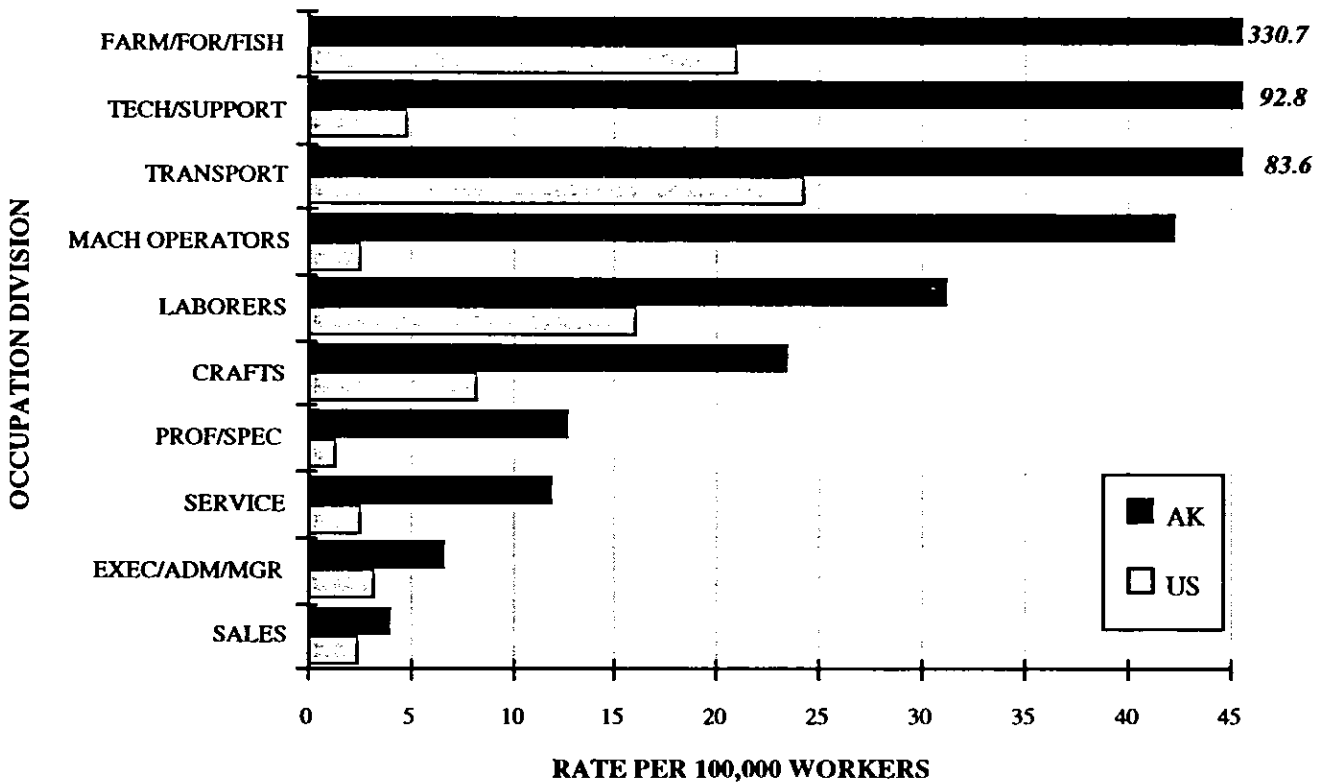


Figure AK-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Alaska, 1983-1989.

Table AK-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Alaska.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	159	330.7
TECH/SUPPORT	71	92.8
TRANSPORT	68	83.6
MACH OPERATORS	19	42.4
LABORERS	33	31.3
CRAFTS	61	23.5
PROF/SPEC	35	12.9
SERVICE	31	12.1
EXEC/ADM/MGR	21	6.8
SALES	12	4.2
CLERICAL	3	N/A
NOT CLASSIFIED	48	N/A

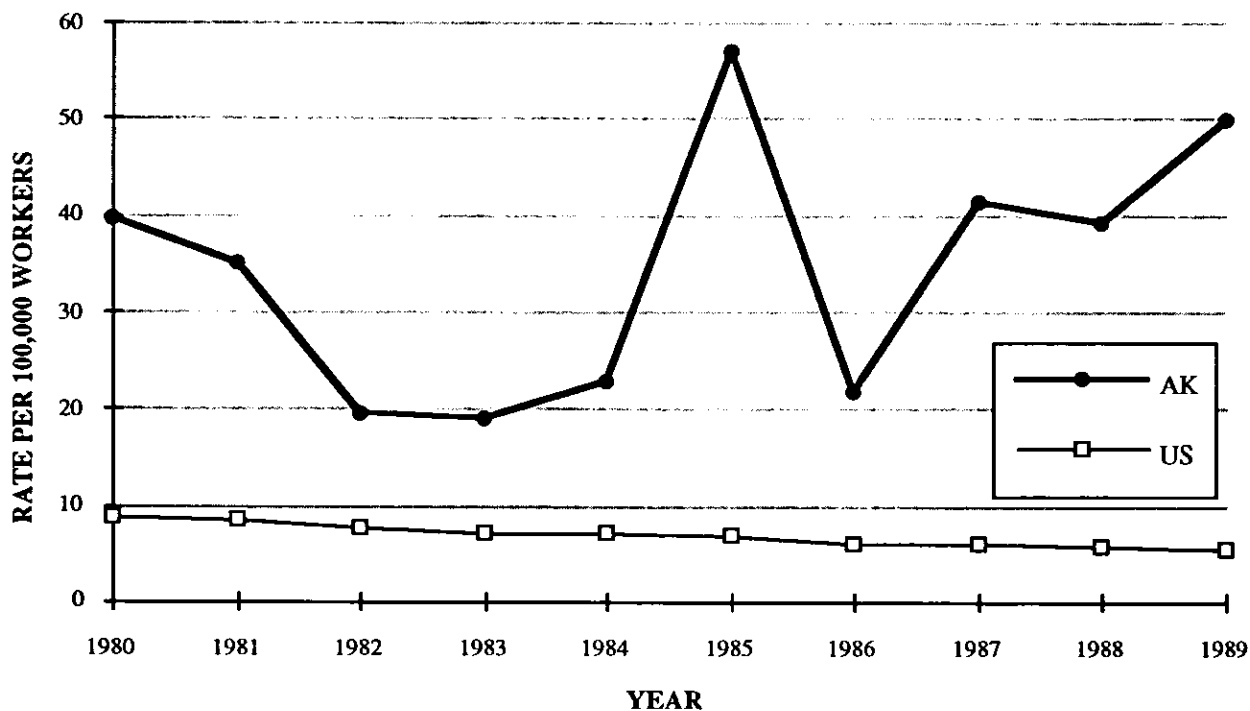


Figure AK-5. Rate of Traumatic Occupational Fatalities by Year, US and Alaska, 1980-1989.

State of Arizona

Average Annual Fatal Injuries: **41**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **3.7**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (97)**
Rate: **Mining (20.9)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (105)**
Rate: **Transportation/Material Movers (12.0)**



The State of Arizona had 409 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 398 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 3.7 for Arizona compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 98.6 per 100,000 workers for Arizona compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Arizona and had a fatality rate of 4.9 per 100,000 workers compared to 0.4 for females. The fatality distribution by **race/ethnicity** for the State of Arizona shows that Whites accounted for 73% of the total fatalities, Hispanics for 19%, and Native Americans for 5% as shown in **Table AZ-1**.

Table AZ-1. Traumatic Occupational Fatalities by Race/Ethnicity, Arizona, 1980-1989.

Race/Ethnicity	Number	Percent
White	300	73.3
Hispanic	76	18.6
Native American	20	4.9
Black	13	3.2

As shown in **Figure AZ-1**, workers aged 30 to 34 years old accounted for the largest number of fatalities (14%). Of all Arizona occupational fatality victims, 82% were Arizona residents (**Table AZ-2**).

Figure AZ-2 presents the distribution of fatalities by external cause of death for the State of Arizona and for the U.S. The three leading causes of death among employees in Arizona were motor vehicle incidents (27%), machine-related incidents (14%), and falls (11%).

In Arizona, the **industry divisions** in which the largest number of fatalities occurred were construction (24%), transportation/communication/public utilities (24%), and agriculture/forestry/fishing (9%). The mining industry had the highest fatality rate at 20.9 per 100,000 workers, followed by transportation/communication/public utilities (17.2), and construction (11.1) (**Figure AZ-3**). **Table AZ-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Arizona with the largest number of fatalities were transportation/material movers (26%), precision production/craft/repair

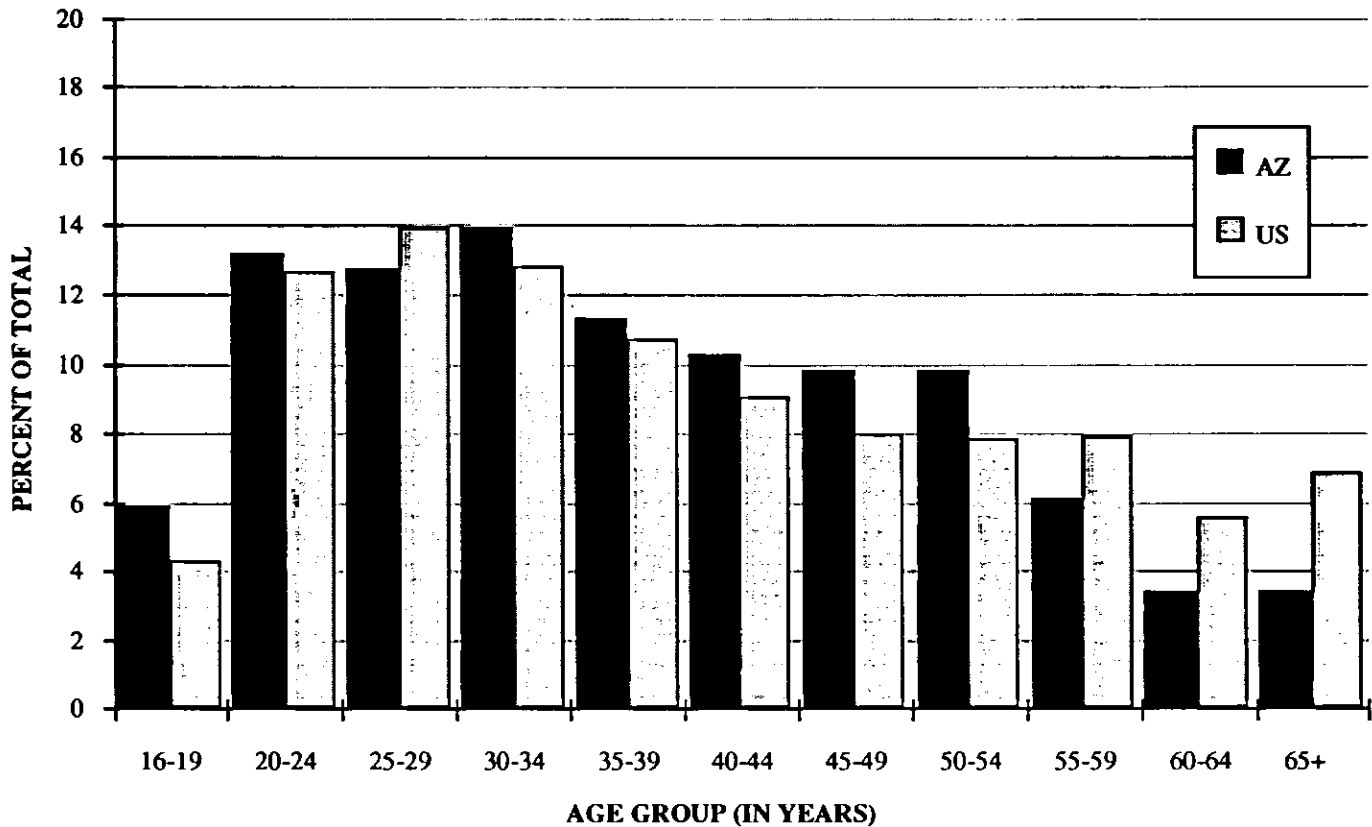


Figure AZ-1. Traumatic Occupational Fatalities by Age Group, US and Arizona, 1980-1989.

Table AZ-2. Traumatic Occupational Fatalities by State of Residence, Arizona, 1980-1989.

State	Number	Percent
Arizona	334	81.7
California	18	4.4
New Mexico	7	1.7
Texas	6	1.5
Utah	5	1.2
Oklahoma	4	1.0
Florida	3	0.7
Illinois	3	0.7
Nevada	3	0.7
North Carolina	3	0.7
Virginia	3	0.7
Other	20	4.9

(24%), and laborers (12%). The occupations with the highest rates were transportation/material movers (12.0 deaths per 100,000 workers), laborers (6.6), precision production/craft/repair (4.0), and farmers/foresters/fishers (3.8) (Figure AZ-4). Table AZ-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Arizona decreased 85%, from 8.0 in 1980 to 1.2 in 1989. A high of 8.9 and a low of 0.8 deaths per 100,000 workers were reported in 1981 and 1988, respectively (Figure AZ-5).

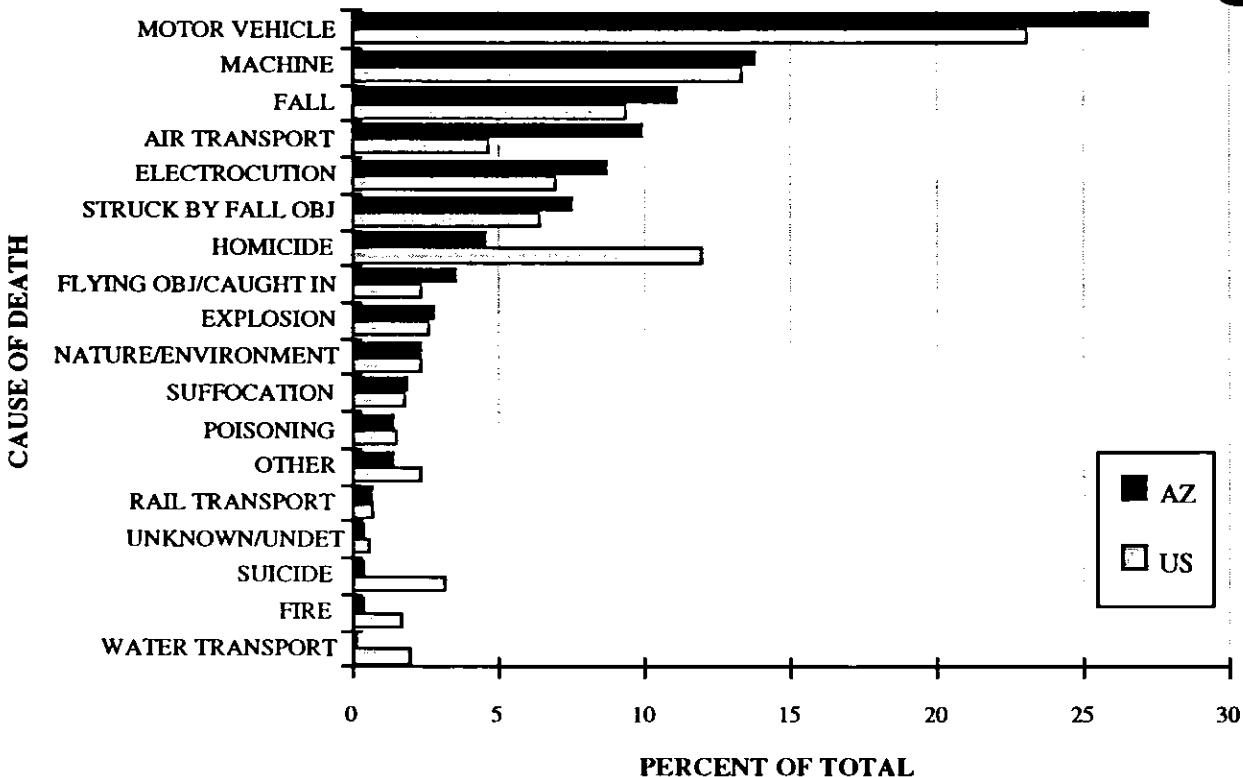


Figure AZ-2. Traumatic Occupational Fatalities by Cause of Death, US and Arizona, 1980-1989.

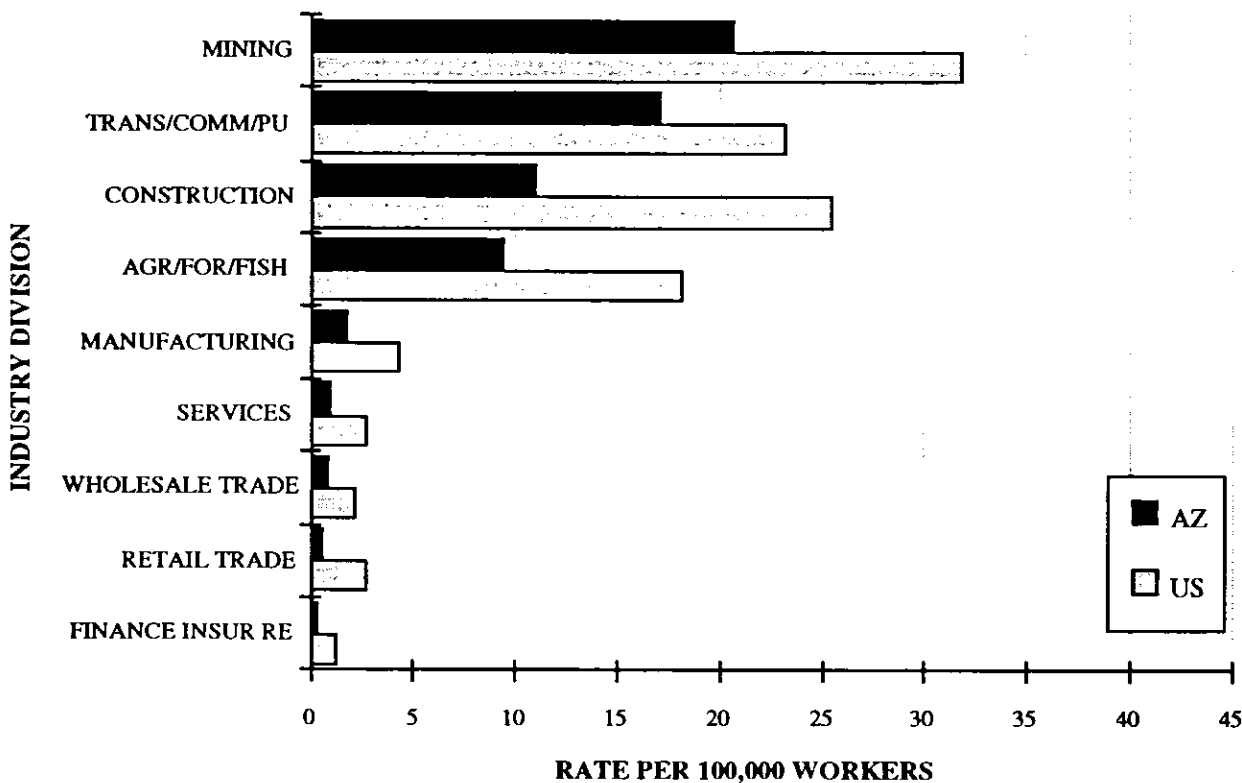


Figure AZ-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Arizona, 1980-1989.

Table AZ-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Arizona, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	7	5	6	--	6	--	--	3	--	--	34	20.9
TRANS/COMM/PU	21	22	12	13	19	3	--	--	--	--	95	17.2
CONSTRUCTION	15	15	9	9	10	19	6	5	3	6	97	11.1
AGR/FOR/FISH	8	8	5	5	5	4	--	--	--	--	36	9.6
MANUFACTURING	7	11	--	3	3	--	--	--	--	--	31	1.8
SERVICES	3	3	6	5	5	3	4	--	--	--	30	1.1
WHOLESALE TRADE	--	--	--	3	--	--	--	--	--	--	6	1.0
RETAIL TRADE	--	--	--	--	--	3	3	--	--	--	16	0.7
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	3	0.4
PUBLIC ADMIN	6	5	--	--	5	--	--	--	--	--	23	N/A
NOT CLASSIFIED	3	8	--	--	--	3	--	3	--	4	27	N/A
STATE	72	80	43	44	57	39	20	17	11	15	398	3.7

NOTE: Dashes denote categories with fewer than three cases.

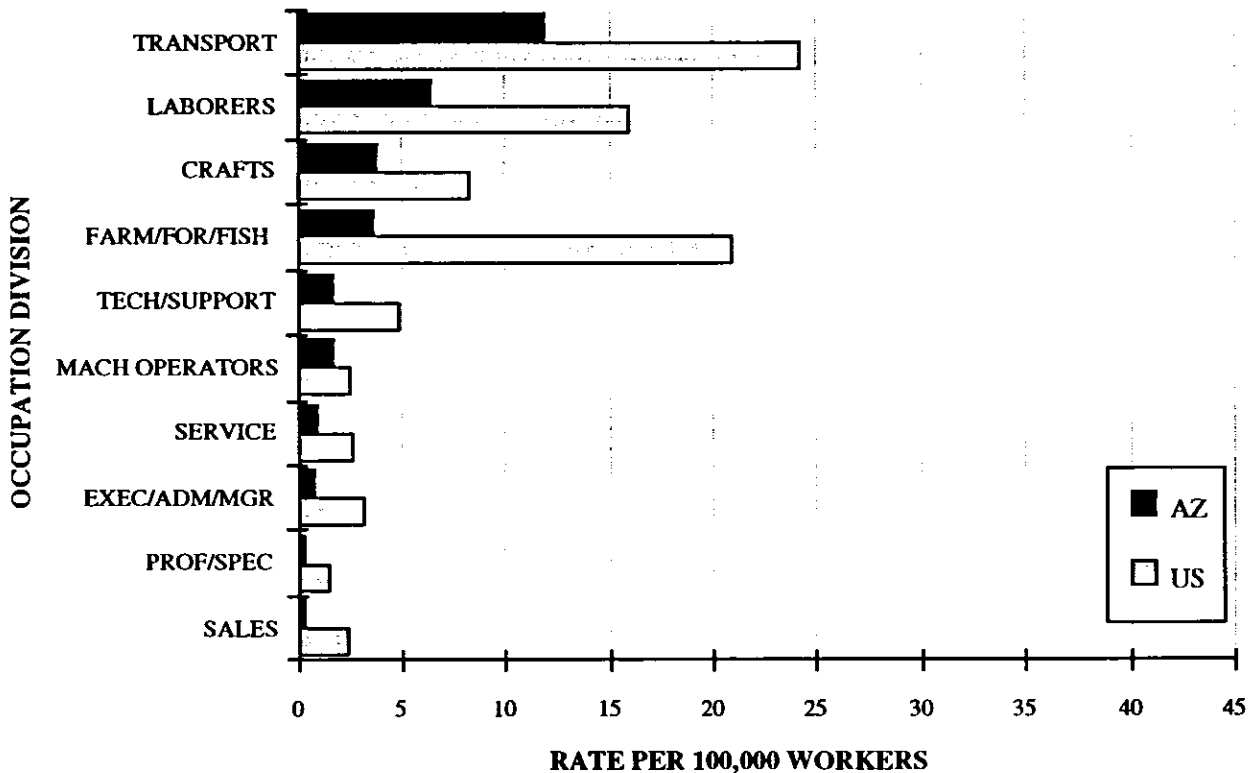


Figure AZ-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Arizona, 1983-1989.

Table AZ-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Arizona.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	105	12.0
LABORERS	49	6.6
CRAFTS	95	4.0
FARM/FOR/FISH	30	3.8
TECH/SUPPORT	19	1.9
MACH OPERATORS	10	1.8
SERVICE	23	1.1
EXEC/ADM/MGR	19	1.0
PROF/SPEC	14	0.5
SALES	5	0.4
CLERICAL	6	N/A
NOT CLASSIFIED	23	N/A

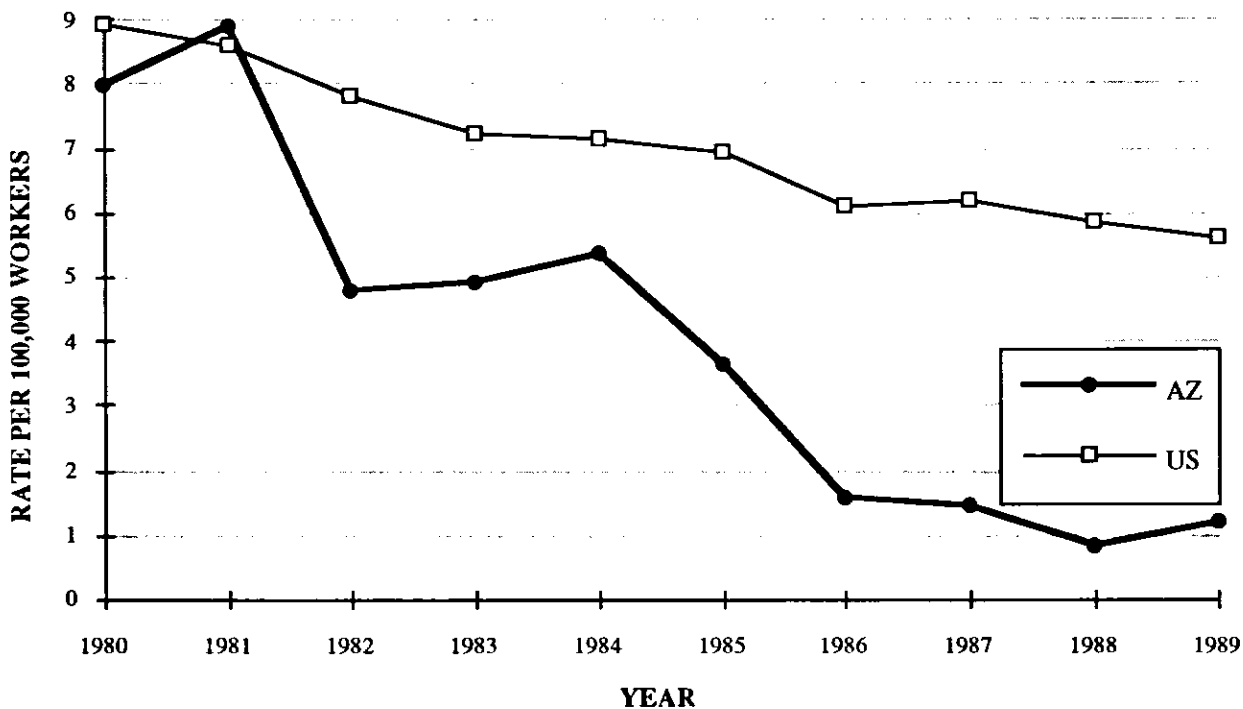


Figure AZ-5. Rate of Traumatic Occupational Fatalities by Year, US and Arizona, 1980-1989.

State of Arkansas

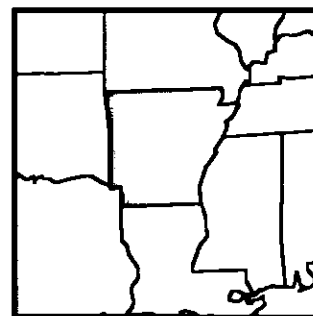
Average Annual Fatal Injuries: **89**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **12.0**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (192)**

Rate: **Transportation/Communication/
Public Utilities (47.6)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (211)**

Rate: **Transportation/Material Movers (39.9)**

The State of Arkansas had 891 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 874 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 12.0 for Arkansas compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 302.5 per 100,000 workers for Arkansas compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Arkansas and had a fatality rate of 15.3 per 100,000 workers compared to 1.2 for fe-

males. The fatality distribution by **race/ethnicity** for the State of Arkansas shows that Whites accounted for 75% of the total fatalities, Blacks for 15%, and Hispanics for 10% as shown in **Table AR-1**. Workers aged 20 to 24, 25 to 29, and 30 to 34 years old each accounted for 13% of the fatalities as shown in **Figure AR-1**. Of all Arkansas occupational fatality victims, 83% were Arkansas residents (**Table AR-2**).

Figure AR-2 presents the distribution of fatalities by external cause of death for the State of Arkansas and for the U.S. The three leading causes of death among employees in Arkansas were motor vehicle incidents (30%), machine-related incidents (11%), and being struck by falling objects (9%).

Table AR-1. Traumatic Occupational Fatalities by Race/Ethnicity, Arkansas, 1980-1989.

Race/Ethnicity	Number	Percent
White	666	74.7
Black	135	15.2
Hispanic	85	9.5
Asian	3	0.3
Other	2	0.2

In Arkansas, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (22%), manufacturing (19%), and construction (15%). The transportation/communication/public utilities industry had the highest fatality rate at 47.6 per 100,000 workers, followed by construction (41.5), and mining (38.4) (**Figure AR-3**). **Table AR-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

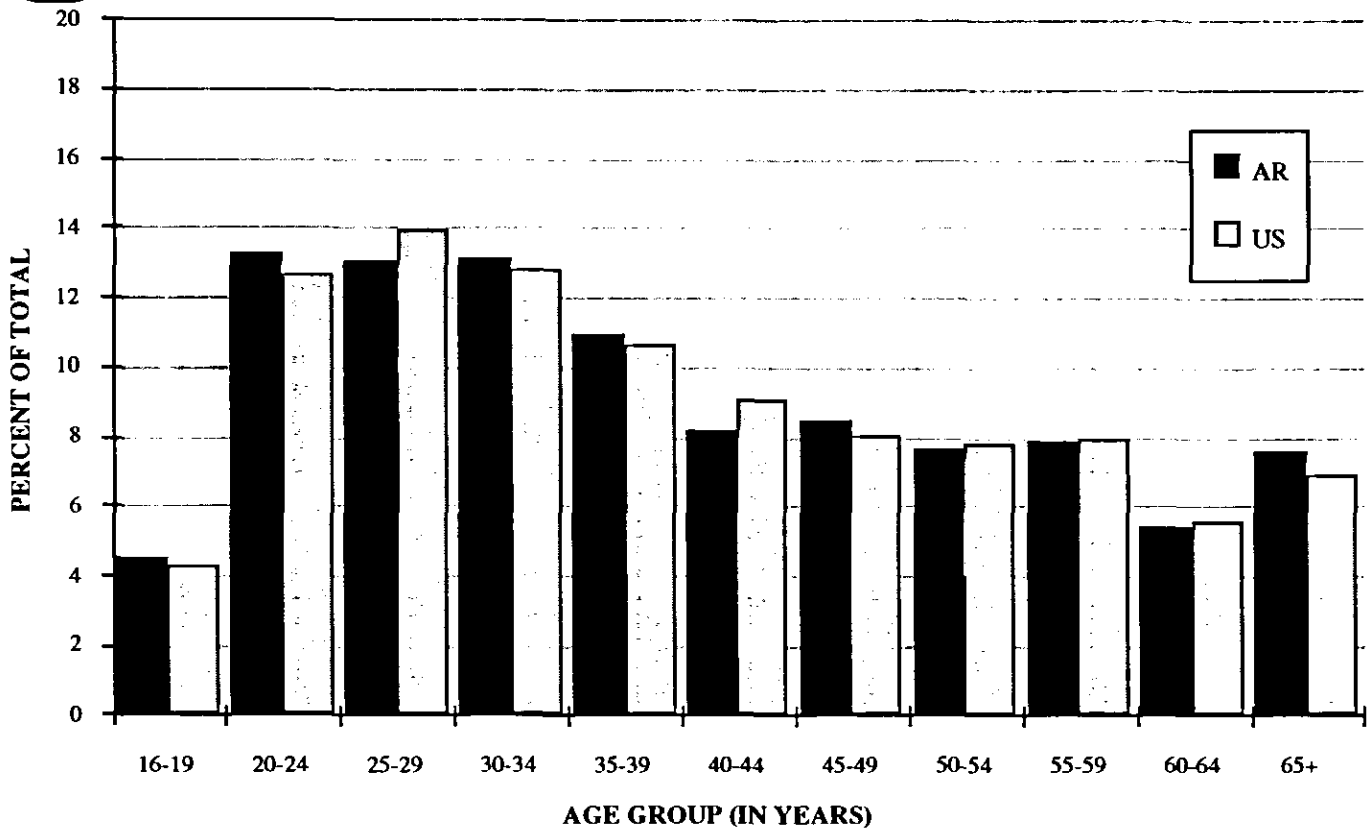


Figure AR-1. Traumatic Occupational Fatalities by Age Group, US and Arkansas, 1980-1989.

Table AR-2. Traumatic Occupational Fatalities by State of Residence, Arkansas, 1980-1989.

State	Number	Percent
Arkansas	740	83.1
Texas	32	3.6
Louisiana	24	2.7
Oklahoma	21	2.4
Missouri	15	1.7
Tennessee	12	1.3
Alabama	6	0.7
Mississippi	6	0.7
Illinois	4	0.4
Kansas	4	0.4
North Carolina	4	0.4
Other	23	2.6

The occupation divisions in Arkansas with the largest number of fatalities were transportation/material movers (24%), farmers/foresters/fishers (14%), and laborers (14%). The occupations with the highest rates were transportation/material movers (39.9 deaths per 100,000 workers), laborers (21.7), and farmers/foresters/fishers (21.1) (Figure AR-4). Table AR-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Arkansas decreased 30%, from 11.9 in 1980 to 8.3 in 1989. A high of 15.5 and a low of 8.0 deaths per 100,000 workers were reported in 1985 and 1984, respectively (Figure AR-5).

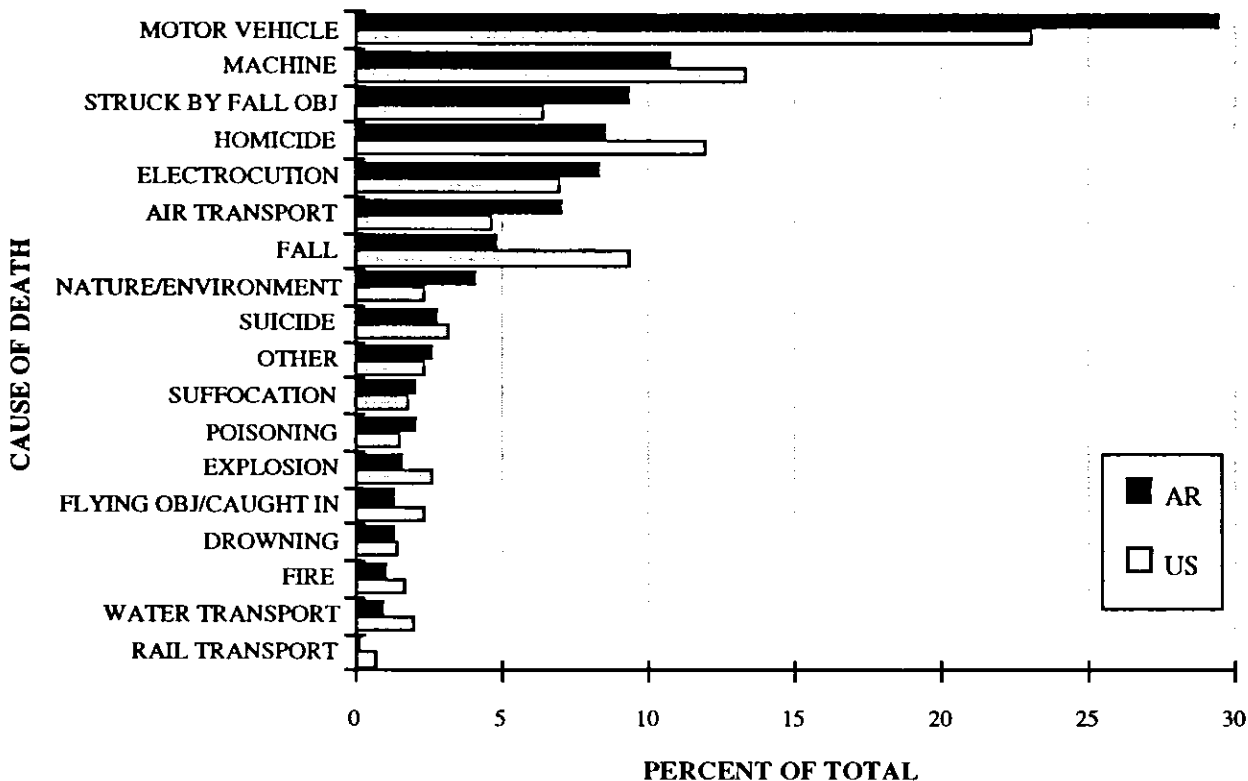


Figure AR-2. Traumatic Occupational Fatalities by Cause of Death, US and Arkansas, 1980-1989.

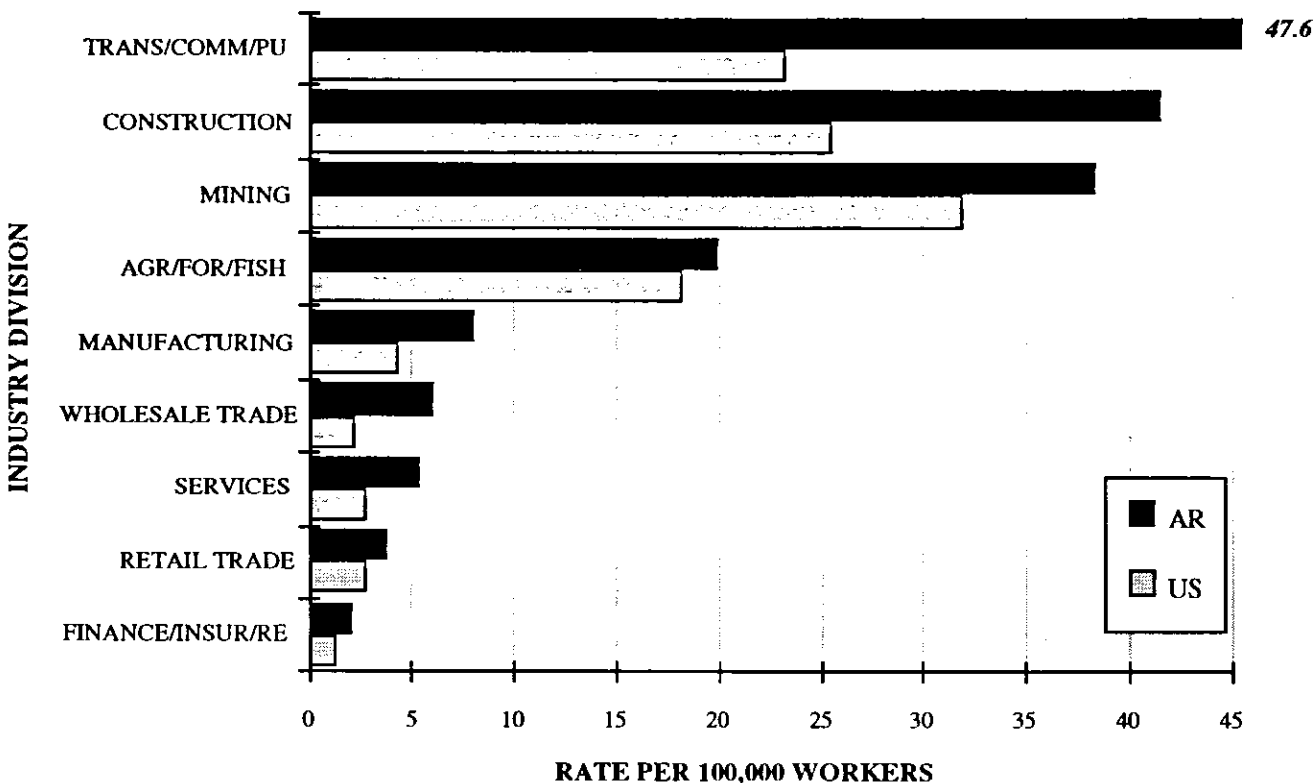


Figure AR-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Arkansas, 1980-1989.

Table AR-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Arkansas, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	15	13	16	14	11	25	31	25	24	18	192	47.6
CONSTRUCTION	17	11	13	8	10	17	16	17	12	10	131	41.5
MINING	--	3	3	--	--	--	--	--	--	--	18	38.4
AGR/FOR/FISH	11	7	15	7	11	16	13	11	16	8	115	20.1
MANUFACTURING	17	21	18	7	9	15	18	23	24	14	166	8.2
WHOLESALE TRADE	--	3	4	4	--	--	3	4	--	--	25	6.1
SERVICES	7	3	8	7	6	16	3	8	14	3	75	5.5
RETAIL TRADE	4	8	--	3	--	10	7	7	8	--	51	3.8
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	7	2.1
PUBLIC ADMIN	4	4	11	4	6	5	5	6	4	--	50	N/A
NOT CLASSIFIED	3	6	7	6	--	3	3	5	--	8	44	N/A
STATE	81	79	96	63	60	111	102	108	108	66	874	12.0

NOTE: Dashes denote categories with fewer than three cases.

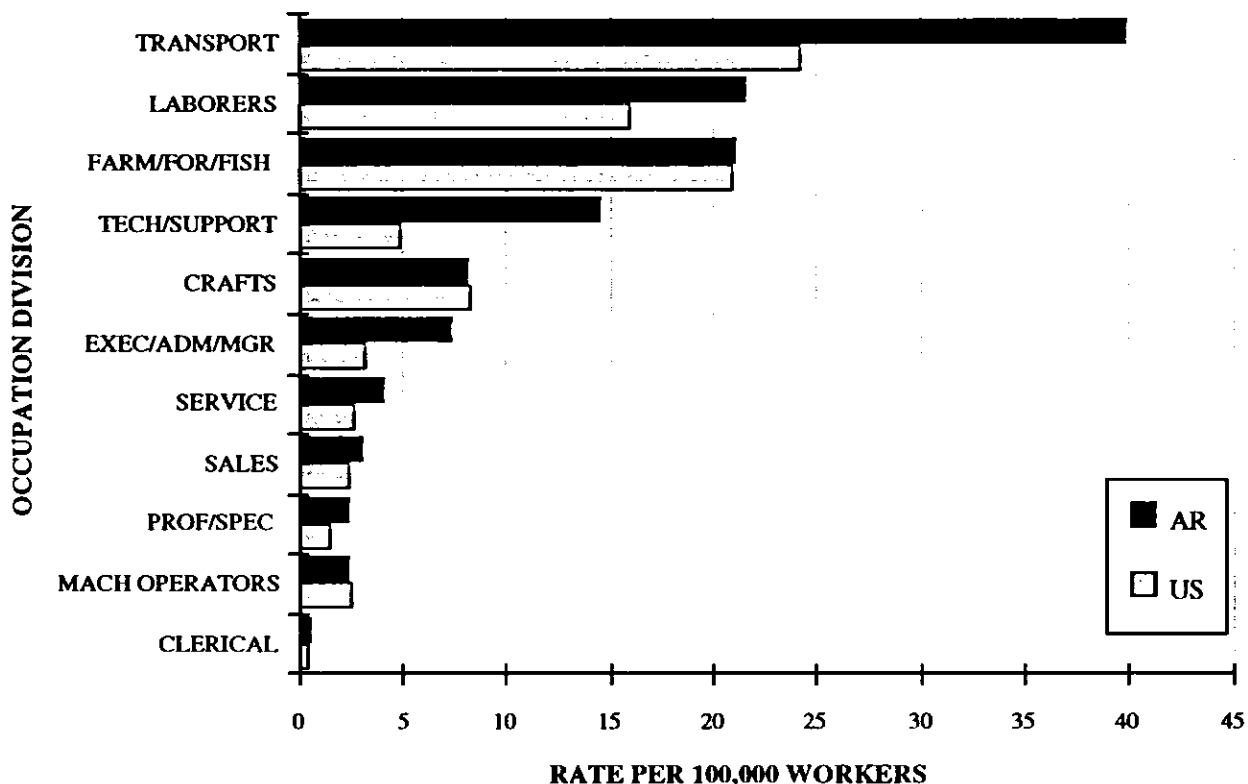


Figure AR-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Arkansas, 1983-1989.

Table AR-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Arkansas.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	211	39.9
LABORERS	121	21.7
FARM/FOR/FISH	125	21.1
TECH/SUPPORT	33	14.7
CRAFTS	116	8.3
EXEC/ADM/MGR	67	7.4
SERVICE	51	4.3
SALES	39	3.2
PROF/SPEC	22	2.5
MACH OPERATORS	27	2.5
CLERICAL	8	0.6
NOT CLASSIFIED	54	N/A

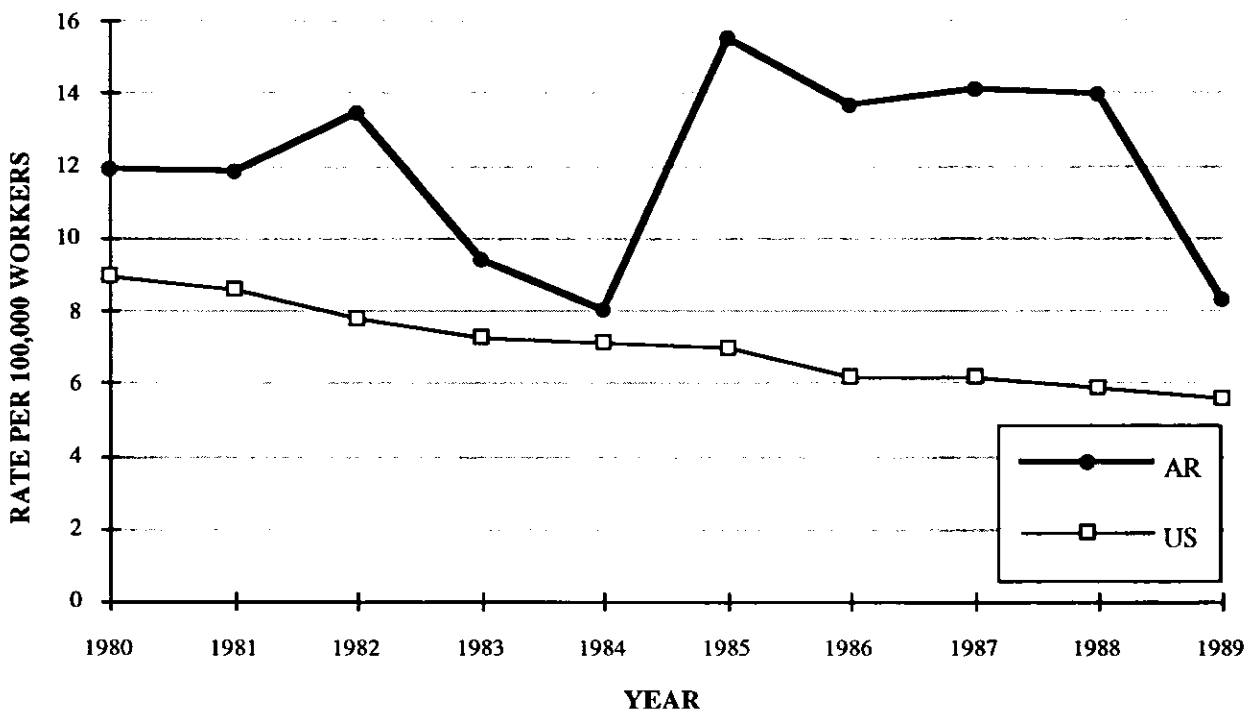


Figure AR-5. Rate of Traumatic Occupational Fatalities by Year, US and Arkansas, 1980-1989.

State of California

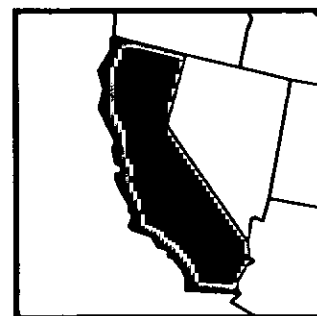
Average Annual Fatal Injuries: **698**
 Average Annual Fatal Injury Rate
 (deaths per 100,000 workers): **6.3**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
 Public Utilities (1,297)**
 Rate: **Mining (26.1)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (1,300)**
 Rate: **Transportation/Material Movers (31.0)**



The State of California had 6,976 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 6,623 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 6.3 for California compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 162.6 per 100,000 workers for California compared to 175.6 for the United States.

Males accounted for 92% of the civilian occupational fatalities in California and had a fatality rate of

Table CA-1. Traumatic Occupational Fatalities by Race/Ethnicity, California, 1980-1989.

Race/Ethnicity	Number	Percent
White	5045	72.3
Hispanic	978	14.0
Black	495	7.1
Asian	359	5.1
Native American	30	0.4
Other	69	1.0

9.1 per 100,000 workers compared to 1.0 for females. The fatality distribution by **race/ethnicity** for the State of California shows that Whites accounted for 72% of the total fatalities and Hispanics for 14% as shown in **Table CA-1**. As shown in **Figure CA-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (15%). Of all California occupational fatality victims, 92% were California residents (**Table CA-2**).

Figure CA-2 presents the distribution of fatalities by external cause of death for the State of California and for the U.S. The three leading causes of death among employees in California were motor vehicle incidents (30%), homicides (19%), and machine-related incidents (9%).

In California, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (20%), construction (15%), and services (14%). The mining industry had the highest fatality rate at 26.1 per 100,000 workers, followed by transportation/communication/public utilities (23.1), and construction (19.1) (**Figure CA-3**). **Table CA-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

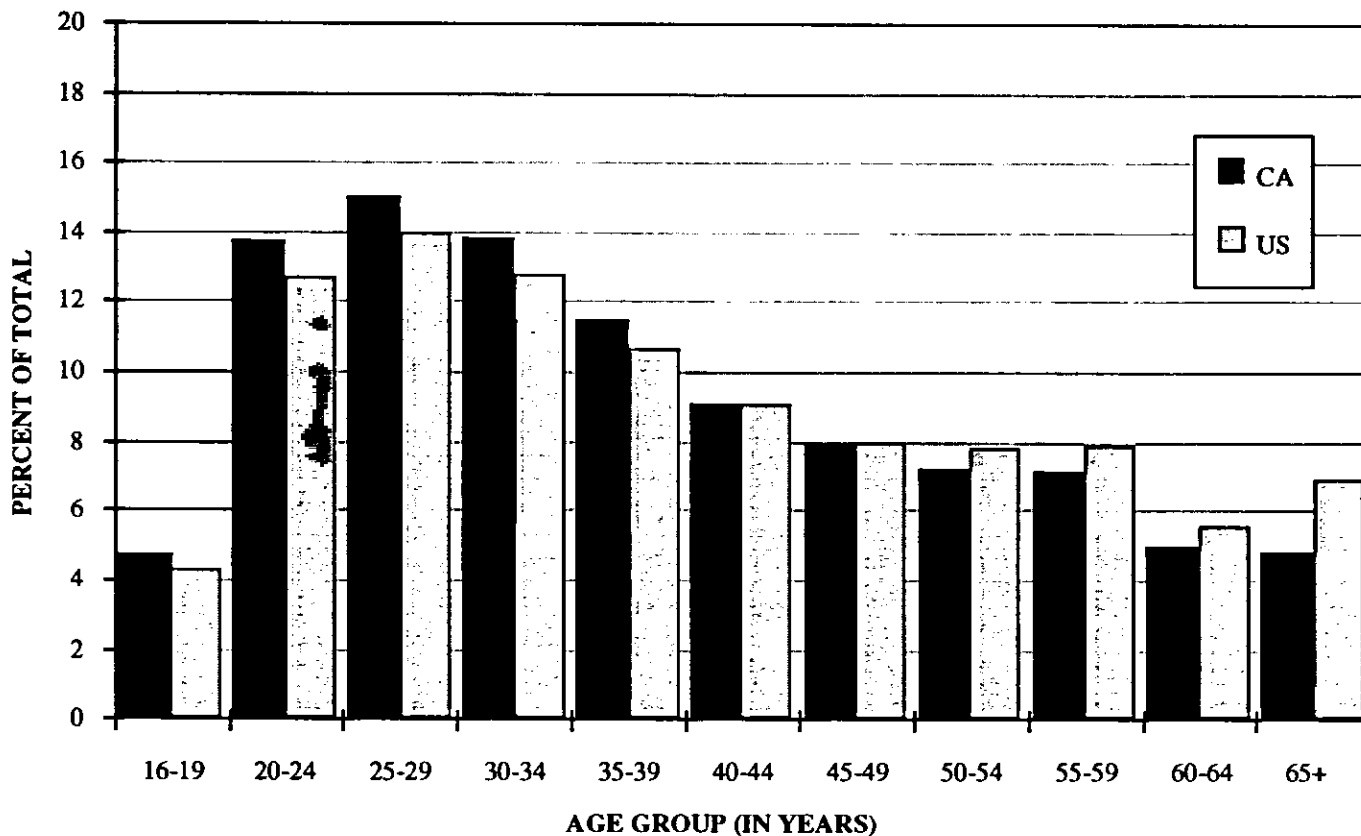


Figure CA-1. Traumatic Occupational Fatalities by Age Group, US and California, 1980-1989.

Table CA-2. Traumatic Occupational Fatalities by State of Residence, California, 1980-1989.

State	Number	Percent
California	6411	91.9
Oregon	56	0.8
Nevada	44	0.6
Arizona	36	0.5
Washington	32	0.5
Texas	28	0.4
North Carolina	24	0.3
Colorado	20	0.3
Utah	19	0.3
Florida	14	0.2
Illinois	12	0.2
Other	280	4.0

The occupation divisions in California with the largest number of fatalities were transportation/material movers (20%), precision production/craft/repair (17%), services (9%), and farmers/foresters/fishers (9%). The occupations with the highest rates were transportation/material movers (31.0 deaths per 100,000 workers), farmers/foresters/fishers (14.9), and laborers (13.2) (Figure CA-4). Table CA-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in California decreased 47%, from a high of 8.8 in 1980 to a low of 4.7 in 1989 (Figure CA-5).

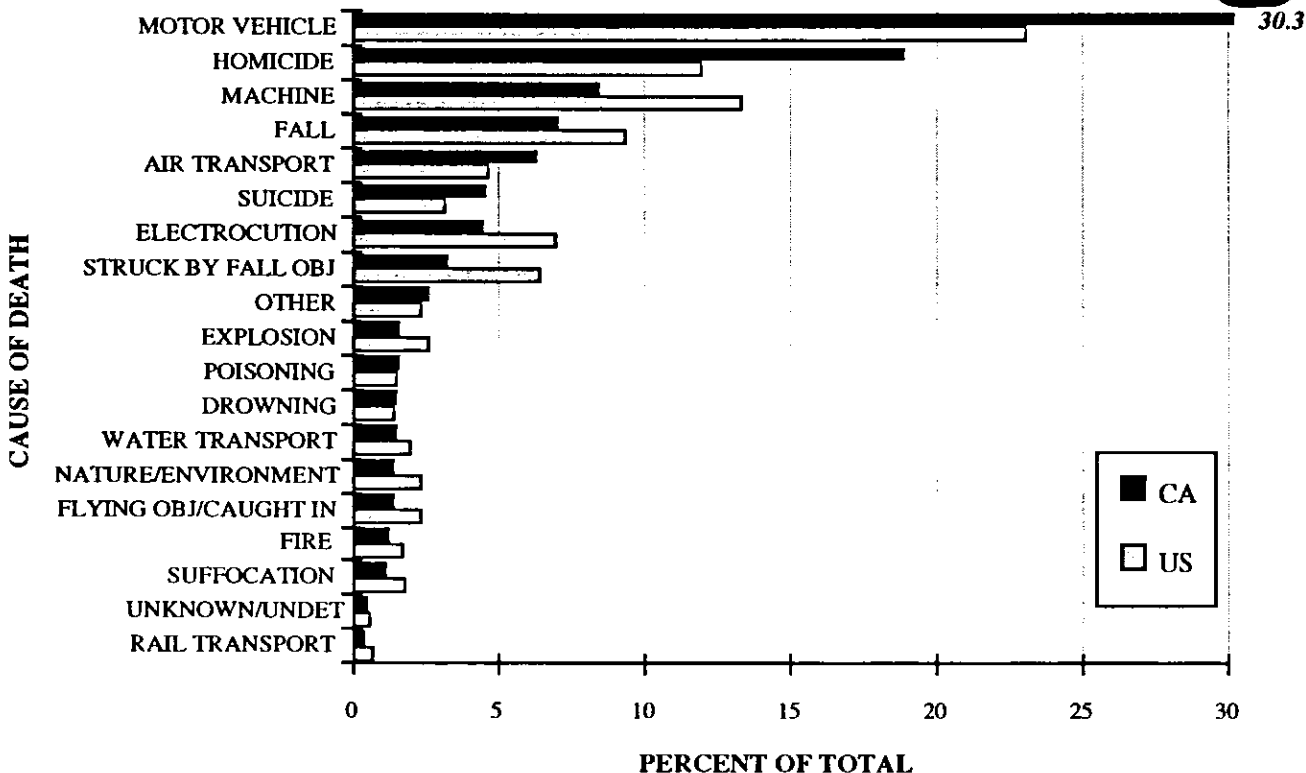


Figure CA-2. Traumatic Occupational Fatalities by Cause of Death, US and California, 1980-1989.

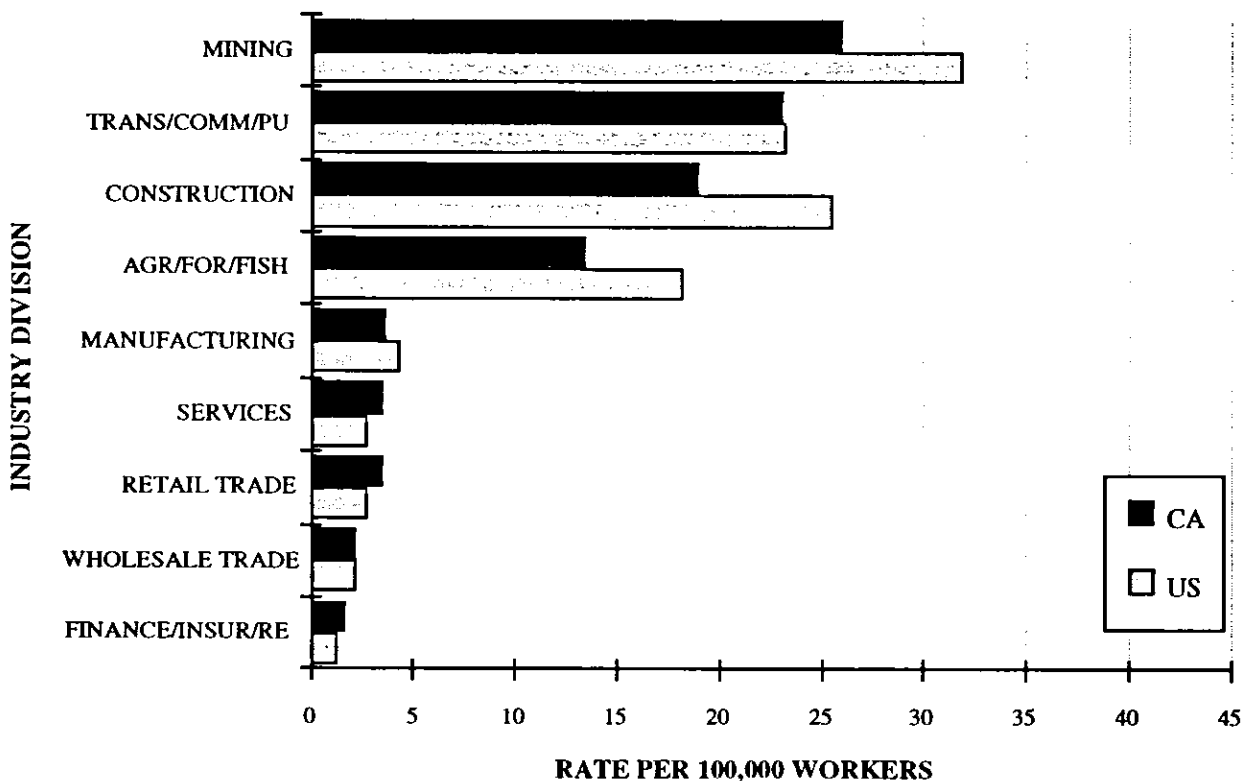


Figure CA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and California, 1980-1989.

Table CA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, California, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	13	22	13	4	23	16	9	11	14	4	129	26.1
TRANS/COMM/PU	165	153	138	103	134	118	130	134	119	103	1297	23.1
CONSTRUCTION	100	86	77	83	103	113	101	118	107	102	990	19.1
AGR/FOR/FISH	81	75	66	63	56	74	68	67	51	55	656	13.6
MANUFACTURING	100	91	57	71	86	77	69	68	84	72	775	3.7
SERVICES	105	100	112	106	92	87	95	85	79	89	950	3.7
RETAIL TRADE	115	83	84	55	68	70	56	55	50	59	695	3.7
WHOLESALE TRADE	30	14	9	15	19	14	16	13	14	7	151	2.3
FINANCE/INSUR/RE	13	19	18	17	14	10	14	16	8	7	136	1.8
PUBLIC ADMIN	55	61	50	70	53	48	43	56	63	28	527	N/A
NOT CLASSIFIED	33	45	22	24	37	27	31	42	18	38	317	N/A
STATE	810	749	646	611	685	654	632	665	607	564	6623	6.3

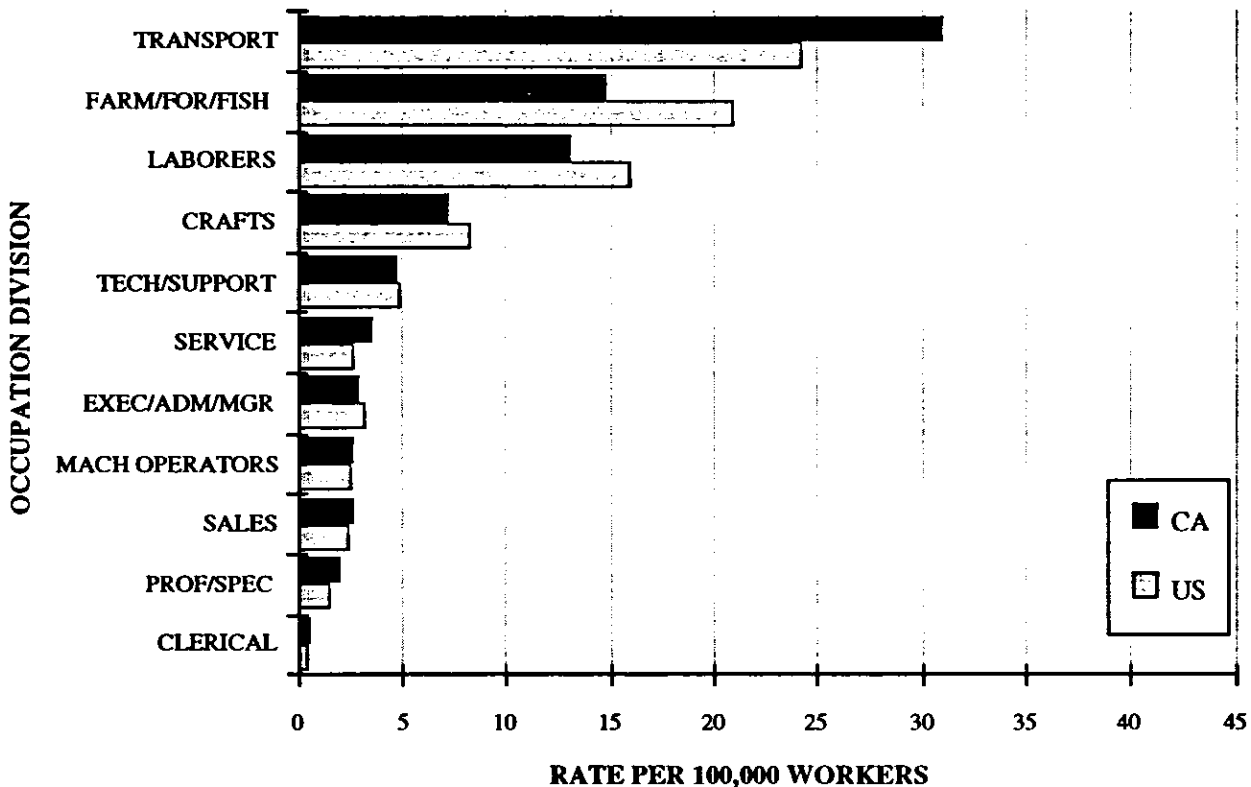


Figure CA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and California, 1980-1989.

Table CA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, California.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	1300	31.0
FARM/FOR/FISH	594	14.9
LABORERS	565	13.2
CRAFTS	1099	7.3
TECH/SUPPORT	214	4.9
SERVICE	622	3.7
EXEC/ADM/MGR	540	3.0
MACH OPERATORS	235	2.8
SALES	476	2.7
PROF/SPEC	402	2.1
CLERICAL	159	0.7
NOT CLASSIFIED	417	N/A

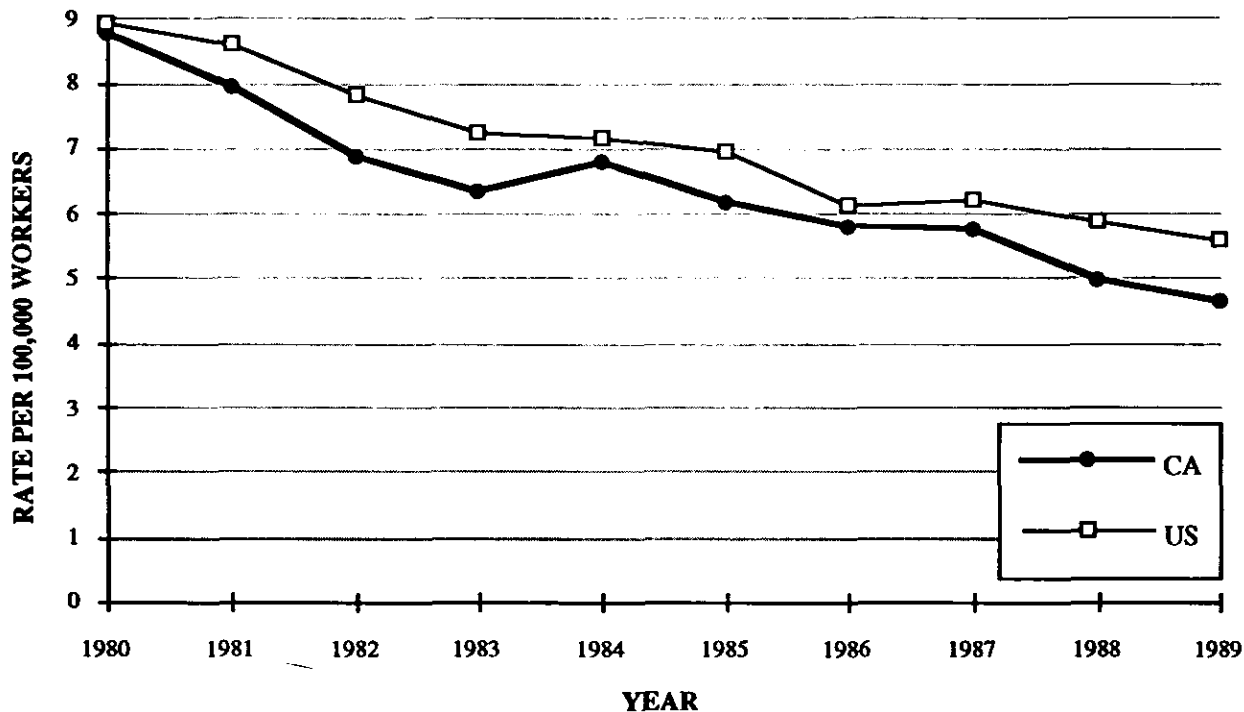


Figure CA-5. Rate of Traumatic Occupational Fatalities by Year, US and California, 1980-1989.

State of Colorado

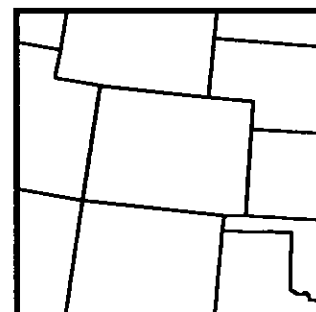
Average Annual Fatal Injuries: **116**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **8.9**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (271)**

Rate: **Transportation/Communication/
Public Utilities (33.3)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (238)**

Rate: **Transportation/Material Movers (34.2)**

The State of Colorado had 1,162 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,110 of these deaths. The average annual rate of fatalities per 100,000 workers was 8.9 for Colorado compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 245.6 per 100,000 workers for Colorado compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Colorado and had a fatality rate of 12.2 per 100,000 workers compared to 1.0 for fe-

males. The fatality distribution by **race/ethnicity** for the State of Colorado shows that Whites accounted for 87% of the total fatalities and Hispanics for 9% as shown in **Table CO-1**. As shown in **Figure CO-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (18%). Of all Colorado occupational fatality victims, 82% were Colorado residents (**Table CO-2**).

Figure CO-2 presents the distribution of fatalities by external cause of death for the State of Colorado and for the U.S. The three leading causes of death among employees in Colorado were motor vehicle incidents (30%), machine-related incidents (10%), and air transportation (10%).

Table CO-1. Traumatic Occupational Fatalities by Race/Ethnicity, Colorado, 1980-1989.

Race/Ethnicity	Number	Percent
White	1015	87.3
Hispanic	104	9.0
Black	32	2.8
Native American	7	0.6
Other	4	0.3

In Colorado, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (24%), construction (20%), and services (12%). The transportation/communication/public utilities industry had the highest fatality rate at 33.2 per 100,000 workers, followed by construction (28.5), and mining (22.3) (**Figure CO-3**). **Table CO-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

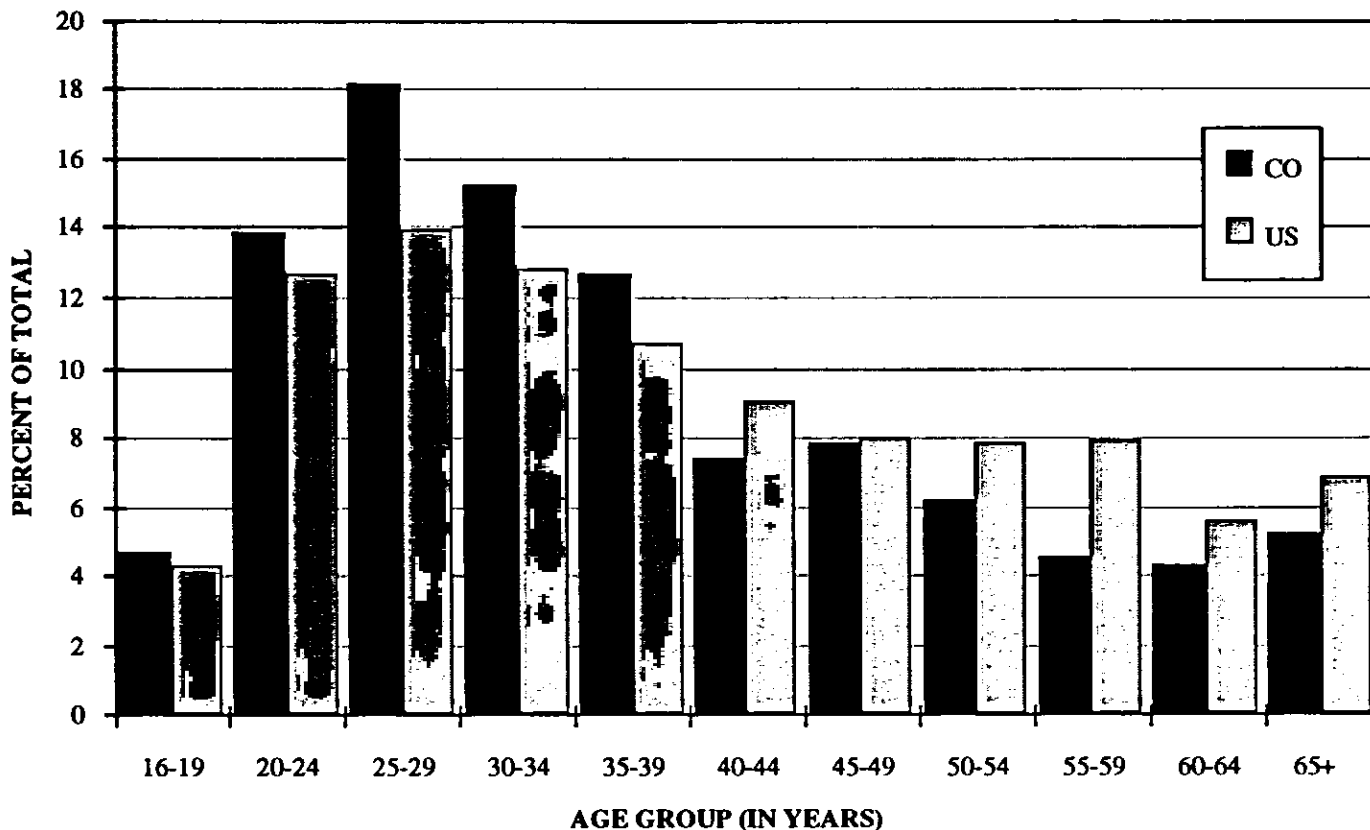


Figure CO-1. Traumatic Occupational Fatalities by Age Group, US and Colorado, 1980-1989.

Table CO-2. Traumatic Occupational Fatalities by State of Residence, Colorado, 1980-1989.

State	Number	Percent
Colorado	953	82.0
Texas	29	2.5
Wyoming	22	1.9
California	18	1.5
New Mexico	13	1.1
Oklahoma	13	1.1
Utah	13	1.1
Nebraska	12	1.0
Kansas	11	0.9
Arizona	8	0.7
Minnesota	6	0.5
Missouri	6	0.5
Other	58	5.0

The **occupation divisions** in Colorado with the largest number of fatalities were precision production/craft/repair (21%), transportation/material movers (21%), and laborers (11%). The occupations with the highest rates were transportation/material movers (34.2 deaths per 100,000 workers), laborers (17.5), and farmers/foresters/fishers (15.3) (**Figure CO-4**). **Table CO-4** provides numbers and rates of work-related deaths for each occupation division.

During the decade, the **fatality rates** in Colorado decreased 54%, from 11.9 in 1980 to 5.5 in 1989. A high of 13.0 and a low of 5.4 deaths per 100,000 workers were reported in 1982 and 1988, respectively (**Figure CO-5**).

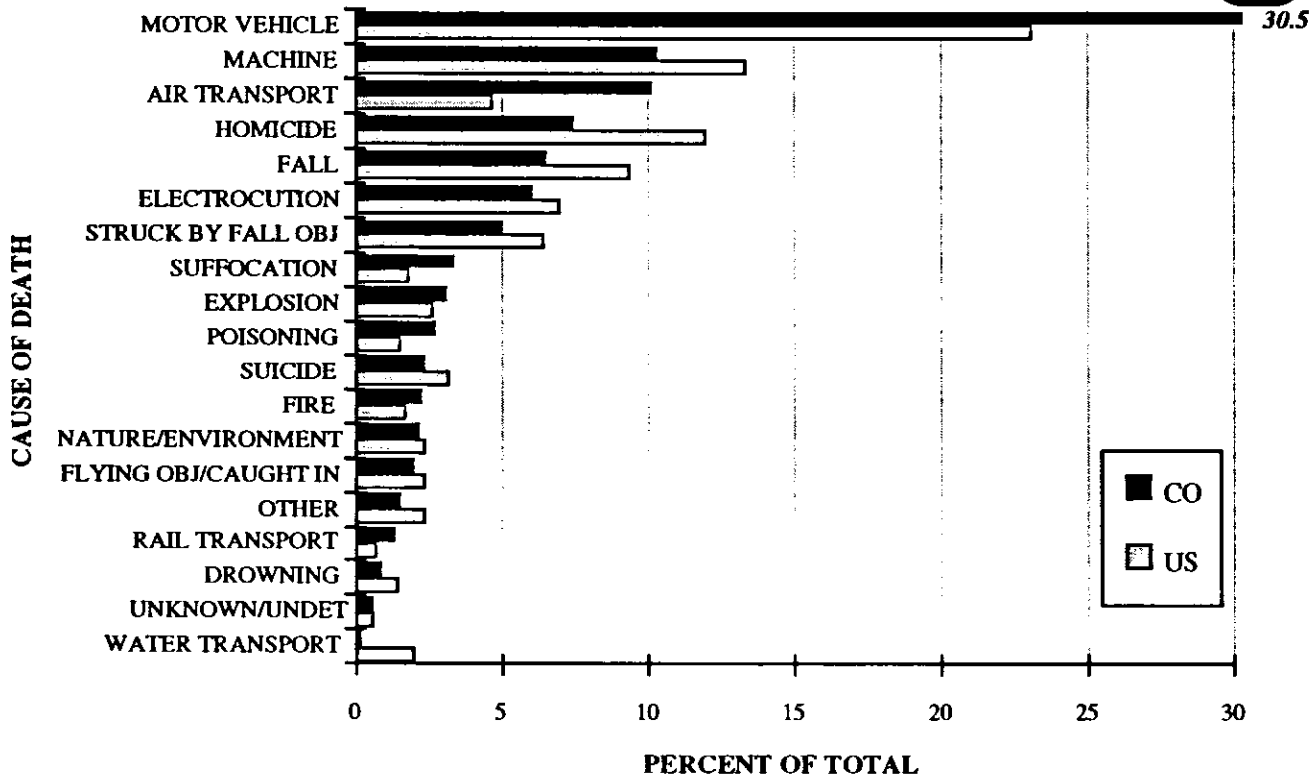


Figure CO-2. Traumatic Occupational Fatalities by Cause of Death, US and Colorado, 1980-1989.

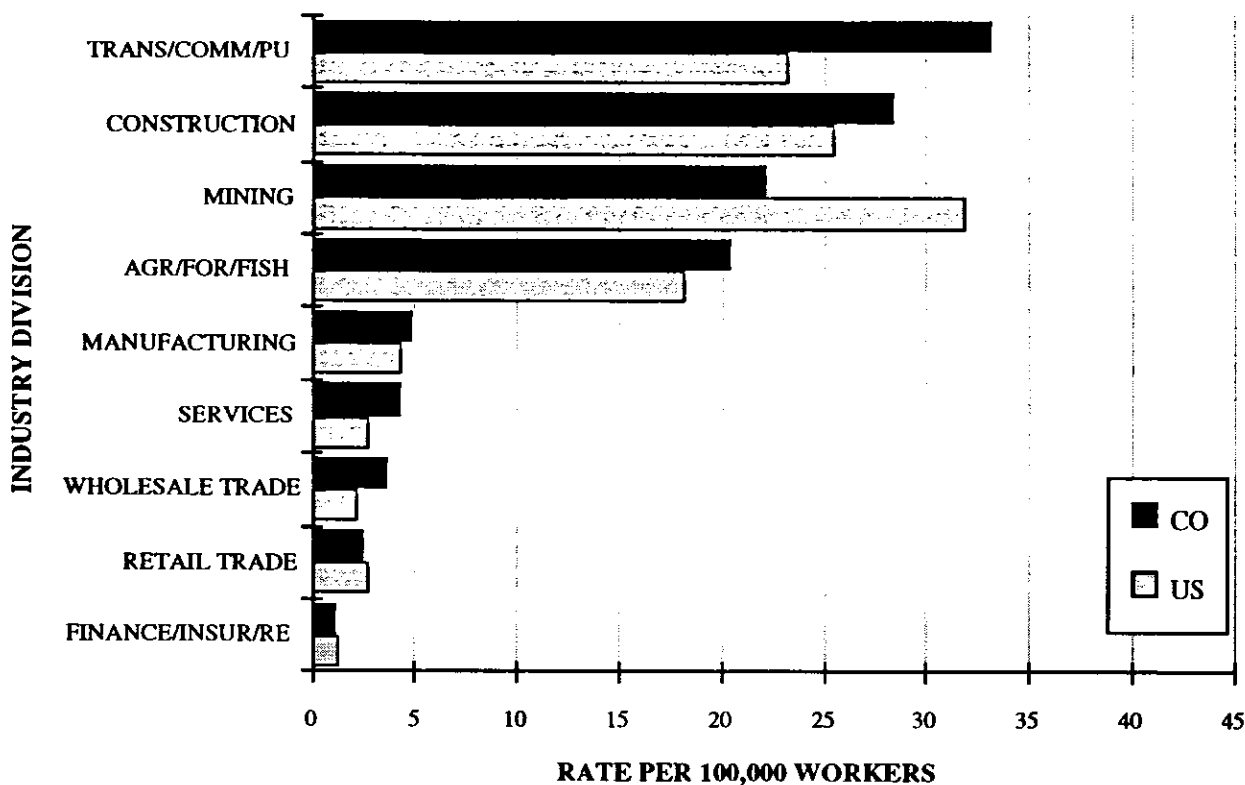


Figure CO-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Colorado, 1980-1989.

Table CO-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Colorado, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	25	43	36	13	31	42	18	23	17	23	271	33.3
CONSTRUCTION	29	23	42	18	29	21	19	19	11	15	226	28.5
MINING	14	26	8	--	6	7	4	5	5	4	79	22.3
AGR/FOR/FISH	12	9	13	10	10	14	6	8	3	6	91	20.5
MANUFACTURING	9	12	21	7	14	6	9	5	5	5	93	4.9
SERVICES	12	11	11	10	18	16	27	11	13	7	136	4.4
WHOLESALE TRADE	5	--	6	--	3	--	4	--	3	--	30	3.8
RETAIL TRADE	8	9	11	--	6	5	12	6	6	--	67	2.6
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	11	1.2
PUBLIC ADMIN	5	11	8	3	5	5	3	11	7	5	63	N/A
NOT CLASSIFIED	11	3	--	5	4	6	5	--	3	5	43	N/A
STATE	132	150	157	72	127	125	108	92	73	74	1110	8.9

NOTE: Dashes denote categories with fewer than three cases.

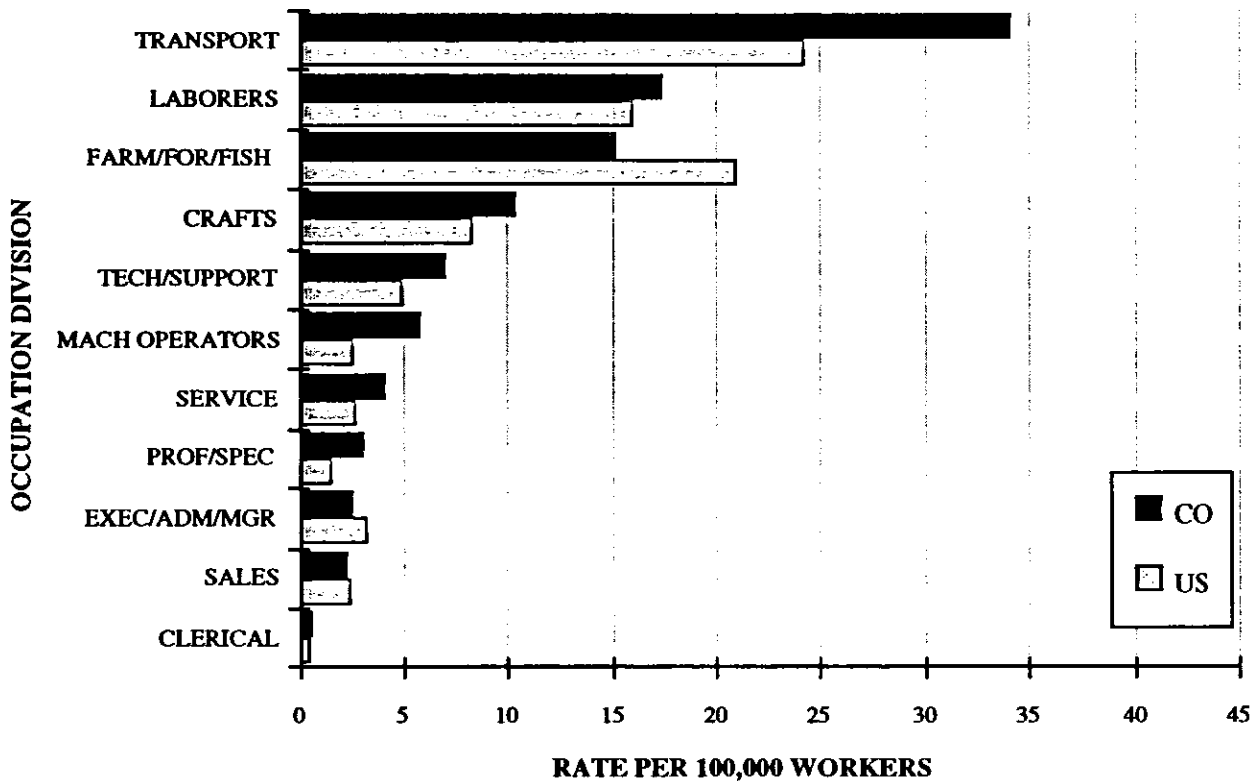


Figure CO-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Colorado, 1983-1989.

Table CO-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Colorado.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	236	34.2
LABORERS	118	17.5
FARM/FOR/FISH	78	15.3
CRAFTS	238	10.5
TECH/SUPPORT	48	7.1
MACH OPERATORS	40	5.9
SERVICE	84	4.2
PROF/SPEC	63	3.2
EXEC/ADM/MGR	79	2.6
SALES	56	2.4
CLERICAL	18	0.7
NOT CLASSIFIED	52	N/A

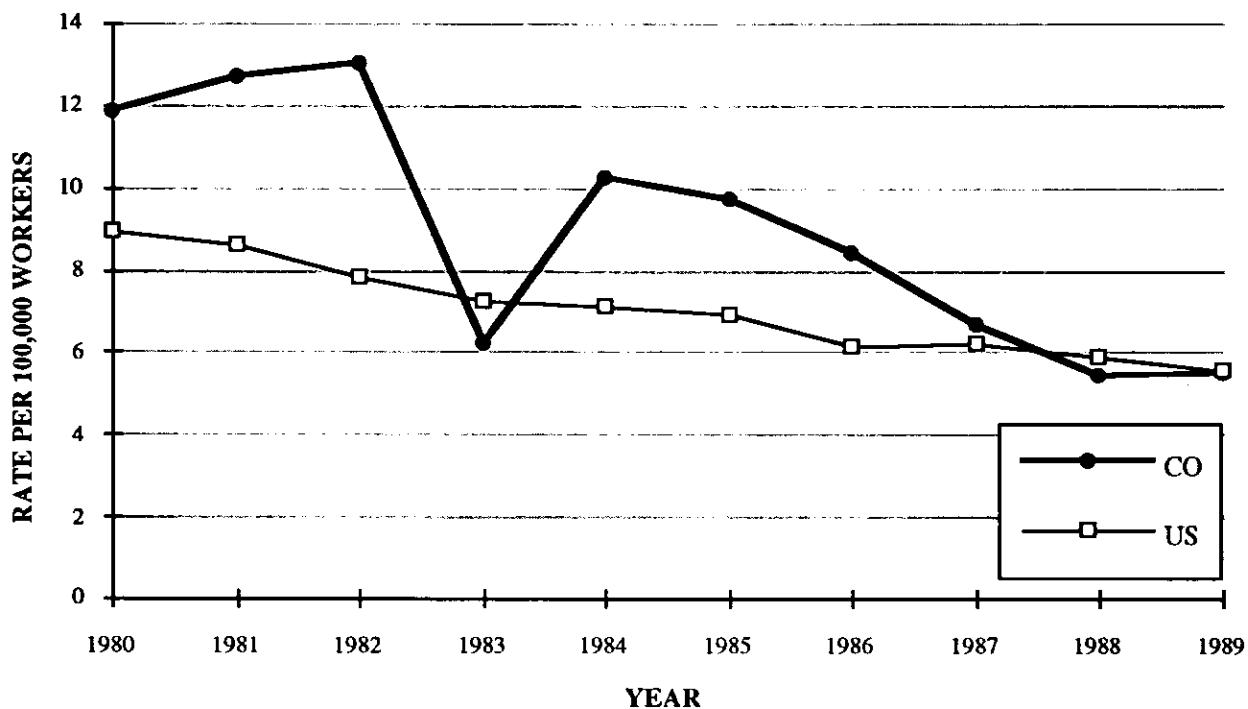


Figure CO-5. Rate of Traumatic Occupational Fatalities by Year, US and Colorado, 1980-1989.

State of Connecticut

Average Annual Fatal Injuries: **26**

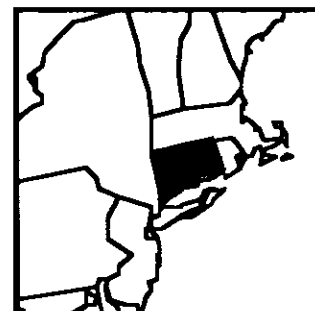
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **1.8**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (94)**
Rate: **Construction (15.0)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (71)**
Rate: **Laborers (9.4)**



The State of Connecticut had 255 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for all of these deaths. The **average annual rate** of fatalities per 100,000 workers was 1.8 for Connecticut compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 43.1 per 100,000 workers for Connecticut compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Connecticut and had a fatality rate of 2.7 per 100,000 workers compared to 0.2 for females. The fatality distribution by **race/ethnicity** for the State of Connecticut shows that Whites accounted for 84% of the total fatalities and Blacks for 12% as shown in **Table CT-1**. As shown in **Figure**

Table CT-1. Traumatic Occupational Fatalities by Race/Ethnicity, Connecticut, 1980-1989.

Race/Ethnicity	Number	Percent
White	215	84.3
Black	30	11.8
Other	10	3.9

CT-1, workers aged 25 to 29 and 30 to 34 years old each accounted for 13% of the fatalities. Of all Connecticut occupational fatality victims, 91% were Connecticut residents (**Table CT-2**).

Figure CT-2 presents the distribution of fatalities by external cause of death for the State of Connecticut and for the U.S. The three leading causes of death among employees in Connecticut were homicides (20%), falls (18%), and being struck by falling objects (15%).

In Connecticut, the **industry divisions** in which the largest number of fatalities occurred were construction (37%), manufacturing (15%), and retail trade (11%). The construction industry had the highest fatality rate at 15.0 per 100,000 workers, followed by agriculture/forestry/fishing (6.7), and transportation/communication/public utilities (3.9) (**Figure CT-3**). **Table CT-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Connecticut with the largest number of fatalities were precision production/craft/repair (28%), laborers (19%), and transportation/material movers (12%). The occupations

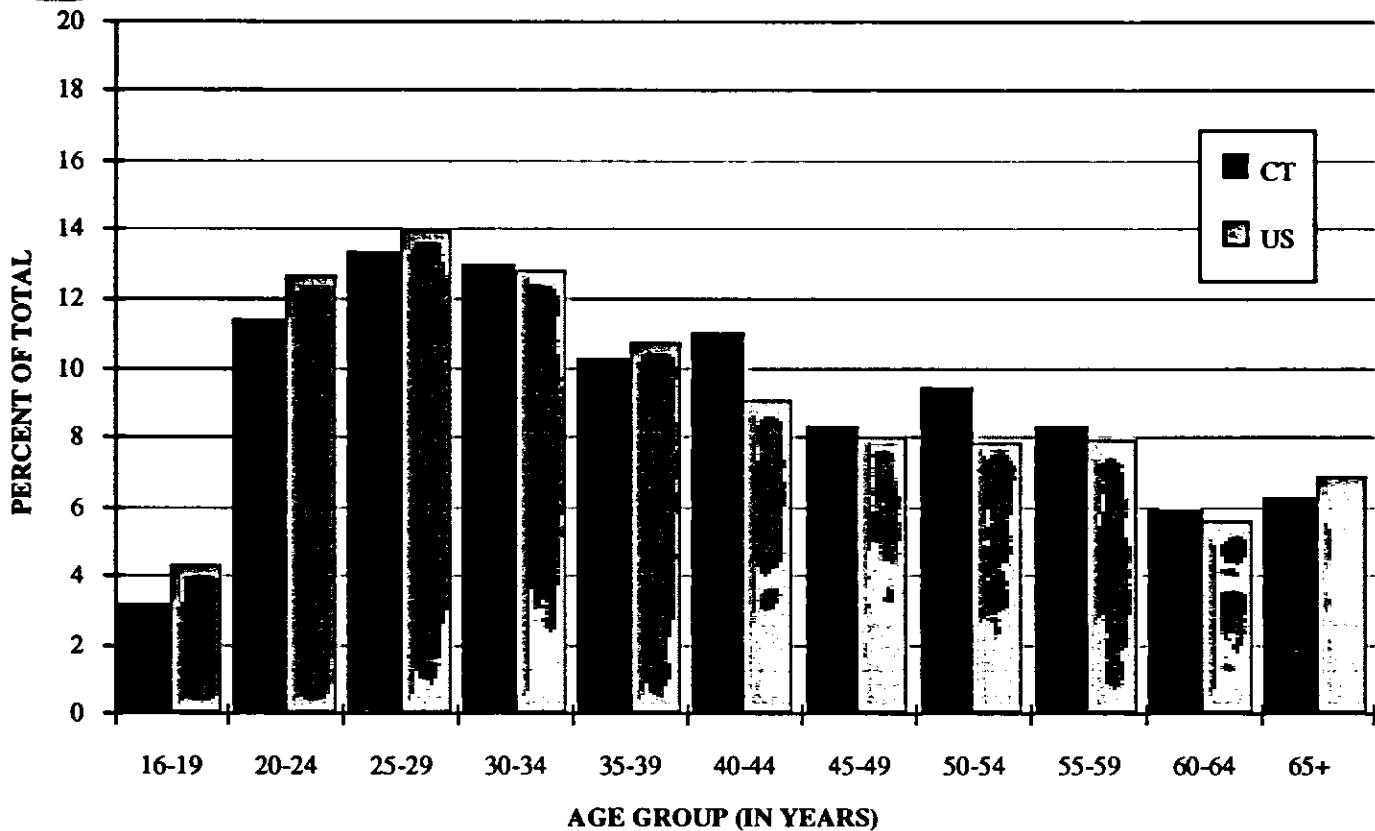


Figure CT-1. Traumatic Occupational Fatalities by Age Group, US and Connecticut, 1980-1989.

Table CT-2. Traumatic Occupational Fatalities by State of Residence, Connecticut, 1980-1989.

State	Number	Percent
Connecticut	232	91.0
Massachusetts	5	2.0
New York	5	2.0
Pennsylvania	3	1.2
Other	10	3.9

with the highest rates were laborers (9.4 deaths per 100,000 workers), transportation/material movers (7.9), and farmers/foresters/fishers (4.2) (Figure CT-4). Table CT-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Connecticut decreased 63%, from 1.9 in 1980 to a low of 0.7 in 1989. It should be noted that only 4 unintentional injury deaths were reported in Connecticut in 1989 compared to an average of 20 unintentional deaths per year for the remaining 9-years of the decade. Whether this represents an artifact of record keeping is undetermined, but this low number of unintentional deaths resulted in the low fatality rate reported in 1989. A high of 3.6 deaths per 100,000 workers was reported in 1987 (Figure CT-5).

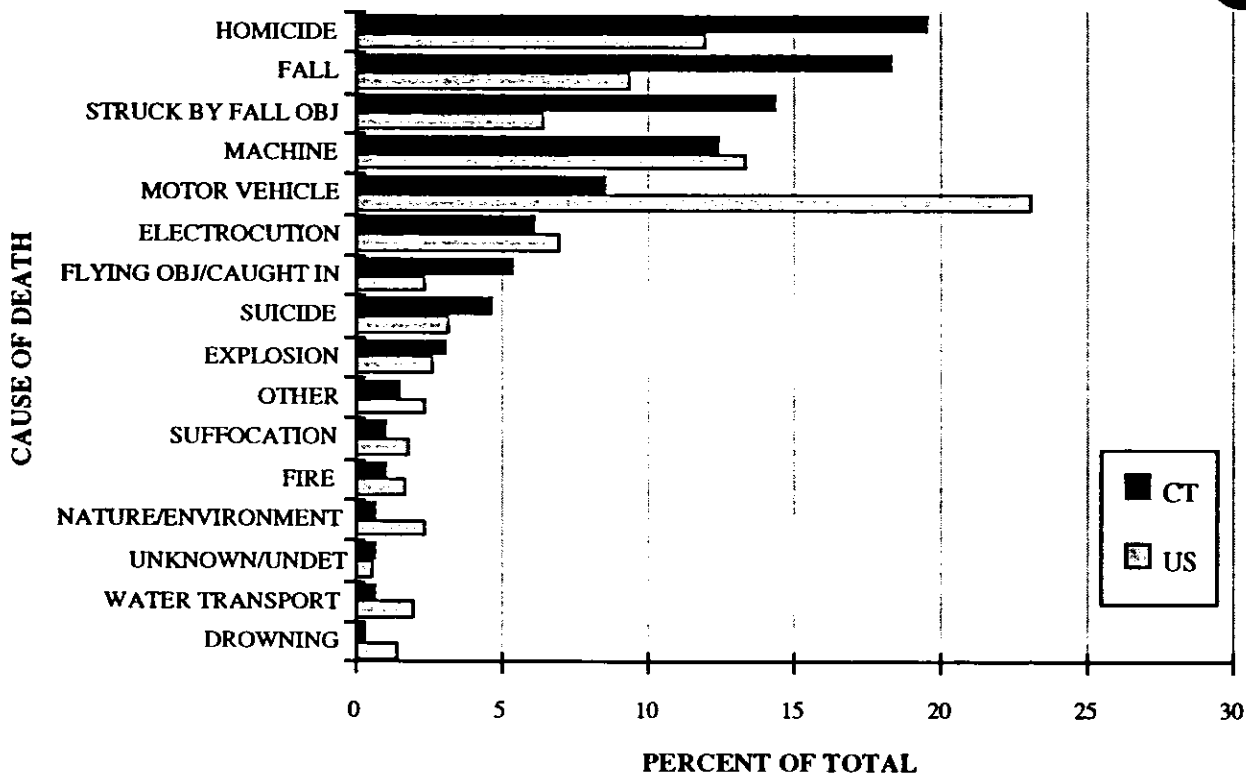


Figure CT-2. Traumatic Occupational Fatalities by Cause of Death, US and Connecticut, 1980-1989.

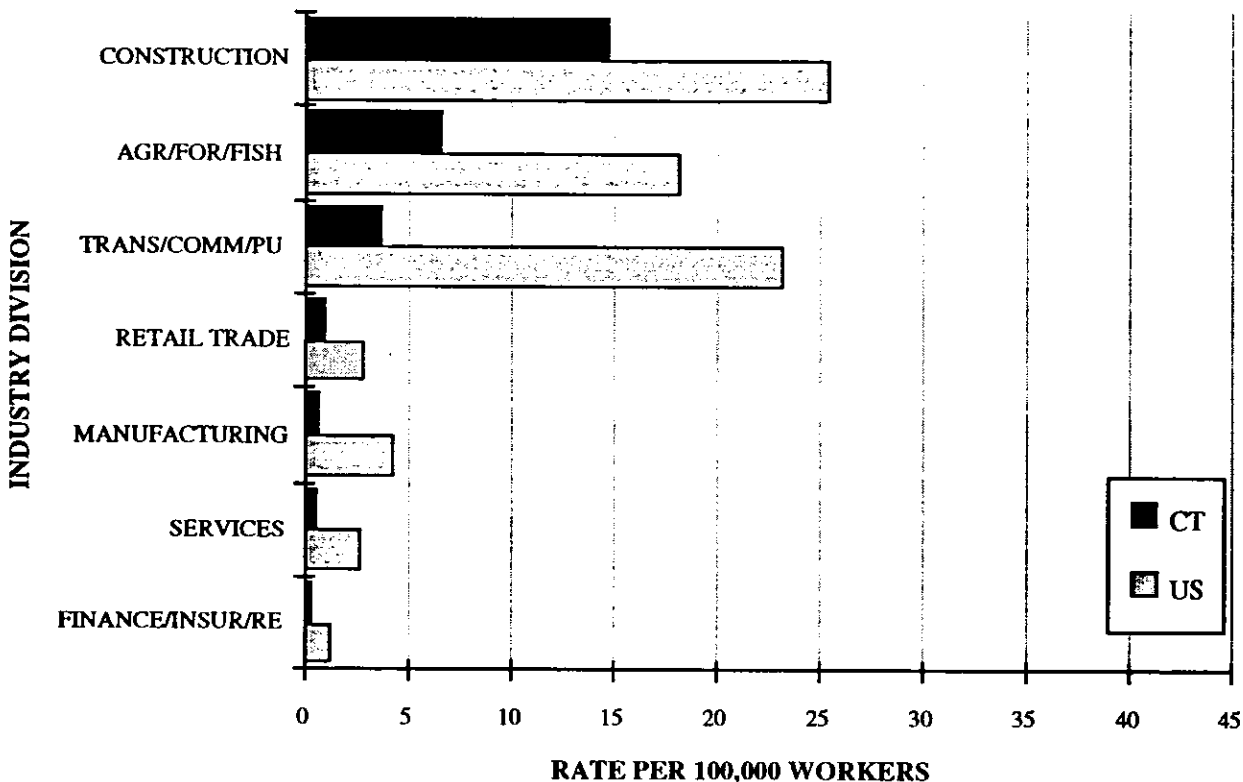


Figure CT-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Connecticut, 1980-1989.

Table CT-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Connecticut, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	7	8	5	6	6	7	8	37	9	--	94	15.0
AGR/FOR/FISH	--	--	--	--	--	--	--	3	3	--	11	6.7
TRANS/COMM/PU	--	--	3	--	3	4	9	--	--	--	26	3.9
RETAIL TRADE	--	5	--	--	4	3	3	--	3	4	27	1.1
MANUFACTURING	--	--	3	4	5	4	6	5	4	--	37	0.9
SERVICES	6	--	--	--	--	--	3	4	6	--	26	0.8
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	6	0.5
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	--	N/A
MINING	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	--	12	N/A
NOT CLASSIFIED	3	--	--	3	--	--	--	--	--	--	14	N/A
STATE	26	24	17	18	20	21	34	54	30	11	255	1.8

NOTE: Dashes denote categories with fewer than three cases.

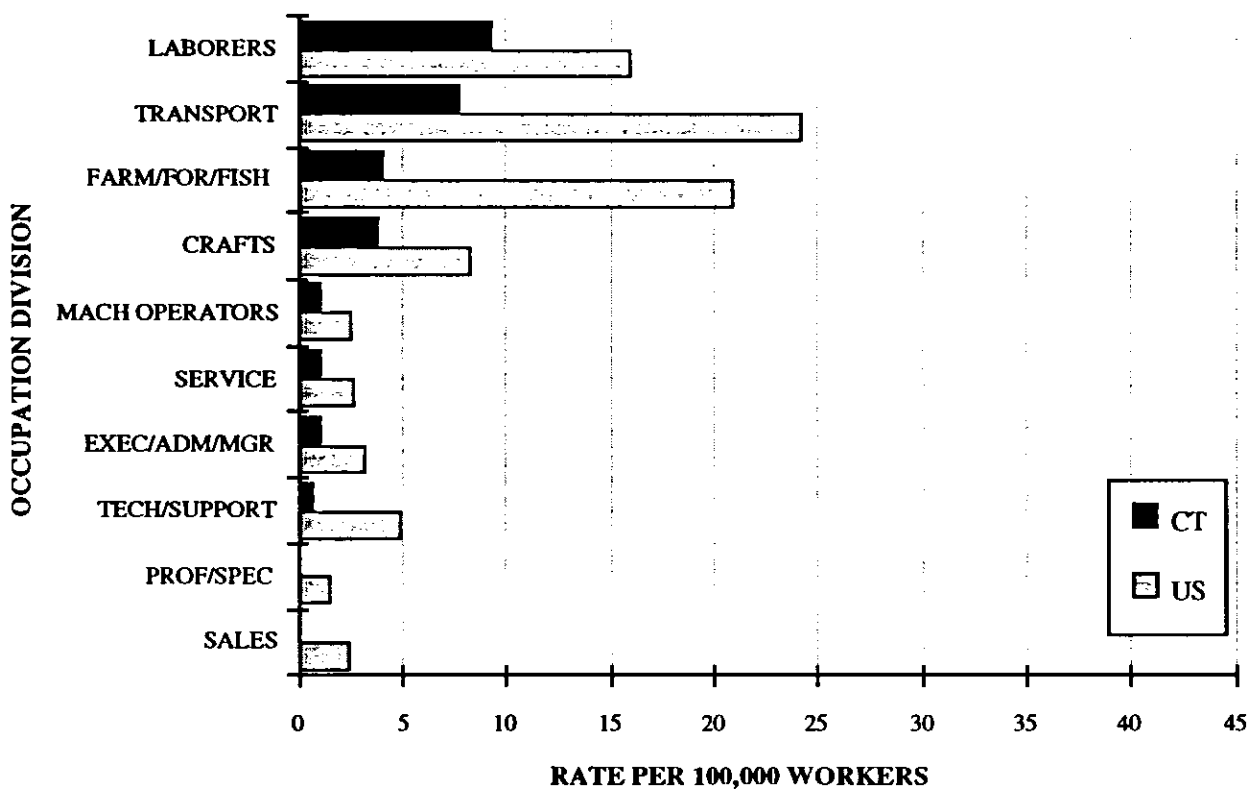


Figure CT-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Connecticut, 1983-1989.

Table CT-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Connecticut.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
LABORERS	48	9.4
TRANSPORT	31	7.9
FARM/FOR/FISH	6	4.2
CRAFTS	71	4.0
MACH OPERATORS	13	1.2
SERVICE	20	1.2
EXEC/ADM/MGR	26	1.2
TECH/SUPPORT	3	0.8
PROF/SPEC	7	0.2
SALES	6	0.2
CLERICAL	3	N/A
NOT CLASSIFIED	21	N/A

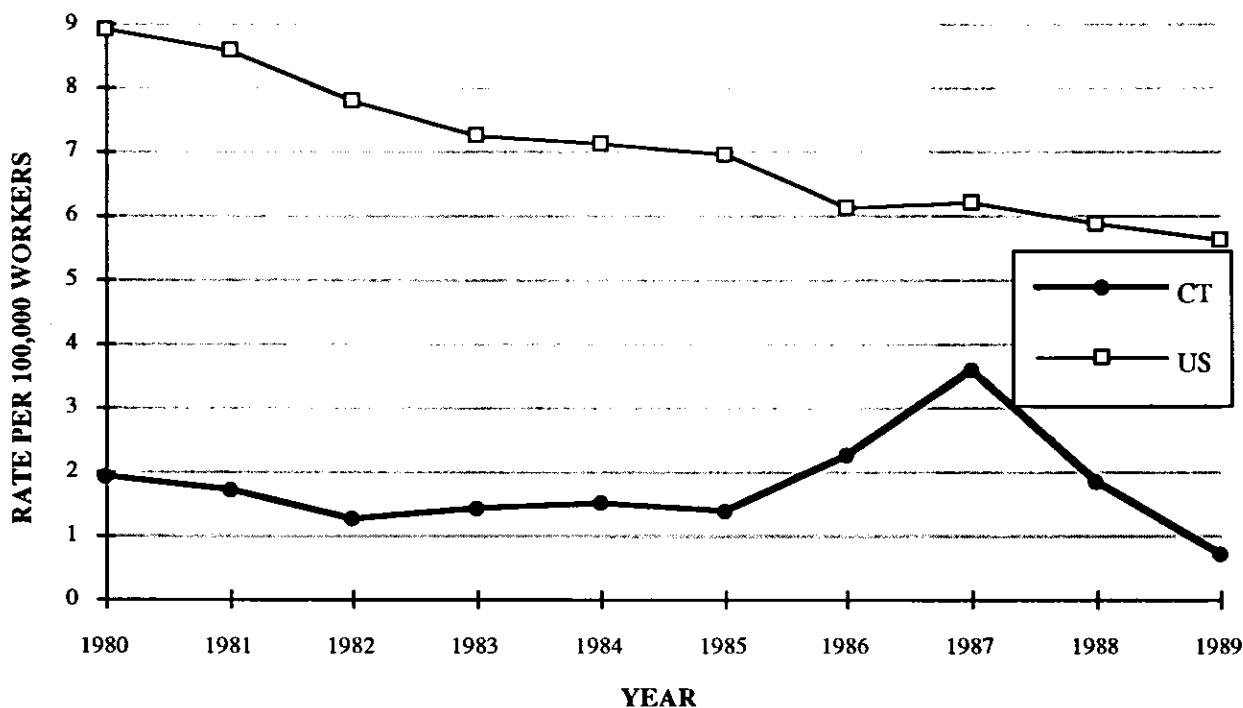


Figure CT-5. Rate of Traumatic Occupational Fatalities by Year, US and Connecticut, 1980-1989.

State of Delaware

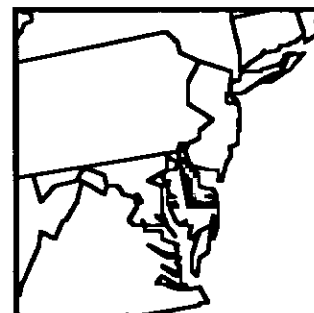
Average Annual Fatal Injuries: 15

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): 5.6

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (27)**

Rate: **Transportation/Communication/
Public Utilities (21.5)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (33)**

Rate: **Transportation/Material Movers (24.5)**

The State of Delaware had 149 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 146 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 5.6 for Delaware compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 136.9 per 100,000 workers for Delaware compared to 175.6 for the United States.

Males accounted for 92% of the civilian occupational fatalities in Delaware and had a fatality rate of 8.3 per 100,000 workers compared to 0.8 for females. The fatality distribution by **race/ethnicity** for the State of Delaware shows that Whites accounted for

Table DE-1. Traumatic Occupational Fatalities by Race/Ethnicity, Delaware, 1980-1989.

Race/Ethnicity	Number	Percent
White	107	71.8
Black	20	13.4
Hispanic	18	12.7
Other	4	2.7

72% of the total fatalities, Blacks for 13%, and Hispanics for 13% as shown in **Table DE-1**. As shown in **Figure DE-1**, workers aged 20 to 24 years old accounted for the largest number of fatalities (13%). Of all Delaware occupational fatality victims, 71% were Delaware residents (**Table DE-2**).

Figure DE-2 presents the distribution of fatalities by external cause of death for the State of Delaware and for the U.S. The three leading causes of death among employees in Delaware were motor vehicle incidents (30%), homicides (12%), and falls (11%).

In Delaware, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (18%), construction (18%), and services (9%). The transportation/communication/public utilities industry had the highest fatality rate at 21.5 per 100,000 workers, followed by construction (15.4), and agriculture/forestry/fishing (7.0) (**Figure DE-3**). **Table DE-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Delaware with the largest number of fatalities were precision produc-

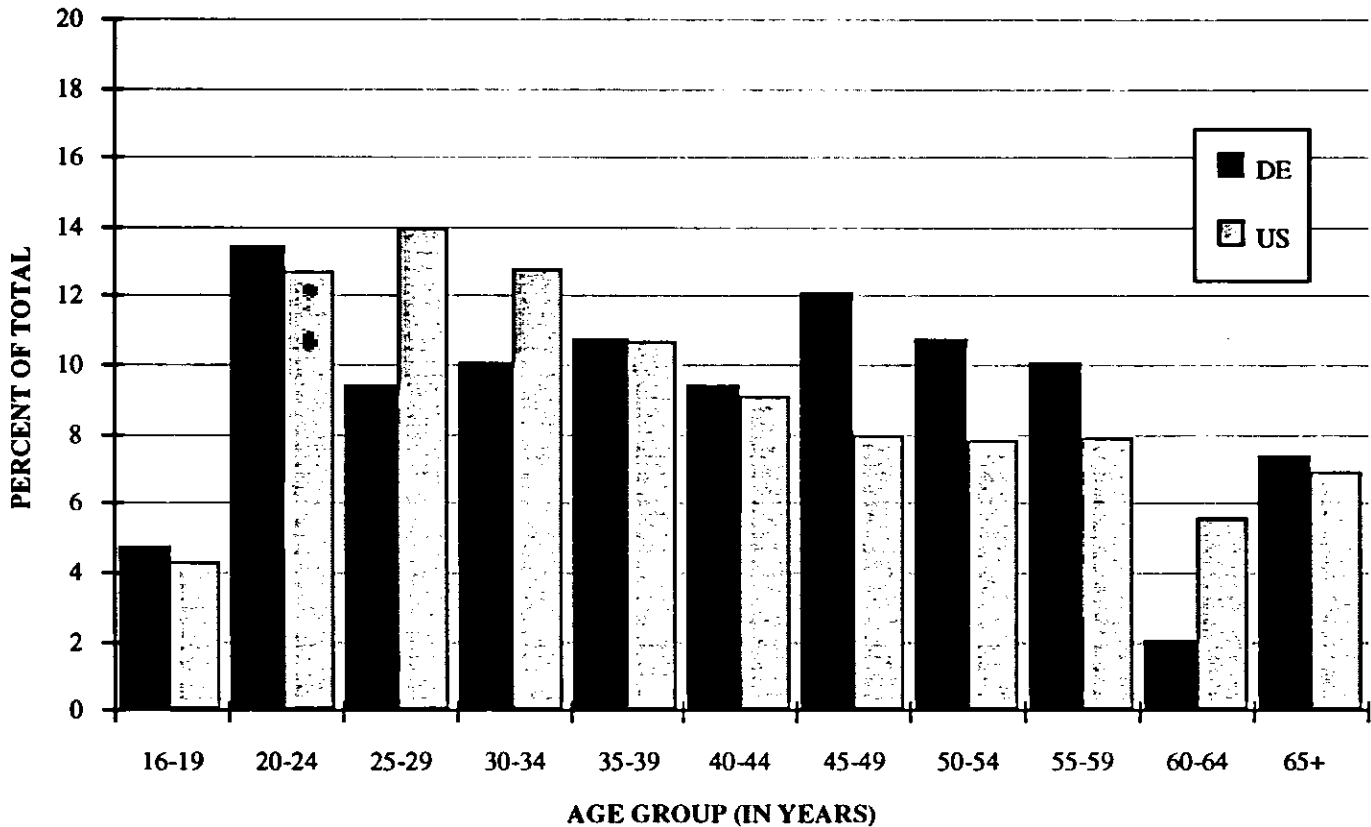


Figure DE-1. Traumatic Occupational Fatalities by Age Group, US and Delaware, 1980-1989.

Table DE-2. Traumatic Occupational Fatalities by State of Residence, Delaware, 1980-1989.

State	Number	Percent
Delaware	106	71.1
Maryland	14	9.4
Pennsylvania	13	8.7
New Jersey	7	4.7
North Carolina	3	2.0
Other	6	4.0

tion/craft/repair (23%), transportation/material movers (18%), and laborers (14%). The occupations with the highest rates were transportation/material movers (24.5 deaths per 100,000 workers), laborers (13.3), and farmers/foresters/fishers (10.2) (Figure DE-4). Table DE-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Delaware decreased 61%, from a high of 12.4 in 1980 to 4.8 in 1989. A low of 1.0 deaths per 100,000 workers was reported in 1988 (Figure DE-5).

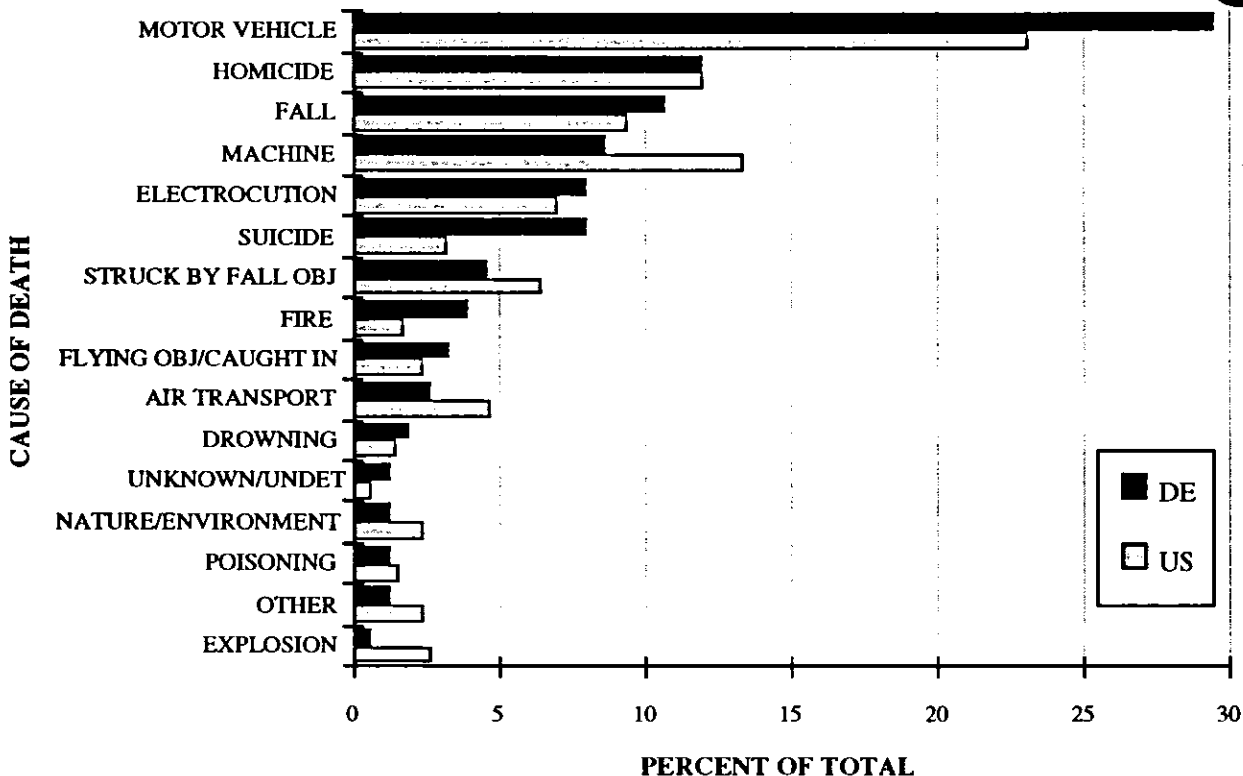


Figure DE-2. Traumatic Occupational Fatalities by Cause of Death, US and Delaware, 1980-1989.

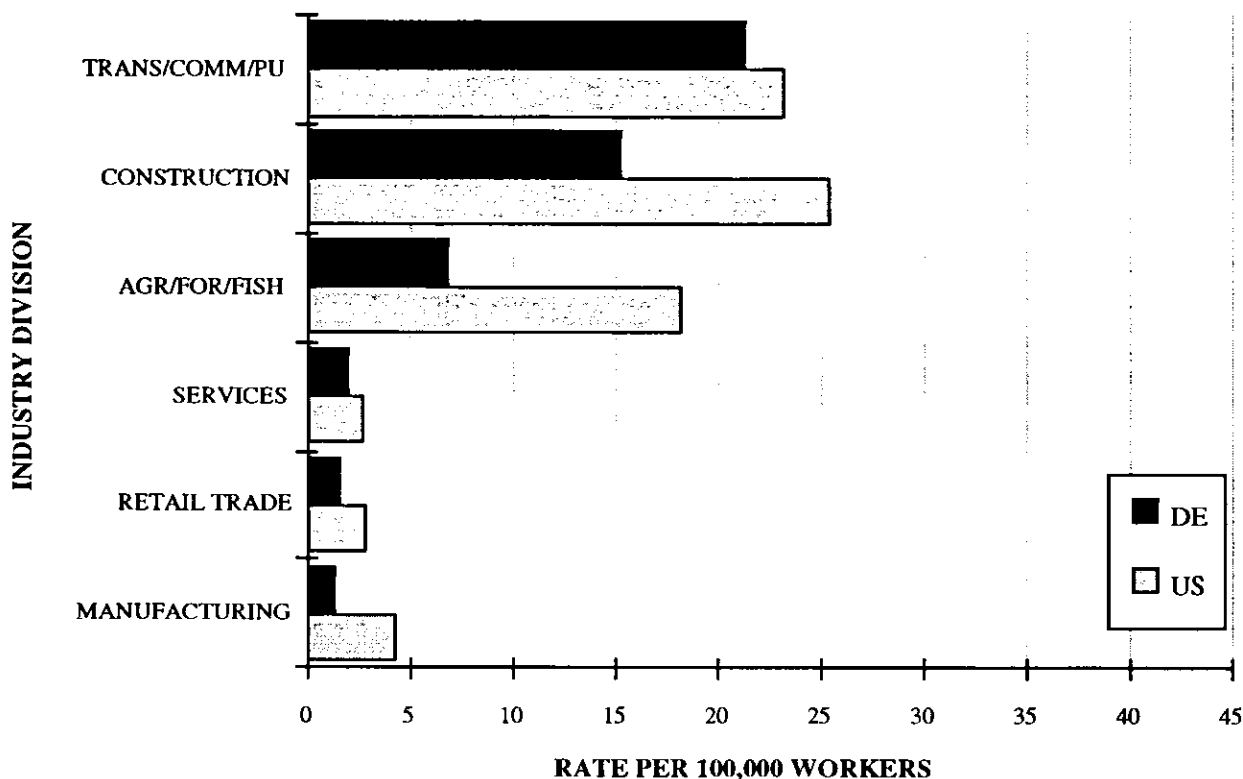


Figure DE-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Delaware, 1980-1989.

Table DE-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Delaware, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	3	--	7	--	3	3	3	--	--	6	27	21.5
CONSTRUCTION	4	4	--	--	4	3	4	3	--	3	26	15.4
AGR/FOR/FISH	--	--	--	--	--	--	--	--	--	--	6	7.0
SERVICES	--	3	--	--	--	--	--	--	--	--	13	2.1
RETAIL TRADE	--	--	3	--	--	--	--	--	--	--	9	1.8
MANUFACTURING	4	--	--	--	--	--	--	--	--	--	10	1.5
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	--	N/A
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	--	N/A
MINING	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	--	3	N/A
NOT CLASSIFIED	13	--	--	3	13	7	9	--	--	--	49	N/A
STATE	27	11	13	6	24	16	20	10	3	16	146	5.6

NOTE: Dashes denote categories with fewer than three cases.

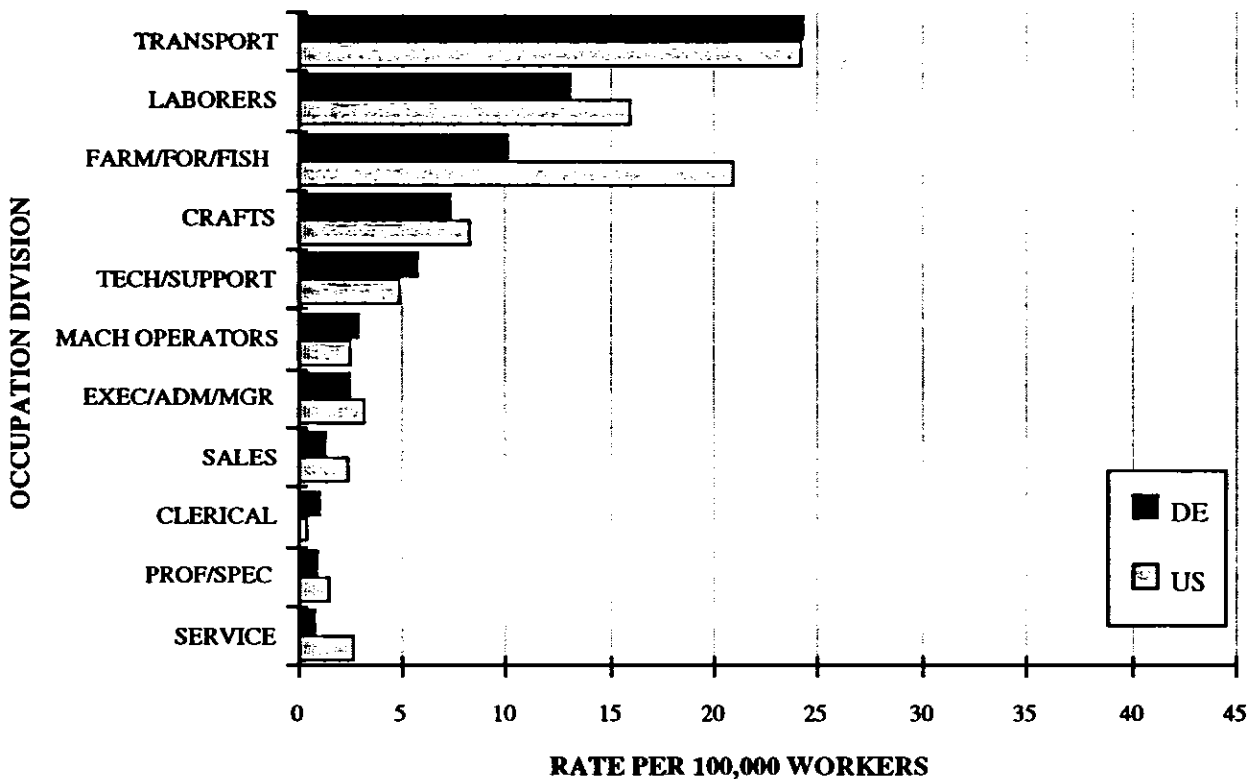


Figure DE-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Delaware, 1983-1989.

Table DE-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Delaware.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	26	24.5
LABORERS	20	13.3
FARM/FOR/FISH	7	10.2
CRAFTS	33	7.5
TECH/SUPPORT	5	5.9
MACH OPERATORS	6	3.0
EXEC/ADM/MGR	8	2.7
SALES	5	1.5
CLERICAL	6	1.3
PROF/SPEC	7	1.1
SERVICE	7	1.0
NOT CLASSIFIED	16	N/A

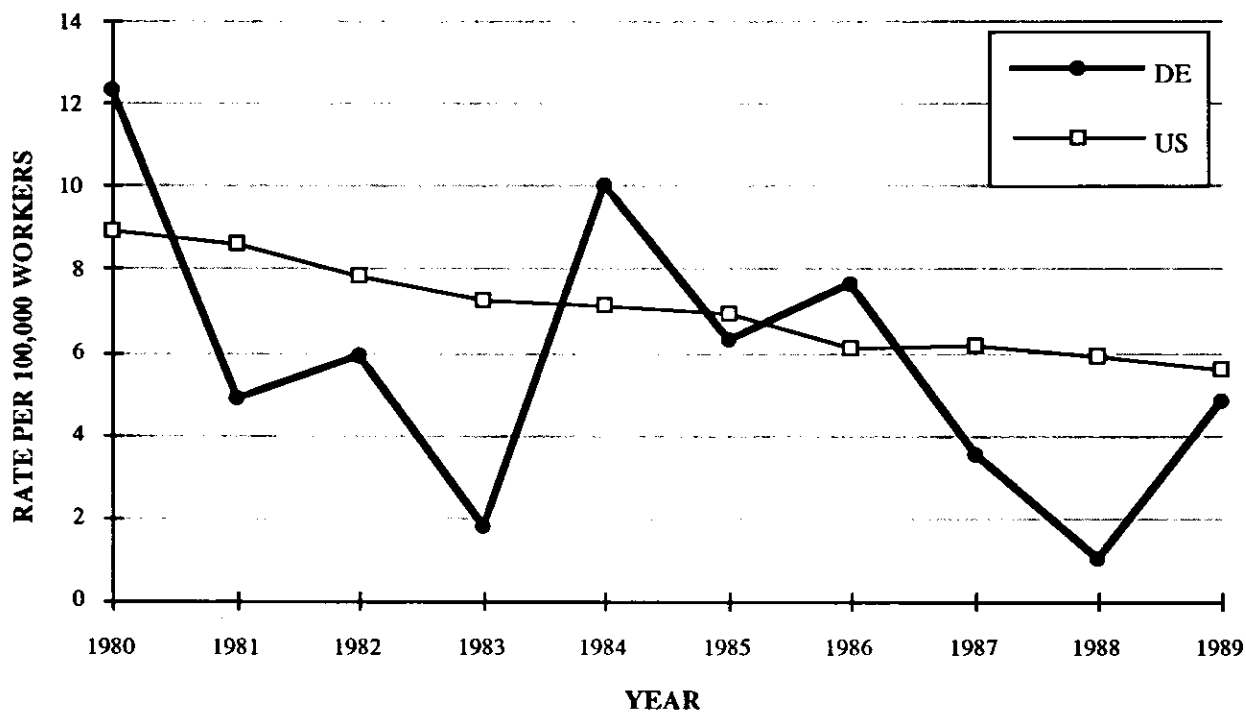


Figure DE-5. Rate of Traumatic Occupational Fatalities by Year, US and Delaware, 1980-1989.

District of Columbia

Average Annual Fatal Injuries: **20**

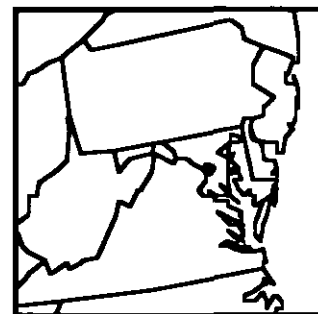
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **4.5**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (41)**
Rate: **Construction (45.5)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (38)**
Rate: **Precision Production/Craft/Repair (26.1)**



The District of Columbia had 195 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 191 of these deaths. The average annual rate of fatalities per 100,000 workers was 4.5 for the District of Columbia compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 114.3 per 100,000 workers for the District of Columbia compared to 175.6 for the United States.

Males accounted for 91% of the civilian occupational fatalities in the District of Columbia and had a fatality rate of 11.9 per 100,000 workers compared to

1.1 for females. The fatality distribution by race/ethnicity for the District of Columbia shows that Whites accounted for 44% of the total fatalities and Blacks for 43% as shown in **Table DC-1**. As shown in **Figure DC-1**, workers aged 20 to 24 years old accounted for the largest number of fatalities (16%). Of all District of Columbia occupational fatality victims, 37% were District of Columbia residents (**Table DC-2**).

Figure DC-2 presents the distribution of fatalities by external cause of death for the District of Columbia and for the U.S. The three leading causes of death among employees in the District of Columbia were homicides (36%), falls (18%), and motor vehicle incidents (8%).

Table DC-1. Traumatic Occupational Fatalities by Race/Ethnicity, District of Columbia, 1980-1989.

Race/Ethnicity	Number	Percent
White	85	43.6
Black	83	42.6
Hispanic	13	6.7
Asian	11	5.6
Other	3	1.5

In the District of Columbia, the industry divisions in which the largest number of fatalities occurred were construction (21%), retail trade (16%), and services (15%). The construction industry had the highest fatality rate at 45.5 per 100,000 workers, followed by agriculture/forestry/fishing (26.8), and transportation/communication/public utilities (9.2) (**Figure DC-3**). **Table DC-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

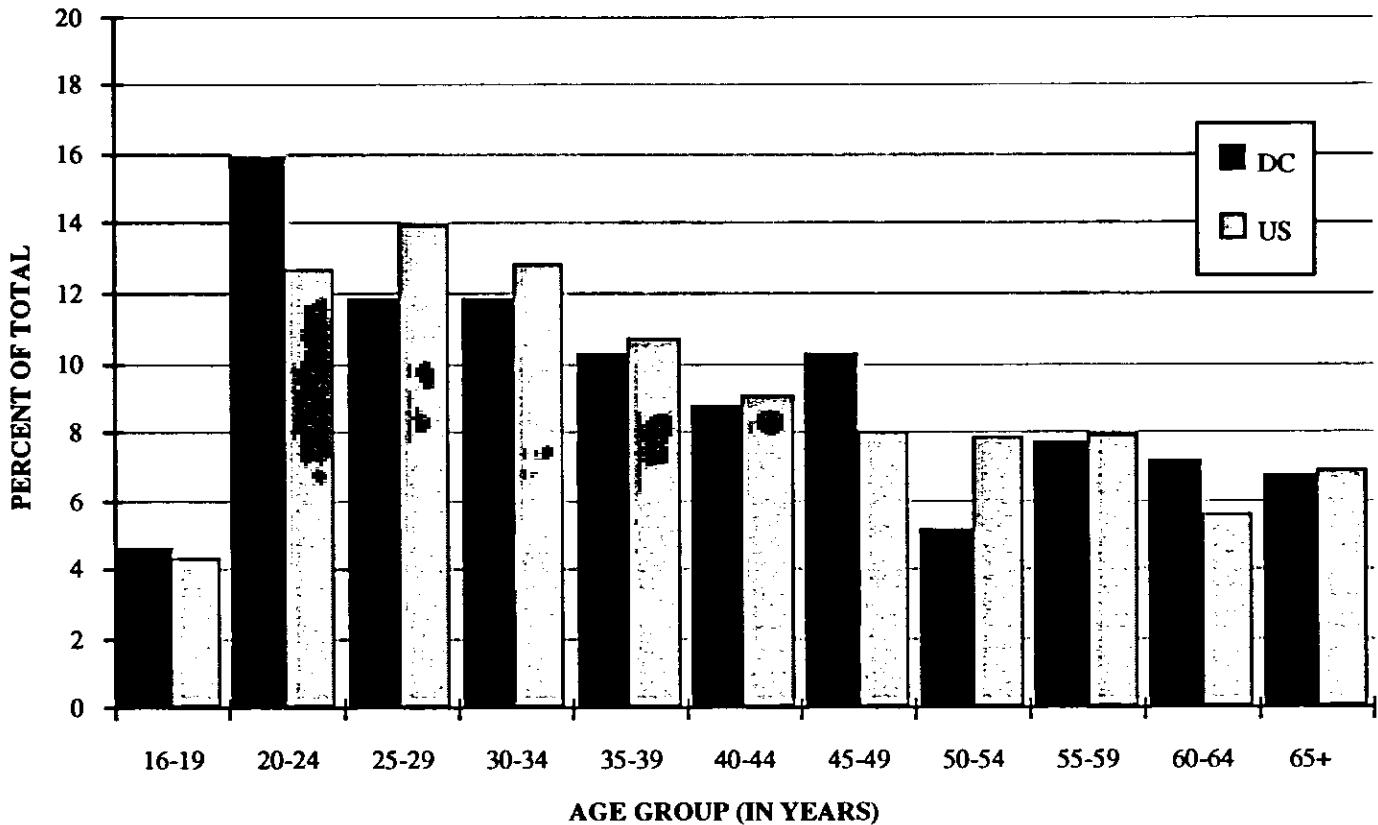


Figure DC-1. Traumatic Occupational Fatalities by Age Group, US and District of Columbia, 1980-1989.

Table DC-2. Traumatic Occupational Fatalities by State of Residence, District of Columbia, 1980-1989.

State	Number	Percent
Maryland	76	39.0
Washington, D.C.	73	37.4
Virginia	28	14.4
Florida	4	2.1
Other	14	7.2

The occupation divisions in the District of Columbia with the largest number of fatalities were precision production/craft/repair (20%), services (17%), and sales (12%). The occupations with the highest rates were precision production/craft/repair (26.1 deaths per 100,000 workers), laborers (18.9), and transportation/material movers (13.1) (Figure DC-4). Table DC-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in the District of Columbia decreased 53%, from 5.5 in 1980 to a low of 2.6 in 1989. A high of 7.3 deaths per 100,000 workers was reported in 1982 (Figure DC-5).

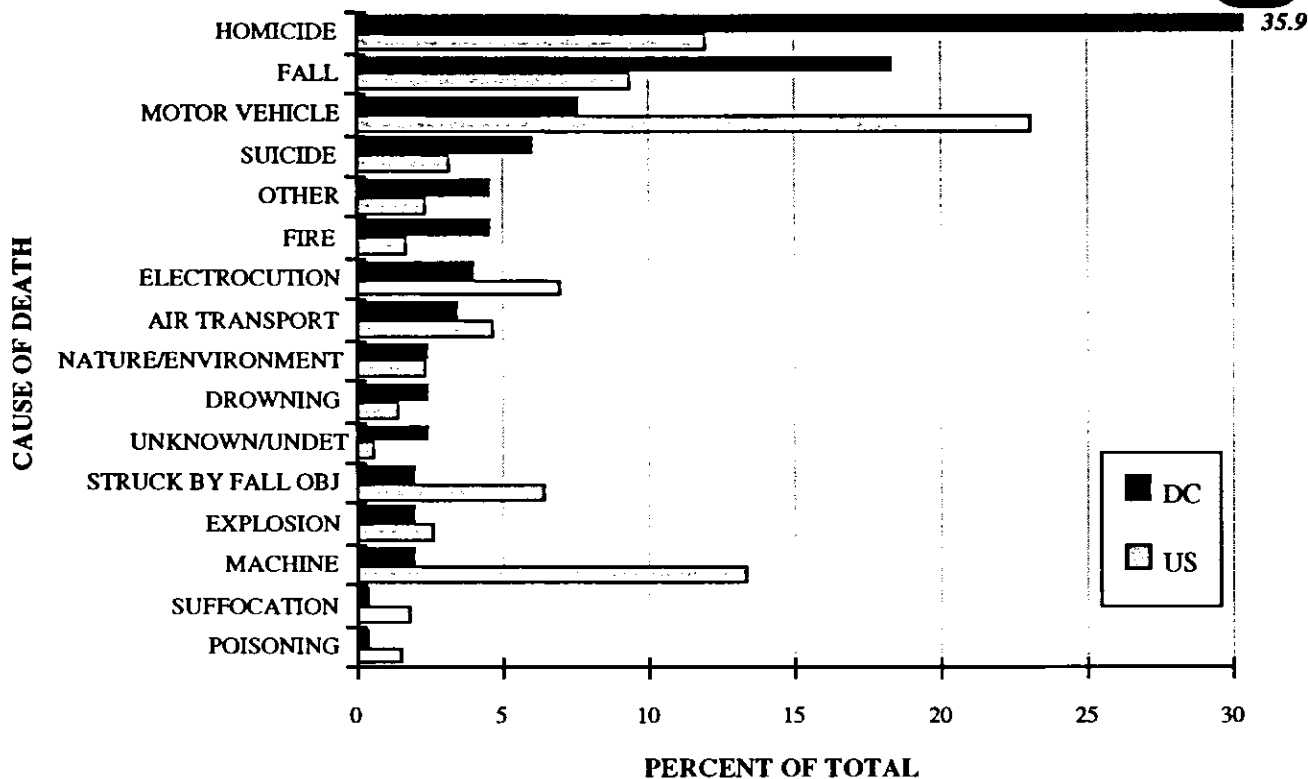


Figure DC-2. Traumatic Occupational Fatalities by Cause of Death, US and District of Columbia, 1980-1989.

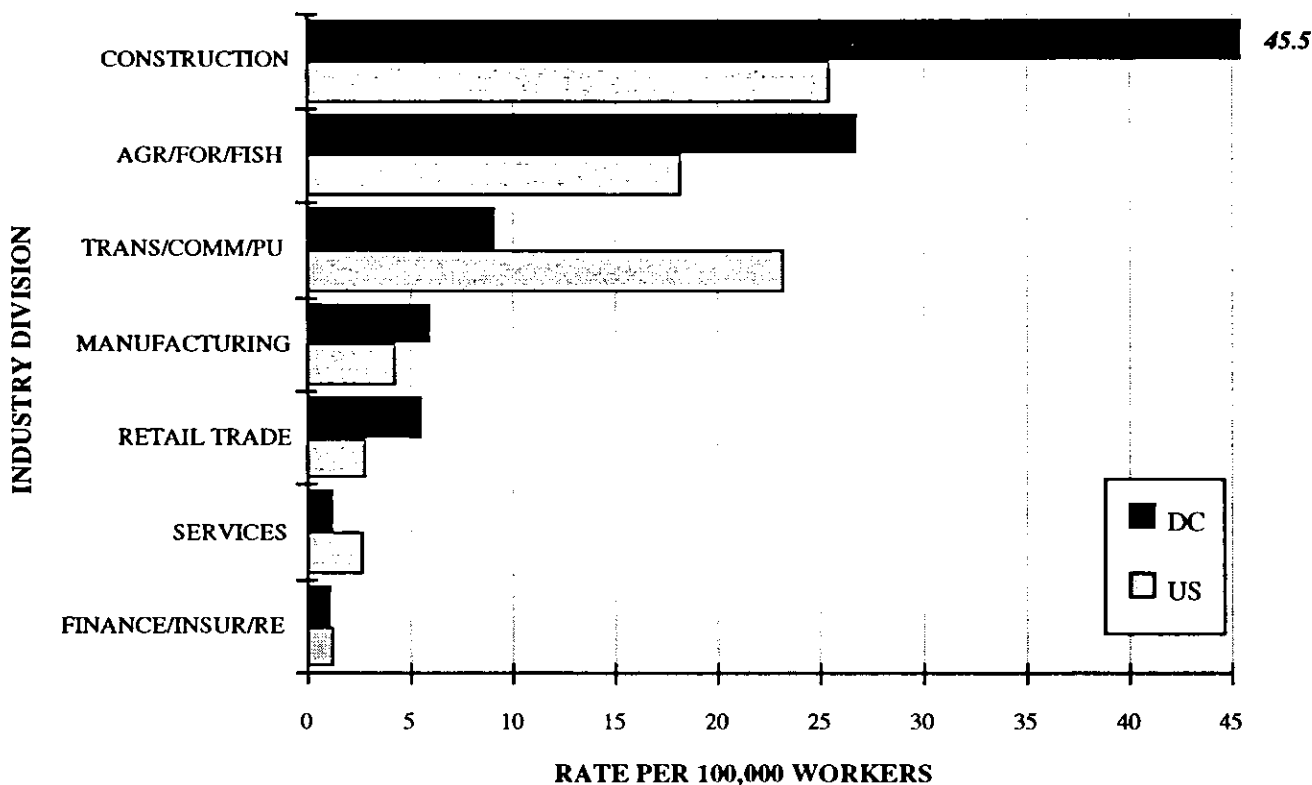


Figure DC-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and District of Columbia, 1980-1989.

Table DC-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, District of Columbia, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	4	3	3	--	3	3	--	8	7	7	41	45.5
AGR/FOR/FISH	--	--	--	--	--	--	--	--	--	--	3	26.8
TRANS/COMM/PU	--	--	3	3	--	--	3	--	3	--	22	9.2
MANUFACTURING	--	--	--	--	--	3	--	3	--	--	11	6.1
RETAIL TRADE	5	5	--	3	4	5	--	4	--	--	30	5.7
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	--	N/A
SERVICES	4	3	4	4	3	--	3	--	3	--	29	1.3
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	5	1.3
MINING	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	5	--	5	4	4	--	--	--	--	--	24	N/A
NOT CLASSIFIED	--	3	8	4	--	--	--	--	--	--	24	N/A
STATE	24	16	29	21	19	19	12	23	17	11	191	4.5

NOTE: Dashes denote categories with fewer than three cases.

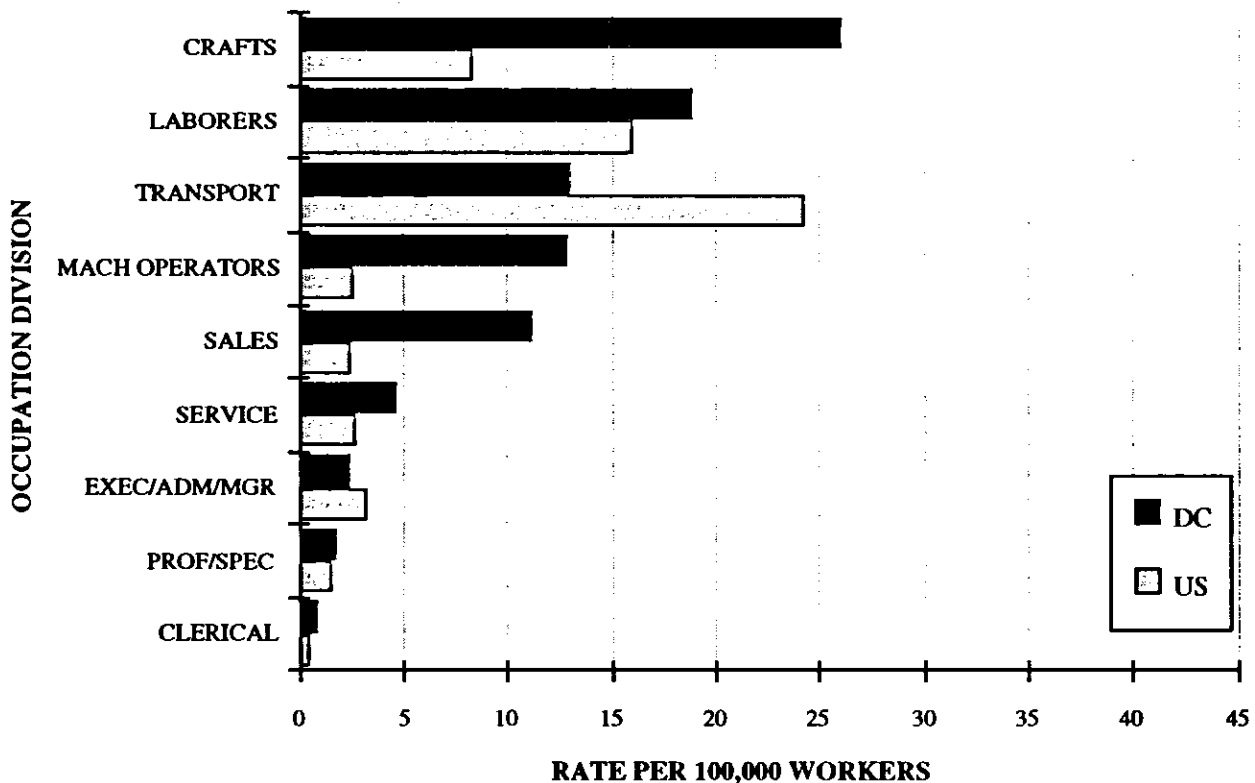


Figure DC-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and District of Columbia, 1983-1989.

Table DC-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, District of Columbia.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
CRAFTS	38	26.1
LABORERS	21	18.9
TRANSPORT	19	13.1
MACH OPERATORS	4	12.9
SALES	23	11.3
SERVICE	32	4.7
EXEC/ADM/MGR	11	2.5
PROF/SPEC	13	1.9
CLERICAL	8	0.9
FARM/FOR/FISH	3	N/A
TECH/SUPPORT	—	N/A
NOT CLASSIFIED	17	N/A

NOTE: Dashes denote categories with fewer than three cases.

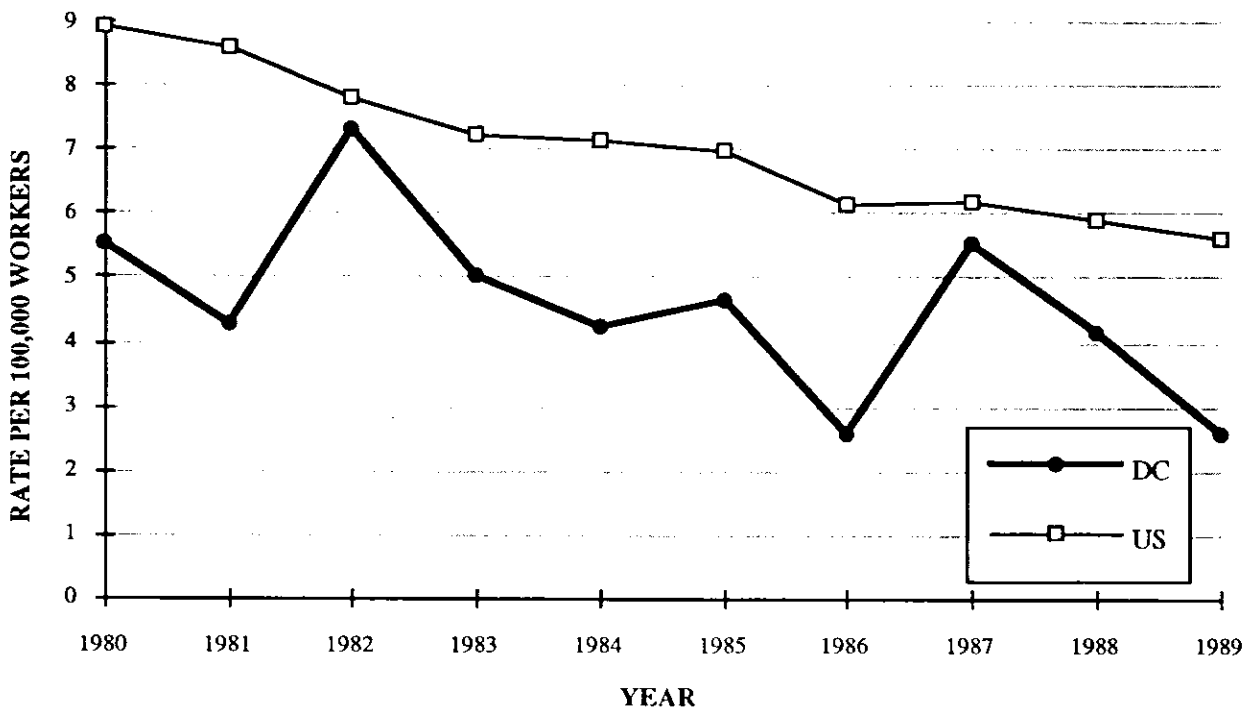


Figure DC-5. Rate of Traumatic Occupational Fatalities by Year, US and District of Columbia, 1980-1989.

State of Florida

Average Annual Fatal Injuries: **376**

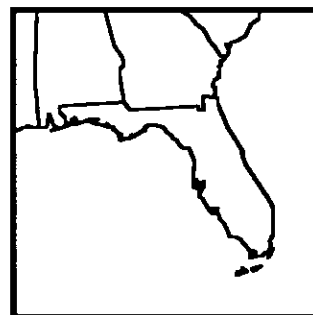
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **9.1**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (883)**
Rate: **Construction (29.5)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (718)**
Rate: **Transportation/Material Movers (33.7)**



The State of Florida had 3,761 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 3,681 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 9.1 for Florida compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 227.8 per 100,000 workers for Florida compared to 175.6 for the United States.

Males accounted for 92% of the civilian occupational fatalities in Florida and had a fatality rate of

Table FL-1. Traumatic Occupational Fatalities by Race/Ethnicity, Florida, 1980-1989.

Race/Ethnicity	Number	Percent
White	2918	77.6
Black	659	17.5
Hispanic	132	3.5
Asian	28	0.7
Native American	7	0.2
Other	17	0.5

12.5 per 100,000 workers compared to 1.4 for females. The fatality distribution by **race/ethnicity** for the State of Florida shows that Whites accounted for 78% of the total fatalities and Blacks for 18% as shown in **Table FL-1**. As shown in **Figure FL-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (14%). Of all Florida occupational fatality victims, 90% were Florida residents (**Table FL-2**).

Figure FL-2 presents the distribution of fatalities by external cause of death for the State of Florida and for the U.S. The three leading causes of death among employees in Florida were motor vehicle incidents (23%), homicides (20%), and falls (10%).

In Florida, the **industry divisions** in which the largest number of fatalities occurred were construction (24%), transportation/communication/public utilities (18%), services (12%), and retail trade (12%). The construction industry had the highest fatality rate at 29.5 per 100,000 workers, followed by transportation/communication/public utilities (28.7), and agriculture/forestry/fishing (25.4) (**Figure FL-3**). **Table FL-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

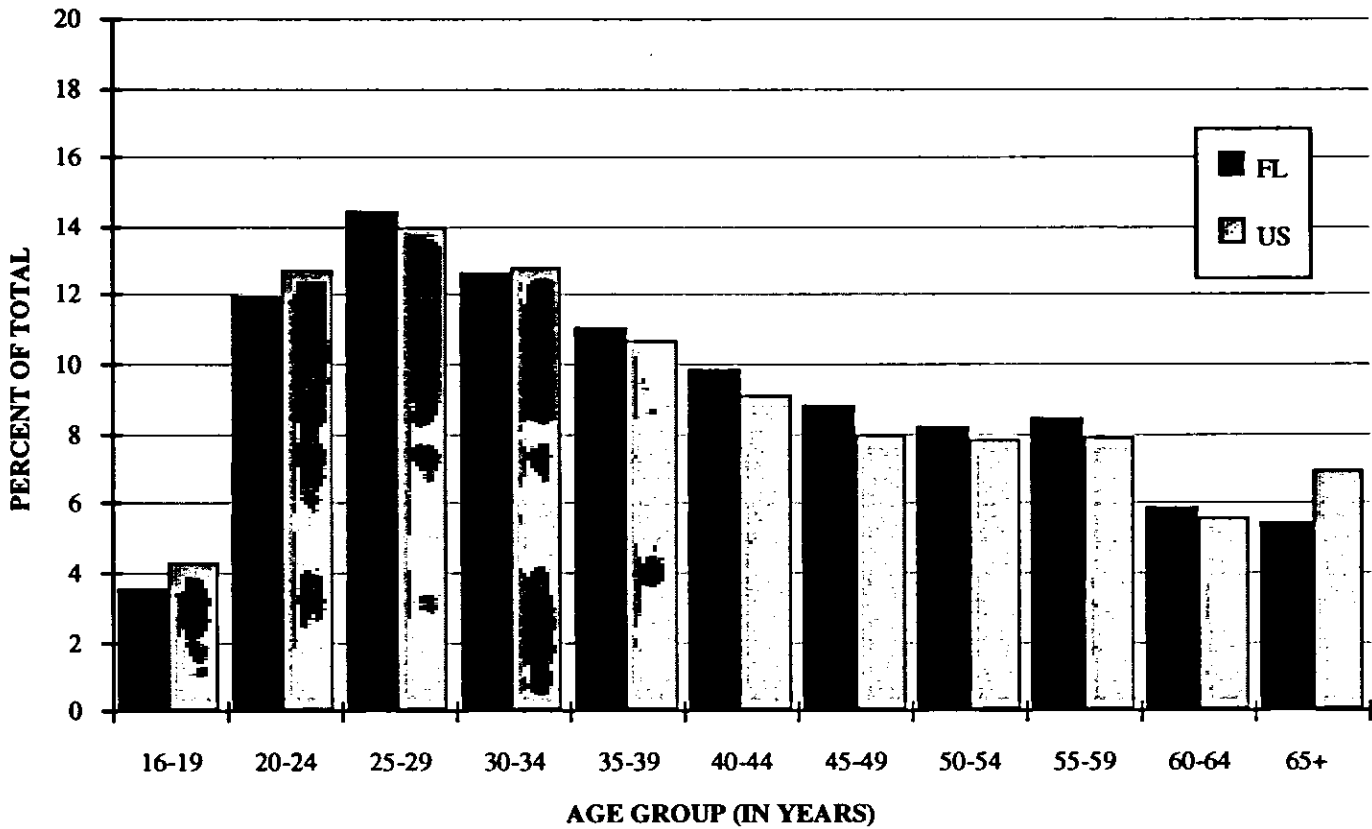


Figure FL-1. Traumatic Occupational Fatalities by Age Group, US and Florida, 1980-1989.

Table FL-2. Traumatic Occupational Fatalities by State of Residence, Florida, 1980-1989.

State	Number	Percent
Florida	3381	89.9
Georgia	52	1.4
Alabama	41	1.1
Texas	25	0.7
North Carolina	18	0.5
South Carolina	17	0.5
Ohio	14	0.4
New York	13	0.3
Tennessee	12	0.3
California	11	0.3
Illinois	11	0.3
Other	166	4.4

The occupation divisions in Florida with the largest number of fatalities were precision production/craft/repair (20%), transportation/material movers (19%), and laborers (13%). The occupations with the highest rates were transportation/material movers (33.7 deaths per 100,000 workers), laborers (22.0), and farmers/foresters/fishers (13.3) (Figure FL-4). Table FL-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Florida decreased 22%, from 10.8 in 1980 to 8.4 in 1989. A high of 12.5 and a low of 7.7 deaths per 100,000 workers were reported in 1981 and 1987, respectively (Figure FL-5).

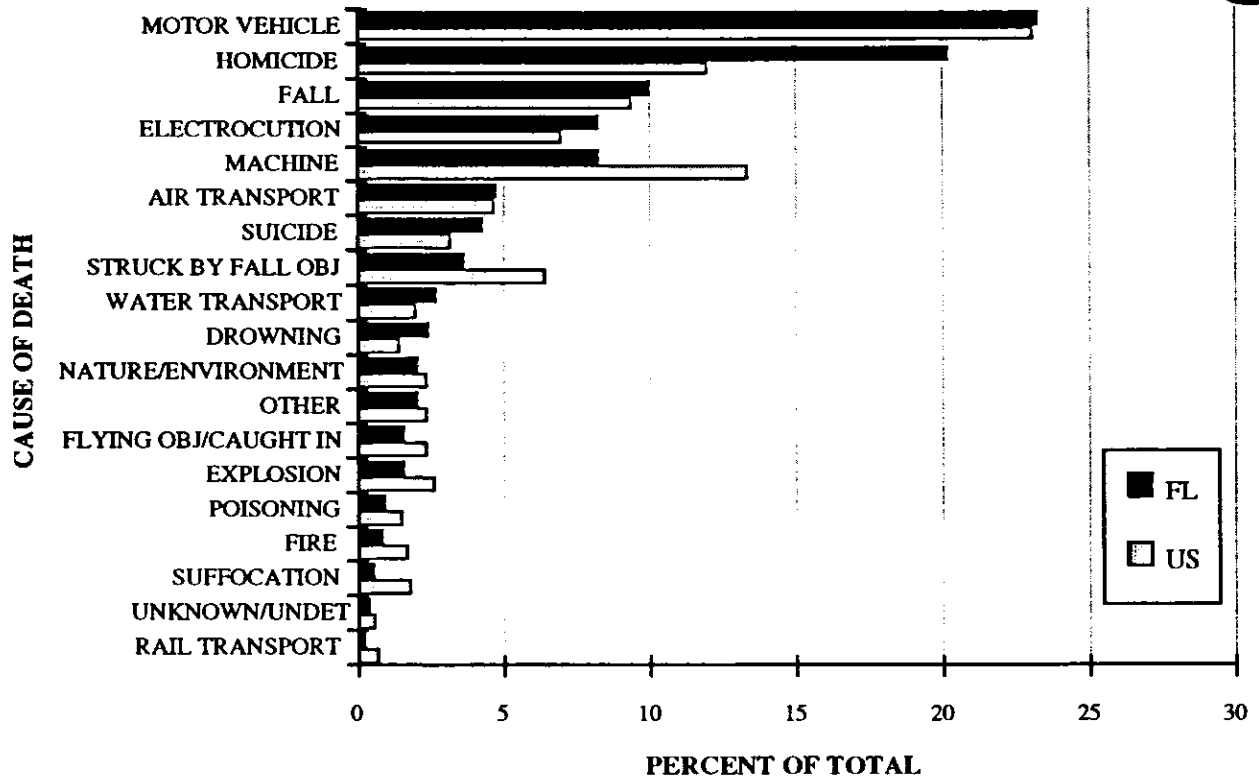


Figure FL-2. Traumatic Occupational Fatalities by Cause of Death, US and Florida, 1980-1989.

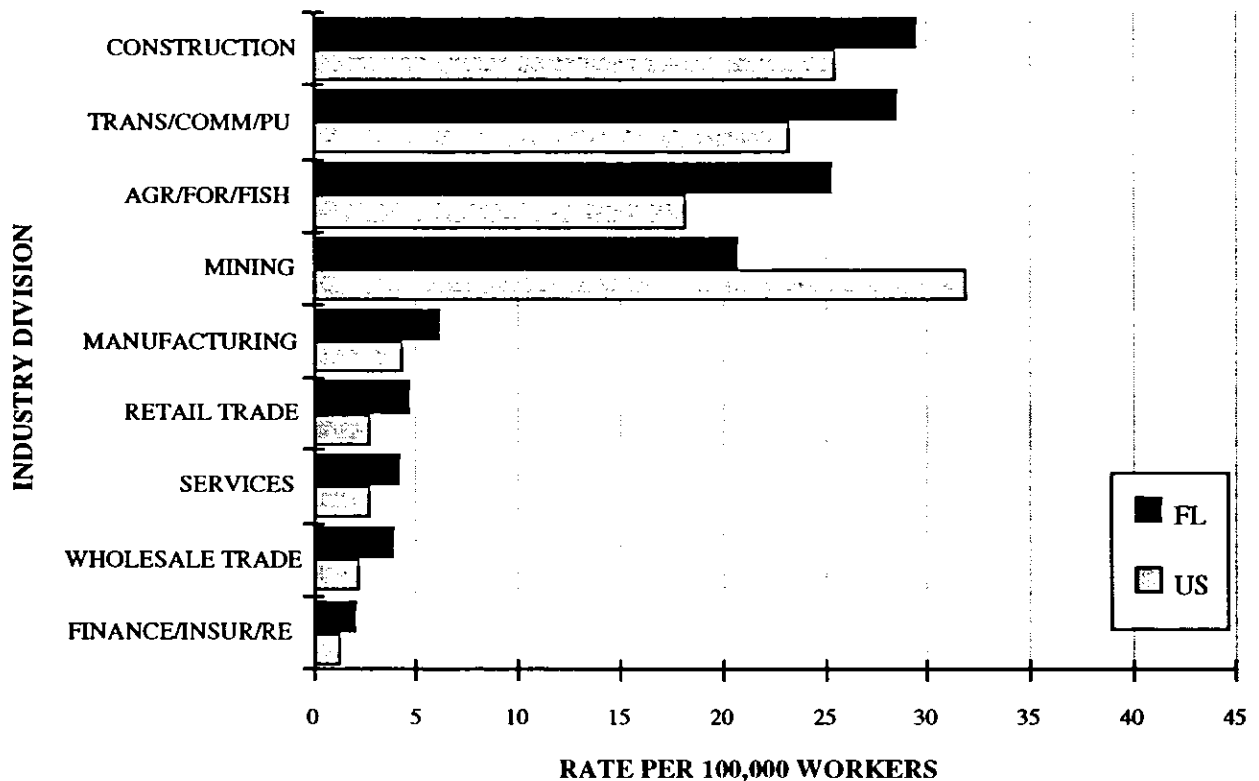


Figure FL-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Florida, 1980-1989.

Table FL-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Florida, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	87	124	74	89	71	91	93	78	83	93	883	29.5
TRANS/COMM/PU	56	61	60	61	79	54	67	69	74	79	660	28.7
AGR/FOR/FISH	43	38	35	28	39	31	28	28	42	39	351	25.4
MINING	4	--	--	--	3	--	--	3	--	5	23	20.8
MANUFACTURING	37	36	31	35	37	29	23	27	19	30	304	6.2
RETAIL TRADE	30	54	53	41	43	41	42	44	48	46	442	4.8
SERVICES	41	41	38	45	43	51	42	44	50	60	455	4.2
WHOLESALE TRADE	10	14	12	7	5	9	11	9	8	11	96	4.0
FINANCE/INSUR/RE	--	6	6	--	6	9	10	10	9	7	67	2.1
PUBLIC ADMIN	39	22	18	21	22	19	24	28	31	28	252	N/A
NOT CLASSIFIED	20	25	16	8	17	11	8	13	11	19	148	N/A
STATE	369	423	345	338	365	346	349	353	376	417	3681	9.1

NOTE: Dashes denote categories with fewer than three cases.

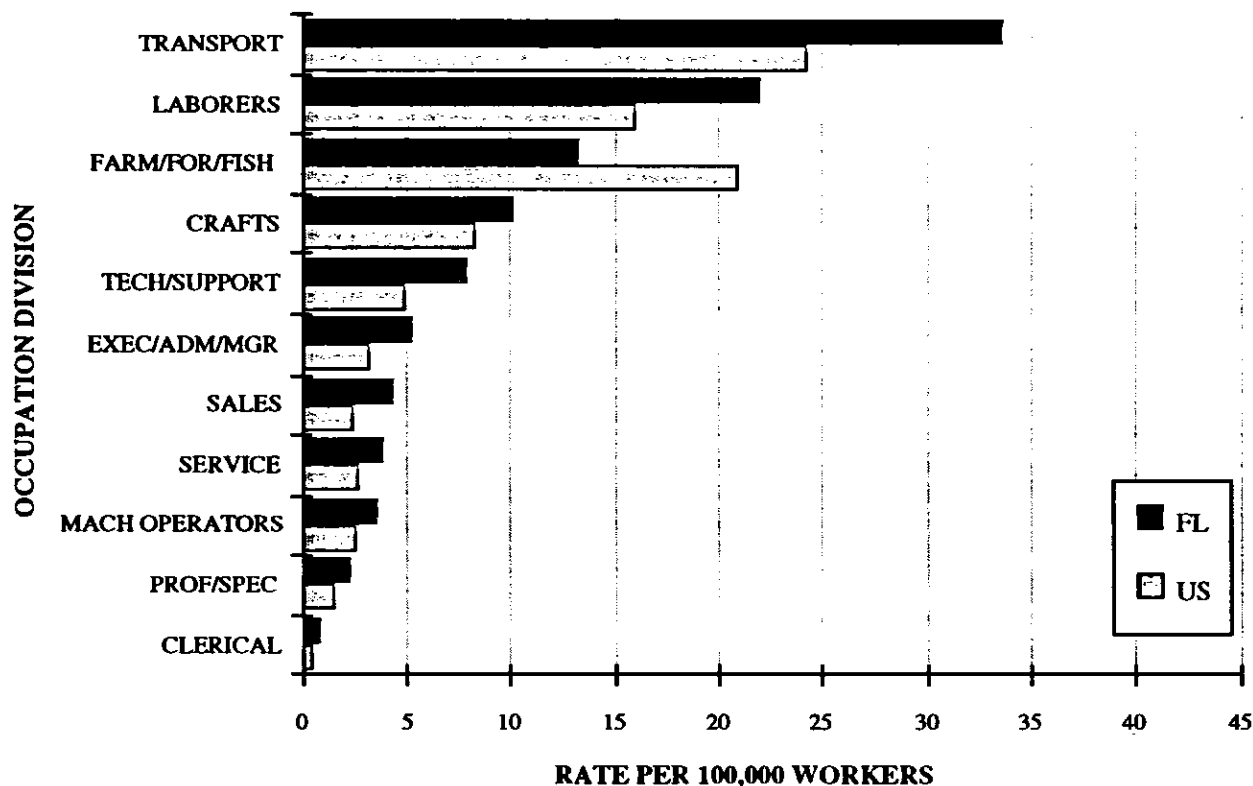


Figure FL-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Florida, 1983-1989.

Table FL-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Florida.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	714	33.7
LABORERS	483	22.0
FARM/FOR/FISH	248	13.3
CRAFTS	718	10.3
TECH/SUPPORT	109	8.0
EXEC/ADM/MGR	339	5.4
SALES	327	4.5
SERVICE	295	3.9
MACH OPERATORS	83	3.7
PROF/SPEC	145	2.4
CLERICAL	71	1.0
NOT CLASSIFIED	149	N/A

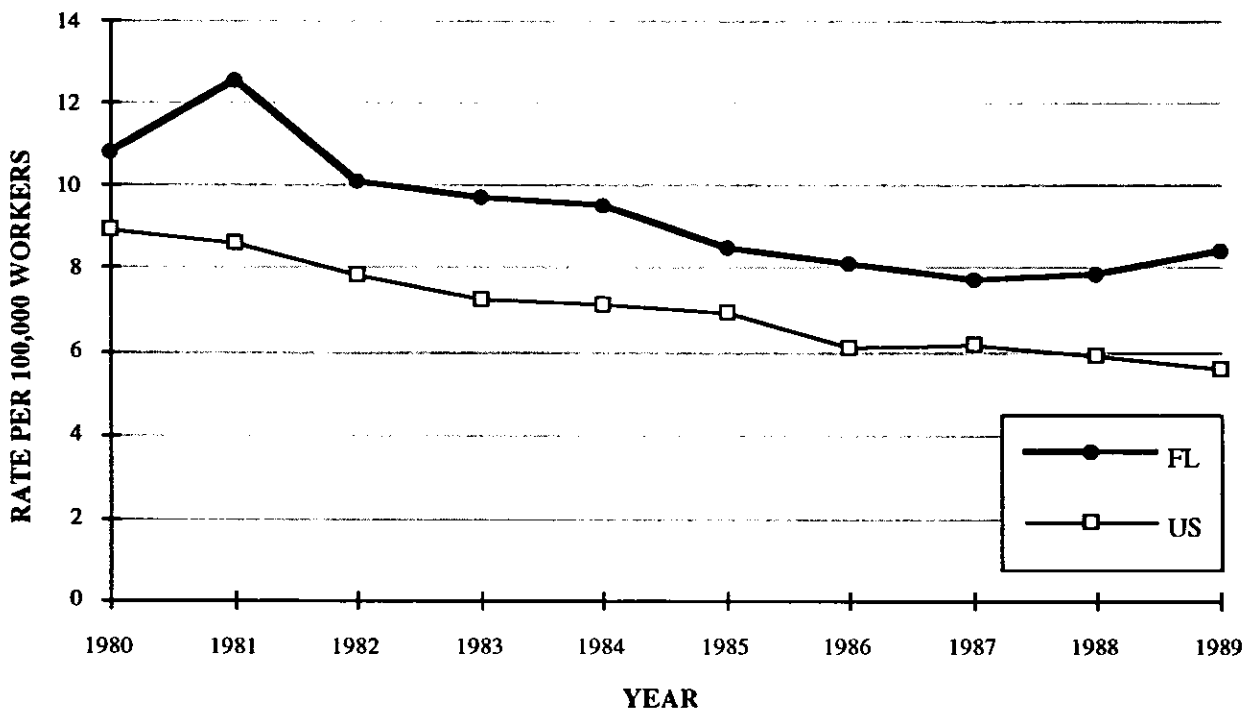


Figure FL-5. Rate of Traumatic Occupational Fatalities by Year, US and Florida, 1980-1989.

State of Georgia

Average Annual Fatal Injuries: **222**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **9.6**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Manufacturing (432)**
Rate: **Construction (31.6)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (467)**
Rate: **Transportation/Material Movers (35.3)**

The State of Georgia had 2,216 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 2,176 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 9.6 for Georgia compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 235.5 per 100,000 workers for Georgia compared to 175.6 for the United States.

Males accounted for 93% of the civilian occupational fatalities in Georgia and had a fatality rate of

13.9 per 100,000 workers compared to 1.2 for females. The fatality distribution by **race/ethnicity** for the State of Georgia shows that Whites accounted for 71% of the total fatalities and Blacks for 27% as shown in **Table GA-1**. As shown in **Figure GA-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (13%). Of all Georgia occupational fatality victims, 92% were Georgia residents (**Table GA-2**).

Figure GA-2 presents the distribution of fatalities by external cause of death for the State of Georgia and for the U.S. The three leading causes of death among employees in Georgia were motor vehicle incidents (28%), homicides (16%), and machine-related incidents (10%).

Table GA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Georgia, 1980-1989.

Race/Ethnicity	Number	Percent
White	1573	71.0
Black	595	26.9
Hispanic	30	1.4
Asian	12	0.5
Other	6	0.3

In Georgia, the **industry divisions** in which the largest number of fatalities occurred were manufacturing (20%), transportation/communication/public utilities (18%), and construction (18%). The construction industry had the highest fatality rate at 31.6 per 100,000 workers, followed by mining (28.2), and transportation/communication/public utilities (26.6) (**Figure GA-3**). **Table GA-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

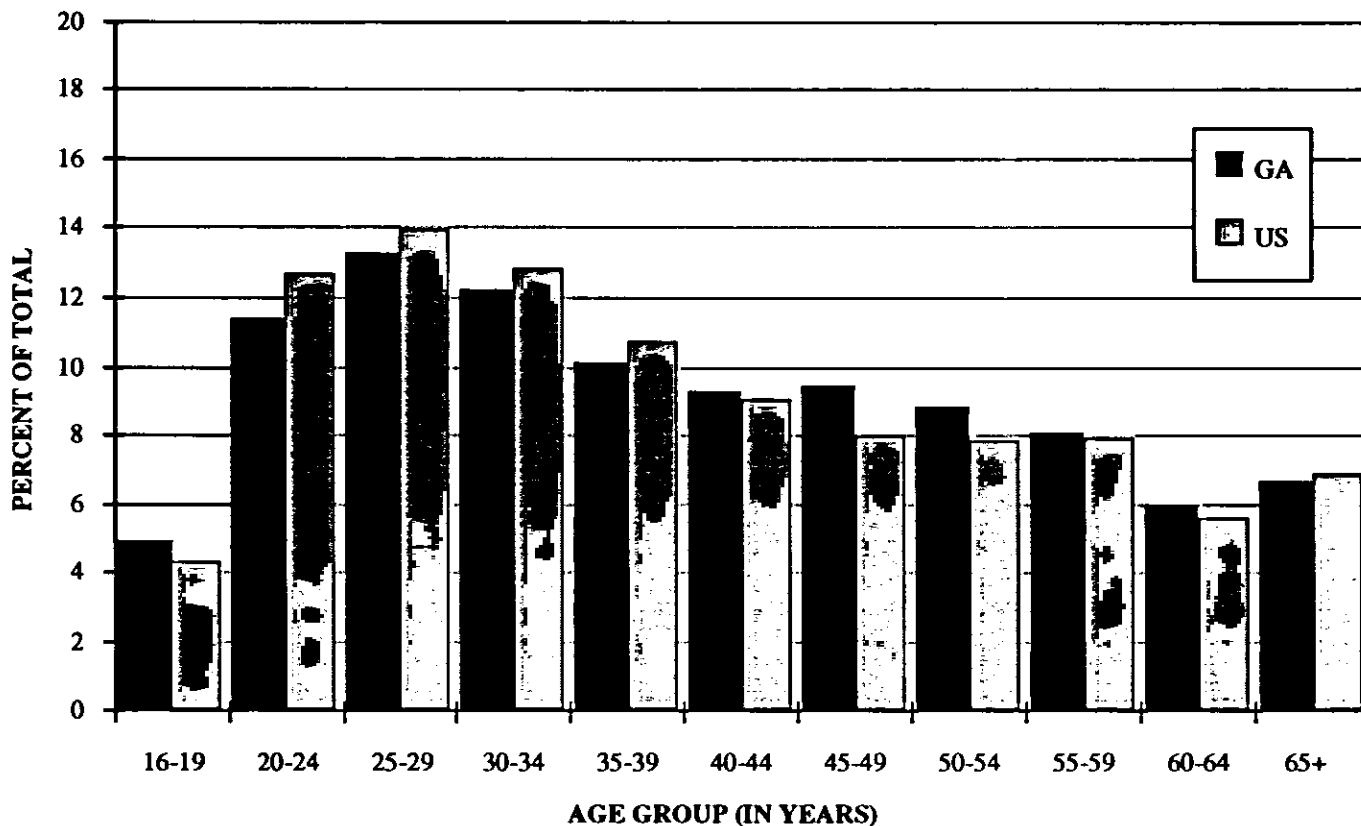


Figure GA-1. Traumatic Occupational Fatalities by Age Group, US and Georgia, 1980-1989.

Table GA-2. Traumatic Occupational Fatalities by State of Residence, Georgia, 1980-1989.

State	Number	Percent
Georgia	2044	92.2
Florida	31	1.4
South Carolina	31	1.4
Alabama	18	0.8
Tennessee	17	0.8
North Carolina	15	0.7
Ohio	10	0.5
Texas	10	0.5
New Jersey	6	0.3
Indiana	5	0.2
New York	4	0.2
Other	25	1.1

The occupation divisions in Georgia with the largest number of fatalities were transportation/material movers (21%), precision production/craft/repair (18%), laborers (12%), and farmers/foresters/fishers (12%). The occupations with the highest rates were transportation/ material movers (35.3 deaths per 100,000 workers), farmers/foresters/fishers (31.8), and laborers (16.1) (Figure GA-4). Table GA-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Georgia decreased 66%, from a high of 15.1 in 1980 to 5.1 in 1989. A low of 3.7 deaths per 100,000 workers was reported in 1988 (Figure GA-5).

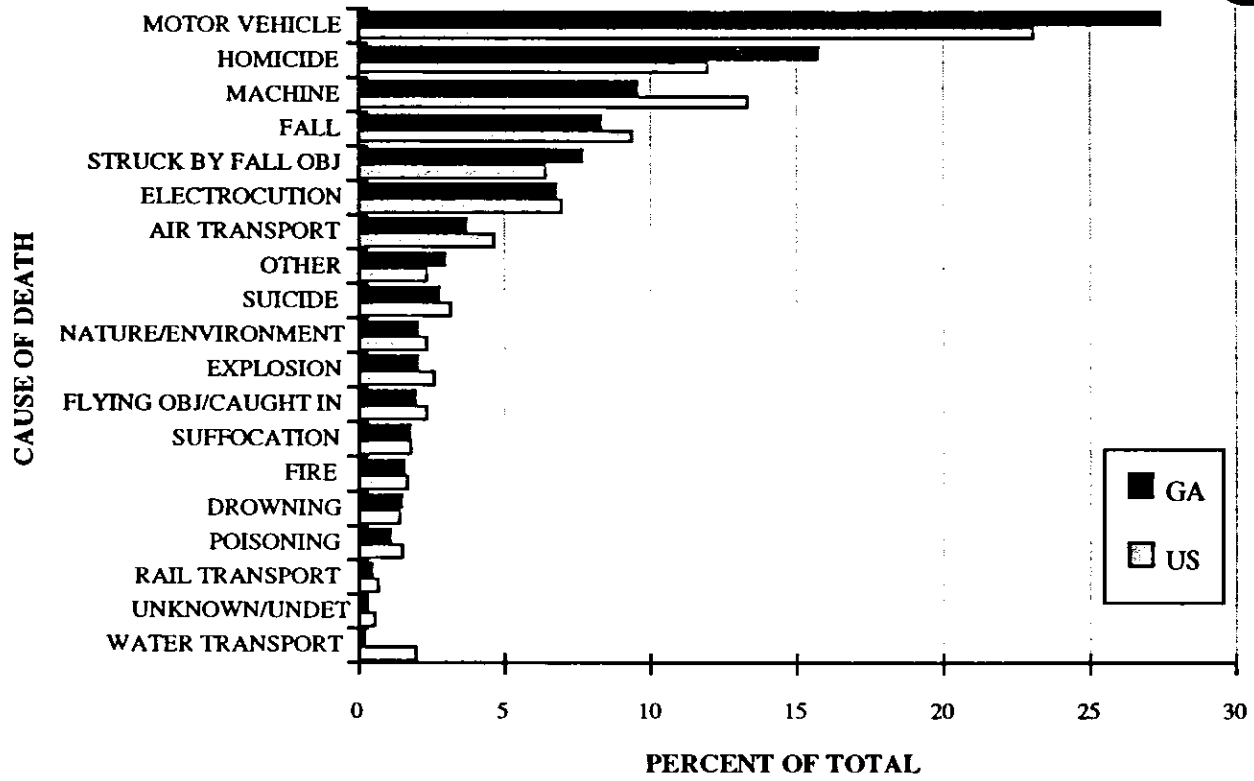


Figure GA-2. Traumatic Occupational Fatalities by Cause of Death, US and Georgia, 1980-1989.

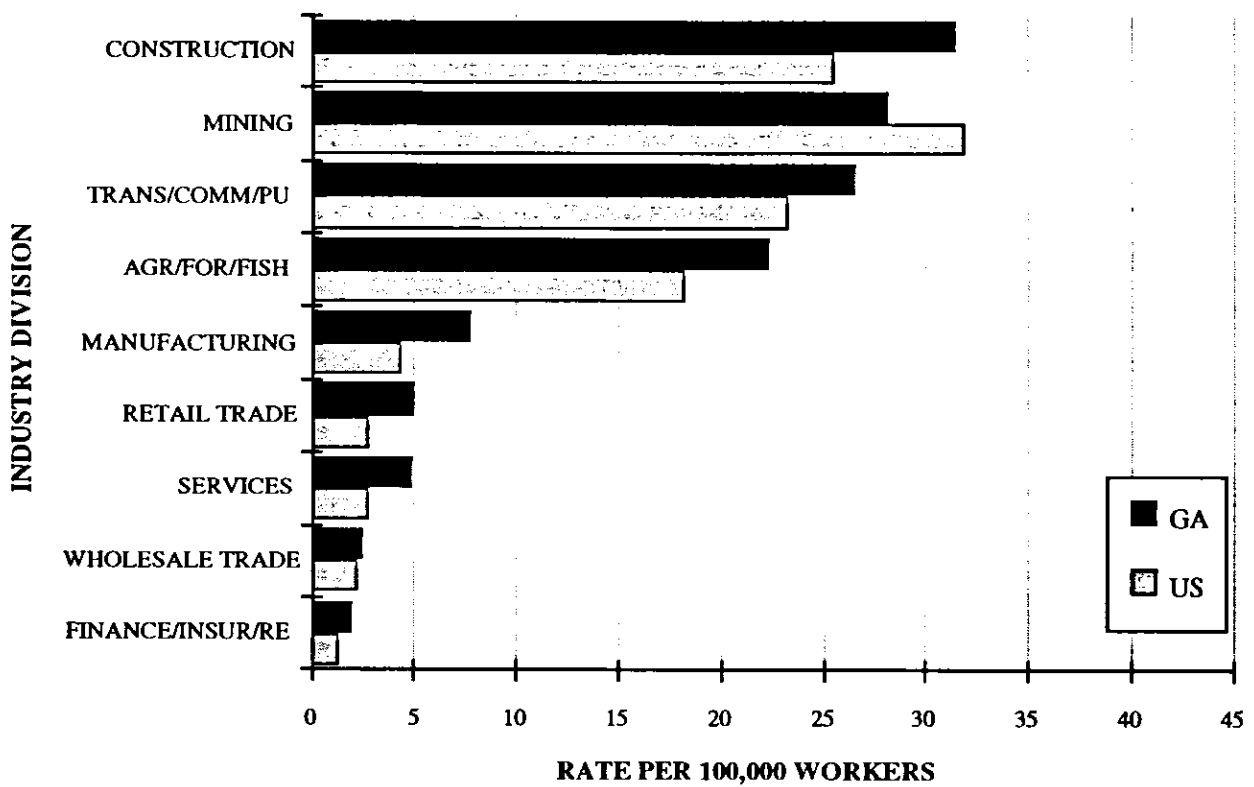


Figure GA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Georgia, 1980-1989.

Table GA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Georgia, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	49	34	42	40	55	38	47	54	13	20	392	31.6
MINING	3	--	--	--	--	3	3	3	--	3	22	28.2
TRANS/COMM/PU	61	39	43	42	52	42	45	32	16	29	401	26.6
AGR/FOR/FISH	30	33	24	21	27	29	14	19	7	7	211	22.5
MANUFACTURING	49	61	55	47	55	51	36	35	14	29	432	7.9
RETAIL TRADE	23	32	18	22	21	18	27	22	23	15	221	5.1
SERVICES	32	19	27	19	29	20	23	15	12	22	218	4.9
WHOLESALE TRADE	10	3	--	5	3	7	3	4	4	--	42	2.5
FINANCE/INSUR/RE	3	3	3	--	8	--	4	3	--	--	28	2.1
PUBLIC ADMIN	23	20	9	22	19	8	22	19	6	7	155	N/A
NOT CLASSIFIED	7	9	8	8	8	3	--	4	--	5	54	N/A
STATE	290	255	232	229	278	220	226	210	97	139	2176	9.6

NOTE: Dashes denote categories with fewer than three cases.

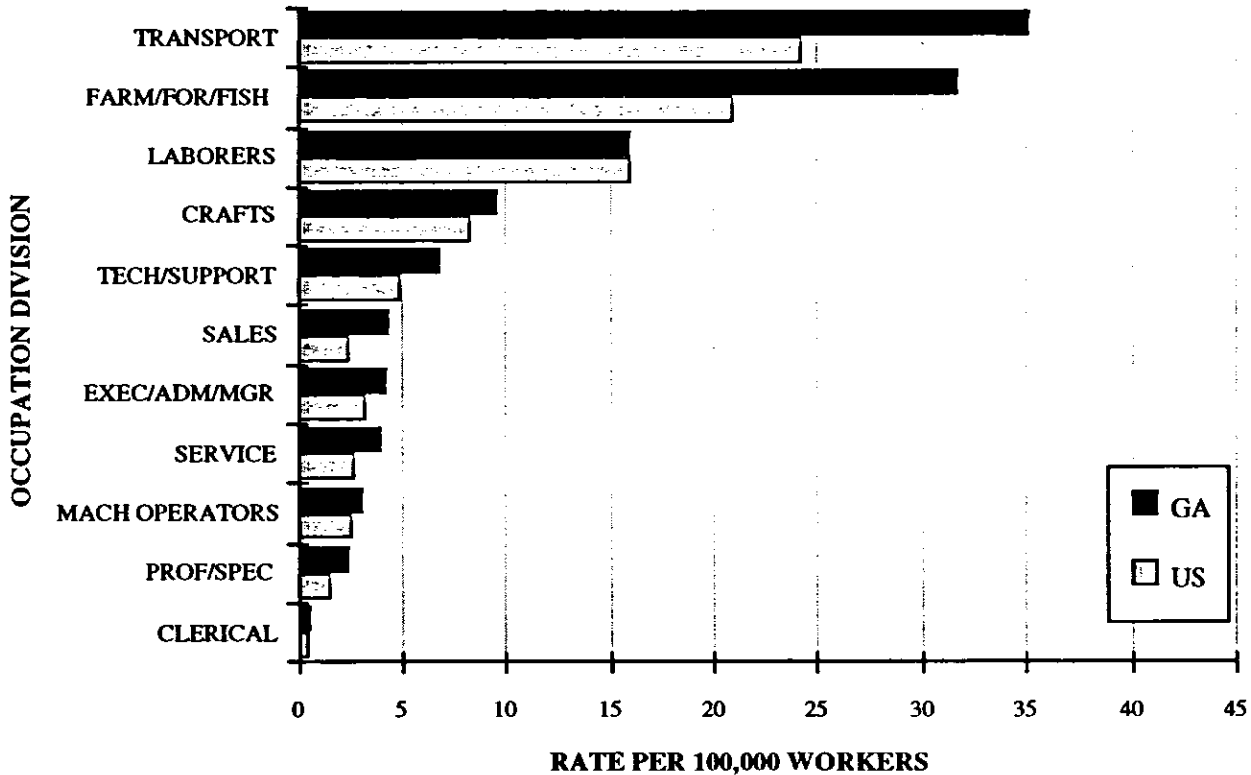


Figure GA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Georgia, 1983-1989.

Table GA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Georgia.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	467	35.3
FARM/FOR/FISH	253	31.8
LABORERS	264	16.1
CRAFTS	381	9.7
TECH/SUPPORT	50	6.9
SALES	154	4.5
EXEC/ADM/MGR	157	4.3
SERVICE	160	4.1
MACH OPERATORS	100	3.2
PROF/SPEC	80	2.6
CLERICAL	28	0.7
NOT CLASSIFIED	82	N/A

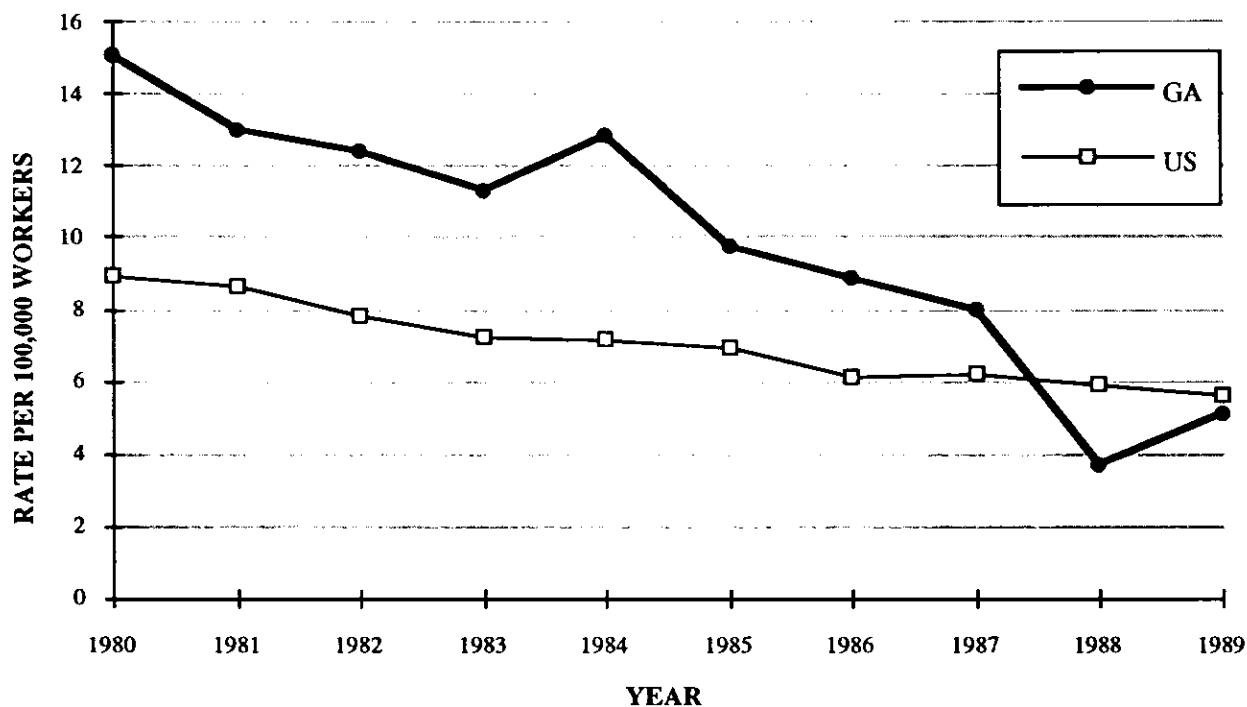


Figure GA-5. Rate of Traumatic Occupational Fatalities by Year, US and Georgia, 1980-1989.

State of Hawaii

Average Annual Fatal Injuries: **30**

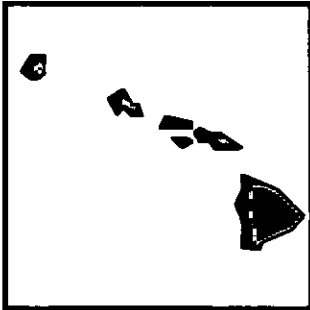
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **6.1**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (61)**
Rate: **Agriculture/Forestry/Fishing (43.2)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (52)**
Rate: **Transportation/Material Movers (27.5)**



The State of Hawaii had 301 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 235 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 6.1 for Hawaii compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 152.0 per 100,000 workers for Hawaii compared to 175.6 for the United States.

Males accounted for 93% of the civilian occupational fatalities in Hawaii and had a fatality rate of 9.1 per 100,000 workers compared to 0.7 for females. The fatality distribution by **race/ethnicity** for the State of Hawaii shows that Asians accounted for 46%

Table HI-1. Traumatic Occupational Fatalities by Race/Ethnicity, Hawaii, 1980-1989.

Race/Ethnicity	Number	Percent
Asian	137	45.5
White	123	40.9
Hispanic	11	3.7
Black	10	3.3
Other	20	6.6

of the total fatalities and Whites for 41% as shown in **Table HI-1**. As shown in **Figure HI-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (18%). Of all Hawaii occupational fatality victims, 85% were Hawaii residents (**Table HI-2**).

Figure HI-2 presents the distribution of fatalities by external cause of death for the State of Hawaii and for the U.S. The three leading causes of death among employees in Hawaii were air transportation (18%), motor vehicle incidents (14%), and homicides (12%).

In Hawaii, the **industry divisions** in which the largest number of fatalities occurred were agriculture/forestry/fishing (26%), construction (20%), and transportation/communication/public utilities (17%). The agriculture/forestry/fishing industry had the highest fatality rate at 43.2 per 100,000 workers, followed by construction (21.9), and transportation/communication/public utilities (12.8) (**Figure HI-3**). **Table HI-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Hawaii with the largest number of fatalities were transportation/material

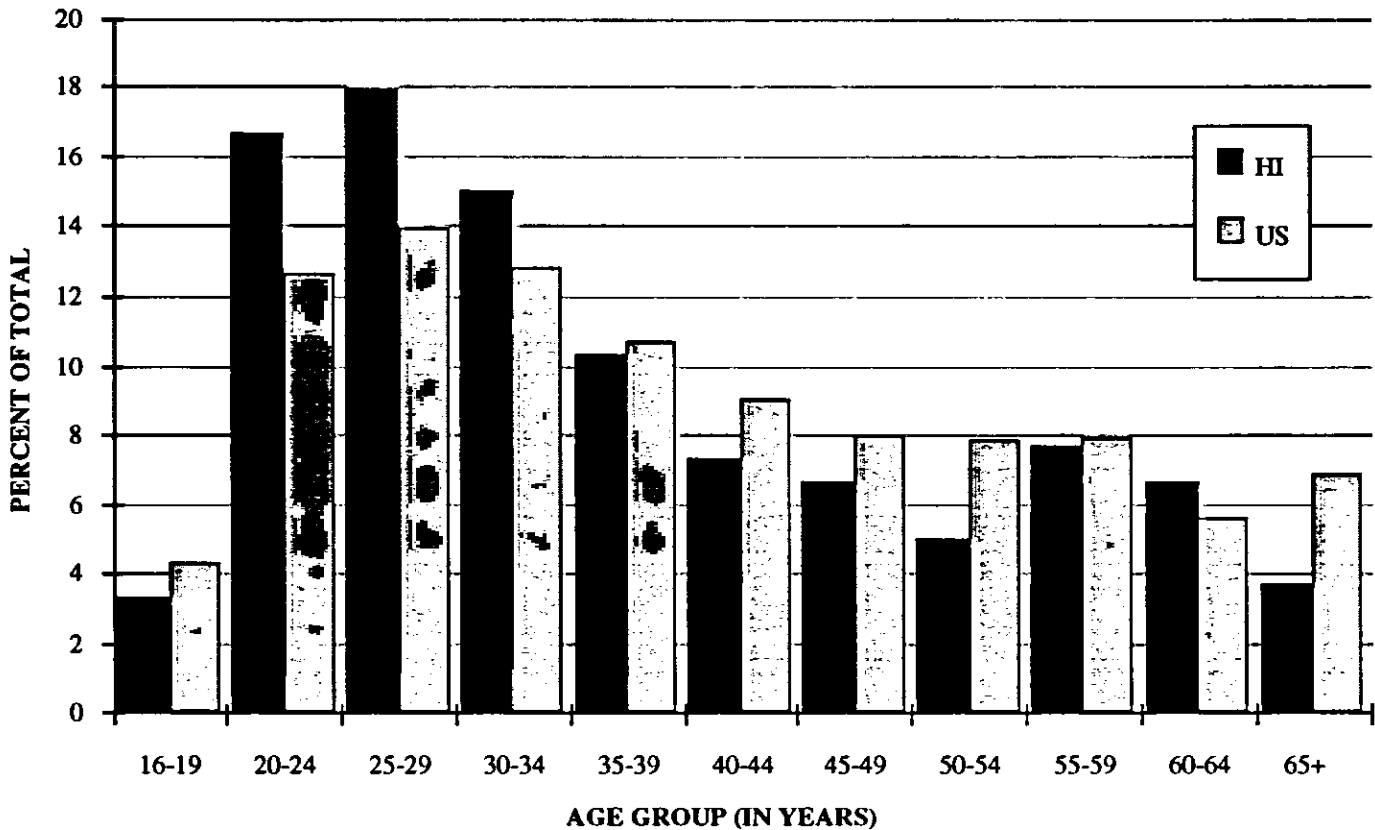


Figure HI-1. Traumatic Occupational Fatalities by Age Group, US and Hawaii, 1980-1989.

Table HI-2. Traumatic Occupational Fatalities by State of Residence, Hawaii, 1980-1989.

State	Number	Percent
Hawaii	255	84.7
California	3	1.0
Other	43	14.3

movers (22%), precision production/craft/repair (21%), executives/administrators/managers (9%), and farmers/foresters/fishers (9%). The occupations with the highest rates were transportation/material movers (27.5 deaths per 100,000 workers), laborers (10.0), and precision production/craft/repair (8.1) (Figure HI-4). Table HI-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Hawaii decreased 31%, from 9.3 in 1980 to 6.4 in 1989. A high of 10.6 deaths per 100,000 workers was reported in 1981; a low of 3.9 deaths per 100,000 workers was reported in 1984 and 1986 (Figure HI-5).

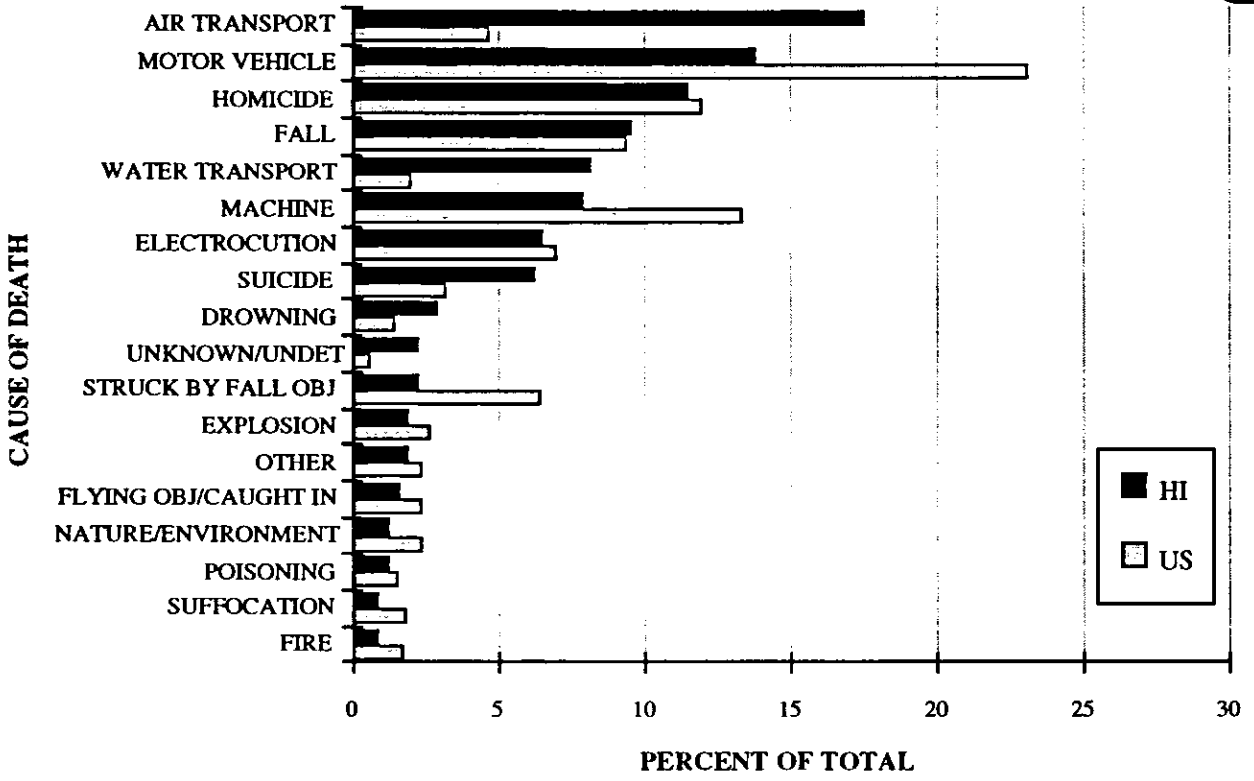


Figure HI-2. Traumatic Occupational Fatalities by Cause of Death, US and Hawaii, 1980-1989.

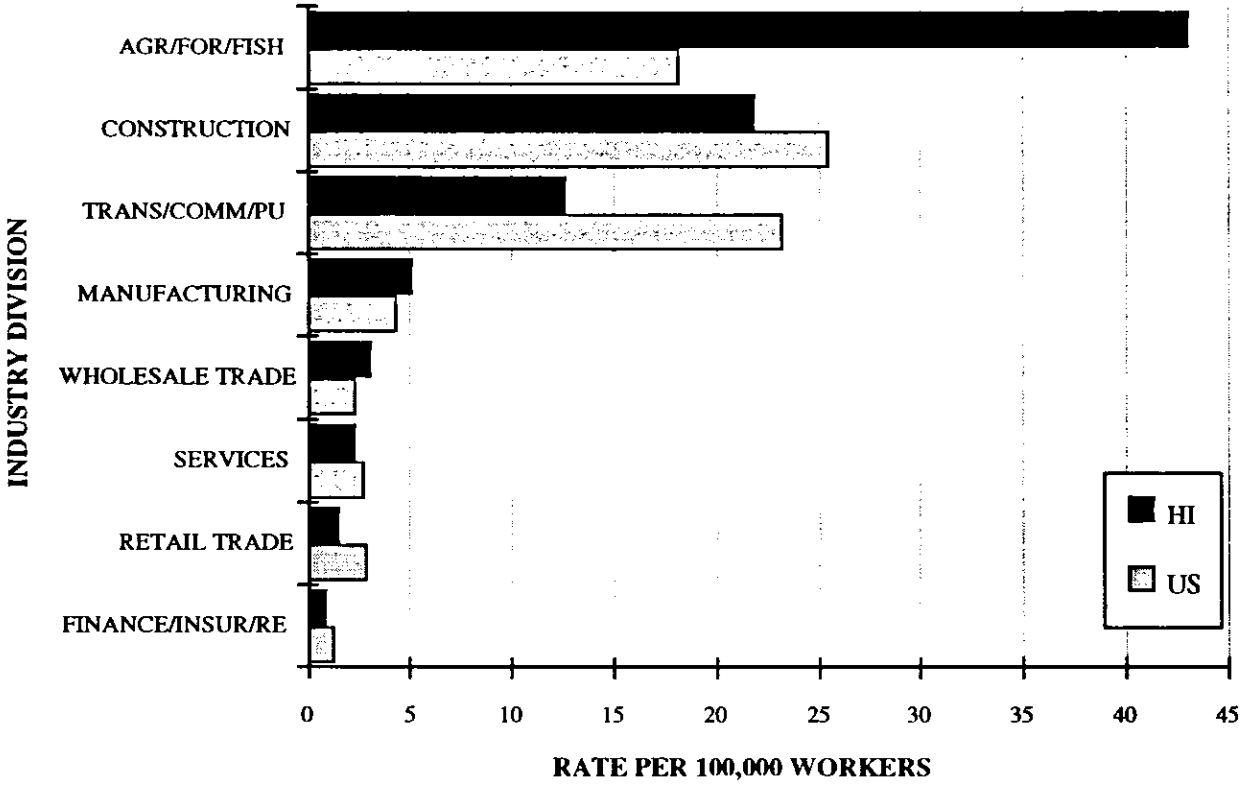


Figure HI-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Hawaii, 1980-1989.

Table HI-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Hawaii, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
AGR/FOR/FISH	7	13	7	5	3	6	3	4	5	8	61	43.2
CONSTRUCTION	6	4	3	4	4	3	5	6	4	7	46	21.9
TRANS/COMM/PU	6	4	3	5	--	4	--	3	6	6	41	12.8
MANUFACTURING	--	3	--	--	--	--	--	--	--	--	12	5.2
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	6	3.2
SERVICES	4	6	--	4	3	--	--	--	5	3	28	2.5
RETAIL TRADE	3	3	--	--	--	3	--	--	--	--	15	1.6
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	3	1.0
MINING	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	--	--	3	3	3	--	--	3	4	--	21	N/A
NOT CLASSIFIED	--	--	--	--	--	--	--	--	--	--	--	N/A
STATE	31	35	19	23	16	18	16	20	29	28	235	6.1

NOTE: Dashes denote categories with fewer than three cases.

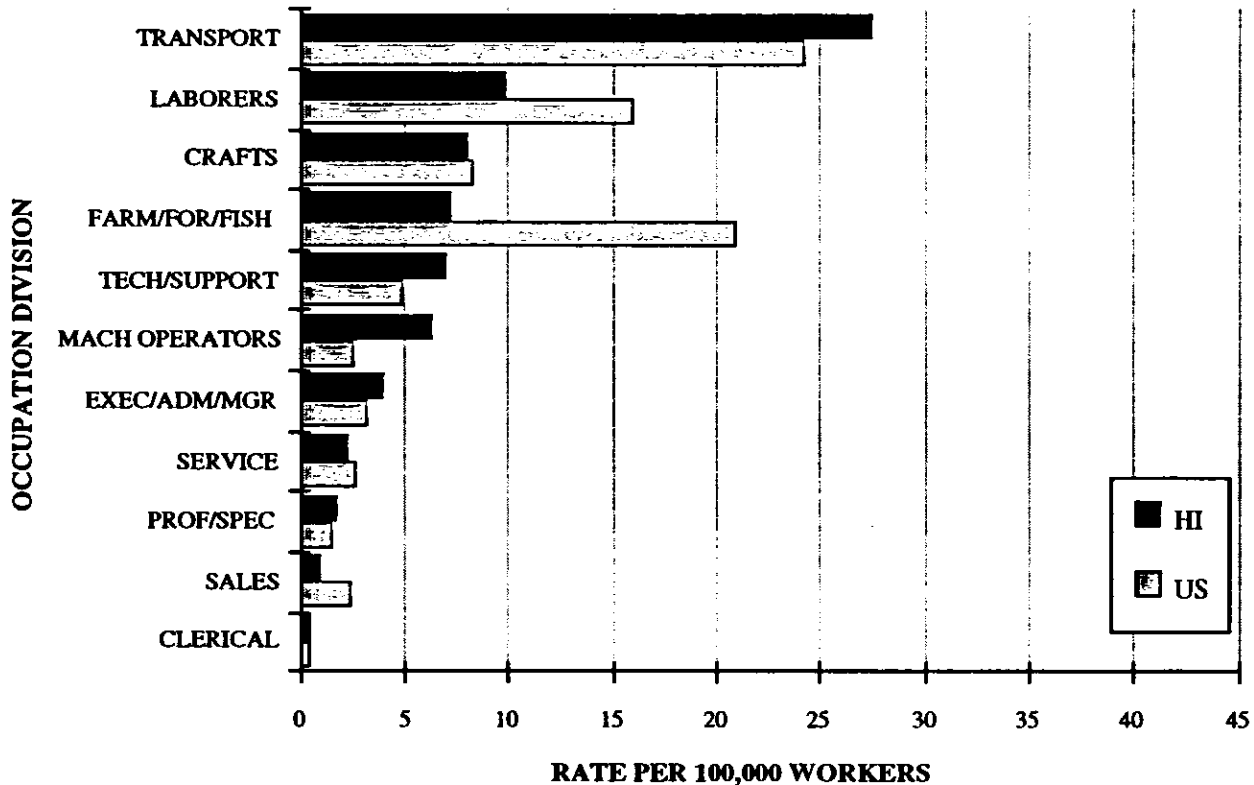


Figure HI-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Hawaii, 1983-1989.

Table HI-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Hawaii.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	52	27.5
LABORERS	17	10.0
CRAFTS	49	8.1
FARM/FOR/FISH	20	7.3
TECH/SUPPORT	12	7.1
MACH OPERATORS	9	6.4
EXEC/ADM/MGR	22	4.1
SERVICE	16	2.3
PROF/SPEC	13	1.9
SALES	7	1.1
CLERICAL	5	0.6
NOT CLASSIFIED	13	N/A

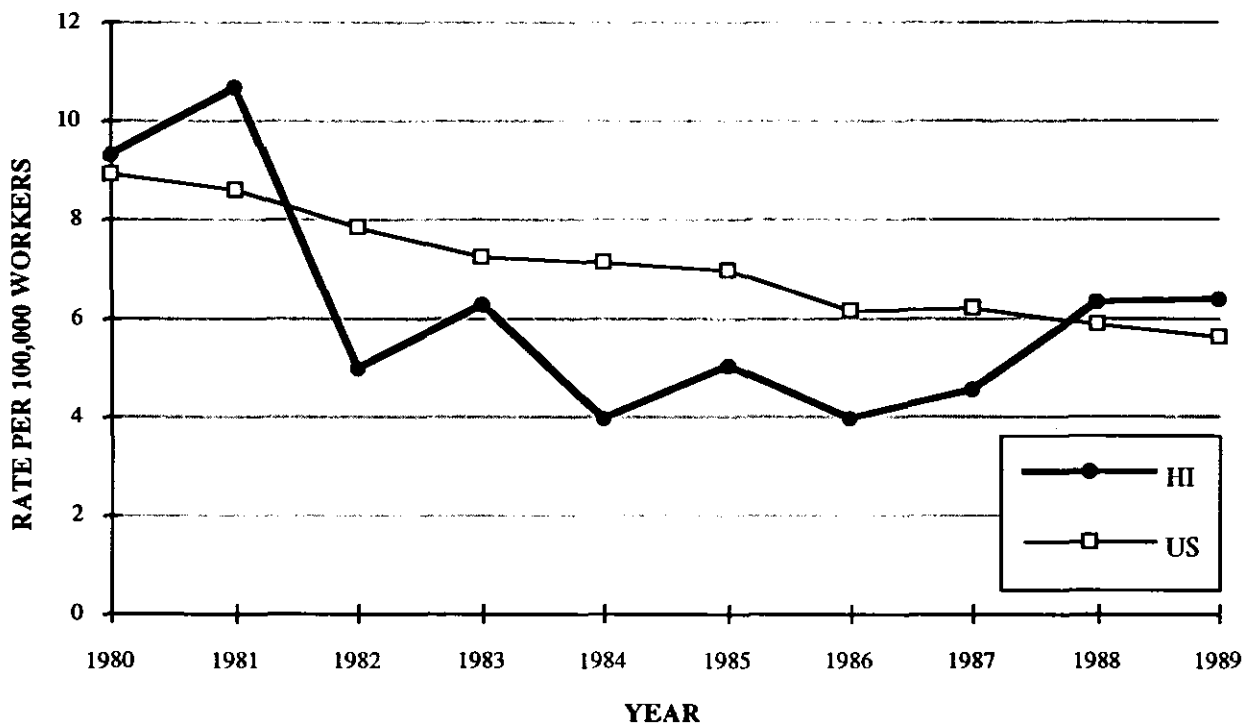


Figure HI-5. Rate of Traumatic Occupational Fatalities by Year, US and Hawaii, 1980-1989.

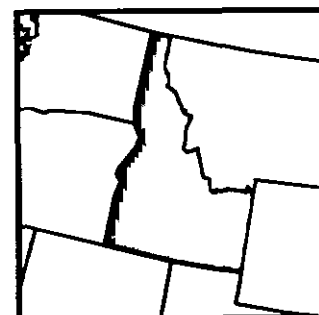
State of Idaho

Average Annual Fatal Injuries: **53**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **16.7**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (120)**
Rate: **Transportation/Communication/
Public Utilities (77.3)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (130)**
Rate: **Transportation/Material Movers (47.6)**

The State of Idaho had 531 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 520 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 16.7 for Idaho compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 423.2 per 100,000 workers for Idaho compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Idaho and had a fatality rate of 20.3 per 100,000 workers compared to 1.7 for females.

Table ID-1. Traumatic Occupational Fatalities by Race/Ethnicity, Idaho, 1980-1989.

Race/Ethnicity	Number	Percent
White	480	90.4
Hispanic	38	7.2
Asian	4	0.8
Native American	3	0.6
Other	6	1.1

The fatality distribution by **race/ethnicity** for the State of Idaho shows that Whites accounted for 90% of the total fatalities and Hispanics for 7% as shown in **Table ID-1**. As shown in **Figure ID-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (17%). Of all Idaho occupational fatality victims, 79% were Idaho residents (**Table ID-2**).

Figure ID-2 presents the distribution of fatalities by external cause of death for the State of Idaho and for the U.S. The three leading causes of death among employees in Idaho were motor vehicle incidents (33%), machine-related incidents (17%), and air transportation (12%).

In Idaho, the **industry divisions** in which the largest number of fatalities occurred were agriculture/forestry/fishing (23%), transportation/communication/public utilities (23%), and manufacturing (17%). The transportation/communication/public utilities industry had the highest fatality rate at 77.3 per 100,000 workers, followed by mining (60.8), and construction (31.6) (**Figure ID-3**). **Table ID-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

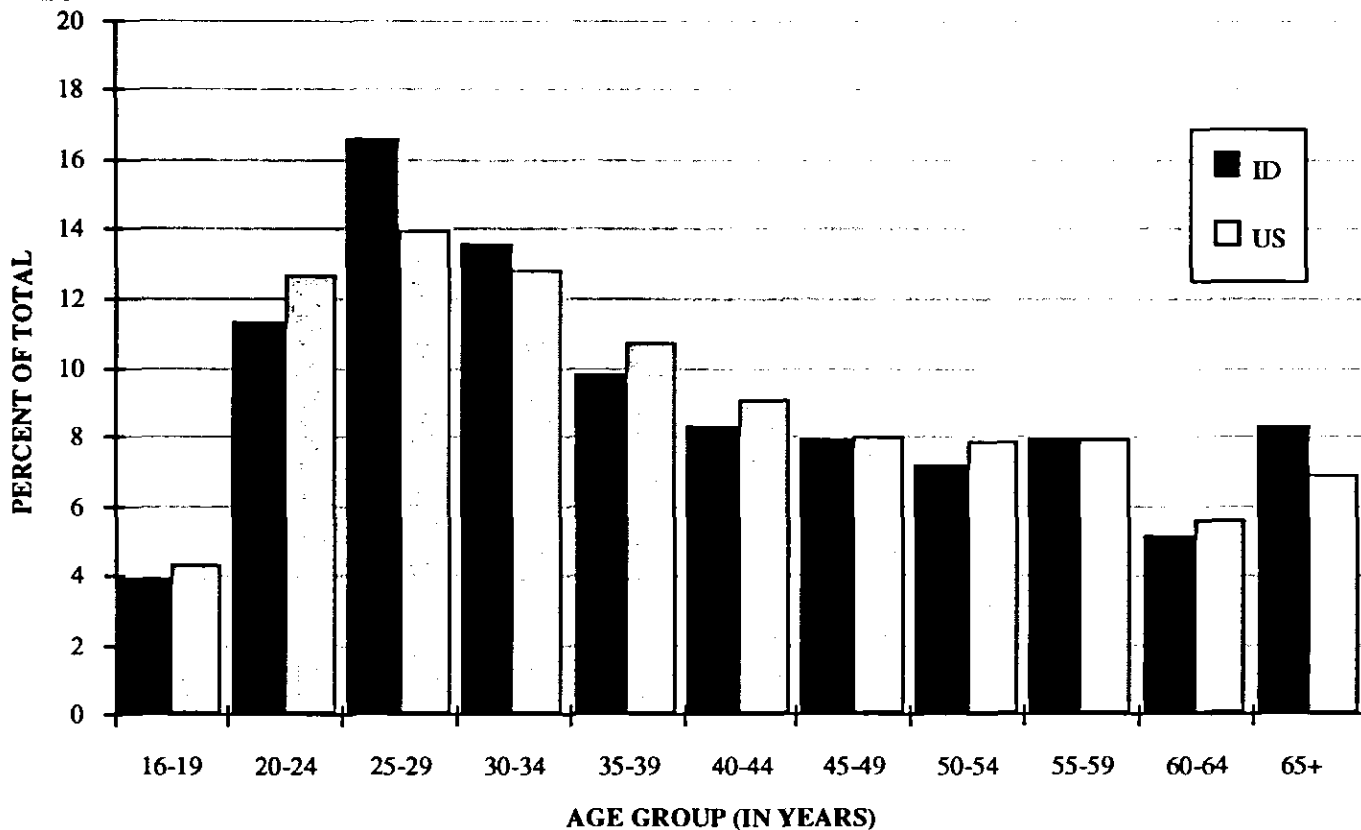


Figure ID-1. Traumatic Occupational Fatalities by Age Group, US and Idaho, 1980-1989.

Table ID-2. Traumatic Occupational Fatalities by State of Residence, Idaho, 1980-1989.

State	Number	Percent
Idaho	417	78.5
Washington	20	3.8
Utah	15	2.8
Montana	12	2.3
Oregon	9	1.7
California	7	1.3
Wyoming	7	1.3
Colorado	4	0.8
New Mexico	4	0.8
Minnesota	3	0.6
Other	33	6.2

The occupation divisions in Idaho with the largest number of fatalities were farmers/foresters/fishers (25%), transportation/material movers (21%), laborers (10%), and precision production/craft/repair (10%). The occupations with the highest rates were transportation/material movers (47.6 deaths per 100,000 workers), farmers/foresters/fishers (34.2), and laborers (22.0) (Figure ID-4). Table ID-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Idaho decreased 38%, from a high of 21.6 in 1980 to a low of 13.5 in 1989 (Figure ID-5).

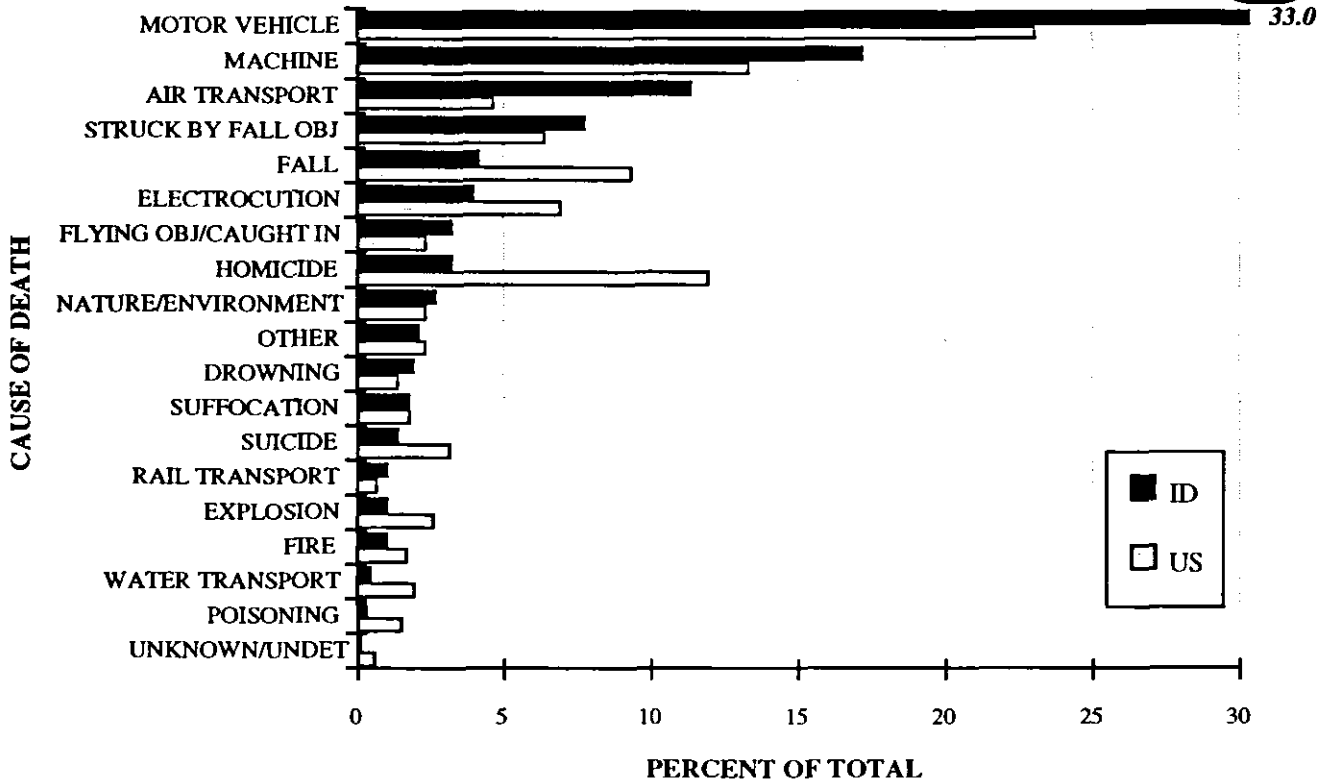


Figure ID-2. Traumatic Occupational Fatalities by Cause of Death, US and Idaho, 1980-1989.

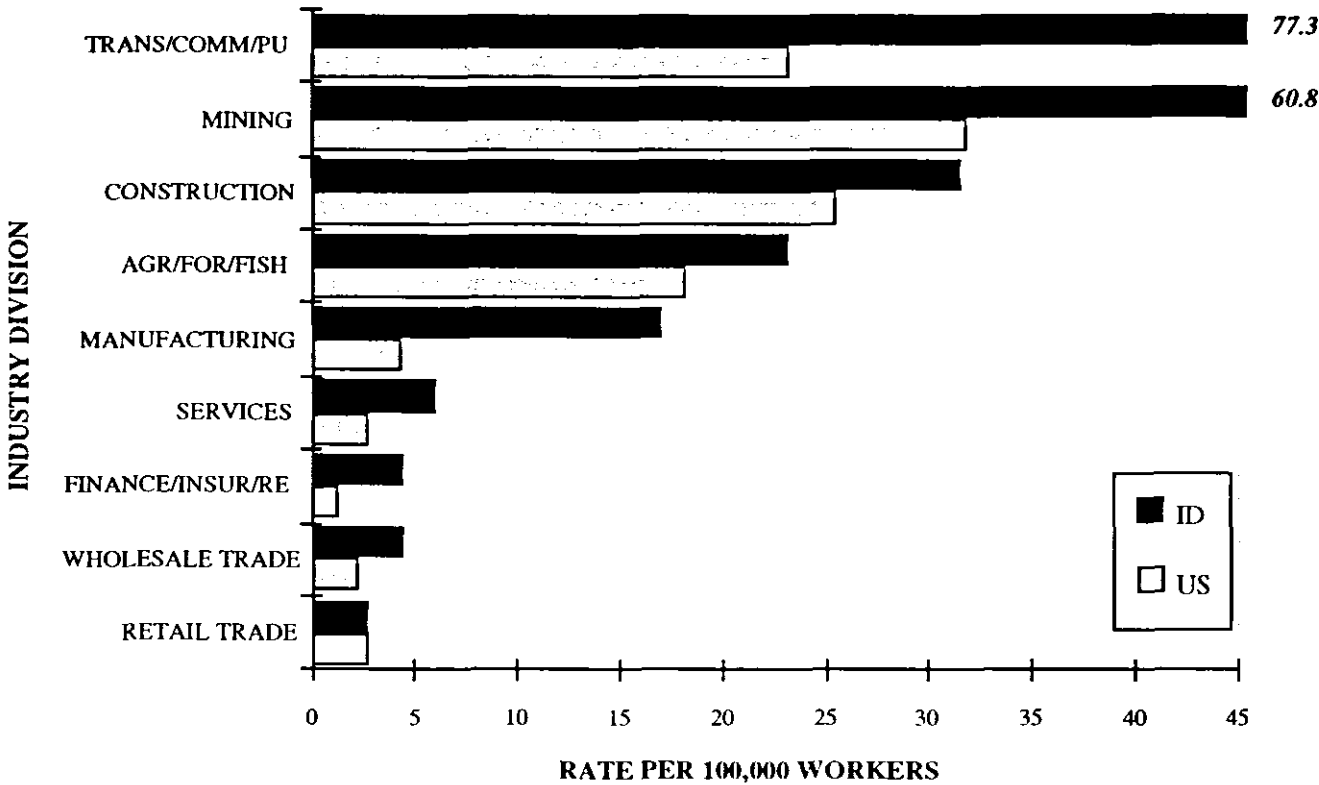


Figure ID-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Idaho, 1980-1989.

Table ID-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Idaho, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	17	10	11	12	16	8	12	11	9	12	118	77.3
MINING	4	6	--	--	--	--	--	--	--	--	21	60.8
CONSTRUCTION	5	6	6	5	3	4	6	3	6	6	50	31.6
AGR/FOR/FISH	12	15	13	9	15	13	19	7	10	7	120	23.3
MANUFACTURING	12	4	7	9	6	14	10	8	9	10	89	17.1
SERVICES	8	--	--	--	7	3	6	--	6	4	37	6.1
FINANCE/INSUR/RE	--	--	--	--	--	--	--	3	--	--	7	4.6
WHOLESALE TRADE	--	4	--	--	--	--	--	--	--	--	10	4.5
RETAIL TRADE	--	4	--	--	--	--	--	--	4	--	17	2.8
PUBLIC ADMIN	4	4	--	3	--	--	--	--	--	4	18	N/A
NOT CLASSIFIED	3	8	3	--	3	3	4	6	--	--	33	N/A
STATE	67	62	45	42	55	50	61	41	47	50	520	16.7

NOTE: Dashes denote categories with fewer than three cases.

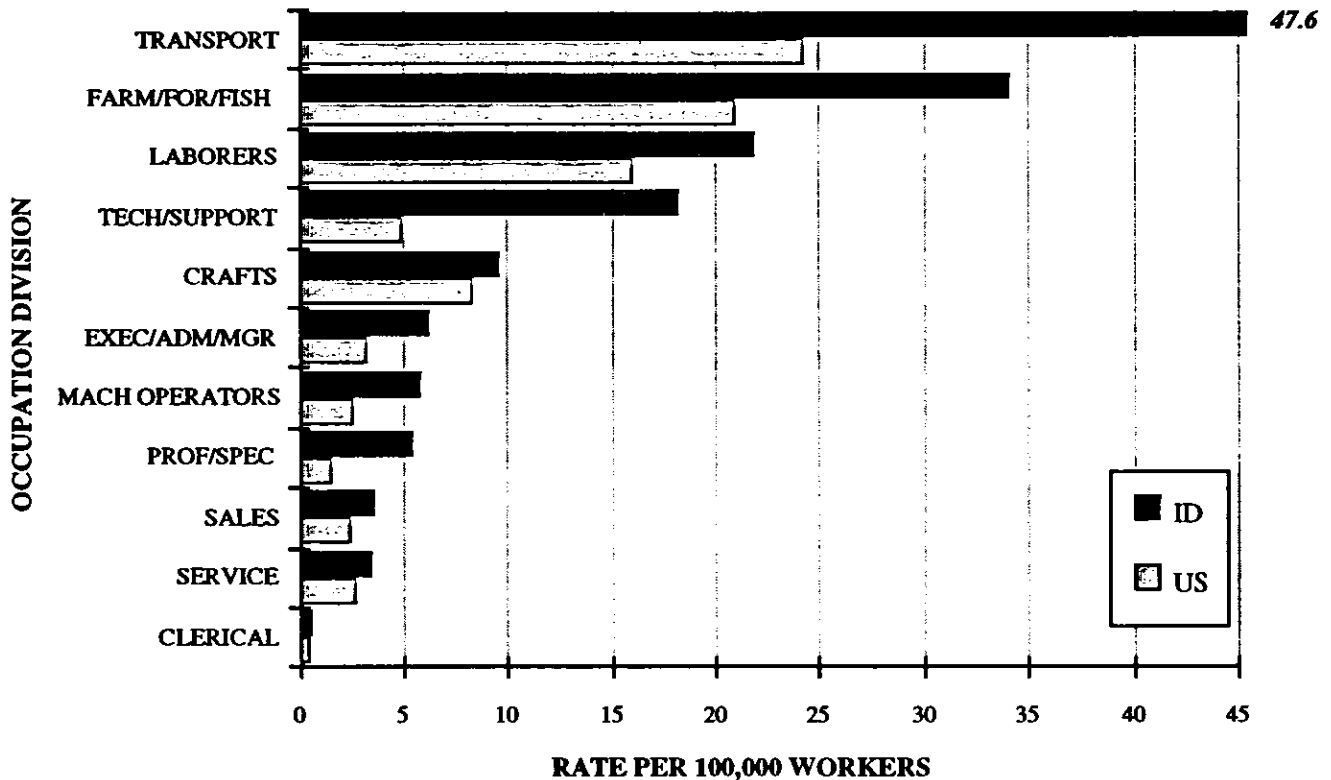


Figure ID-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Idaho, 1983-1989.

Table ID-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Idaho.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	108	47.6
FARM/FOR/FISH	130	34.2
LABORERS	54	22.0
TECH/SUPPORT	24	18.3
CRAFTS	52	9.7
EXEC/ADM/MGR	32	6.3
MACH OPERATORS	15	5.9
PROF/SPEC	23	5.5
SALES	22	3.7
SERVICE	23	3.6
CLERICAL	5	0.7
NOT CLASSIFIED	32	N/A

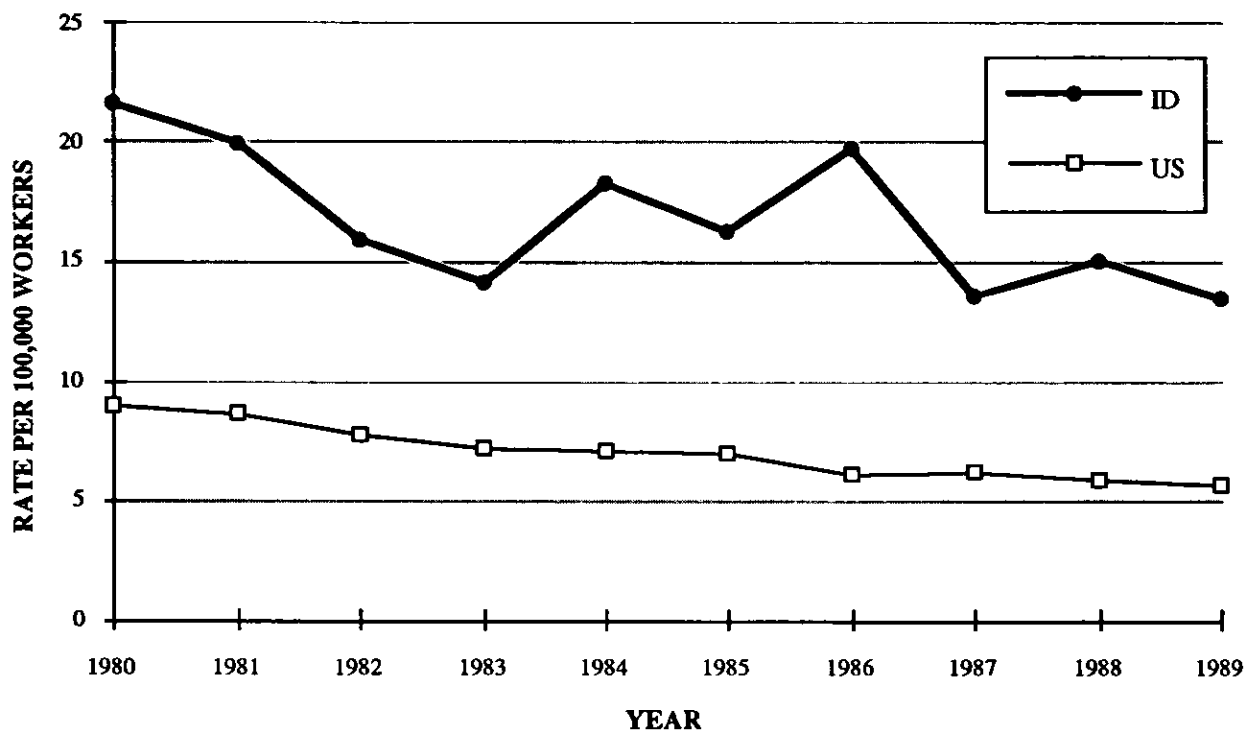


Figure ID-5. Rate of Traumatic Occupational Fatalities by Year, US and Idaho, 1980-1989.

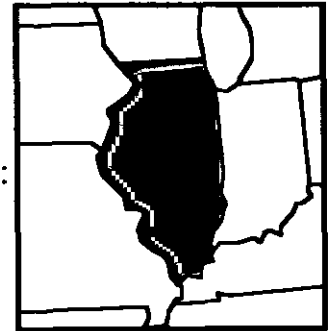
State of Illinois

Average Annual Fatal Injuries: **286**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **6.3**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (538)**
Rate: **Construction (29.2)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (583)**
Rate: **Farmers/Foresters/Fishers (26.5)**

The State of Illinois had 2,860 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 2,853 of these deaths. The average annual rate of fatalities per 100,000 workers was 6.3 for Illinois compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 145.5 per 100,000 workers for Illinois compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Illinois and had a fatality rate of 9.2 per 100,000 workers compared to 0.8 for females.

Table IL-1. Traumatic Occupational Fatalities by Race/Ethnicity, Illinois, 1980-1989.

Race/Ethnicity	Number	Percent
White	2218	77.6
Black	409	14.3
Hispanic	185	6.5
Asian	21	0.7
Native American	3	0.1
Other	24	0.8

The fatality distribution by race/ethnicity for the State of Illinois shows that Whites accounted for 78% of the total fatalities, Blacks for 14%, and Hispanics for 7% as shown in Table IL-1. As shown in Figure IL-1, workers aged 25 to 29 years old accounted for the largest number of fatalities (12%). Of all Illinois occupational fatality victims, 90% were Illinois residents (Table IL-2).

Figure IL-2 presents the distribution of fatalities by external cause of death for the State of Illinois and for the U.S. The three leading causes of death among employees in Illinois were motor vehicle incidents (18%), homicides (17%), and machine-related incidents (12%).

In Illinois, the industry divisions in which the largest number of fatalities occurred were transportation/communication/public utilities (19%), construction (18%), and manufacturing (14%). The construction industry had the highest fatality rate at 29.2 per 100,000 workers, followed by mining (24.8), transportation/communication/public utilities (22.2), and agriculture/forestry/fishing (21.2) (Figure IL-3). Table IL-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

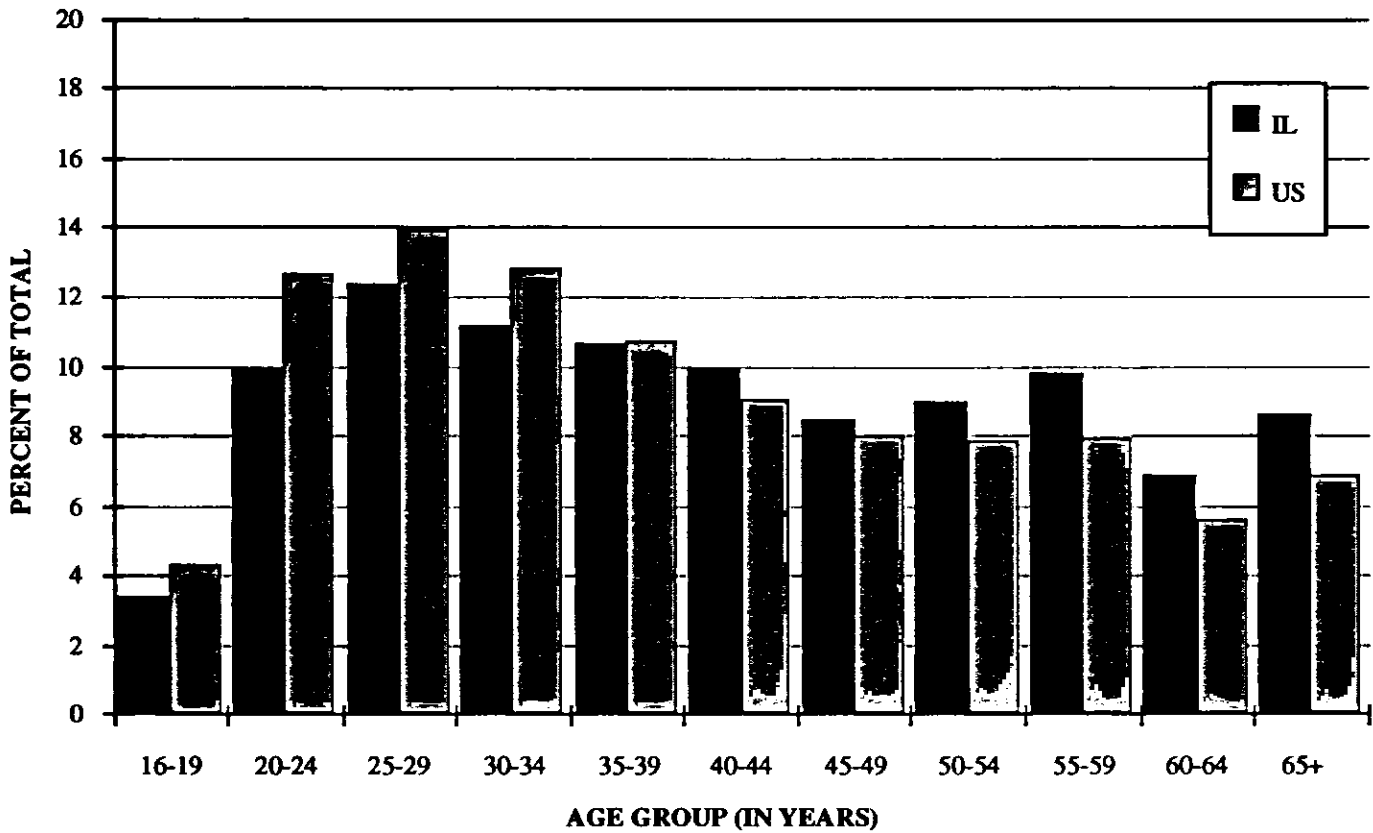


Figure IL-1. Traumatic Occupational Fatalities by Age Group, US and Illinois, 1980-1989.

Table IL-2. Traumatic Occupational Fatalities by State of Residence, Illinois, 1980-1989.

State	Number	Percent
Illinois	2585	90.4
Indiana	62	2.2
Missouri	44	1.5
Wisconsin	33	1.2
Iowa	23	0.8
Michigan	13	0.5
Ohio	10	0.3
Arkansas	8	0.3
Kentucky	7	0.2
Tennessee	7	0.2
Nebraska	6	0.2
Texas	6	0.2
Other	56	2.0

The occupation divisions in Illinois with the largest number of fatalities were precision production/craft/repair (20%), transportation/material movers (16%), and laborers (15%). The occupations with the highest rates were farmers/foresters/fishers (26.5 deaths per 100,000 workers), transportation/material movers (21.8), and laborers (17.8) (Figure IL-4). Table IL-4 provides numbers and rates of work-related deaths for each industry division.

During the decade, the fatality rates in Illinois decreased 38%, from 7.3 in 1980 to a low of 4.5 in 1989. A high of 7.3 deaths per 100,000 workers was reported in 1980 and 1988 (Figure IL-5).

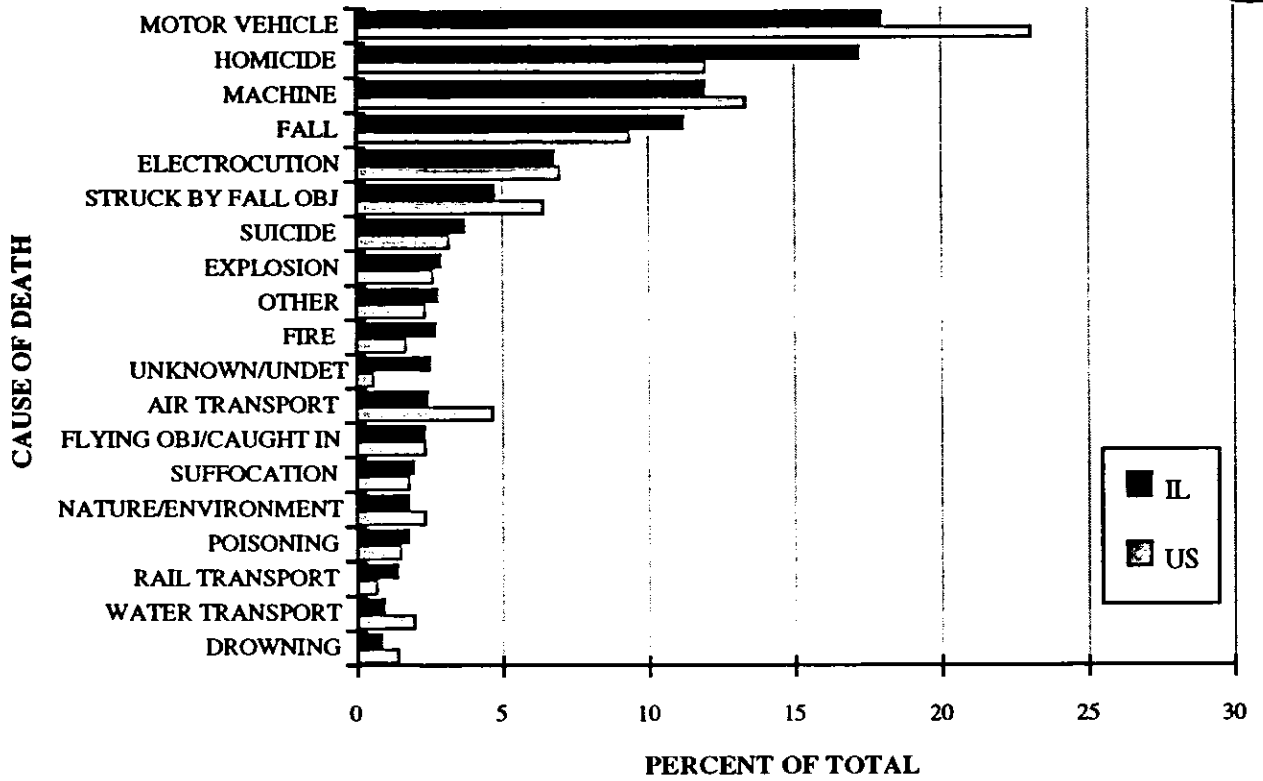


Figure IL-2. Traumatic Occupational Fatalities by Cause of Death, US and Illinois, 1980-1989.

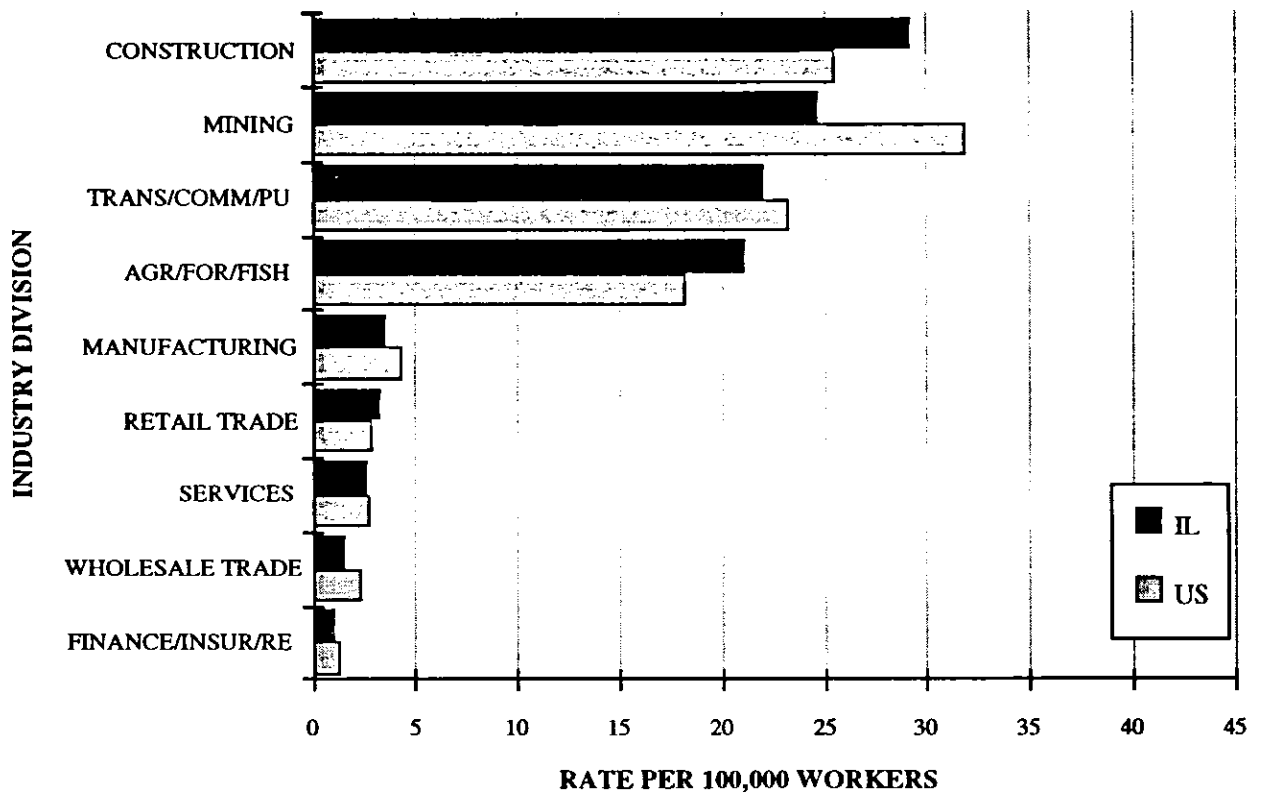


Figure IL-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Illinois, 1980-1989.

Table IL-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Illinois, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	61	46	38	43	46	51	46	55	62	56	504	29.2
MINING	18	4	5	5	7	7	12	3	3	4	68	24.8
TRANS/COMM/PU	56	58	65	43	36	40	54	62	75	49	538	22.2
AGR/FOR/FISH	30	34	36	28	31	27	35	42	42	27	332	21.2
MANUFACTURING	48	46	44	34	55	31	30	31	55	18	392	3.6
RETAIL TRADE	35	44	31	31	21	20	20	19	34	14	269	3.3
SERVICES	29	28	31	32	23	29	32	27	43	21	295	2.7
WHOLESALE TRADE	8	--	6	4	--	6	--	9	11	--	52	1.6
FINANCE/INSUR/RE	8	4	6	4	--	--	--	6	4	--	40	1.1
PUBLIC ADMIN	11	15	18	14	13	17	20	19	12	13	152	N/A
NOT CLASSIFIED	19	23	27	26	24	19	28	19	6	20	211	N/A
STATE	323	304	307	264	260	249	281	292	347	226	2853	6.3

NOTE: Dashes denote categories with fewer than three cases.

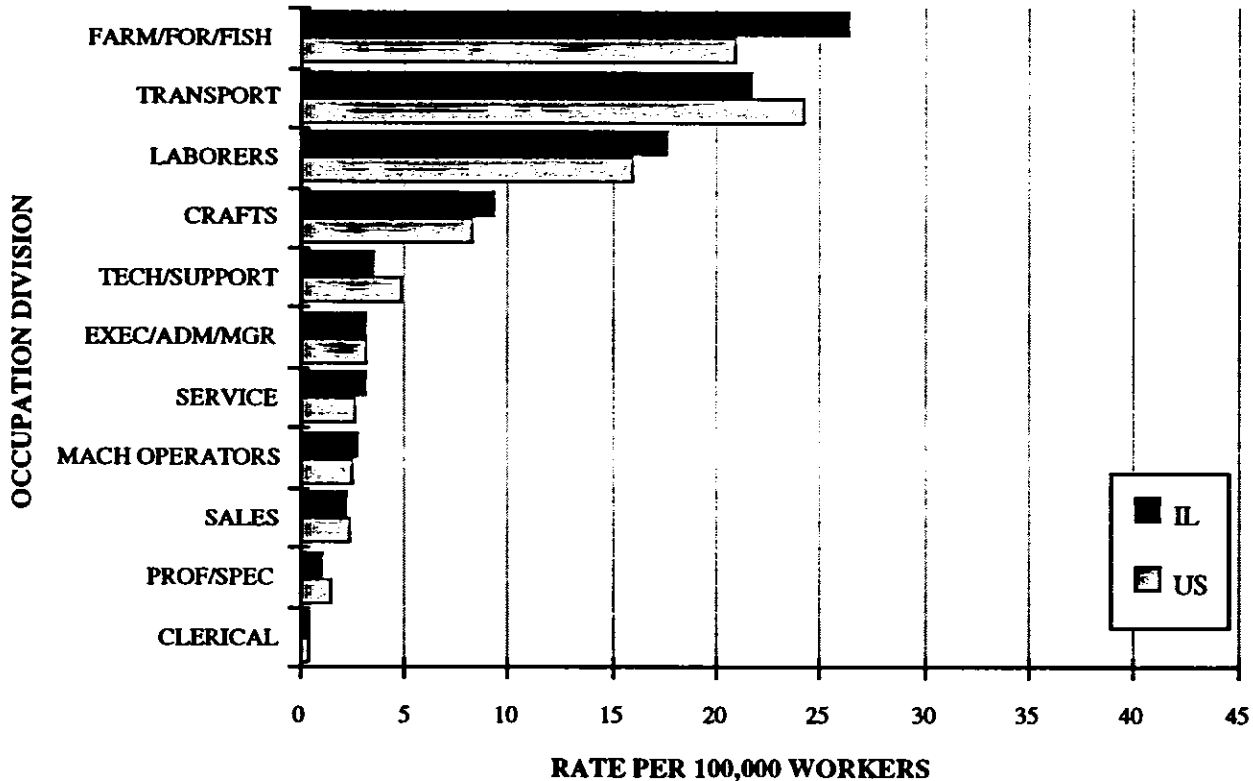


Figure IL-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Illinois, 1983-1989.

Table IL-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Illinois.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	319	26.5
TRANSPORT	463	21.8
LABORERS	437	17.8
CRAFTS	583	9.4
TECH/SUPPORT	46	3.6
EXEC/ADM/MGR	210	3.4
SERVICE	235	3.3
MACH OPERATORS	116	2.9
SALES	171	2.4
PROF/SPEC	99	1.3
CLERICAL	63	0.6
NOT CLASSIFIED	111	N/A

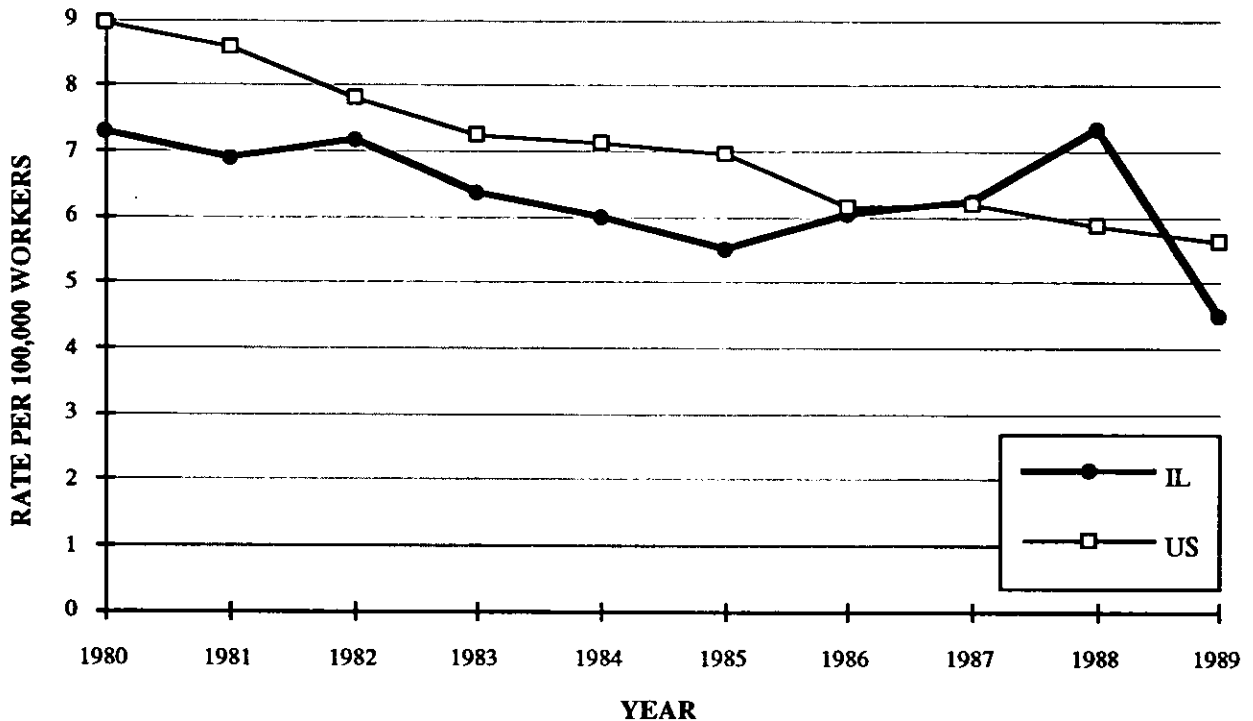


Figure IL-5. Rate of Traumatic Occupational Fatalities by Year, US and Illinois, 1980-1989.

State of Indiana

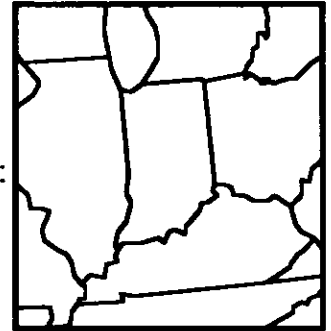
Average Annual Fatal Injuries: **152**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **7.4**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (324)**

Rate: **Mining (35.3)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (321)**

Rate: **Transportation/Material Movers (24.4)**

The State of Indiana had 1,515 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,509 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 7.4 for Indiana compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 181.3 per 100,000 workers for Indiana compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Indiana and had a fatality rate of 10.4 per 100,000 workers compared to 0.7 for females. The fatality distribution by **race/ethnicity** for the State of Indiana shows that Whites accounted for

92% of the total fatalities and Blacks for 7% as shown in **Table IN-1**. As shown in **Figure IN-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (14%). Of all Indiana occupational fatality victims, 83% were Indiana residents (**Table IN-2**).

Figure IN-2 presents the distribution of fatalities by external cause of death for the State of Indiana and for the U.S. The four leading causes of death among employees in Indiana were motor vehicle incidents (26%), machine-related incidents (13%), falls (10%), and homicides (10%).

In Indiana, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (21%), construction (19%), and manufacturing (16%). The mining industry had the highest fatality rate at 35.3 per 100,000 workers, followed by construction (34.1), and transportation/communication/public utilities (33.3) (**Figure IN-3**). **Table IN-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Indiana with the largest number of fatalities were transportation/material mov-

Table IN-1. Traumatic Occupational Fatalities by Race/Ethnicity, Indiana, 1980-1989.

Race/Ethnicity	Number	Percent
White	1387	91.6
Black	99	6.5
Hispanic	19	1.3
Asian	4	0.3
Other	6	0.4

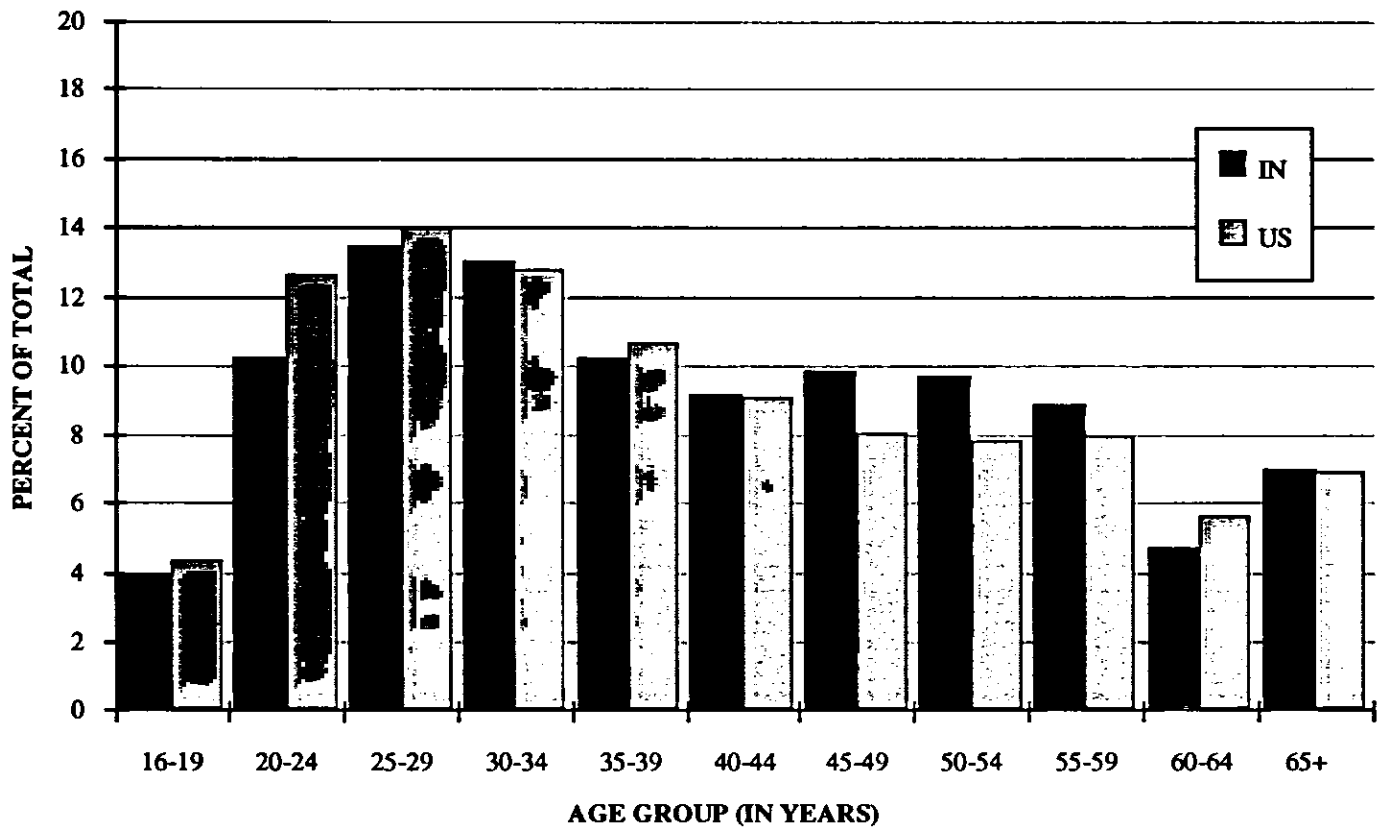


Figure IN-1. Traumatic Occupational Fatalities by Age Group, US and Indiana, 1980-1989.

Table IN-2. Traumatic Occupational Fatalities by State of Residence, Indiana, 1980-1989.

State	Number	Percent
Indiana	1252	82.6
Illinois	70	4.6
Ohio	48	3.2
Kentucky	24	1.6
Michigan	23	1.5
Florida	11	0.7
Missouri	11	0.7
Tennessee	11	0.7
Wisconsin	7	0.5
California	6	0.4
North Carolina	6	0.4
Pennsylvania	6	0.4
Other	40	2.6

ers (21%), precision production/craft/repair (18%), and laborers (16%). The occupations with the highest rates were transportation/material movers (24.4 deaths per 100,000 workers), laborers (18.4), and farmers/foresters/fishers (17.7) (Figure IN-4). Table IN-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Indiana decreased 47%, from 9.8 in 1980 to a low of 5.2 in 1989. A high of 9.9 deaths per 100,000 workers was reported in 1982 (Figure IN-5).

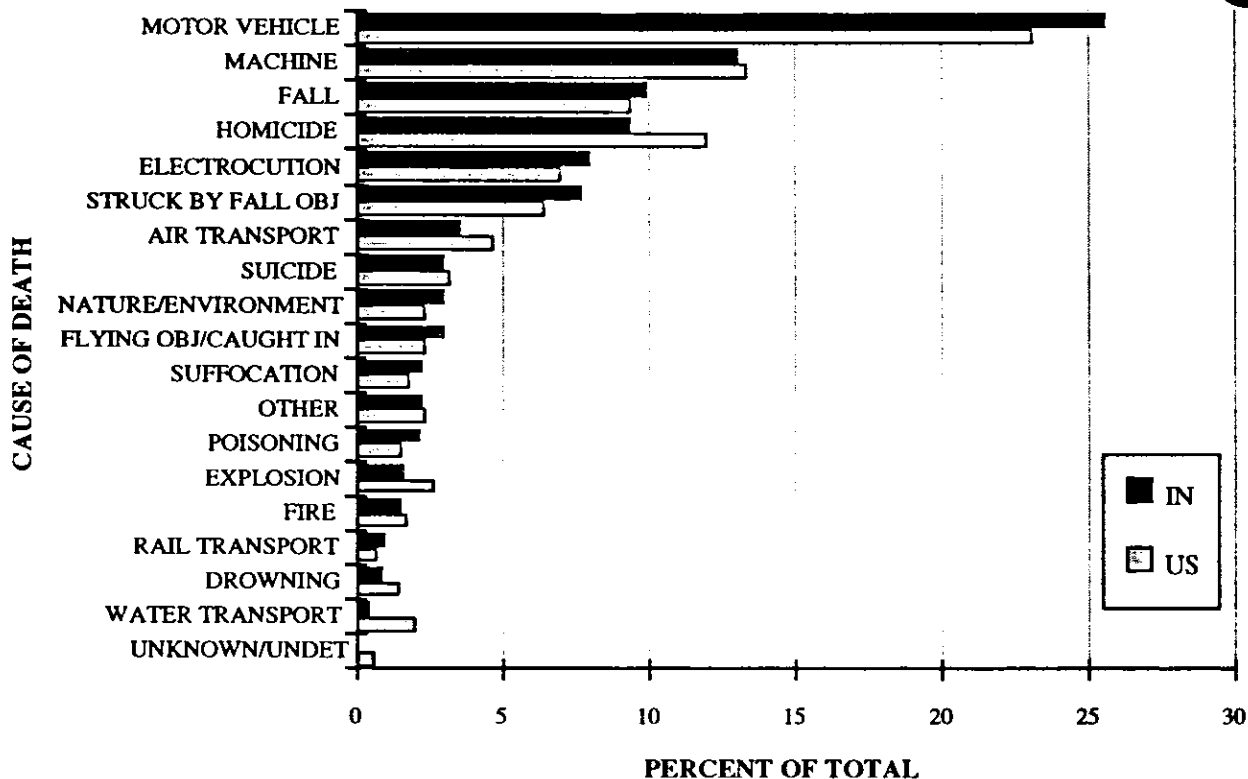


Figure IN-2. Traumatic Occupational Fatalities by Cause of Death, US and Indiana, 1980-1989.

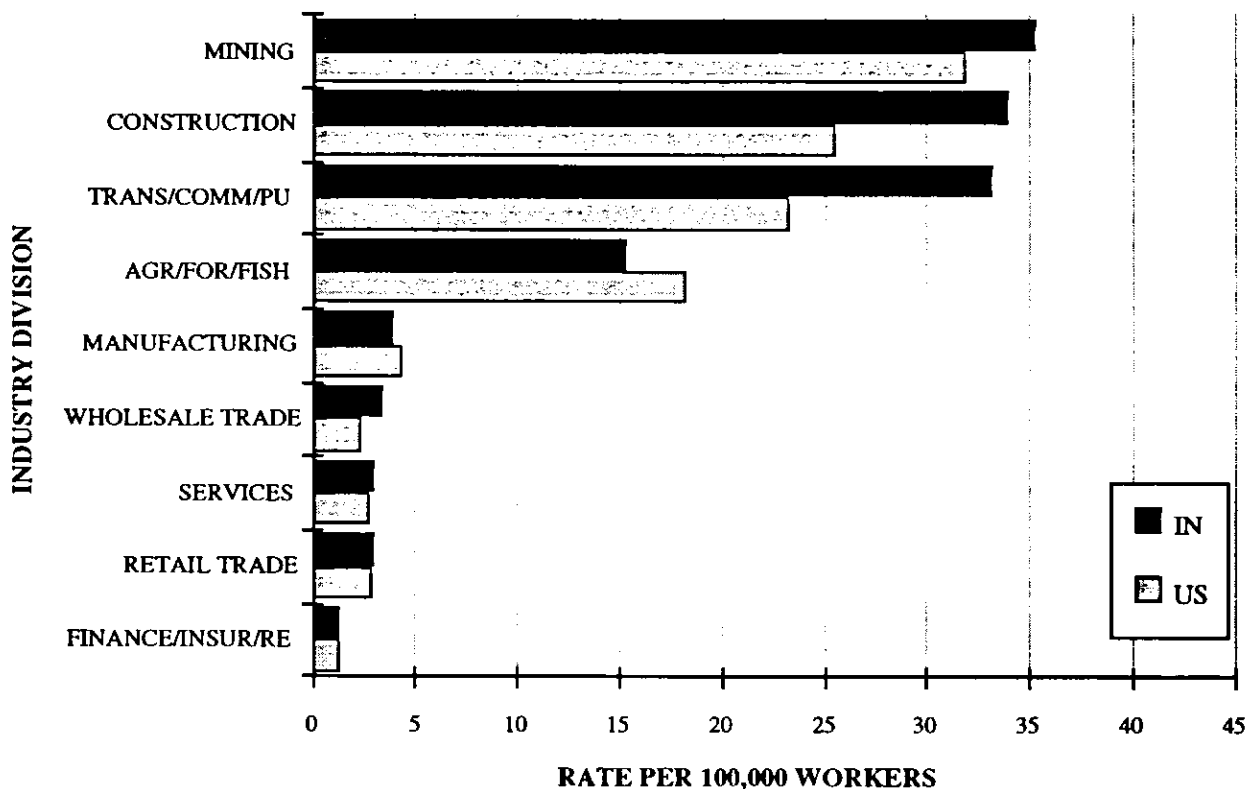


Figure IN-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Indiana, 1980-1989.

Table IN-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Indiana, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	4	--	7	--	3	3	--	3	--	5	31	35.3
CONSTRUCTION	33	31	35	25	24	28	24	28	32	28	288	34.1
TRANS/COMM/PU	44	36	34	32	31	29	25	34	34	25	324	33.3
AGR/FOR/FISH	20	16	23	13	15	12	16	24	20	11	170	15.3
MANUFACTURING	29	29	27	28	19	16	32	24	26	14	244	3.9
WHOLESALE TRADE	7	4	3	4	--	4	--	5	3	5	38	3.5
SERVICES	15	11	15	9	14	13	5	19	14	11	126	3.1
RETAIL TRADE	17	10	17	14	7	15	7	13	9	12	121	3.1
FINANCE/INSUR/RE	--	3	--	--	--	3	--	--	--	--	15	1.4
PUBLIC ADMIN	9	11	7	9	6	--	6	8	6	4	68	N/A
NOT CLASSIFIED	13	8	12	6	7	11	5	7	10	5	84	N/A
STATE	192	161	182	142	129	136	122	165	158	122	1509	7.4

NOTE: Dashes denote categories with fewer than three cases.

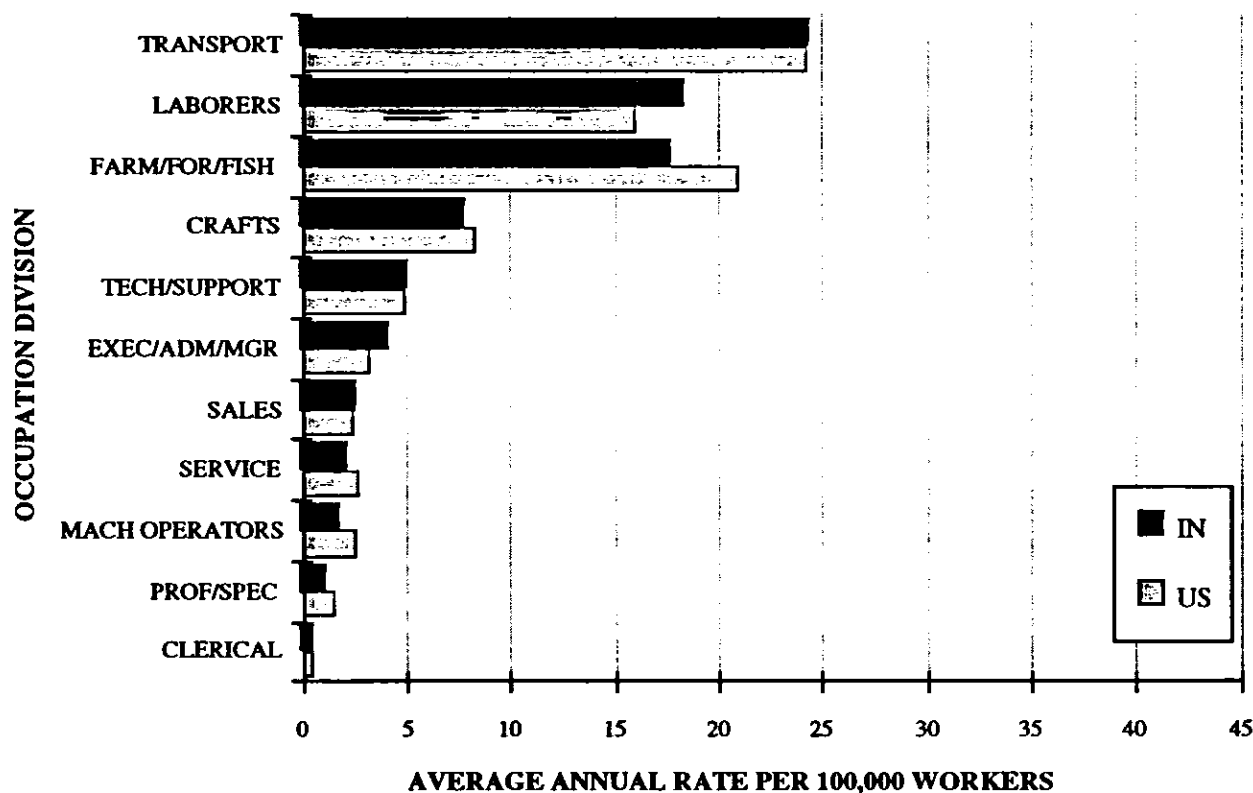


Figure IN-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Indiana, 1983-1989.

Table IN-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Indiana.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	321	24.4
LABORERS	239	18.4
FARM/FOR/FISH	164	17.7
CRAFTS	273	7.7
TECH/SUPPORT	31	5.0
EXEC/ADM/MGR	95	4.2
SALES	92	2.6
SERVICE	91	2.1
MACH OPERATORS	55	1.8
PROF/SPEC	42	1.2
CLERICAL	18	0.5
NOT CLASSIFIED	88	N/A

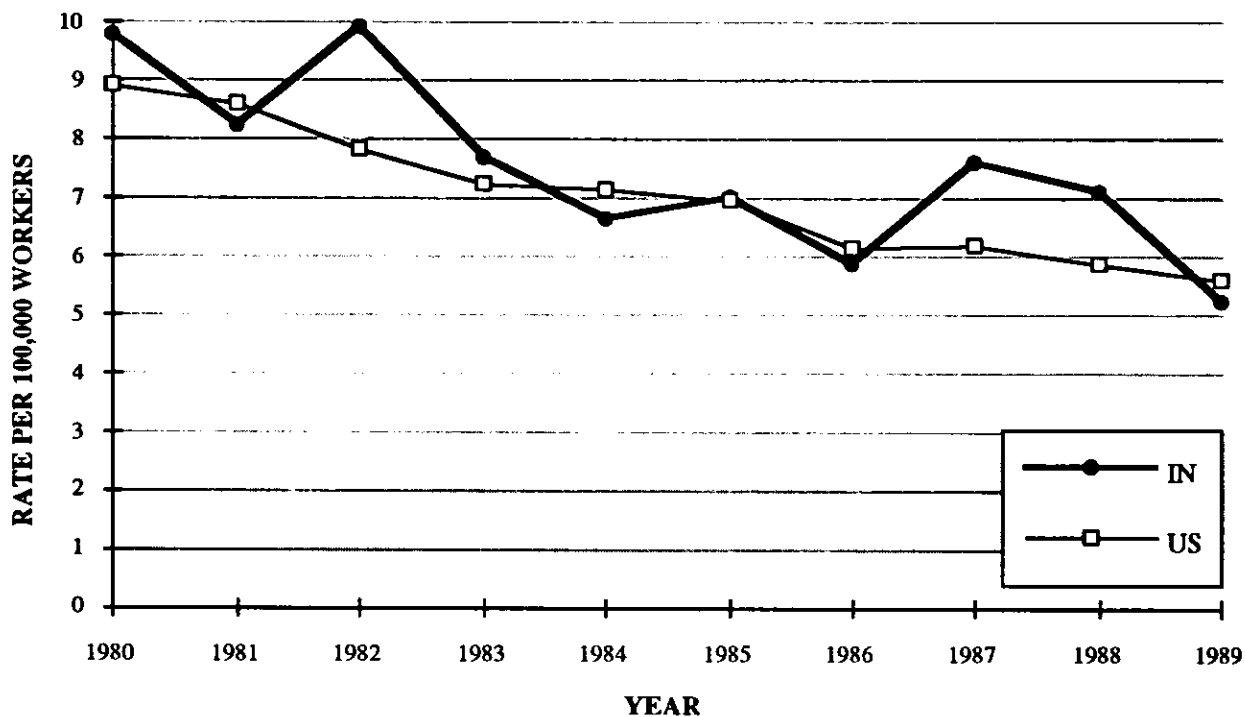


Figure IN-5. Rate of Traumatic Occupational Fatalities by Year, US and Indiana, 1980-1989.

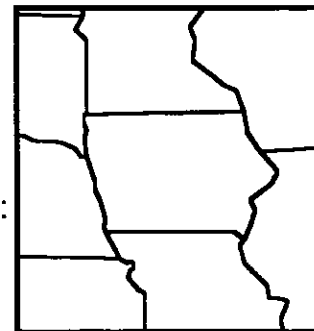
State of Iowa

Average Annual Fatal Injuries: **96**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **9.0**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (323)**
Rate: **Mining (47.1)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (297)**
Rate: **Transportation/Material Movers (23.5)**

The State of Iowa had 962 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for all of these deaths. The **average annual rate** of fatalities per 100,000 workers was 9.0 for Iowa compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 197.9 per 100,000 workers for Iowa compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Iowa and had a fatality rate of 11.9 per 100,000 workers compared to 1.0 for females. The fatality distribution by **race/ethnicity** for the State of Iowa shows that Whites accounted for 99%

Table IA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Iowa, 1980-1989.

Race/Ethnicity	Number	Percent
White	953	99.1
Black	8	0.8
Other	1	0.1

of the total fatalities as shown in **Table IA-1**. As shown in **Figure IA-1**, workers aged 65 years and older accounted for the largest number of fatalities (12%). Of all Iowa occupational fatality victims, 88% were Iowa residents (**Table IA-2**).

Figure IA-2 presents the distribution of fatalities by external cause of death for the State of Iowa and for the U.S. The three leading causes of death among employees in Iowa were machine-related incidents (25%), motor vehicle incidents (25%), and falls (9%).

In Iowa, the **industry divisions** in which the largest number of fatalities occurred were agriculture/forestry/fishing (34%), transportation/communication/public utilities (17%), and construction (15%). The mining industry had the highest fatality rate at 47.1 per 100,000 workers, followed by construction (40.6), and transportation/communication/public utilities (35.3) (**Figure IA-3**). **Table IA-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Iowa with the largest number of fatalities were farmers/foresters/fishers (31%), transportation/material movers (16%), and

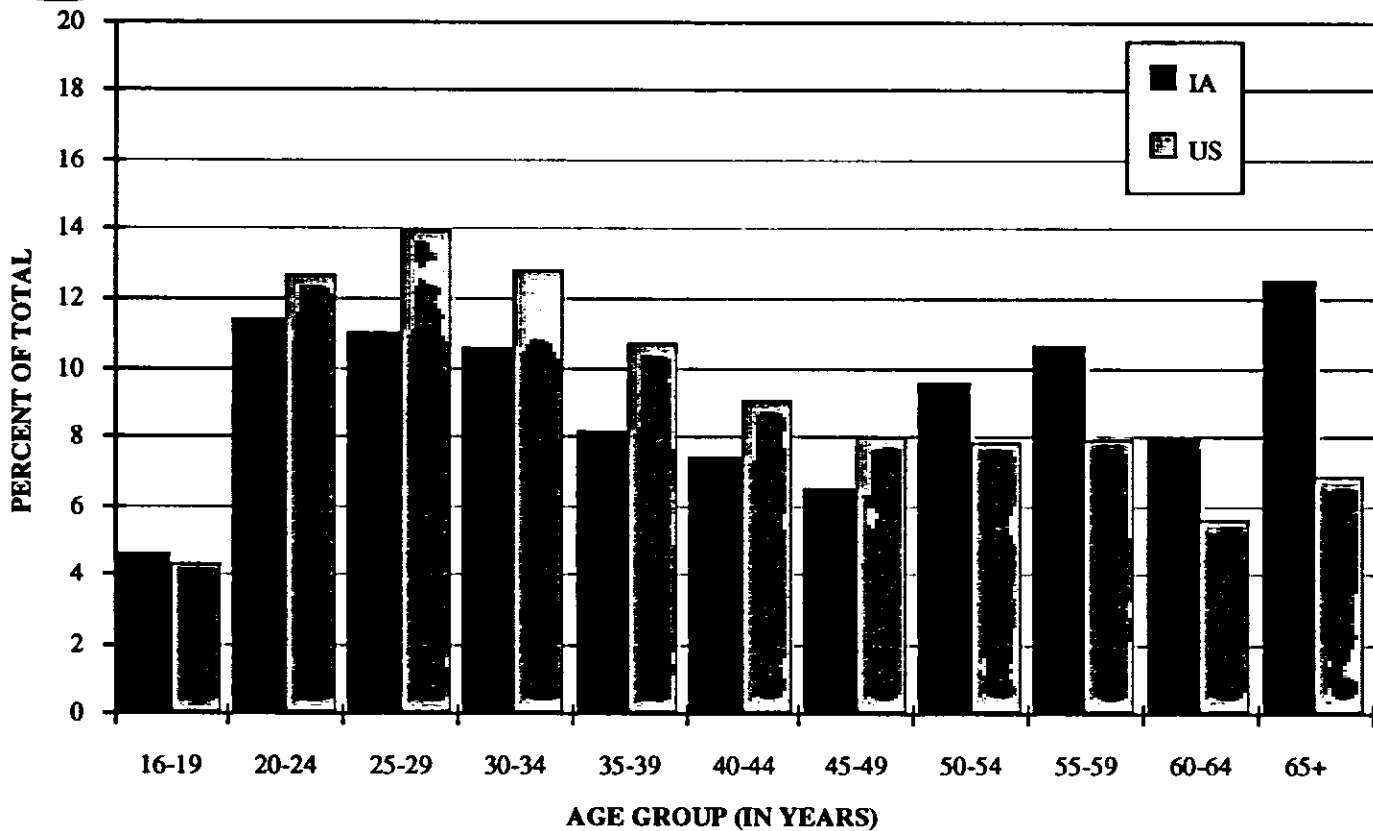


Figure IA-1. Traumatic Occupational Fatalities by Age Group, US and Iowa, 1980-1989.

Table IA-2. Traumatic Occupational Fatalities by State of Residence, Iowa, 1980-1989.

State	Number	Percent
Iowa	848	88.1
Illinois	29	3.0
Nebraska	24	2.5
Missouri	13	1.4
Minnesota	10	1.0
South Dakota	6	0.6
Wisconsin	6	0.6
Indiana	4	0.4
Oklahoma	3	0.3
Other	19	2.0

precision production/craft/repair (14%). The occupations with the highest rates were transportation/material movers (23.5 deaths per 100,000 workers), farmers/foresters/fishers (21.7), and laborers (17.1) (Figure IA-4). Table IA-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Iowa decreased 35%, from a high of 11.9 in 1980 to 7.7 in 1989. A low of 7.5 deaths per 100,000 workers was reported in 1986 and 1987 (Figure IA-5).

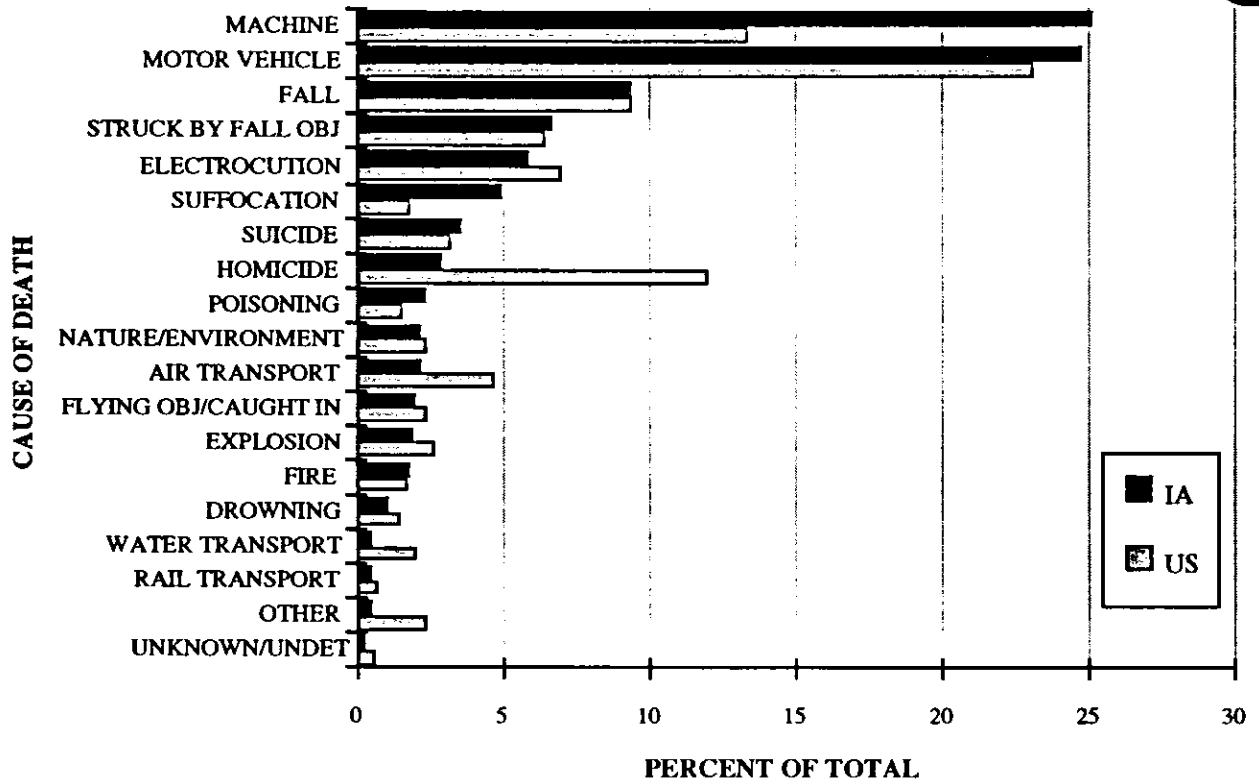


Figure IA-2. Traumatic Occupational Fatalities by Cause of Death, US and Iowa, 1980-1989.

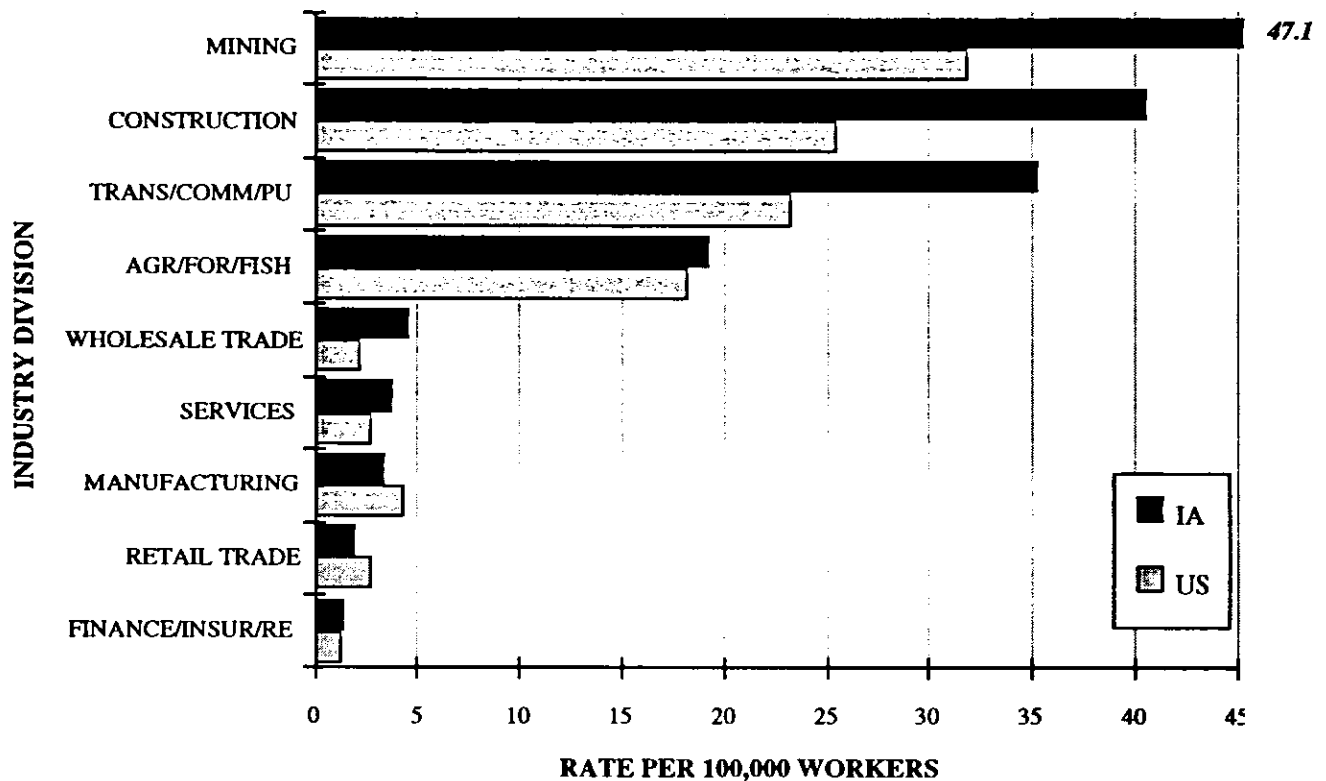


Figure IA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Iowa, 1980-1989.

Table IA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Iowa, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	3	--	--	--	--	--	10	47.1
CONSTRUCTION	24	16	16	13	8	14	14	9	19	11	144	40.6
TRANS/COMM/PU	20	21	18	20	18	13	15	7	16	16	164	35.3
AGR/FOR/FISH	44	26	24	26	33	37	29	33	38	33	323	19.4
WHOLESALE TRADE	3	3	7	5	--	--	--	7	--	--	33	4.7
SERVICES	10	11	8	9	7	8	8	5	15	6	87	3.9
MANUFACTURING	10	5	7	3	8	9	--	10	11	11	76	3.5
RETAIL TRADE	--	4	5	4	3	4	3	3	4	8	40	2.0
FINANCE/INSUR/RE	4	--	3	--	--	--	--	--	--	--	10	1.5
PUBLIC ADMIN	--	5	3	--	--	5	--	--	--	7	28	N/A
NOT CLASSIFIED	6	10	3	3	6	8	4	3	--	--	47	N/A
STATE	126	102	94	84	89	100	78	81	110	98	962	9.0

NOTE: Dashes denote categories with fewer than three cases.

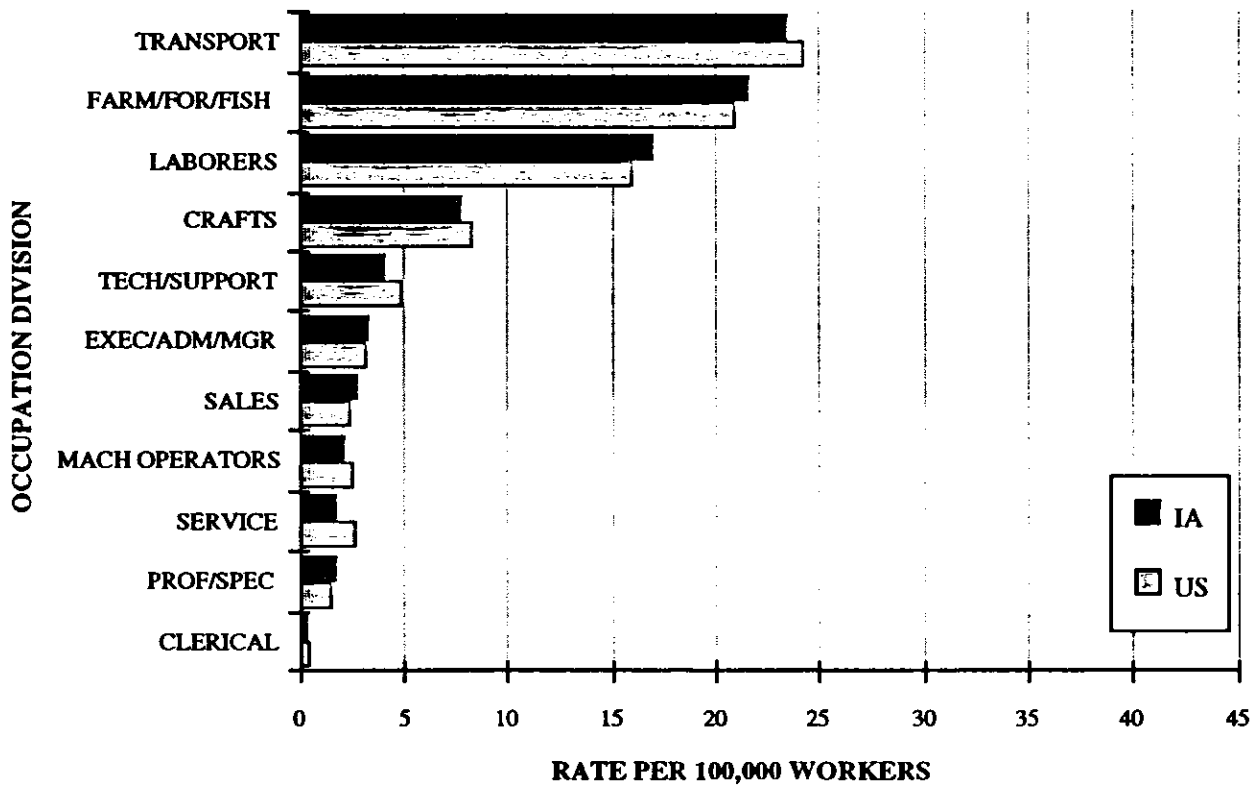


Figure IA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Iowa, 1983-1989.

Table IA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Iowa.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	153	23.5
FARM/FOR/FISH	297	21.7
LABORERS	111	17.1
CRAFTS	135	7.9
TECH/SUPPORT	19	4.2
EXEC/ADM/MGR	48	3.4
SALES	41	2.9
MACH OPERATORS	19	2.2
SERVICE	44	1.9
PROF/SPEC	32	1.9
CLERICAL	13	0.4
NOT CLASSIFIED	50	N/A

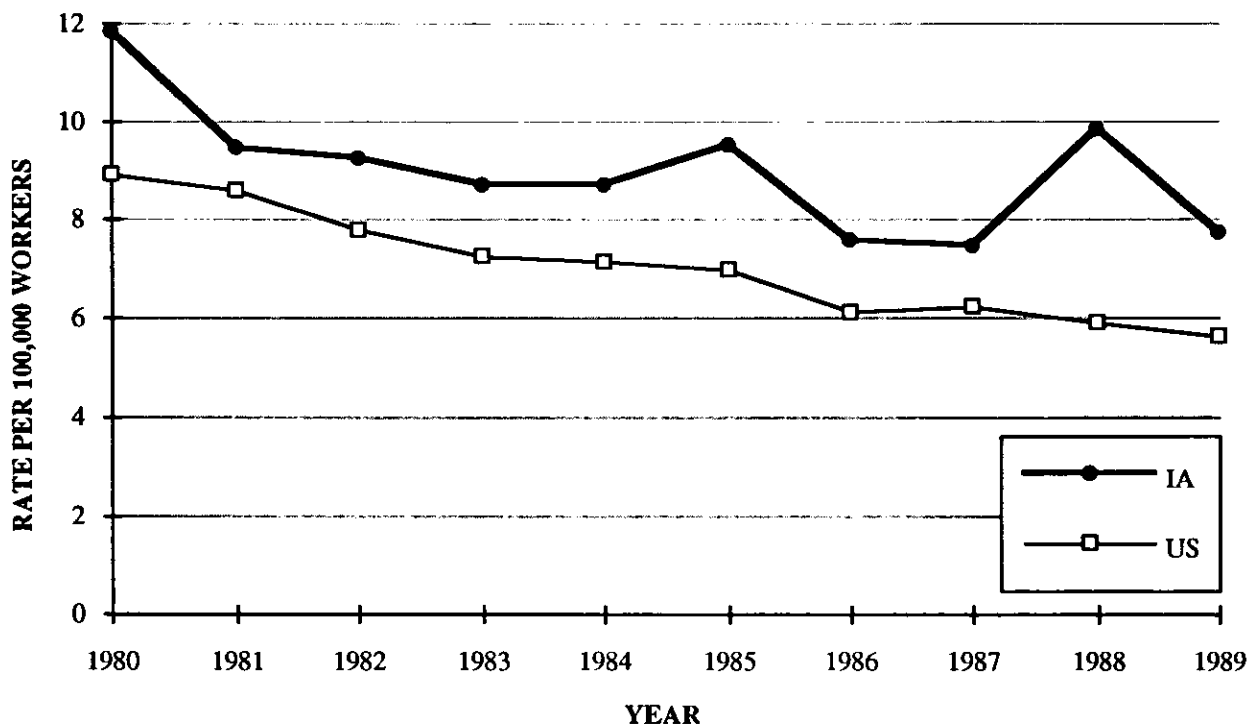


Figure IA-5. Rate of Traumatic Occupational Fatalities by Year, US and Iowa, 1980-1989.

State of Kansas

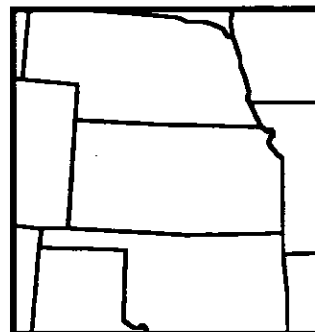
Average Annual Fatal Injuries: **80**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **8.6**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (170)**

Rate: **Transportation/Communication/
Public Utilities (33.2)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (183)**

Rate: **Transportation/Material Movers (34.4)**

The State of Kansas had 798 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 784 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 8.6 for Kansas compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 213.5 per 100,000 workers for Kansas compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Kansas and had a fatality rate of 11.6 per 100,000 workers compared to 0.6 for females. The fatality distribution by **race/ethnicity** for the State of Kansas shows that Whites accounted for

91% of the total fatalities, Hispanics for 5%, and Blacks for 4% as shown in **Table KS-1**. As shown in **Figure KS-1**, workers aged 20 to 24 and 25 to 29 years old each accounted for 14% of the fatalities. Of all Kansas occupational fatality victims, 83% were Kansas residents (**Table KS-2**).

Figure KS-2 presents the distribution of fatalities by external cause of death for the State of Kansas and for the U.S. The three leading causes of death among employees in Kansas were motor vehicle incidents (31%), machine-related incidents (18%), and electrocutions (9%).

In Kansas, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (22%), agriculture/forestry/fishing (21%), and construction (16%). The transportation/communication/public utilities industry had the highest fatality rate at 33.2 per 100,000 workers, followed by construction (29.4), and mining (23.4) (**Figure KS-3**). **Table KS-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Kansas with the largest number of fatalities were transportation/material mov-

Table KS-1. Traumatic Occupational Fatalities by Race/Ethnicity, Kansas, 1980-1989.

Race/Ethnicity	Number	Percent
White	724	90.7
Hispanic	36	4.5
Black	35	4.4
Other	3	0.4

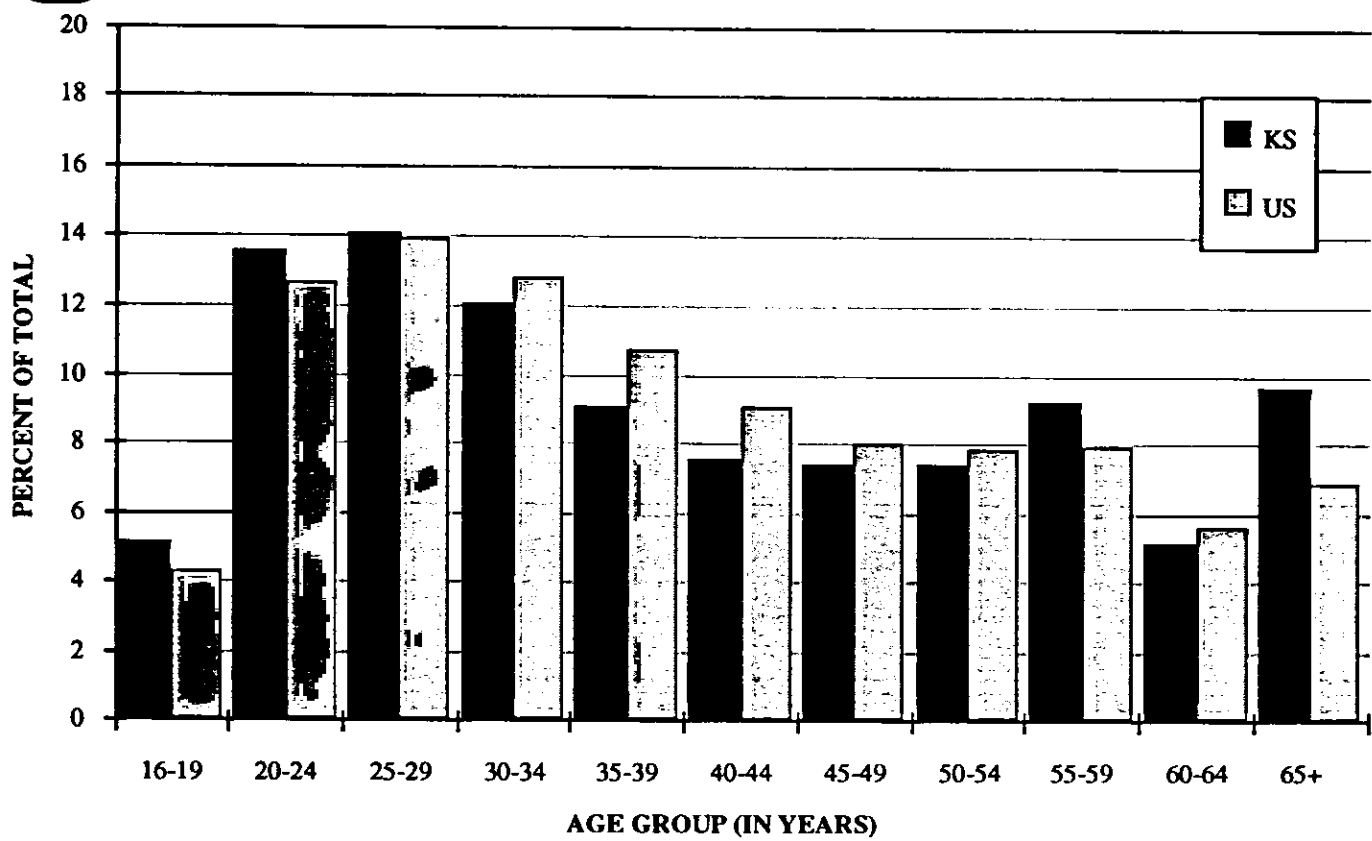


Figure KS-1. Traumatic Occupational Fatalities by Age Group, US and Kansas, 1980-1989.

Table KS-2. Traumatic Occupational Fatalities by State of Residence, Kansas, 1980-1989.

State	Number	Percent
Kansas	663	83.1
Missouri	50	6.3
Oklahoma	28	3.5
Nebraska	11	1.4
Texas	8	1.0
Indiana	5	0.6
New York	5	0.6
Arkansas	3	0.4
Iowa	3	0.4
Other	22	2.8

ers (23%), farmers/foresters/fishers (18%), precision production/craft/repair (13%), and laborers (13%). The occupations with the highest rates were transportation/material movers (34.4 deaths per 100,000 workers), laborers (22.2), and farmers/foresters/fishers (15.5) (Figure KS-4). Table KS-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Kansas decreased 56%, from a high of 13.1 in 1980 to a low of 5.7 in 1989 (Figure KS-5).

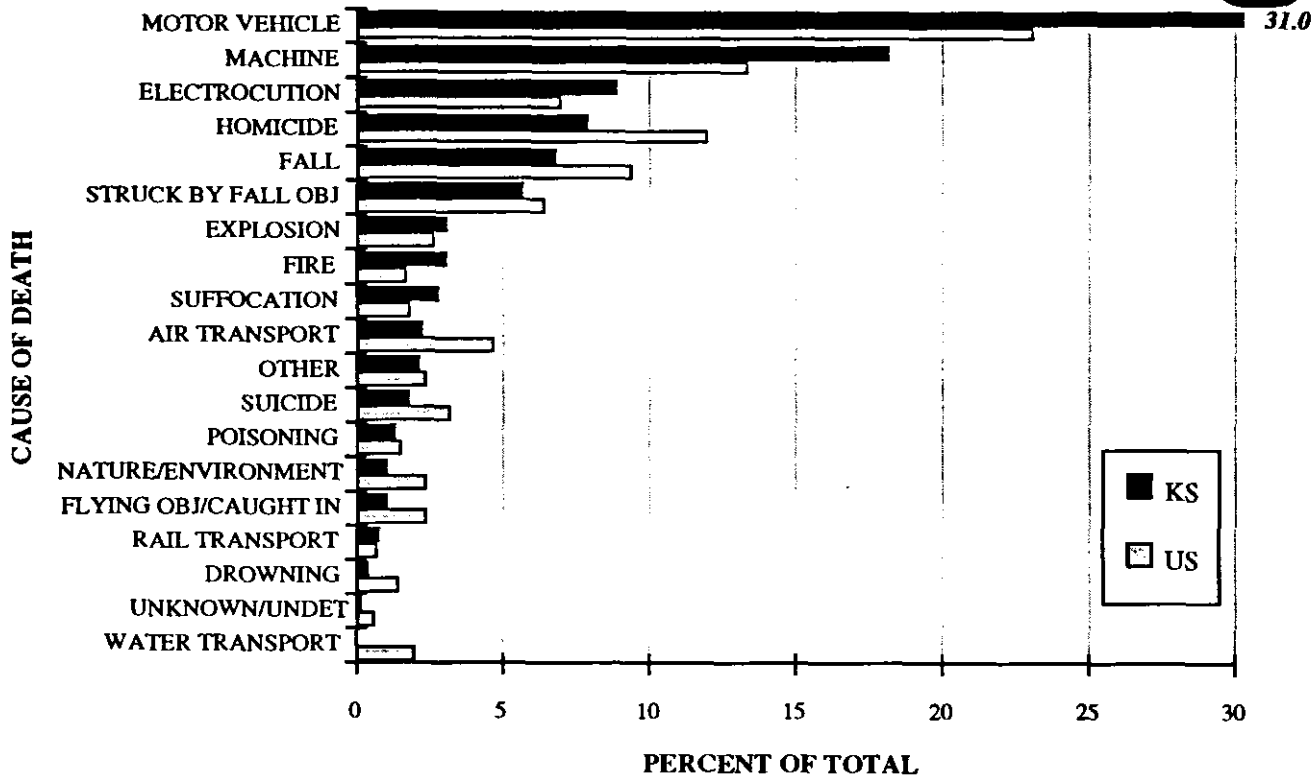


Figure KS-2. Traumatic Occupational Fatalities by Cause of Death, US and Kansas, 1980-1989.

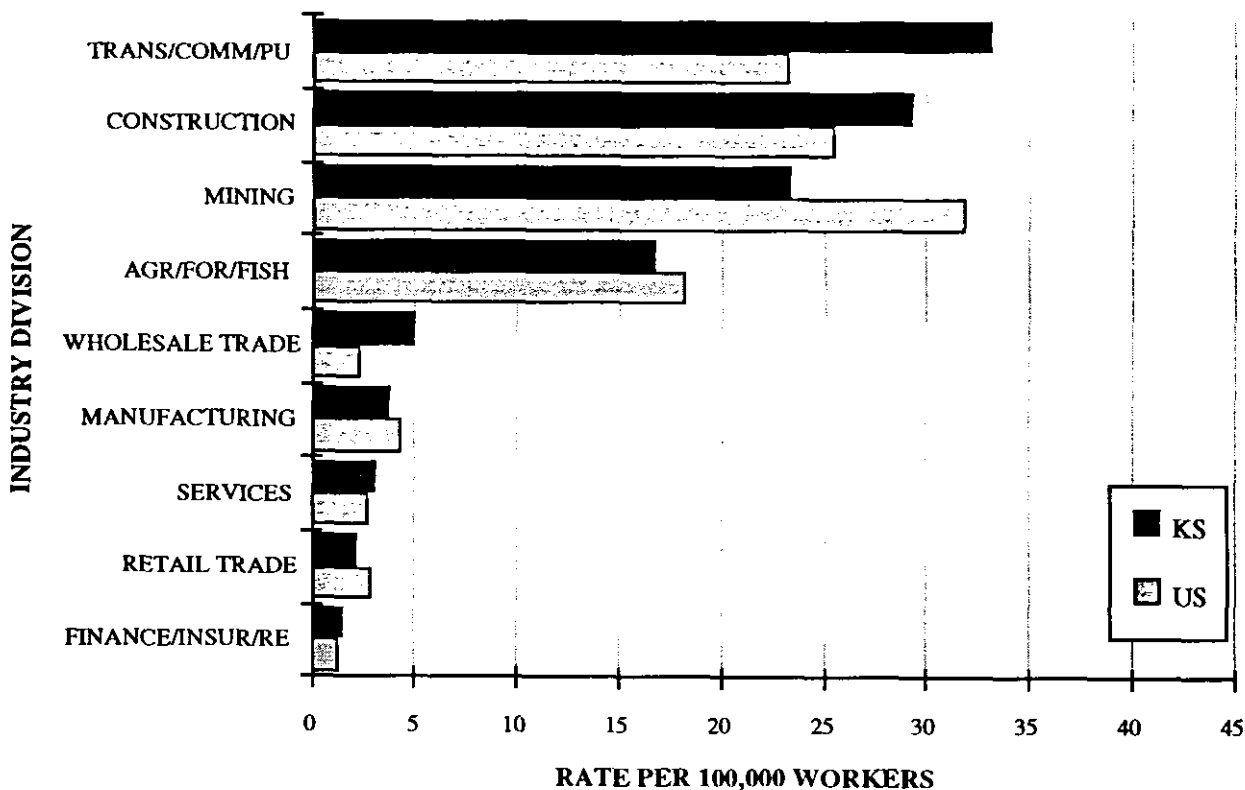


Figure KS-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Kansas, 1980-1989.

Table KS-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Kansas, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	22	18	12	19	21	22	15	19	11	11	170	33.2
CONSTRUCTION	14	17	18	12	14	13	6	15	7	8	124	29.4
MINING	6	4	5	5	5	6	--	3	3	--	40	23.4
AGR/FOR/FISH	32	24	12	11	20	7	17	17	12	12	164	16.9
WHOLESALE TRADE	3	3	5	--	5	4	3	4	--	--	31	5.1
MANUFACTURING	12	4	3	12	9	5	6	7	7	9	74	3.9
SERVICES	4	6	7	8	7	7	4	5	8	5	61	3.3
RETAIL TRADE	7	3	7	5	--	--	6	--	4	3	39	2.2
FINANCE/INSUR/RE	--	--	--	--	4	--	--	--	--	--	9	1.7
PUBLIC ADMIN	3	--	7	--	4	--	4	3	--	3	29	N/A
NOT CLASSIFIED	7	6	4	7	--	--	4	3	--	6	43	N/A
STATE	111	87	80	82	92	67	67	80	58	60	784	8.6

NOTE: Dashes denote categories with fewer than three cases.

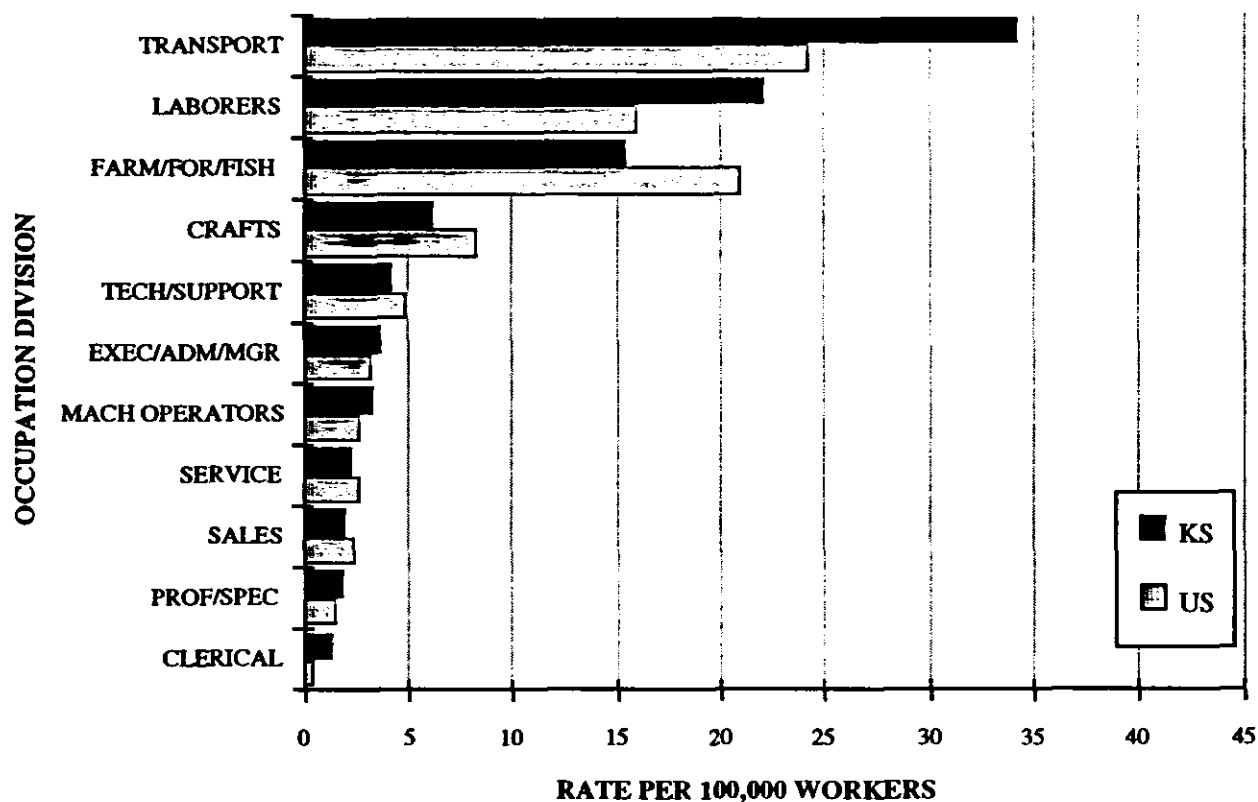


Figure KS-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Kansas, 1983-1989.

Table KS-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Kansas.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	183	34.4
LABORERS	101	22.2
FARM/FOR/FISH	144	15.5
CRAFTS	102	6.2
TECH/SUPPORT	15	4.4
EXEC/ADM/MGR	50	3.8
MACH OPERATORS	22	3.5
SERVICE	42	2.4
SALES	35	2.2
PROF/SPEC	25	1.9
CLERICAL	27	1.5
NOT CLASSIFIED	38	N/A

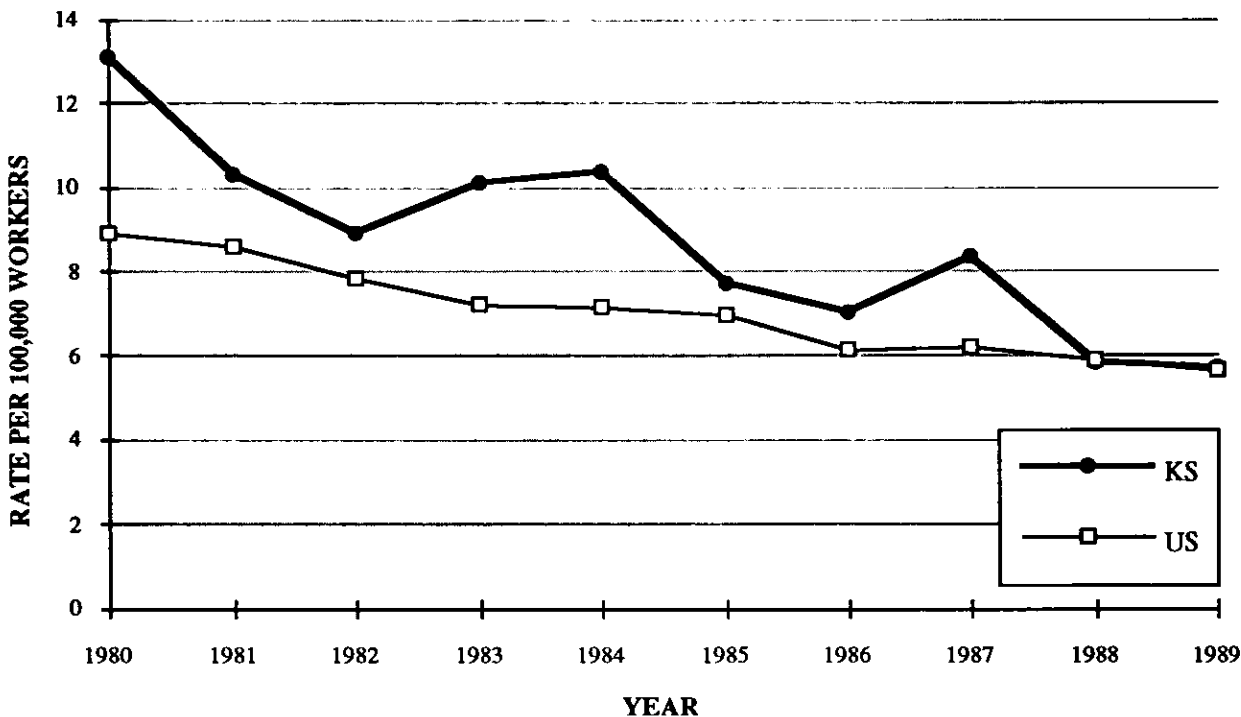


Figure KS-5. Rate of Traumatic Occupational Fatalities by Year, US and Kansas, 1980-1989.

State of Kentucky

Average Annual Fatal Injuries: **141**

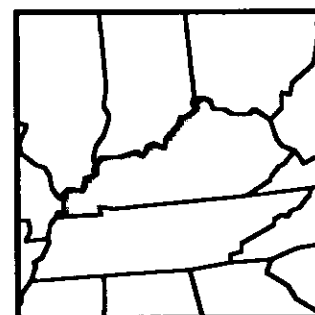
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **11.6**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Mining (286)**
Rate: **Mining (63.4)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (411)**
Rate: **Farmers/Foresters/Fishers (24.5)**



The State of Kentucky had 1,411 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,392 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 11.6 for Kentucky compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 292.8 per 100,000 workers for Kentucky compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Kentucky and had a fatality rate of 15.1 per 100,000 workers compared to 0.9 for females. The fatality distribution by **race/ethnicity** for the State of Kentucky shows that Whites accounted for 96% of the total fatalities and Blacks for 4% as shown in **Table KY-1**. As shown in **Figure KY-1**, workers aged 30 to 34 years old accounted for the

Table KY-1. Traumatic Occupational Fatalities by Race/Ethnicity, Kentucky, 1980-1989.

Race/Ethnicity	Number	Percent
White	1350	95.7
Black	57	4.0
Other	4	0.3

largest number of fatalities (13%). Of all Kentucky occupational fatality victims, 89% were Kentucky residents (**Table KY-2**).

Figure KY-2 presents the distribution of fatalities by external cause of death for the State of Kentucky and for the U.S. The three leading causes of death among employees in Kentucky were motor vehicle incidents (23%), machine-related incidents (19%), and being struck by falling objects (12%).

In Kentucky, the **industry divisions** in which the largest number of fatalities occurred were mining (21%), transportation/communication/public utilities (17%), and agriculture/forestry/fishing (15%). The mining industry had the highest fatality rate at 63.4 per 100,000 workers, followed by transportation/communication/public utilities (42.5), and construction (38.3) (**Figure KY-3**). **Table KY-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Kentucky with the largest number of fatalities were precision production/craft/repair (30%), transportation/material movers (17%), and farmers/foresters/fishers (16%). The

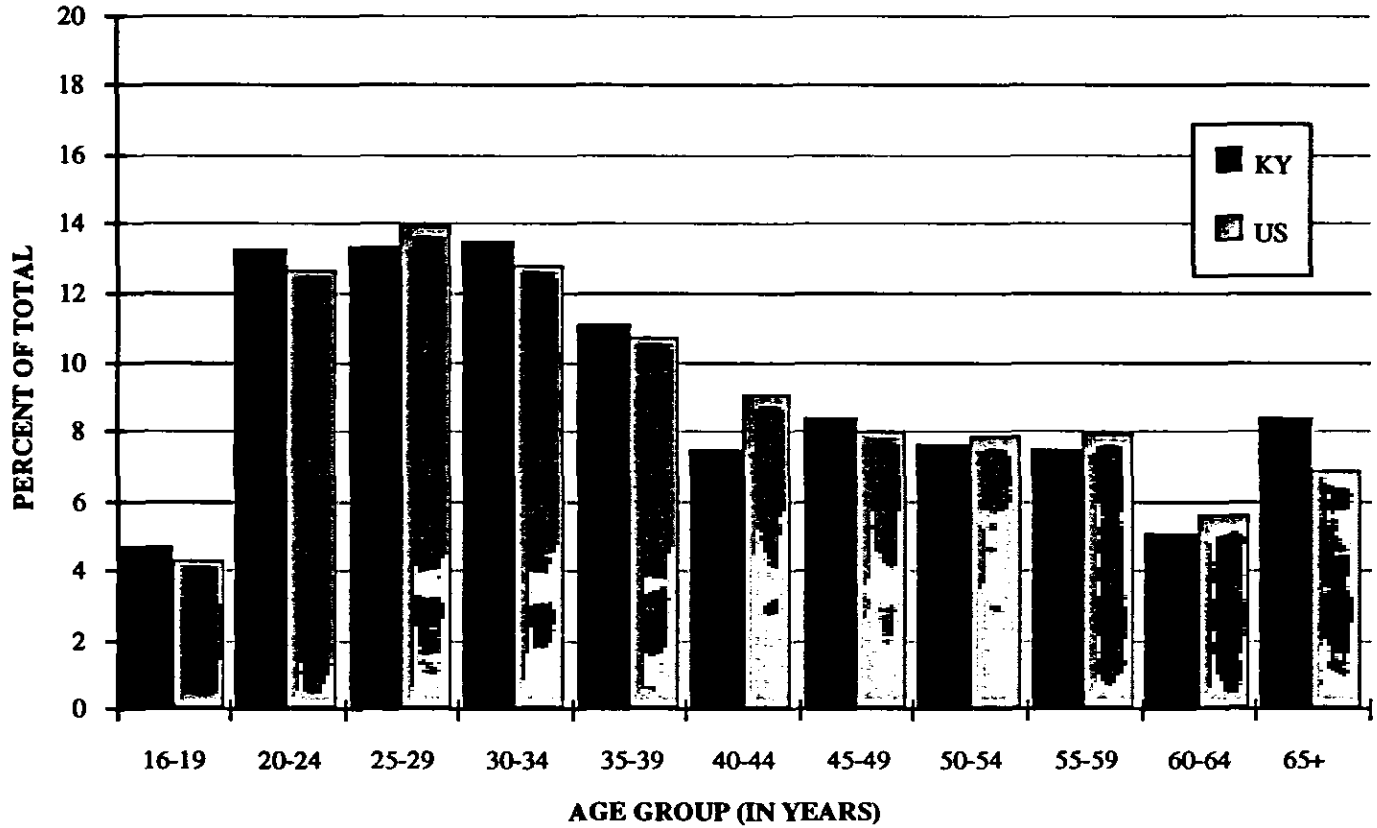


Figure KY-1. Traumatic Occupational Fatalities by Age Group, US and Kentucky, 1980-1989.

Table KY-2. Traumatic Occupational Fatalities by State of Residence, Kentucky, 1980-1989.

State	Number	Percent
Kentucky	1257	89.1
Tennessee	31	2.2
Indiana	28	2.0
Ohio	23	1.6
West Virginia	10	0.7
Virginia	9	0.6
Illinois	7	0.5
Michigan	6	0.4
Pennsylvania	5	0.4
Texas	5	0.4
North Carolina	4	0.3
Other	26	1.8

occupations with the highest rates were farmers/foresters/fishers (24.5 deaths per 100,000 workers), transportation/material movers (21.9), and laborers (20.4) (Figure KY-4). Table KY-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Kentucky decreased 35%, from 14.8 in 1980 to 9.6 in 1989. A high of 17.5 deaths per 100,000 workers was reported in 1981; a low of 8.0 deaths per 100,000 workers was reported in 1986 and 1988 (Figure KY-5).

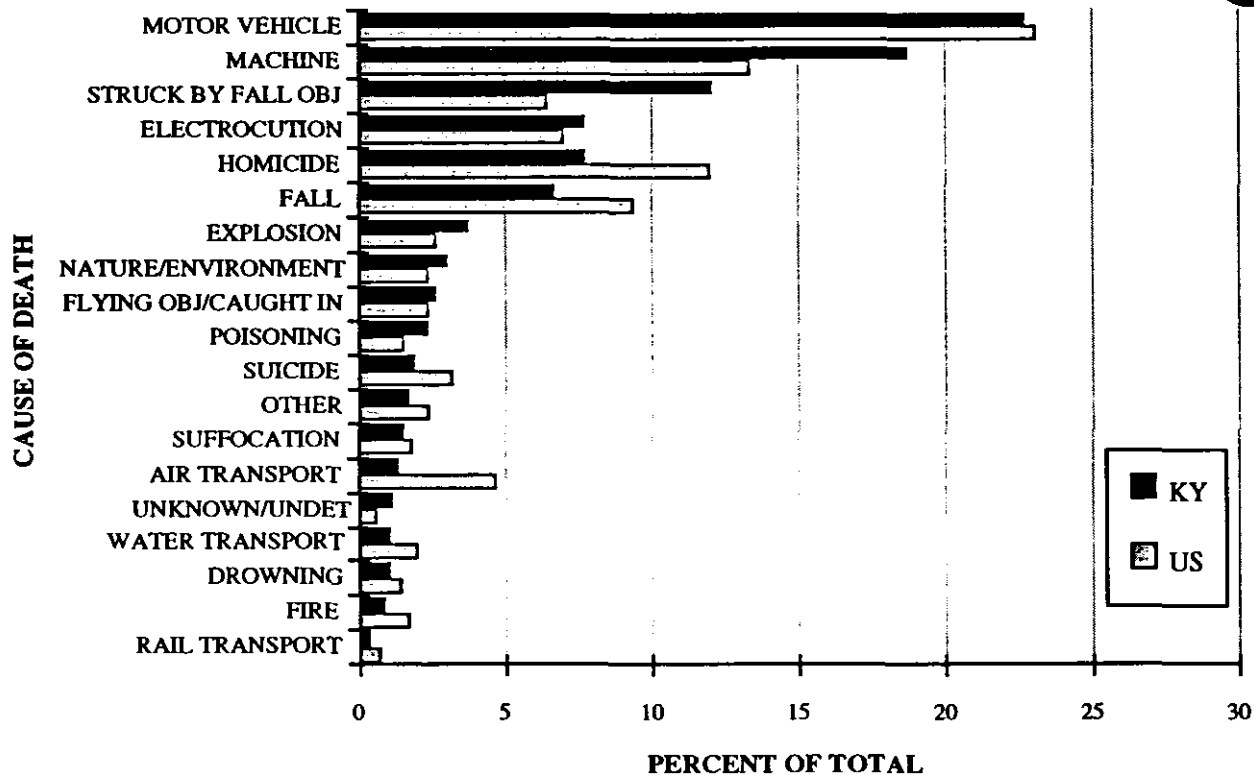


Figure KY-2. Traumatic Occupational Fatalities by Cause of Death, US and Kentucky, 1980-1989.

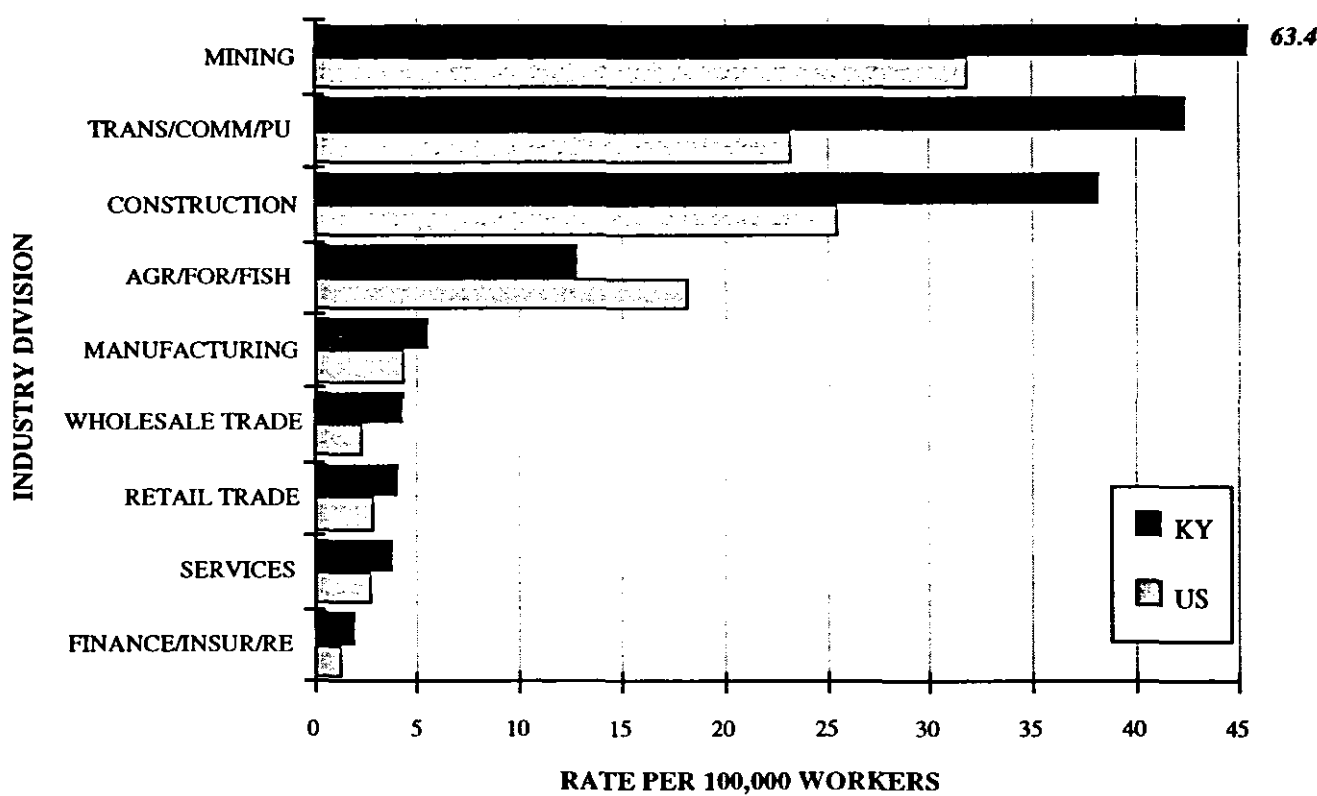


Figure KY-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Kentucky, 1980-1989.

Table KY-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Kentucky, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	30	51	47	17	38	15	19	24	16	29	286	63.4
TRANS/COMM/PU	27	35	29	16	35	33	12	13	14	19	233	42.5
CONSTRUCTION	29	18	18	28	20	17	12	12	17	13	184	38.3
AGR/FOR/FISH	27	26	20	22	19	17	15	23	15	22	206	12.9
MANUFACTURING	12	15	17	9	16	14	15	17	16	15	146	5.6
WHOLESALE TRADE	--	7	3	--	--	3	--	3	4	--	28	4.4
RETAIL TRADE	12	15	6	10	10	6	9	9	6	9	92	4.1
SERVICES	11	7	9	9	7	12	5	8	10	12	90	3.9
FINANCE/INSUR/RE	4	--	--	--	--	--	--	--	--	--	11	2.0
PUBLIC ADMIN	12	3	6	5	7	5	6	--	4	3	52	N/A
NOT CLASSIFIED	6	12	9	7	5	8	5	--	4	6	64	N/A
STATE	170	189	165	126	160	131	100	113	106	132	1392	11.6

NOTE: Dashes denote categories with fewer than three cases.

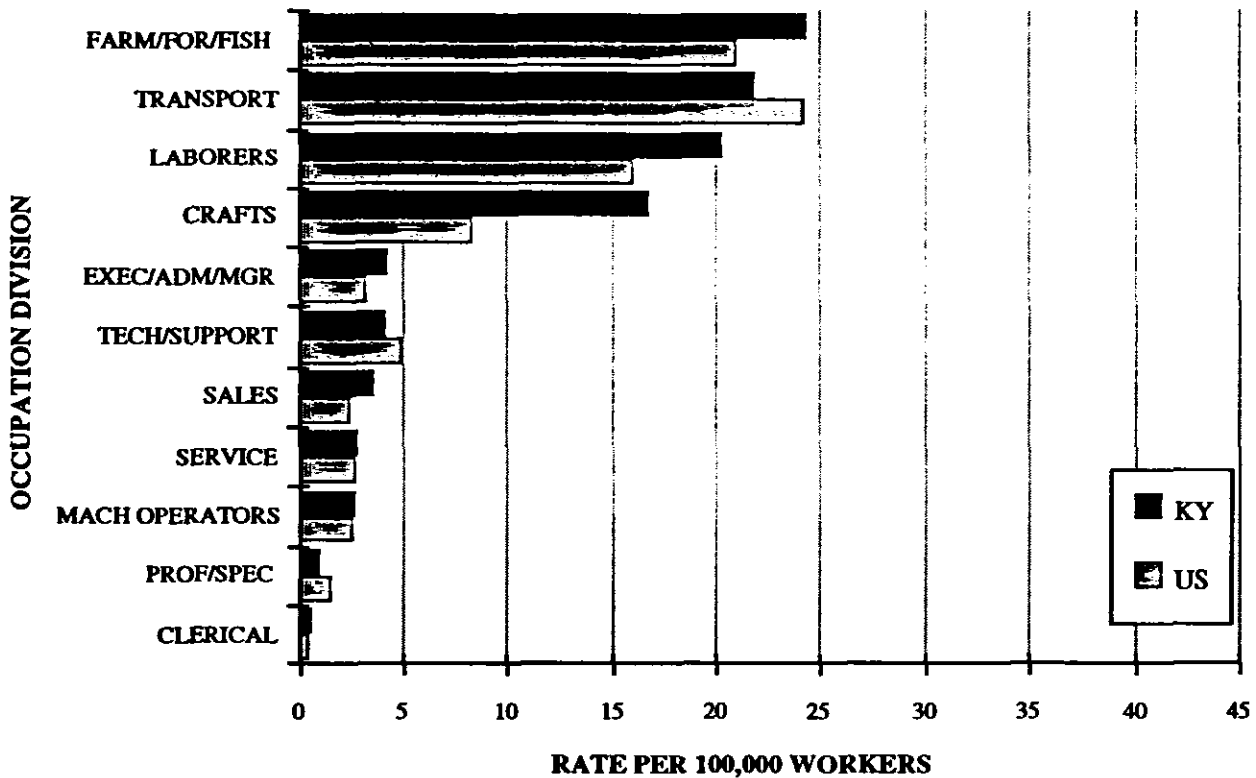


Figure KY-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Kentucky, 1983-1989.

Table KY-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Kentucky.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	226	24.5
TRANSPORT	240	21.9
LABORERS	148	20.4
CRAFTS	411	16.8
EXEC/ADM/MGR	61	4.4
TECH/SUPPORT	17	4.3
SALES	66	3.7
SERVICE	69	3.0
MACH OPERATORS	36	2.7
PROF/SPEC	25	1.1
CLERICAL	21	0.7
NOT CLASSIFIED	72	N/A

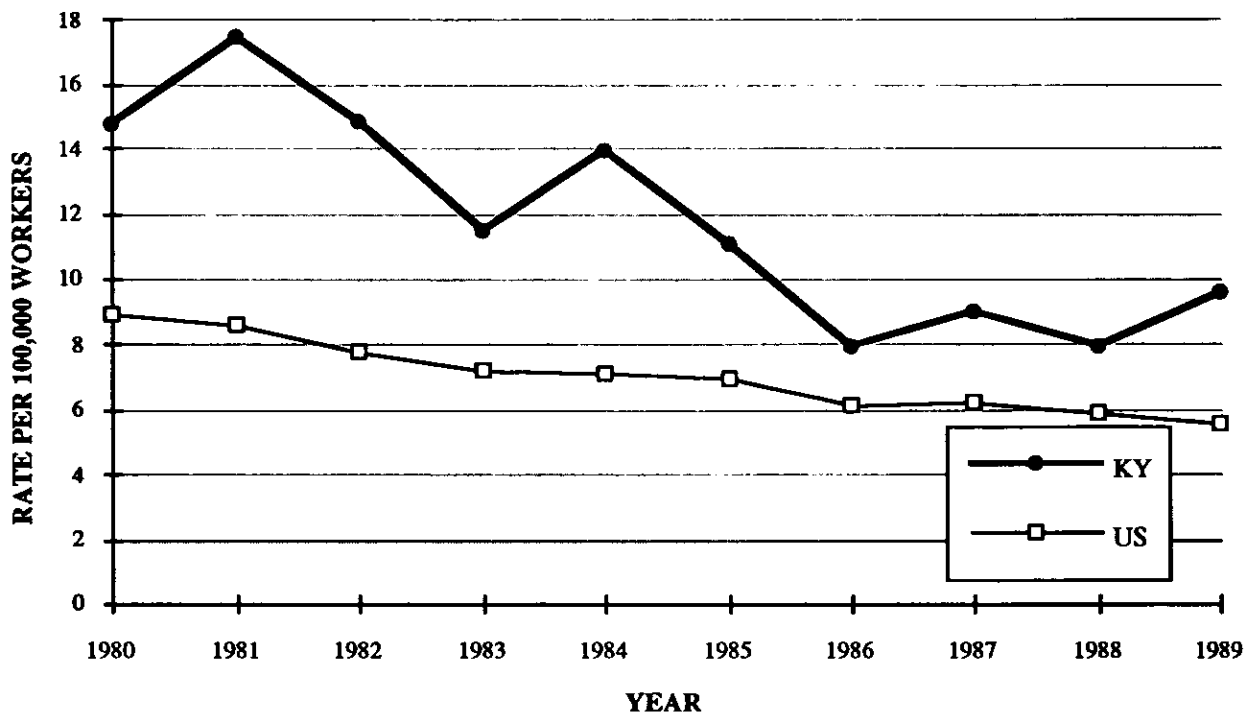


Figure KY-5. Rate of Traumatic Occupational Fatalities by Year, US and Kentucky, 1980-1989.

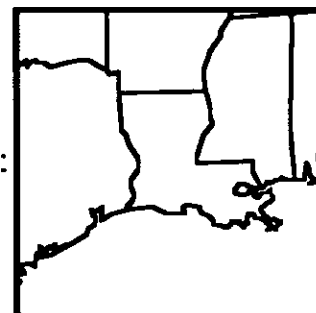
State of Louisiana

Average Annual Fatal Injuries: **145**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **11.0**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (267)**
Rate: **Agriculture/Forestry/Fishing (40.7)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (357)**
Rate: **Farmers/Foresters/Fishers (29.7)**

The State of Louisiana had 1,453 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,438 of these deaths. The average annual rate of fatalities per 100,000 workers was 11.0 for Louisiana compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 326.2 per 100,000 workers for Louisiana compared to 175.6 for the United States.

Males accounted for 98% of the civilian occupational fatalities in Louisiana and had a fatality rate of 14.3 per 100,000 workers compared to 0.4 for fe-

males. The fatality distribution by race/ethnicity for the State of Louisiana shows that Whites accounted for 76% of the total fatalities and Blacks for 21% as shown in Table LA-1. As shown in Figure LA-1, workers aged 20 to 24 years old accounted for the largest number of fatalities (18%). Of all Louisiana occupational fatality victims, 78% were Louisiana residents (Table LA-2).

Table LA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Louisiana, 1980-1989.

Race/Ethnicity	Number	Percent
White	1106	76.1
Black	299	20.6
Asian	26	1.8
Hispanic	17	1.2
Native American	5	0.3

Figure LA-2 presents the distribution of fatalities by external cause of death for the State of Louisiana and for the U.S. The three leading causes of death among employees in Louisiana were machine-related incidents (21%), water transportation (17%), and electrocutions (10%). From 1980 through 1986, the State of Louisiana did not report work-related homicides or suicides. An estimate of the number of homicides was made assuming that Louisiana is similar to the rest of the U.S.; there were an estimated 274.6 ± 42.12 (99% CI) occupational homicides during this 10-year period. This estimate was not used in any of the analyses for the State of Louisiana.

In Louisiana, the industry divisions in which the largest number of fatalities occurred were transportation/communication/public utilities (19%), mining (18%), and construction (18%). The agriculture/forestry/fishing industry had the highest fatality rate

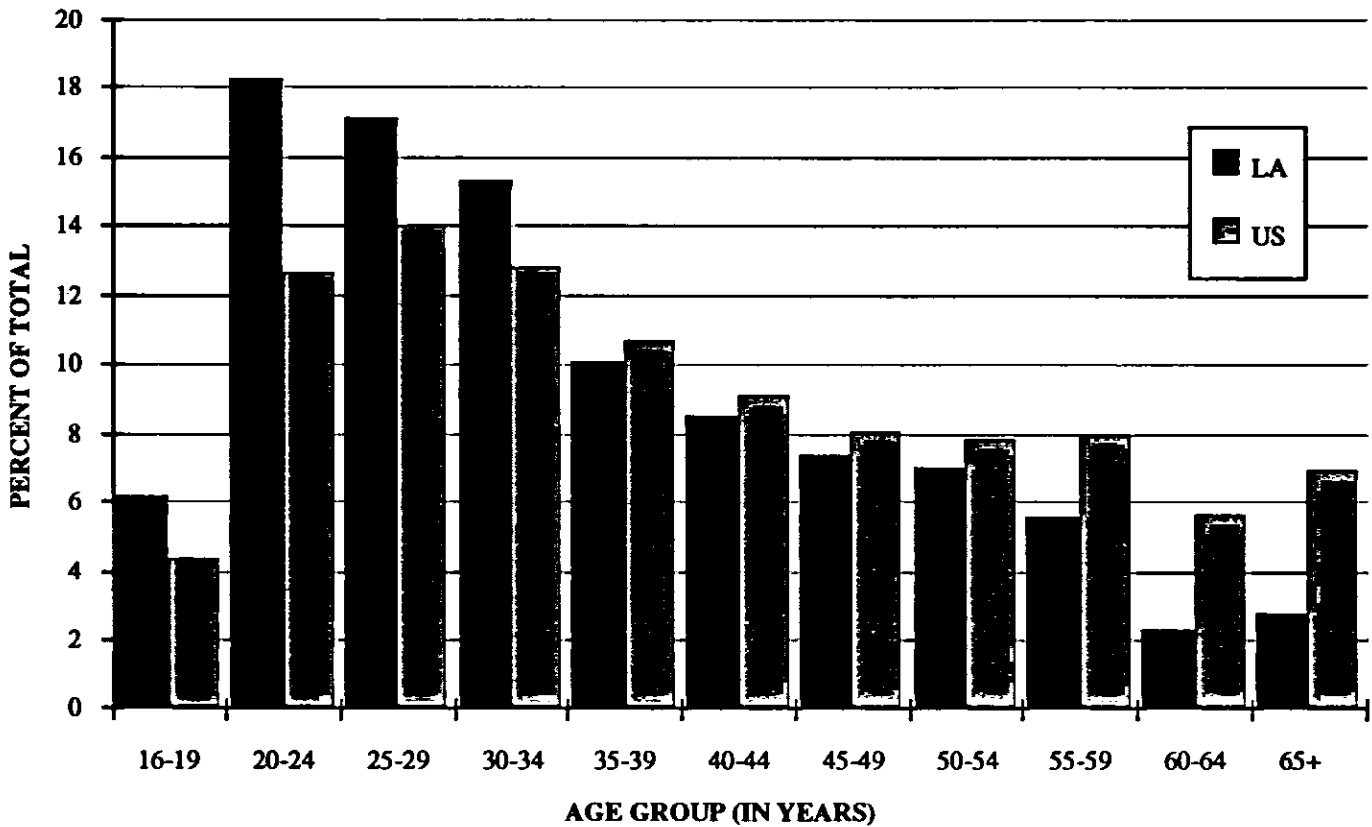


Figure LA-1. Traumatic Occupational Fatalities by Age Group, US and Louisiana, 1980-1989.

Table LA-2. Traumatic Occupational Fatalities by State of Residence, Louisiana, 1980-1989.

State	Number	Percent
Louisiana	1133	78.0
Mississippi	106	7.3
Texas	60	4.1
Florida	32	2.2
Alabama	26	1.8
Arkansas	12	0.8
Georgia	6	0.4
Missouri	5	0.3
Ohio	5	0.3
Oklahoma	5	0.3
Virginia	5	0.3
Other	58	4.0

at 40.7 per 100,000 workers, followed by mining (32.2), and transportation/communication/public utilities (25.1) (Figure LA-3). Table LA-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The occupation divisions in Louisiana with the largest number of fatalities were precision production/craft/repair (25%), transportation/material movers (18%), and laborers (16%). The occupations with the highest rates were farmers/foresters/fishers (29.7 deaths per 100,000 workers), laborers (24.9), and transportation/material movers (23.6) (Figure LA-4). Table LA-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Louisiana decreased 42%, from a high of 15.1 in 1980 to 8.8 in 1989. A low of 8.5 deaths per 100,000 workers was reported in 1986 (Figure LA-5).

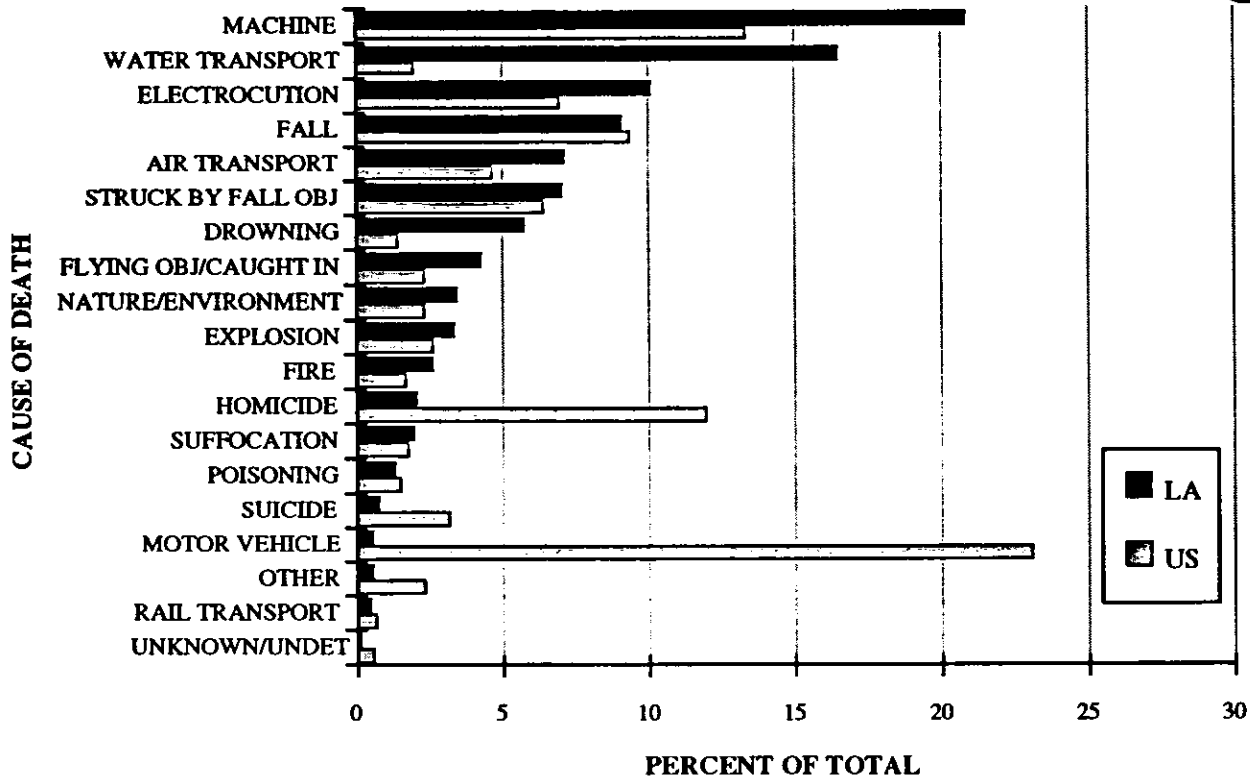


Figure LA-2. Traumatic Occupational Fatalities by Cause of Death, US and Louisiana, 1980-1989.

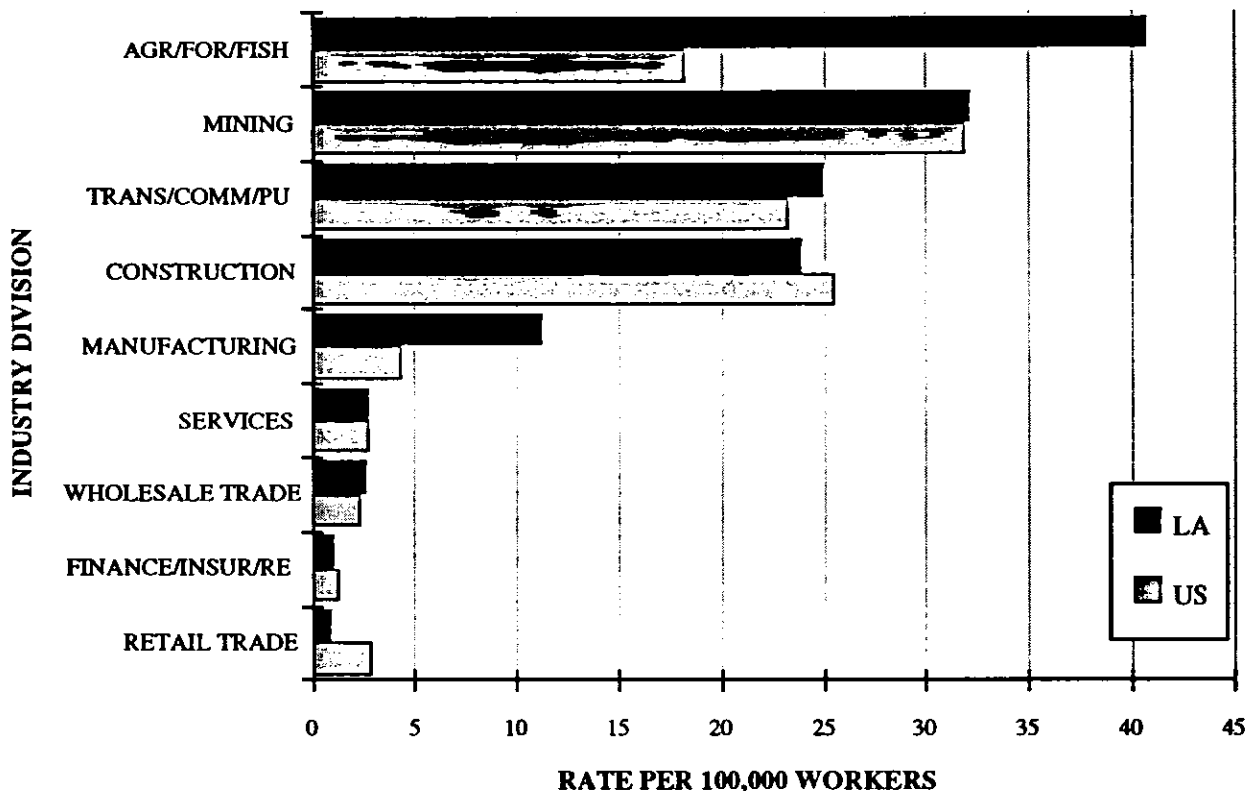


Figure LA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Louisiana, 1980-1989.

Table LA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Louisiana, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
AGR/FOR/FISH	13	12	21	18	16	13	15	22	21	14	165	40.7
MINING	35	40	29	23	33	38	21	16	8	15	258	32.2
TRANS/COMM/PU	40	39	40	30	31	27	9	17	23	11	267	25.1
CONSTRUCTION	36	29	36	27	21	19	28	19	15	23	253	24.0
MANUFACTURING	30	28	27	19	17	23	15	13	18	17	207	11.3
SERVICES	13	7	16	6	6	4	9	5	8	11	85	2.8
WHOLESALE TRADE	3	--	--	--	3	--	--	--	4	3	24	2.7
FINANCE/INSUR/RE	--	--	--	--	3	--	--	--	--	--	9	1.1
RETAIL TRADE	5	--	--	--	--	5	--	3	--	6	27	1.0
PUBLIC ADMIN	--	6	--	--	3	--	--	4	4	4	28	N/A
NOT CLASSIFIED	21	19	9	9	14	12	10	7	5	9	115	N/A
STATE	198	185	184	137	147	144	110	109	109	115	1438	11.0

NOTE: Dashes denote categories with fewer than three cases.

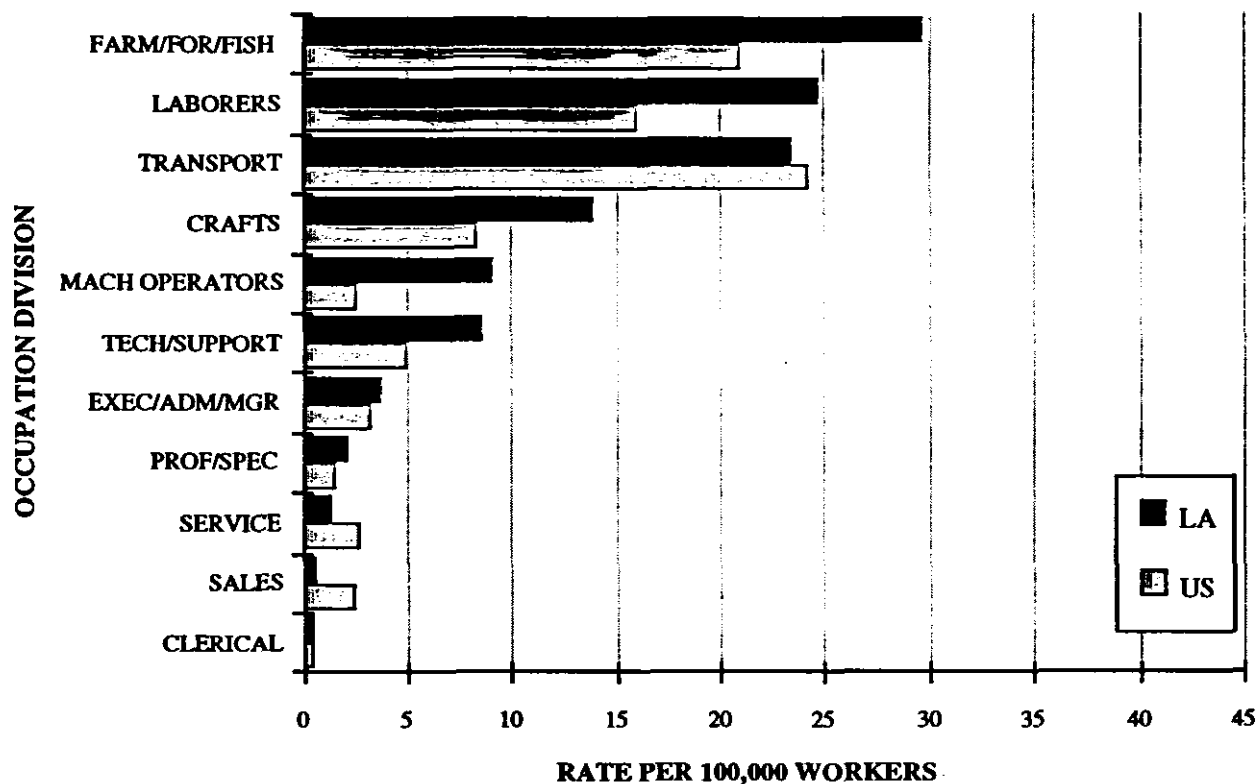


Figure LA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Louisiana, 1983-1989.

Table LA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Louisiana.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	158	29.7
LABORERS	224	24.9
TRANSPORT	256	23.6
CRAFTS	357	14.0
MACH OPERATORS	113	9.2
TECH/SUPPORT	64	8.6
EXEC/ADM/MGR	66	3.8
PROF/SPEC	56	2.3
SERVICE	55	1.5
SALES	17	0.7
CLERICAL	15	0.5
NOT CLASSIFIED	57	N/A

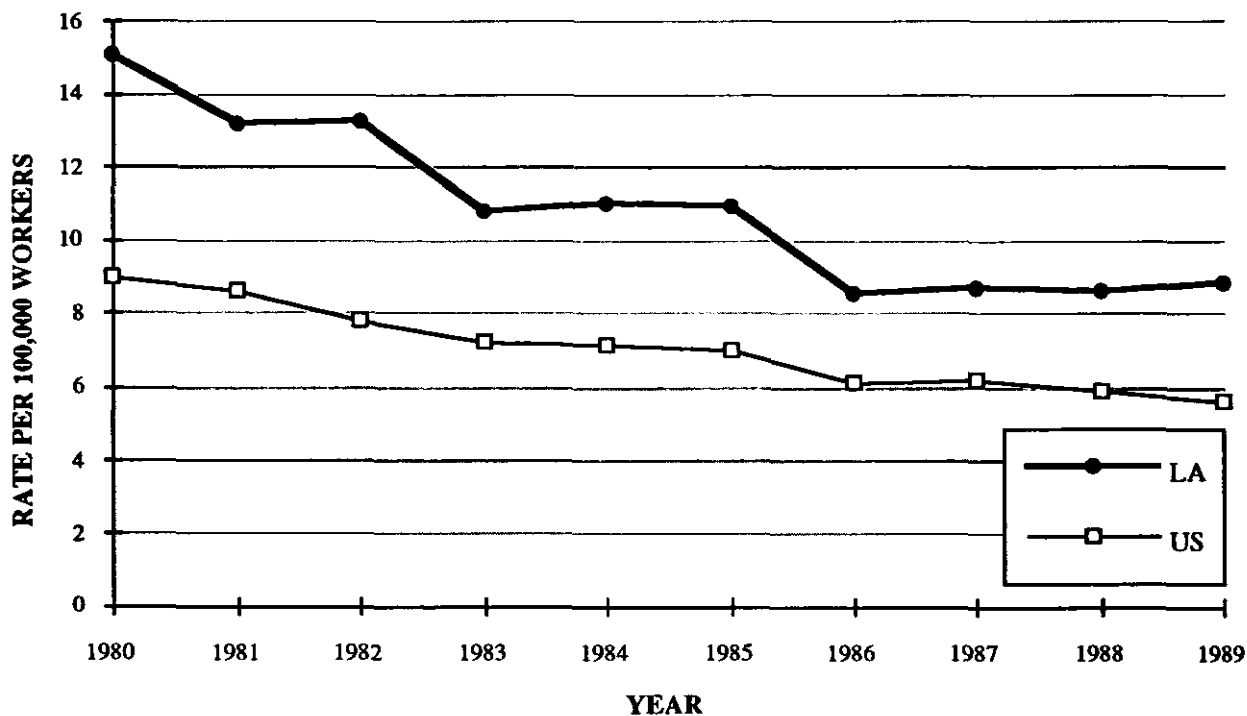


Figure LA-5. Rate of Traumatic Occupational Fatalities by Year, US and Louisiana, 1980-1989.

State of Maine

Average Annual Fatal Injuries: **31**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **7.6**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Manufacturing (78)**

Rate: **Construction (32.3)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (60)**

Rate: **Farmers/Foresters/Fishers (26.1)**



The State of Maine had 305 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 302 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 7.6 for Maine compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 202.1 per 100,000 workers for Maine compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Maine and had a fatality rate of 10.1 per 100,000 workers compared to 0.5 for females. The fatality distribution by **race/ethnicity** for the State of Maine shows that Whites accounted for 86% of the total fatalities and Hispanics for 13% as shown in **Table ME-1**. As shown in **Figure ME-1**,

Table ME-1. Traumatic Occupational Fatalities by Race/Ethnicity, Maine, 1980-1989.

Race/Ethnicity	Number	Percent
White	261	85.6
Hispanic	39	12.8
Other	5	1.6

workers aged 25 to 29 years old accounted for the largest number of fatalities (17%). Of all Maine occupational fatality victims, 87% were Maine residents (**Table ME-2**).

Figure ME-2 presents the distribution of fatalities by external cause of death for the State of Maine and for the U.S. The three leading causes of death among employees in Maine were motor vehicle incidents (27%), being struck by falling objects (13%), and machine-related incidents (13%).

In Maine, the **industry divisions** in which the largest number of fatalities occurred were manufacturing (26%), construction (22%), and transportation/communication/public utilities (15%). The construction industry had the highest fatality rate at 32.3 per 100,000 workers, followed by transportation/communication/public utilities (27.8), and agriculture/forestry/fishing (18.5) (**Figure ME-3**). **Table ME-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Maine with the largest number of fatalities were precision production/craft/repair (20%), farmers/foresters/fishers (18%), and

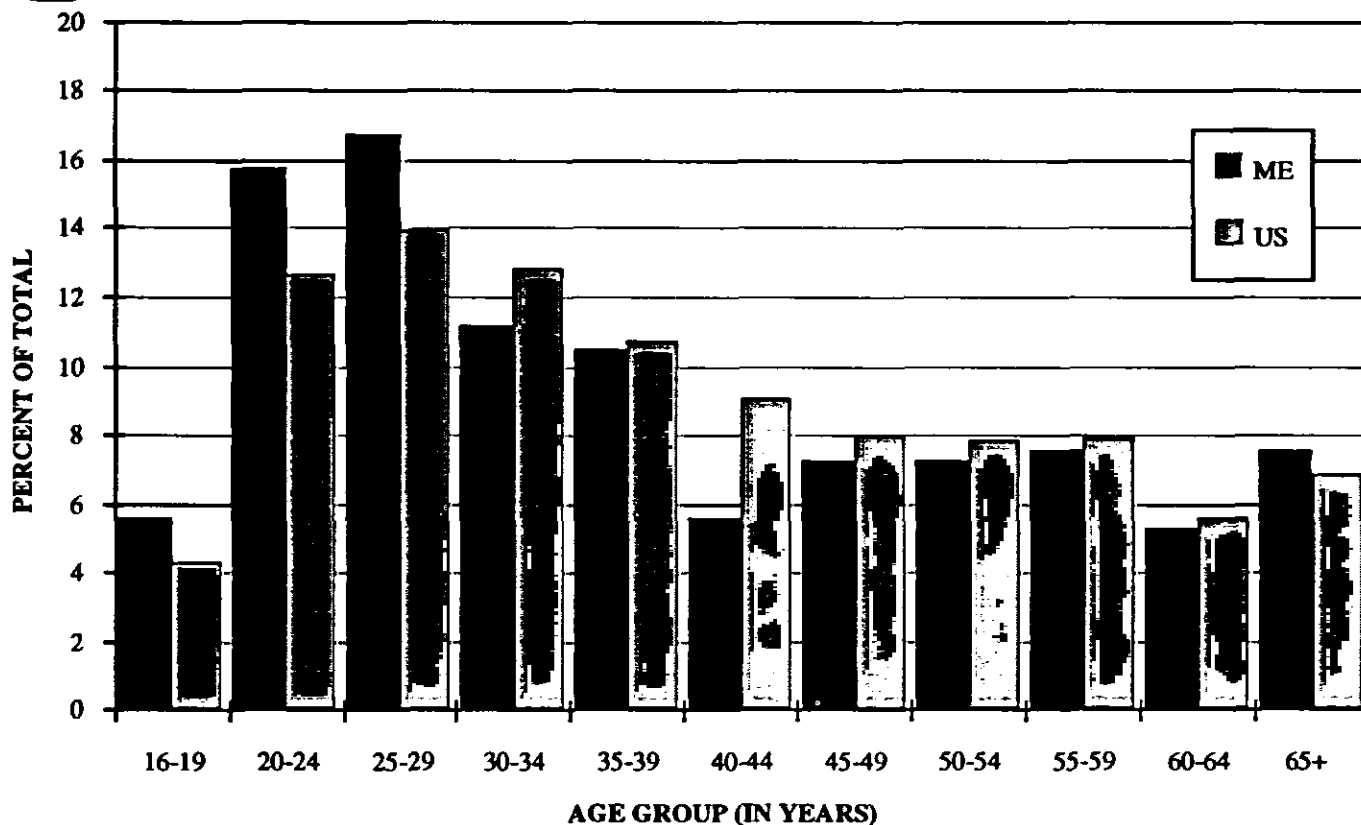


Figure ME-1. Traumatic Occupational Fatalities by Age Group, US and Maine, 1980-1989.

Table ME-2. Traumatic Occupational Fatalities by State of Residence, Maine, 1980-1989.

State	Number	Percent
Maine	266	87.2
Massachusetts	5	1.6
New Hampshire	4	1.3
Other	30	9.8

transportation/material movers (18%). The occupations with the highest rates were farmers/foresters/fishers (26.1 deaths per 100,000 workers), transportation/material movers (23.4), and laborers (10.1) (Figure ME-4). Table ME-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Maine decreased 50%, from a high of 13.5 in 1980 to 6.7 in 1989. A low of 5.3 deaths per 100,000 workers was reported in 1983 (Figure ME-5).

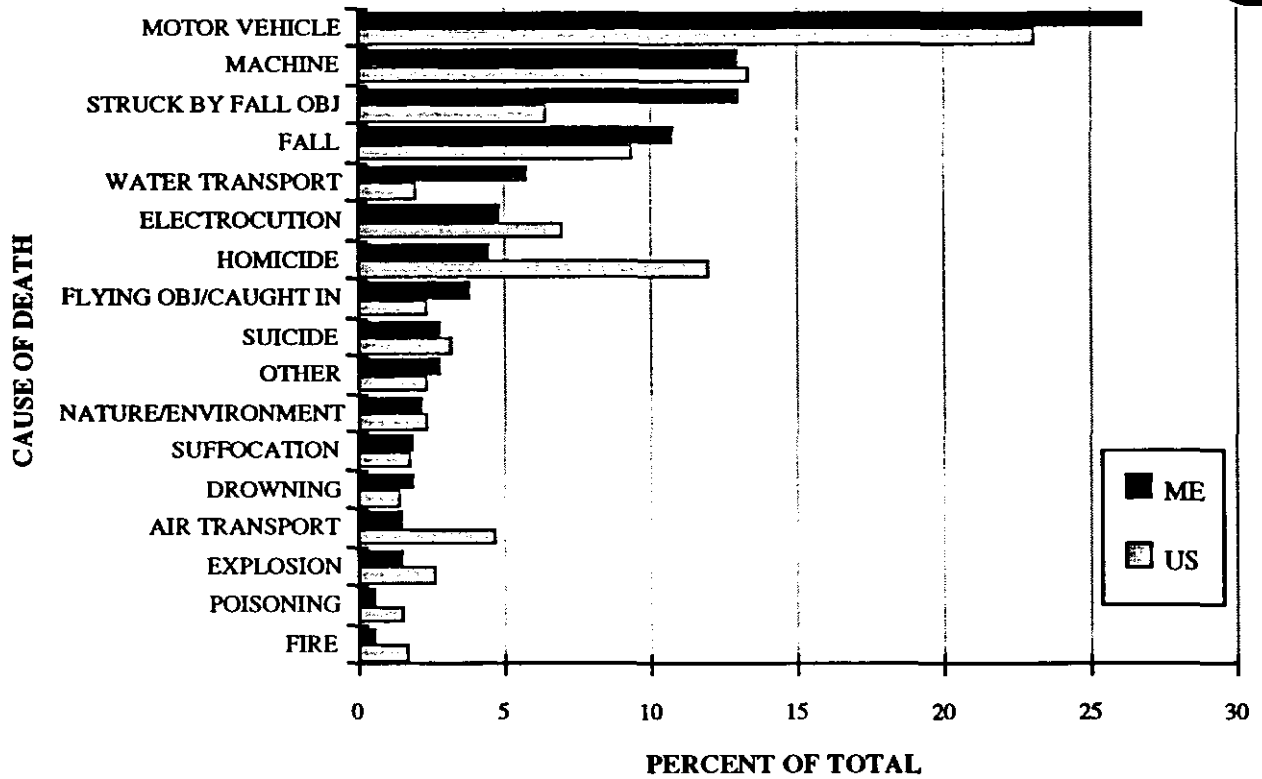


Figure ME-2. Traumatic Occupational Fatalities by Cause of Death, US and Maine, 1980-1989.

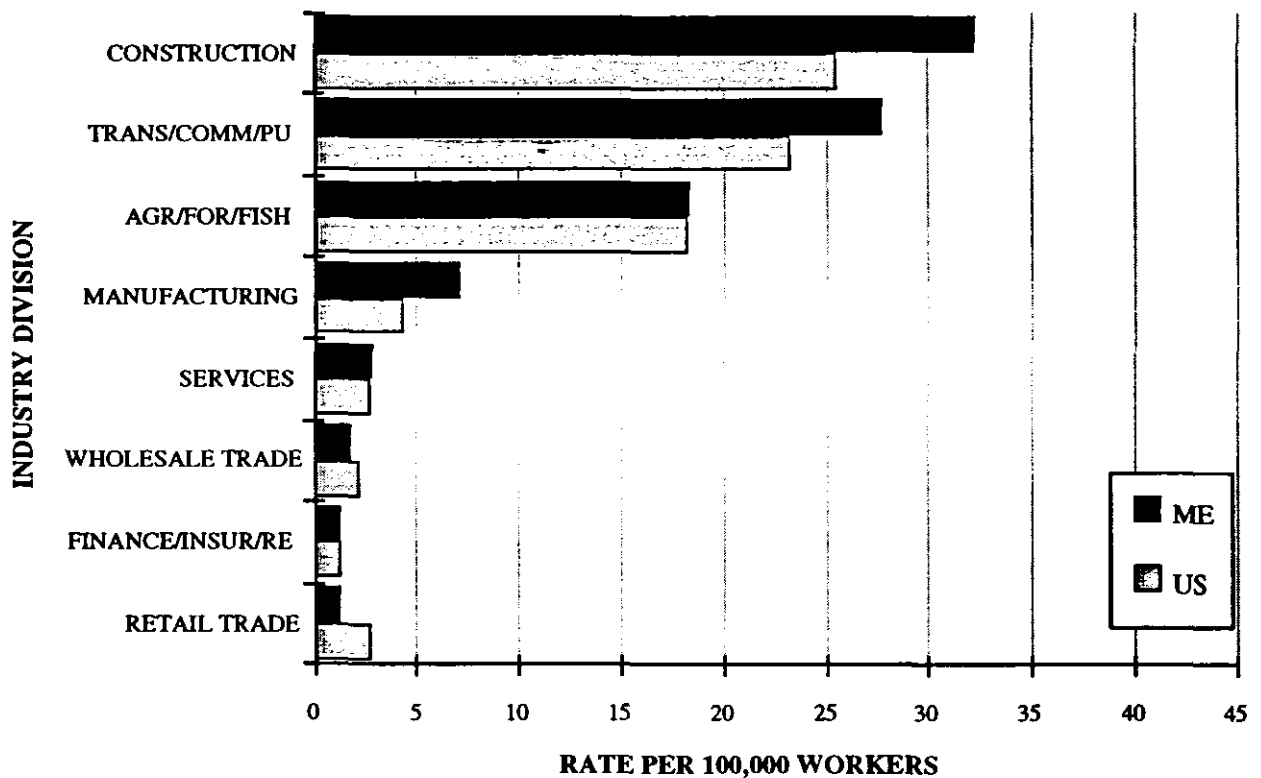


Figure ME-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Maine, 1980-1989.

Table ME-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Maine, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate	
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989			
MINING	--	--	--	--	--	--	--	--	--	--	--	--	N/A
CONSTRUCTION	8	7	4	5	--	10	7	3	11	11	67	32.3	
TRANS/COMM/PU	6	7	--	4	6	4	5	--	7	4	46	27.8	
AGR/FOR/FISH	4	3	4	--	4	--	--	4	5	5	34	18.5	
MANUFACTURING	16	4	8	5	6	7	8	7	9	8	78	7.2	
SERVICES	3	5	--	--	--	--	5	--	--	--	26	3.0	
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	4	2.0	
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	3	1.4	
RETAIL TRADE	--	3	--	--	--	--	--	--	--	--	11	1.4	
PUBLIC ADMIN	3	--	4	--	--	--	--	3	--	--	15	N/A	
NOT CLASSIFIED	5	--	--	--	3	--	--	3	--	--	17	N/A	
STATE	48	31	27	18	22	30	30	26	38	32	302	7.6	

NOTE: Dashes denote categories with fewer than three cases.

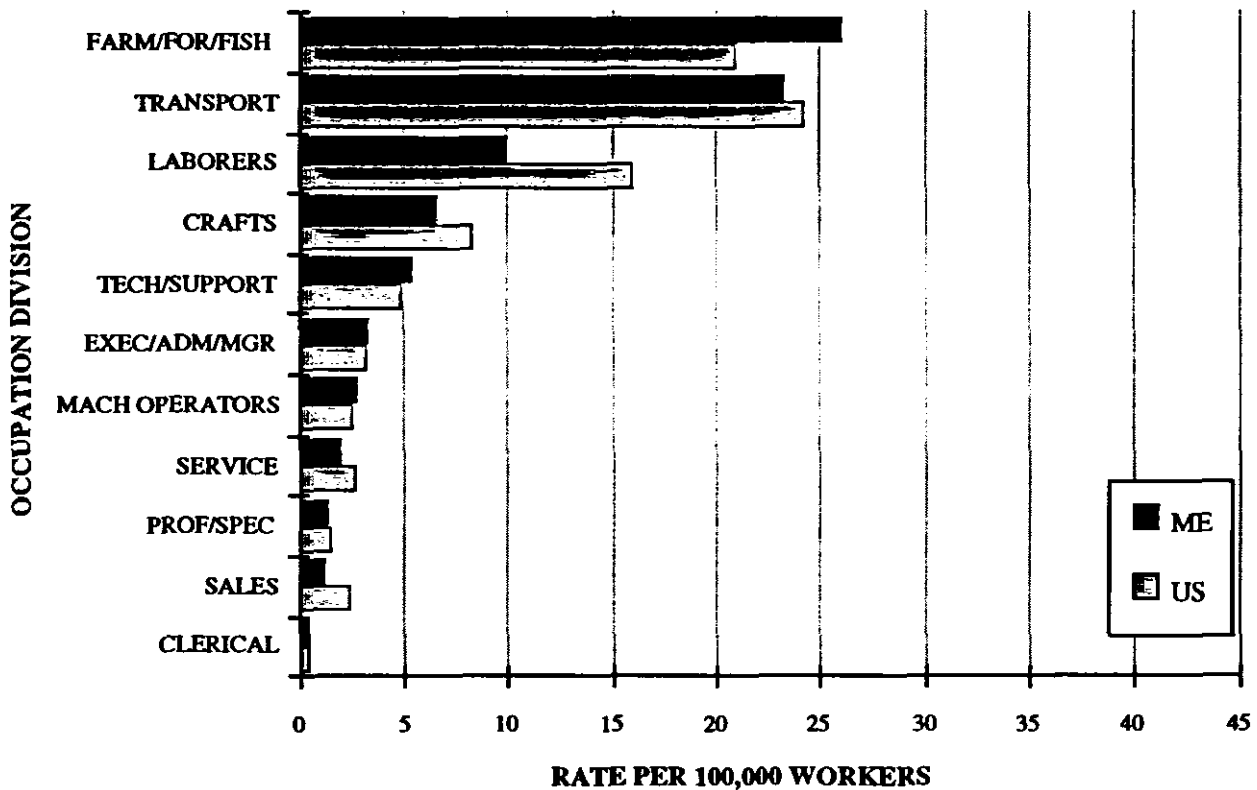


Figure ME-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Maine, 1983-1989.

Table ME-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Maine.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	55	26.1
TRANSPORT	54	23.4
LABORERS	37	10.1
CRAFTS	60	6.7
TECH/SUPPORT	6	5.6
EXEC/ADM/MGR	14	3.4
MACH OPERATORS	17	2.9
SERVICE	20	2.2
PROF/SPEC	9	1.5
SALES	9	1.4
CLERICAL	5	0.6
NOT CLASSIFIED	16	N/A

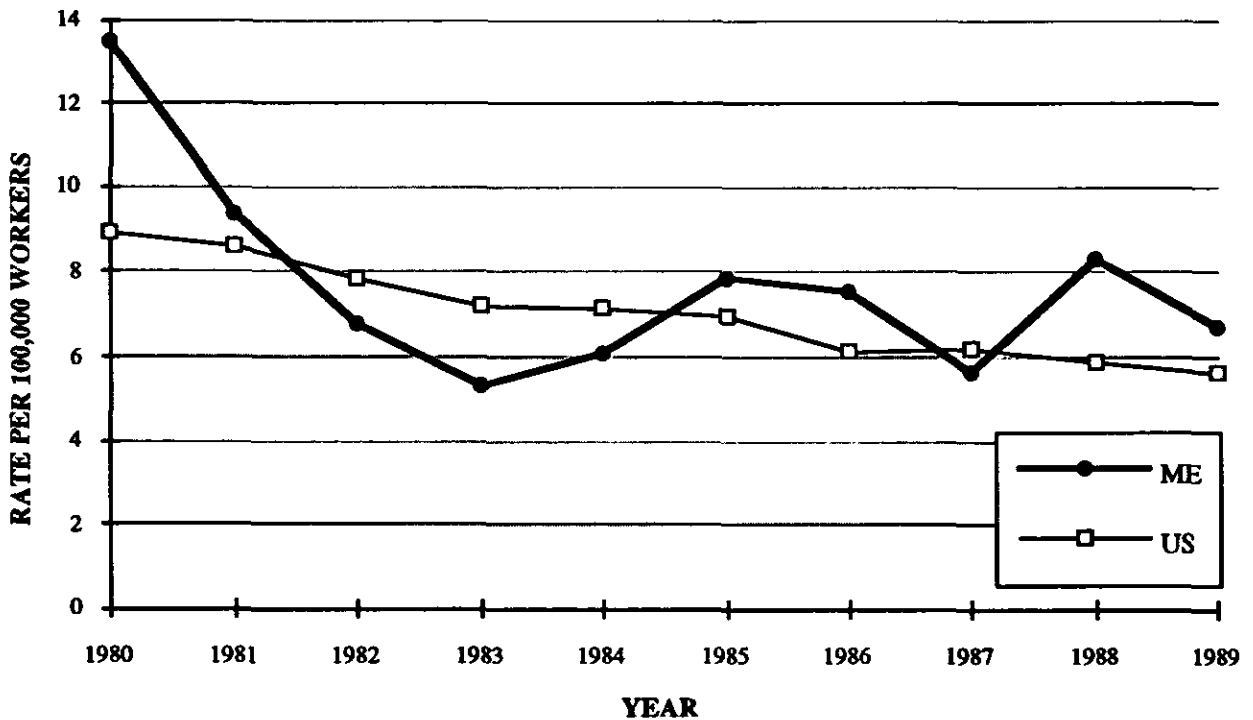


Figure ME-5. Rate of Traumatic Occupational Fatalities by Year, US and Maine, 1980-1989.

State of Maryland

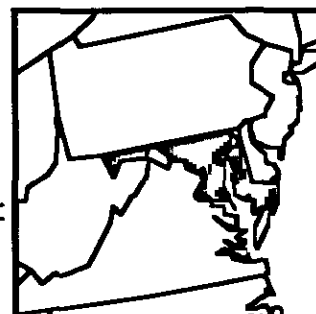
Average Annual Fatal Injuries: **88**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **5.3**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (179)**

Rate: **Mining (40.0)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (174)**

Rate: **Transportation/Material Movers (14.4)**

The State of Maryland had 878 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 862 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 5.3 for Maryland compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 135.1 per 100,000 workers for Maryland compared to 175.6 for the United States.

Males accounted for 92% of the civilian occupational fatalities in Maryland and had a fatality rate of 6.7 per 100,000 workers compared to 0.7 for females.

Table MD-1. Traumatic Occupational Fatalities by Race/Ethnicity, Maryland, 1980-1989.

Race/Ethnicity	Number	Percent
White	656	74.7
Black	205	23.3
Asian	13	1.5
Other	4	0.5

The fatality distribution by **race/ethnicity** for the State of Maryland shows that Whites accounted for 75% of the total fatalities and Blacks for 23% as shown in **Table MD-1**. As shown in **Figure MD-1**, workers aged 20 to 24 and 25 to 29 years old each accounted for 14% of the fatalities. Of all Maryland occupational fatality victims, 80% were Maryland residents (**Table MD-2**).

Figure MD-2 presents the distribution of fatalities by external cause of death for the State of Maryland and for the U.S. The three leading causes of death among employees in Maryland were homicides (21%), motor vehicle incidents (20%), and machine-related incidents (13%).

In Maryland, the **industry divisions** in which the largest number of fatalities occurred were construction (21%), transportation/communication/public utilities (18%), and manufacturing (9%). The mining industry had the highest fatality rate at 40.0 per 100,000 workers, followed by transportation/communication/public utilities (18.8), agriculture/forestry/fishing (14.3), and construction (14.1) (**Figure MD-3**). **Table MD-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

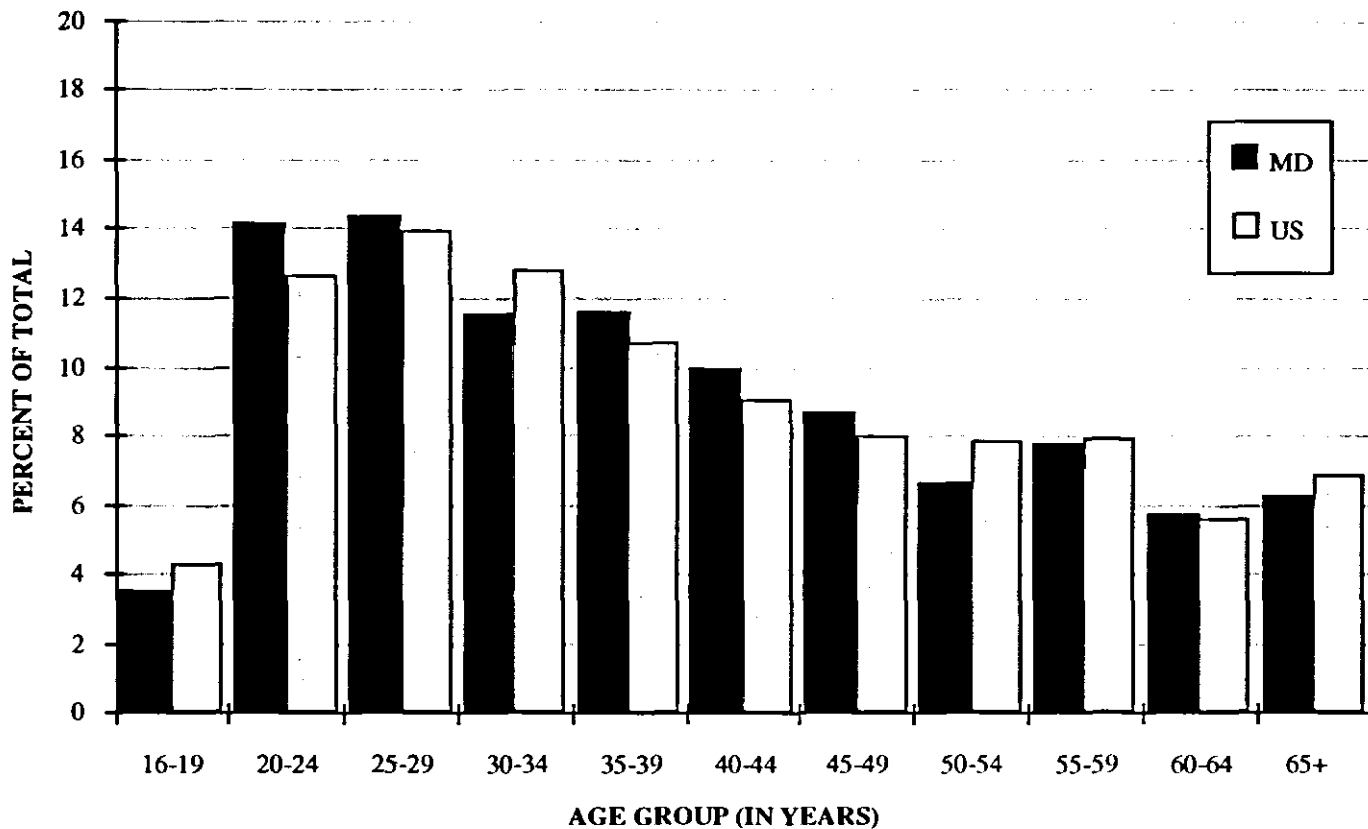


Figure MD-1. Traumatic Occupational Fatalities by Age Group, US and Maryland, 1980-1989.

Table MD-2. Traumatic Occupational Fatalities by State of Residence, Maryland, 1980-1989.

State	Number	Percent
Maryland	703	80.1
Pennsylvania	37	4.2
Washington, D.C.	24	2.7
Virginia	22	2.5
West Virginia	16	1.8
Ohio	15	1.7
North Carolina	10	1.1
Delaware	8	0.9
Florida	6	0.7
New Jersey	5	0.6
New York	5	0.6
Indiana	3	0.3
Other	24	2.7

The **occupation divisions** in Maryland with the largest number of fatalities were precision production/craft/repair (20%), transportation/material movers (16%), and laborers (12%). The occupations with the highest rates were transportation/material movers (14.4 deaths per 100,000 workers), laborers (14.3), and farmers/foresters/fishers (9.5) (**Figure MD-4**). **Table MD-4** provides numbers and rates of work-related deaths for each occupation division.

During the decade, the **fatality rates** in Maryland decreased 62%, from 7.3 in 1980 to a low of 2.8 in 1989. A high of 8.2 deaths per 100,000 workers was reported in 1982 (**Figure MD-5**).

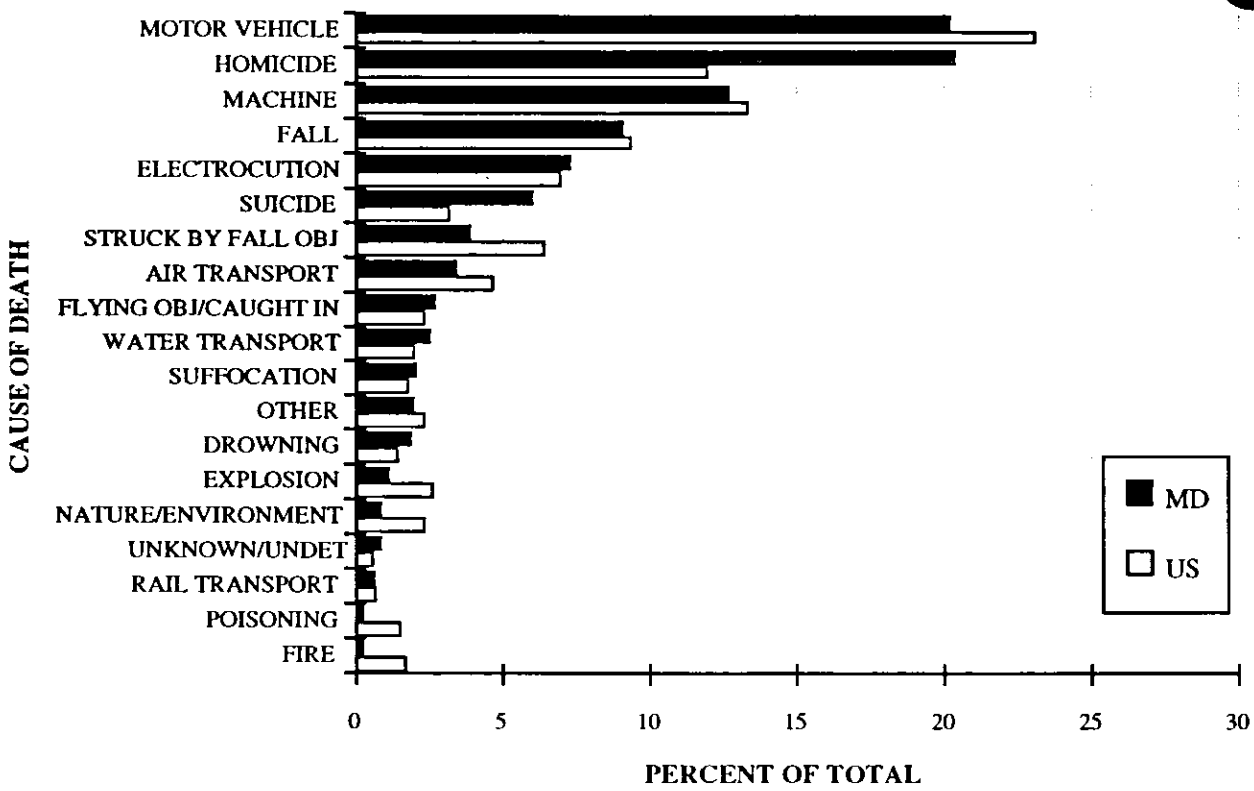


Figure MD-2. Traumatic Occupational Fatalities by Cause of Death, US and Maryland, 1980-1989.

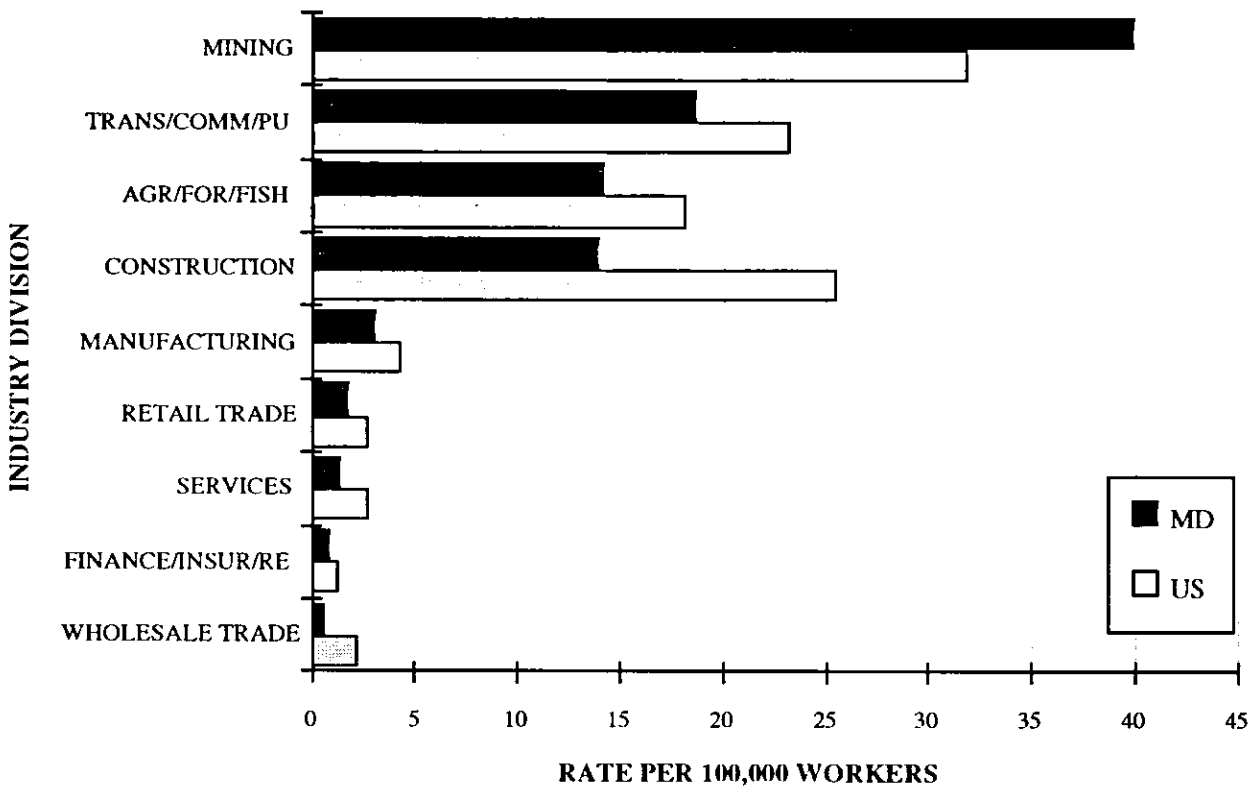


Figure MD-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Maryland, 1980-1989.

Table MD-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Maryland, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	3	--	--	--	--	--	--	--	--	11	40.0
TRANS/COMM/PU	22	16	18	21	4	17	17	13	19	6	153	18.8
AGR/FOR/FISH	7	13	10	5	10	5	--	3	--	--	58	14.3
CONSTRUCTION	18	11	13	24	10	12	25	32	19	15	179	14.1
MANUFACTURING	5	10	16	11	4	4	4	10	8	6	78	3.3
RETAIL TRADE	10	13	4	4	3	7	4	9	6	4	64	1.8
SERVICES	6	4	17	7	6	7	5	6	10	3	71	1.6
FINANCE/INSUR/RE	--	--	3	--	--	--	--	--	--	--	12	1.0
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	7	0.8
PUBLIC ADMIN	7	20	6	6	--	8	4	3	5	4	64	N/A
NOT CLASSIFIED	22	28	23	16	12	13	12	10	18	11	165	N/A
STATE	101	120	112	97	51	73	76	90	88	54	862	5.3

NOTE: Dashes denote categories with fewer than three cases.

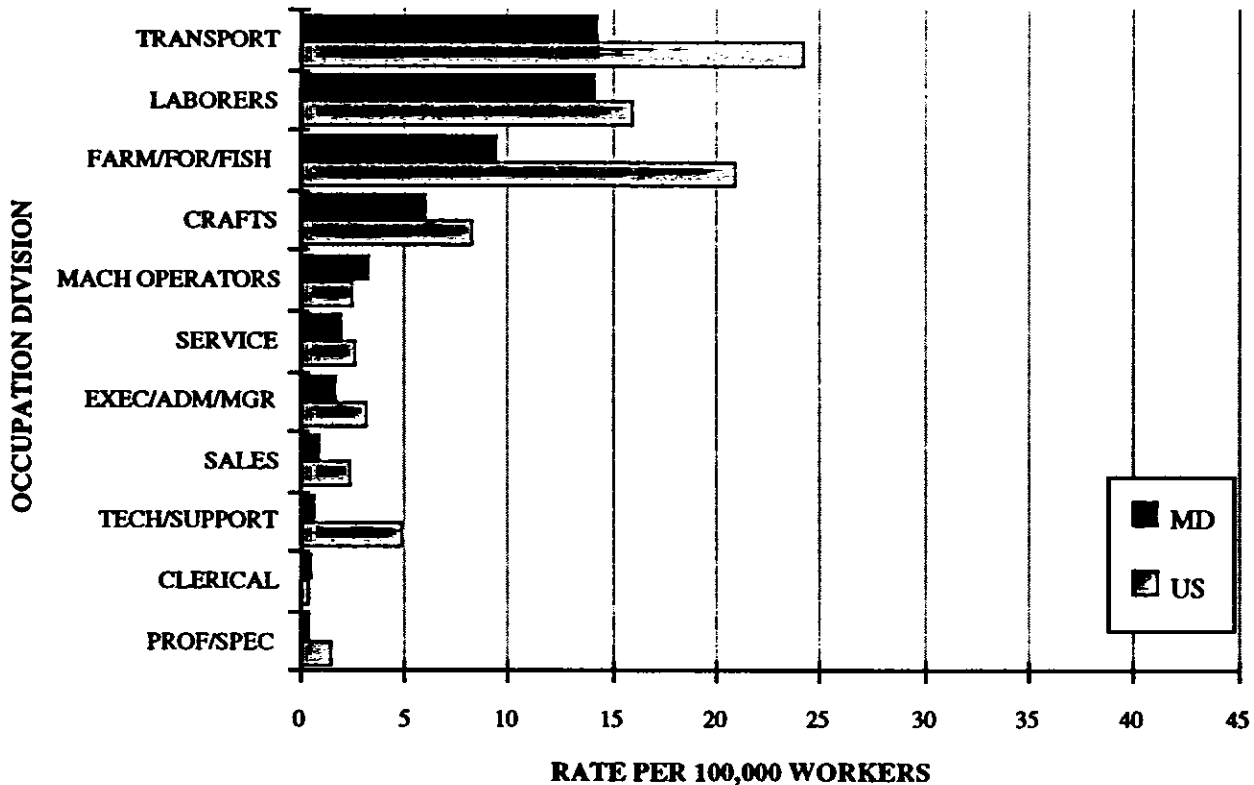


Figure MD-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Maryland, 1983-1989.

Table MD-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Maryland.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	139	14.4
LABORERS	103	14.3
FARM/FOR/FISH	50	9.5
CRAFTS	174	6.1
MACH OPERATORS	31	3.4
SERVICE	58	2.1
EXEC/ADM/MGR	70	1.8
SALES	38	1.1
TECH/SUPPORT	15	0.8
CLERICAL	24	0.7
PROF/SPEC	22	0.5
NOT CLASSIFIED	138	N/A

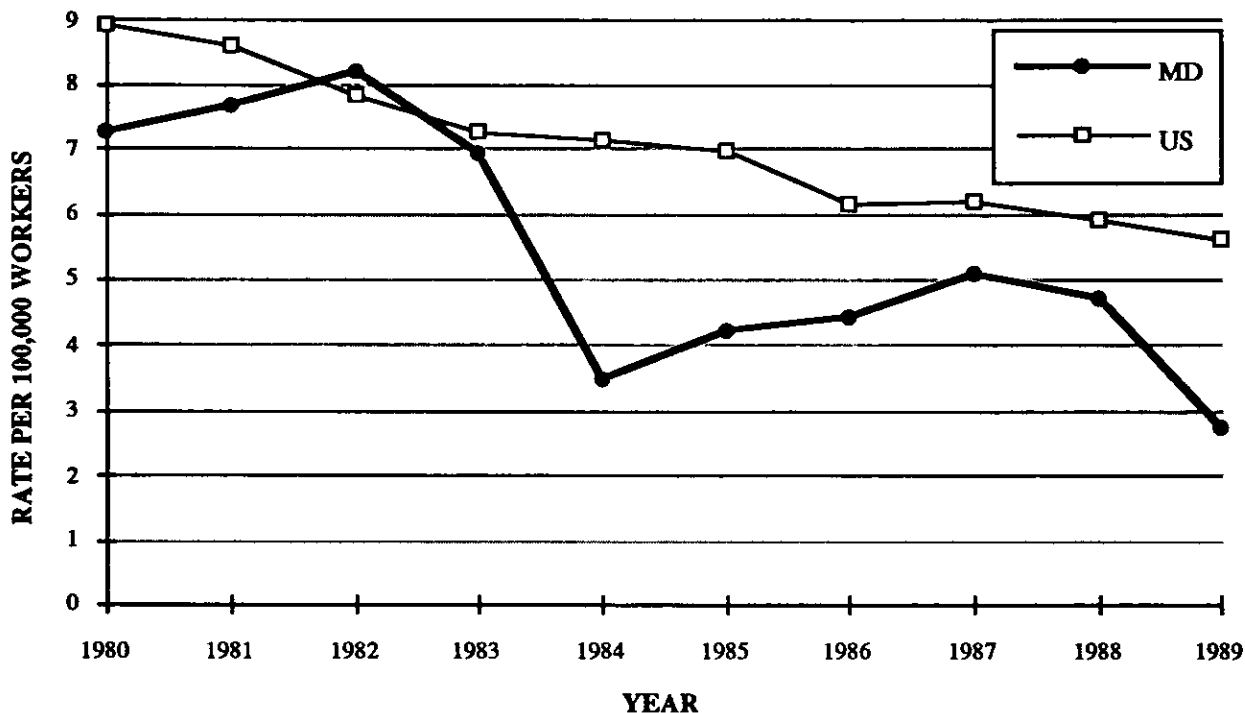


Figure MD-5. Rate of Traumatic Occupational Fatalities by Year, US and Maryland, 1980-1989.

State of Massachusetts

Average Annual Fatal Injuries: **66**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **2.3**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (157)**
Rate: **Mining (20.6)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (168)**
Rate: **Transportation/Material Movers (10.6)**

The State of Massachusetts had 659 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 645 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 2.3 for Massachusetts compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 59.1 per 100,000 workers for Massachusetts compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Massachusetts and had a fatality rate of 3.9 per 100,000 workers compared to 0.2 for females. The fatality distribution by **race/ethnicity**

Table MA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Massachusetts, 1980-1989.

Race/Ethnicity	Number	Percent
White	595	90.3
Black	26	3.9
Hispanic	10	1.5
Asian	9	1.4
Other	19	2.9

for the State of Massachusetts shows that Whites accounted for 90% of the total fatalities and Blacks for 4% as shown in **Table MA-1**. As shown in **Figure MA-1**, workers aged 20 to 24 and 25 to 29 years old each accounted for 14% of the fatalities. Of all Massachusetts occupational fatality victims, 86% were Massachusetts residents (**Table MA-2**).

Figure MA-2 presents the distribution of fatalities by external cause of death for the State of Massachusetts and for the U.S. The leading causes of death among employees in Massachusetts were motor vehicle incidents (23%) and falls (18%).

In Massachusetts, the **industry divisions** in which the largest number of fatalities occurred were construction (24%), transportation/communication/public utilities (18%), and manufacturing (16%). The mining industry had the highest fatality rate at 20.6 per 100,000 workers, followed by construction (15.0), and agriculture/forestry/fishing (14.3) (**Figure MA-3**). **Table MA-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Massachusetts with the largest number of fatalities were precision produc-

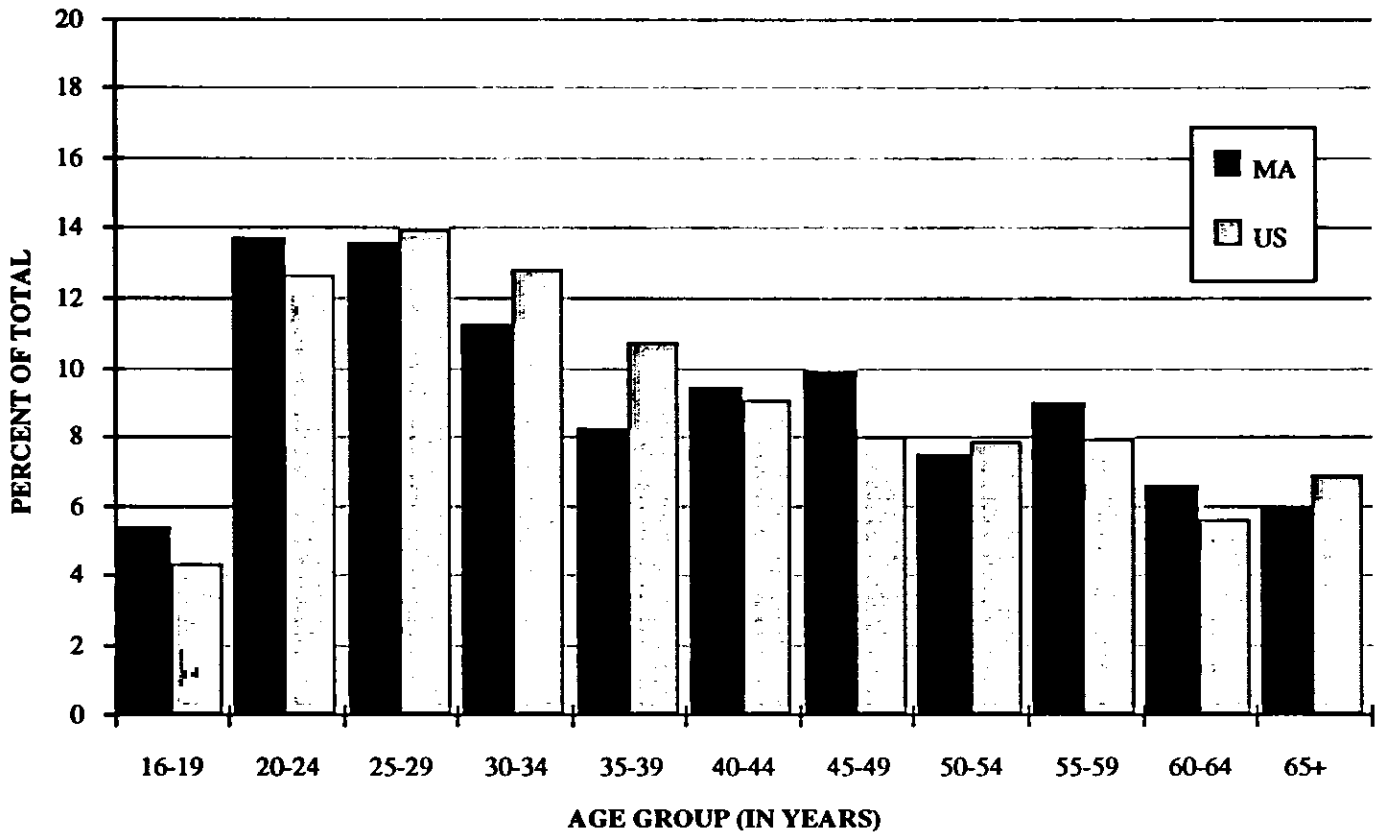


Figure MA-1. Traumatic Occupational Fatalities by Age Group, US and Massachusetts, 1980-1989.

Table MA-2. Traumatic Occupational Fatalities by State of Residence, Massachusetts, 1980-1989.

State	Number	Percent
Massachusetts	568	86.2
Rhode Island	17	2.6
New Hampshire	13	2.0
New York	8	1.2
Maine	7	1.1
Florida	5	0.8
Connecticut	3	0.5
Indiana	3	0.5
Pennsylvania	3	0.5
Vermont	3	0.5
Virginia	3	0.5
Other	26	3.9

tion/craft/repair (26%), transportation/material movers (16%), and laborers (12%). The occupations with the highest rates were transportation/material movers (10.6 deaths per 100,000 workers), farmers/foresters/fishers (8.7), and laborers (7.5) (Figure MA-4). Table MA-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Massachusetts decreased 15%, from 2.7 in 1980 to 2.3 in 1989. A high of 2.9 and a low of 0.8 deaths per 100,000 workers were reported in 1981 and 1984, respectively (Figure MA-5).

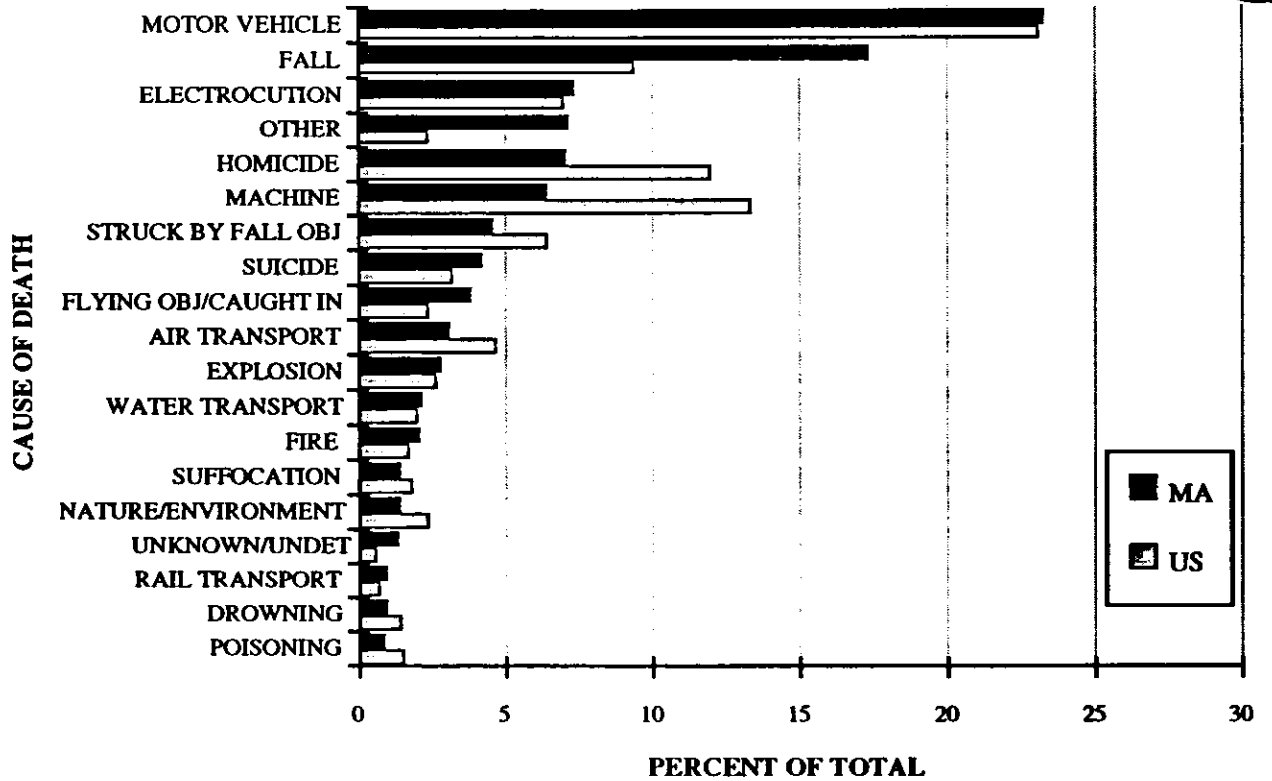


Figure MA-2. Traumatic Occupational Fatalities by Cause of Death, US and Massachusetts, 1980-1989.

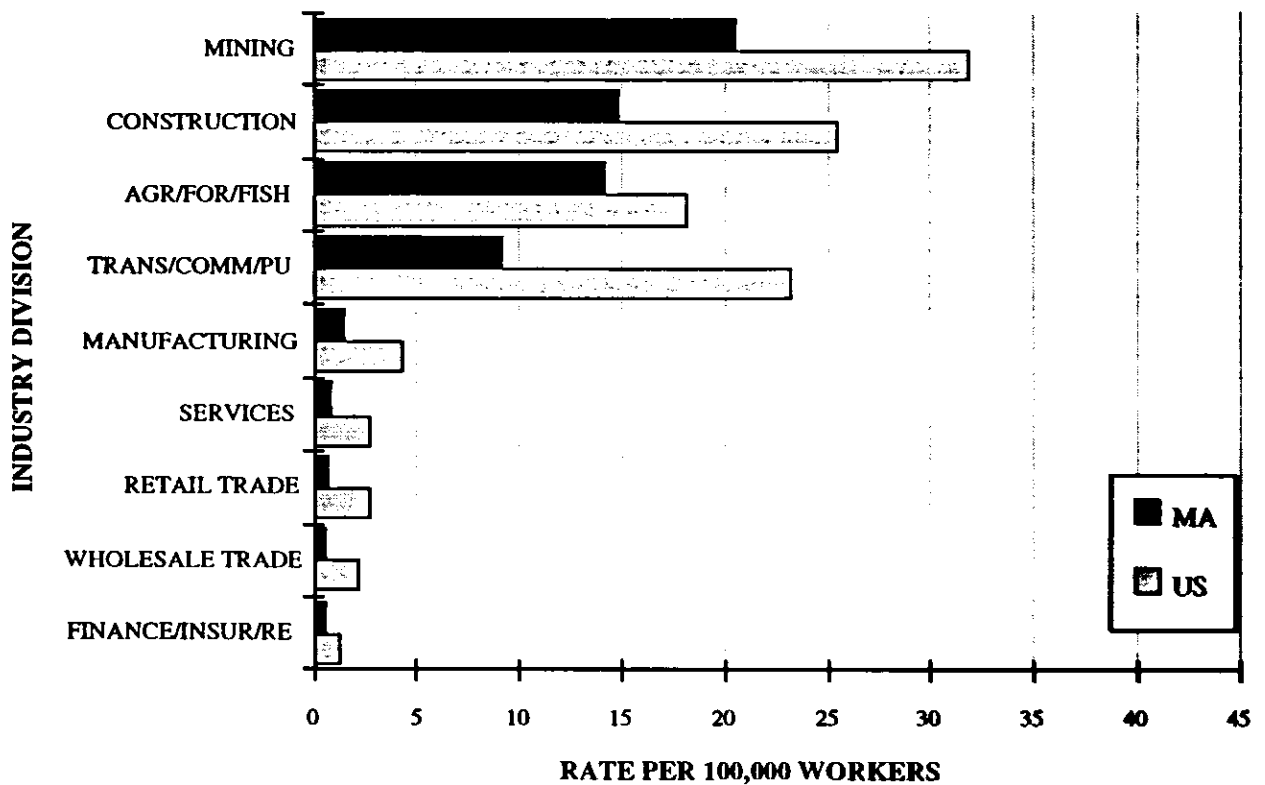


Figure MA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Massachusetts, 1980-1989.

Table MA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Massachusetts, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	--	--	--	--	--	--	3	20.6
CONSTRUCTION	13	17	12	12	3	18	26	24	16	16	157	15.0
AGR/FOR/FISH	4	--	4	3	--	3	--	3	3	4	30	14.3
TRANS/COMM/PU	14	16	14	8	4	10	9	13	14	11	113	9.3
MANUFACTURING	9	11	13	9	3	13	14	10	8	12	102	1.6
SERVICES	9	11	6	13	3	9	11	8	3	7	80	1.0
RETAIL TRADE	6	--	3	7	--	6	5	7	3	4	45	0.9
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	11	0.7
FINANCE/INSUR/RE	--	3	--	--	--	--	--	--	--	--	13	0.7
PUBLIC ADMIN	5	5	3	6	--	6	--	8	3	6	45	N/A
NOT CLASSIFIED	5	3	5	--	--	6	7	3	3	11	46	N/A
STATE	66	72	62	61	20	72	79	81	58	74	645	2.3

NOTE: Dashes denote categories with fewer than three cases.

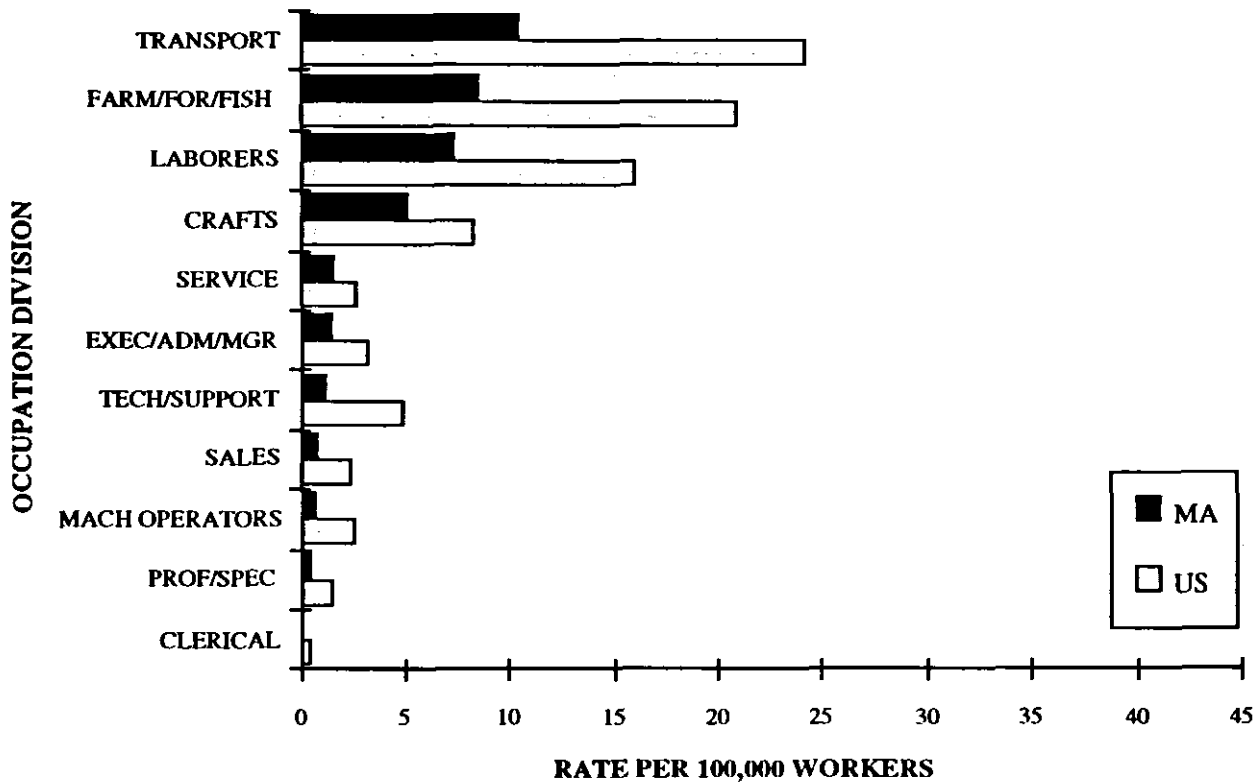


Figure MA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Massachusetts, 1983-1989.

Table MA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Massachusetts.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	100	10.6
FARM/FOR/FISH	30	8.7
LABORERS	78	7.5
CRAFTS	168	5.2
SERVICE	62	1.7
EXEC/ADM/MGR	58	1.6
TECH/SUPPORT	17	1.3
SALES	27	0.9
MACH OPERATORS	24	0.8
PROF/SPEC	31	0.5
CLERICAL	14	0.2
NOT CLASSIFIED	36	N/A

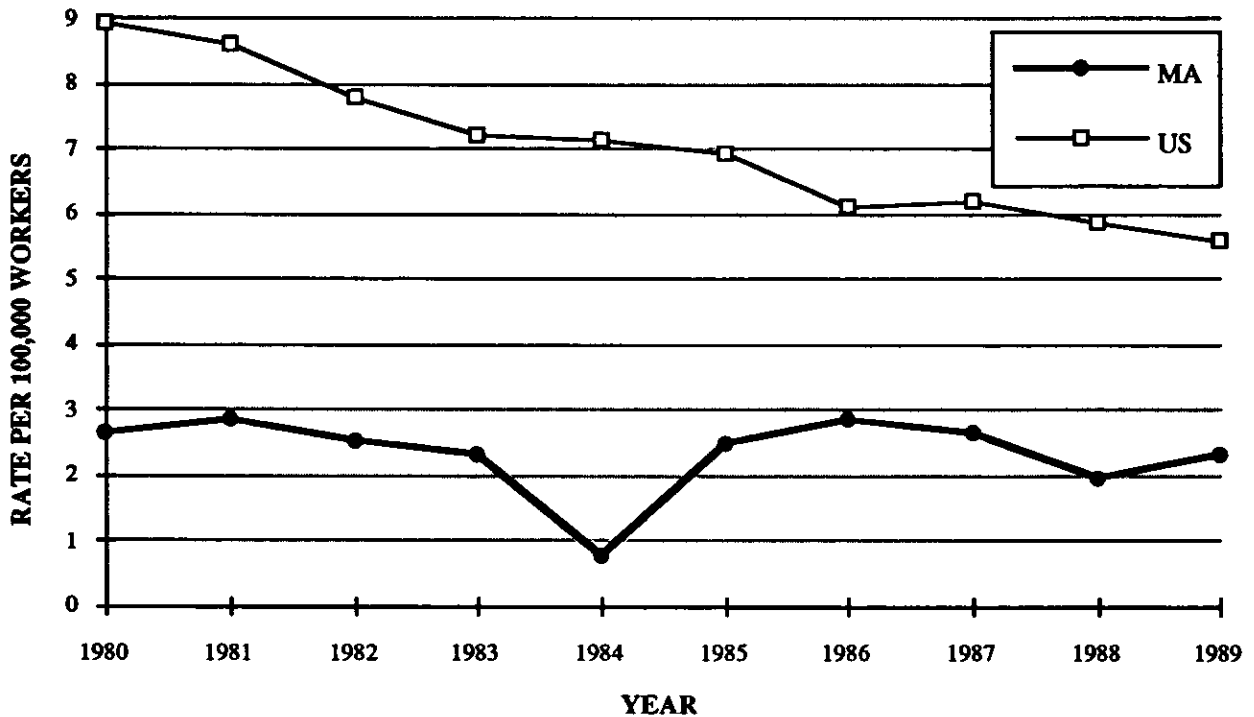


Figure MA-5. Rate of Traumatic Occupational Fatalities by Year, US and Massachusetts, 1980-1989.

State of Michigan

Average Annual Fatal Injuries: 164

Average Annual Fatal Injury Rate (deaths per 100,000 workers): 5.1

Industries with the Highest Number and Rate of Fatal Injuries:

Number: Manufacturing (290)
Rate: Mining (27.4)

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: Precision Production/Craft/Repair (321)
Rate: Transportation/Material Movers (15.3)



The State of Michigan had 1,640 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,627 of these deaths. The average annual rate of fatalities per 100,000 workers was 5.1 for Michigan compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 125.8 per 100,000 workers for Michigan compared to 175.6 for the United States.

Males accounted for 92% of the civilian occupational fatalities in Michigan and had a fatality rate of

Table MI-1. Traumatic Occupational Fatalities by Race/Ethnicity, Michigan, 1980-1989.

Race/Ethnicity	Number	Percent
White	1323	80.7
Black	223	13.6
Hispanic	73	4.5
Asian	10	0.6
Native American	9	0.5
Other	2	0.1

6.7 per 100,000 workers compared to 0.7 for females. The fatality distribution by race/ethnicity for the State of Michigan shows that Whites accounted for 81% of the total fatalities, Blacks for 14%, and Hispanics for 5% as shown in Table MI-1. As shown in Figure MI-1, workers aged 25 to 29 years old accounted for the largest number of fatalities (15%). Of all Michigan occupational fatality victims, 92% were Michigan residents (Table MI-2).

Figure MI-2 presents the distribution of fatalities by external cause of death for the State of Michigan and for the U.S. The three leading causes of death among employees in Michigan were homicides (19%), motor vehicle incidents (19%), and machine-related incidents (15%).

In Michigan, the industry divisions in which the largest number of fatalities occurred were manufacturing (18%), transportation/communication/public utilities (18%), and construction (17%). The mining industry had the highest fatality rate at 27.4 per 100,000 workers, followed by construction (24.6), and transportation/communication/public utilities (20.6) (Figure MI-3). Table MI-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

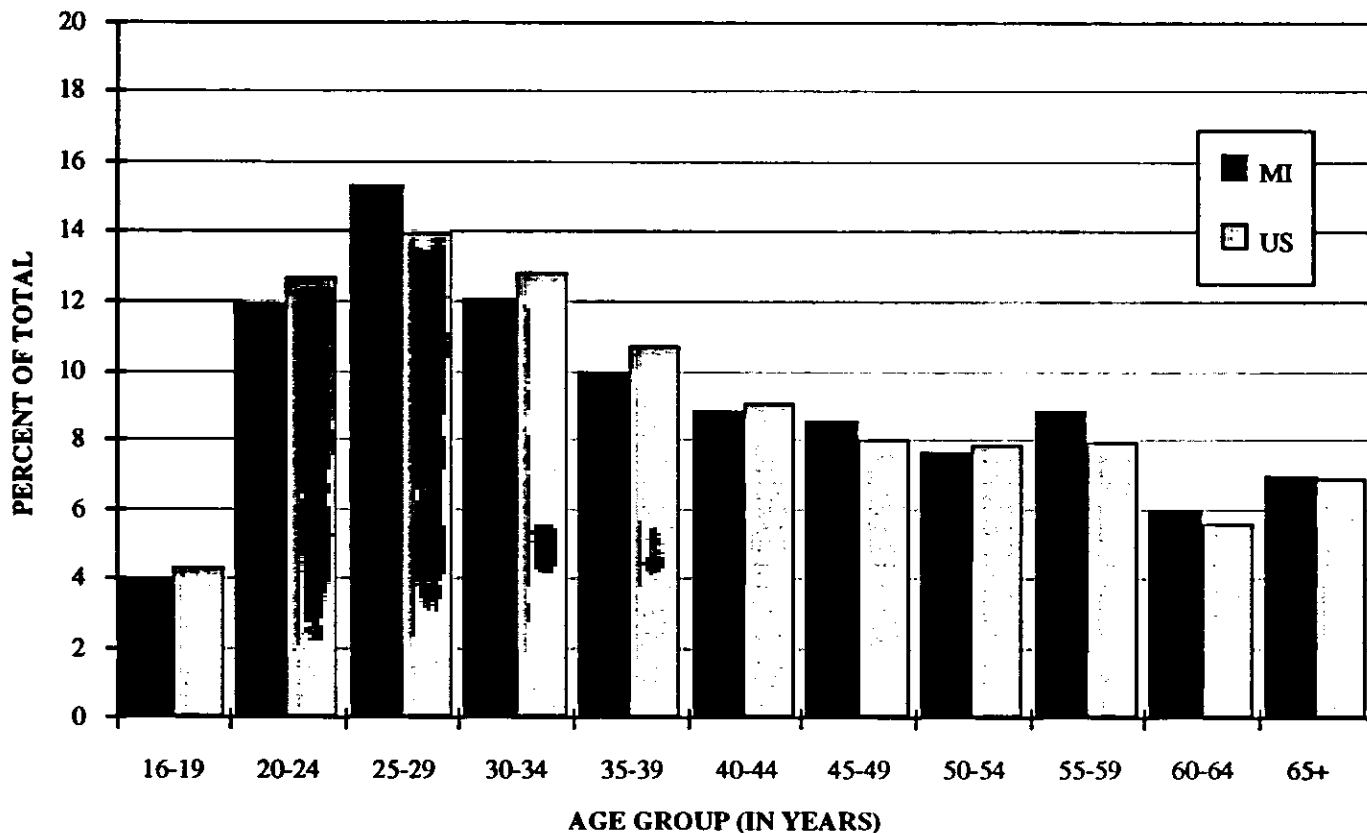


Figure MI-1. Traumatic Occupational Fatalities by Age Group, US and Michigan, 1980-1989.

Table MI-2. Traumatic Occupational Fatalities by State of Residence, Michigan, 1980-1989.

State	Number	Percent
Michigan	1512	92.2
Ohio	26	1.6
Indiana	13	0.8
Illinois	12	0.7
Wisconsin	10	0.6
Arizona	6	0.4
Kentucky	6	0.4
Minnesota	5	0.3
Pennsylvania	4	0.2
Other	46	2.8

The occupation divisions in Michigan with the largest number of fatalities were precision production/craft/repair (20%), transportation/material movers (17%), and laborers (12%). The occupations with the highest rates were transportation/material movers (15.3 deaths per 100,000 workers), farmers/foresters/fishers (14.3), and laborers (11.3) (Figure MI-4). Table MI-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Michigan decreased 31%, from 5.4 in 1980 to a low of 3.7 in 1989. A high of 6.1 deaths per 100,000 workers was reported in 1982 (Figure MI-5).

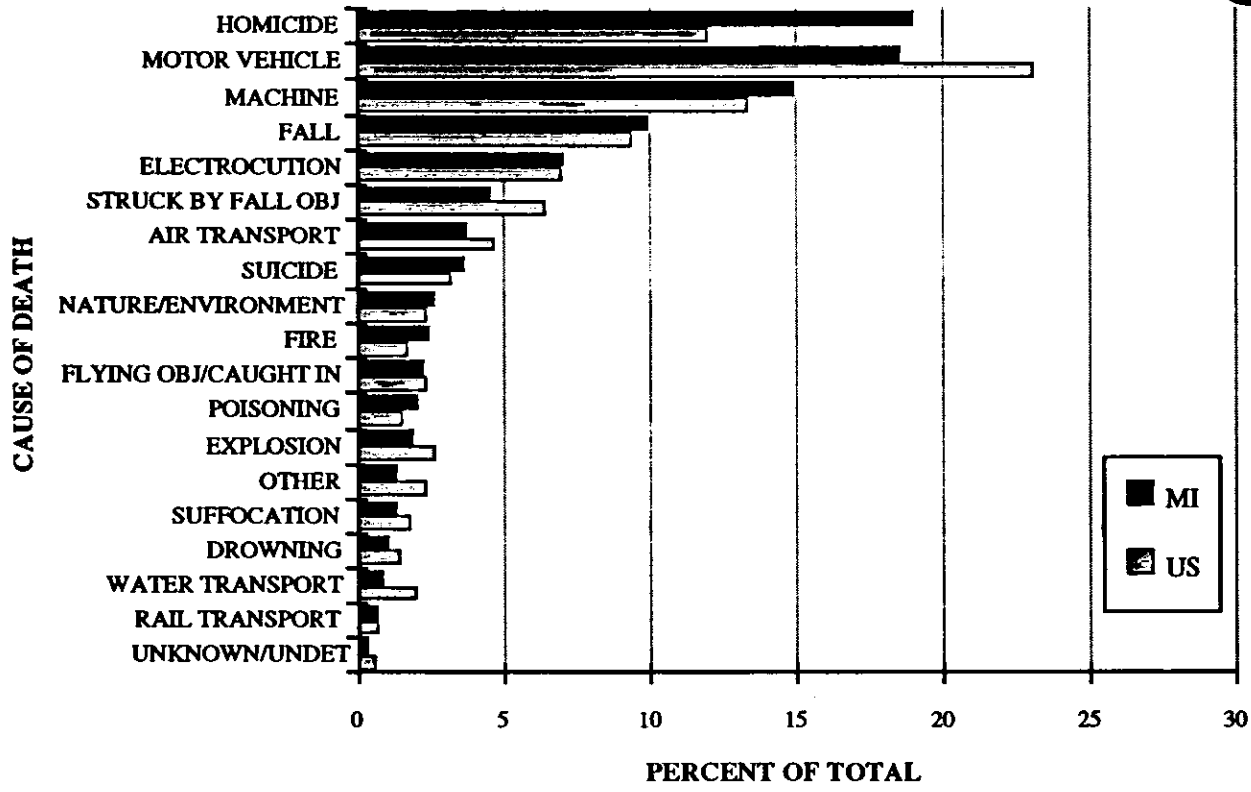


Figure MI-2. Traumatic Occupational Fatalities by Cause of Death, US and Michigan, 1980-1989.

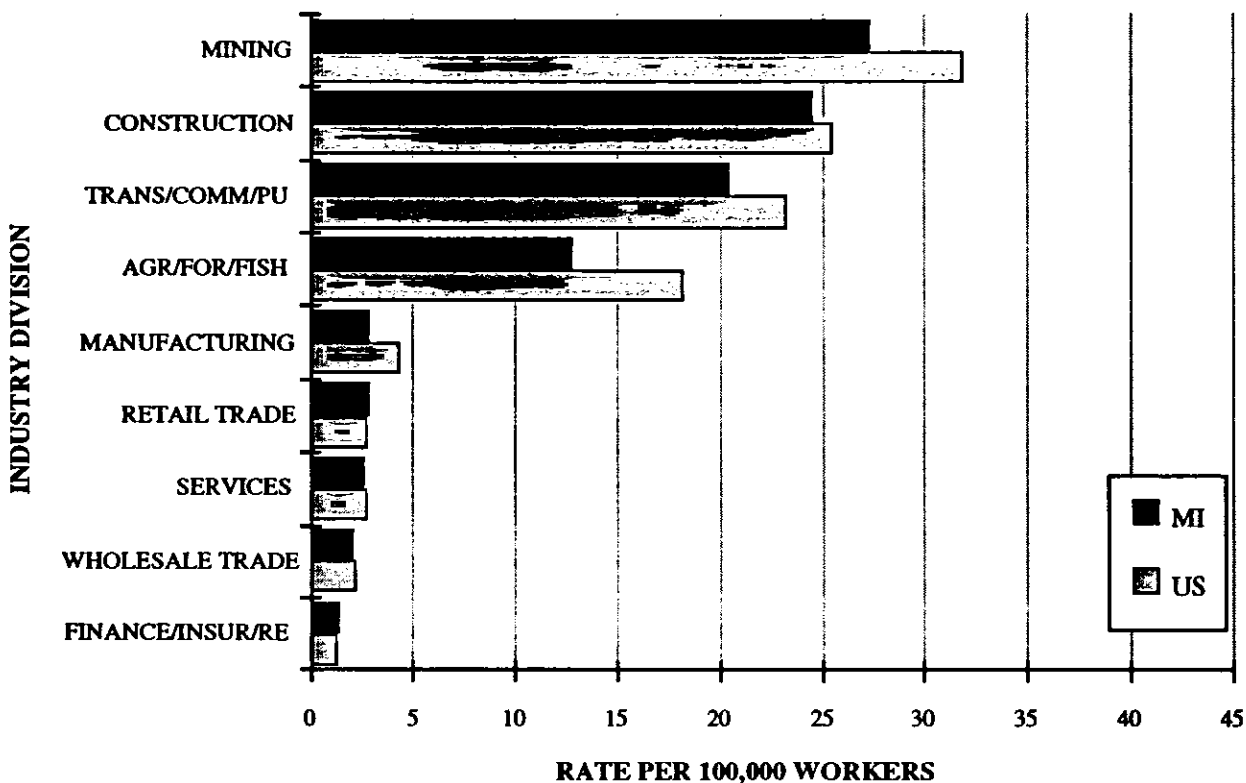


Figure MI-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Michigan, 1980-1989.

Table MI-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Michigan, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	8	3	--	3	4	--	--	4	--	--	30	27.4
CONSTRUCTION	33	32	24	21	17	27	24	35	29	27	269	24.6
TRANS/COMM/PU	28	31	35	29	23	37	30	28	26	18	285	20.6
AGR/FOR/FISH	12	14	9	19	19	19	13	11	19	8	143	12.9
MANUFACTURING	25	29	37	19	21	28	38	27	32	34	290	3.0
RETAIL TRADE	16	23	24	21	13	23	16	18	16	10	180	2.9
SERVICES	21	18	20	18	17	29	21	17	18	21	200	2.7
WHOLESALE TRADE	6	4	--	6	4	--	--	4	4	5	37	2.1
FINANCE/INSUR/RE	--	5	--	3	3	--	4	--	4	--	25	1.5
PUBLIC ADMIN	8	5	11	10	4	7	10	17	8	--	82	N/A
NOT CLASSIFIED	10	9	11	5	9	11	9	8	8	6	86	N/A
STATE	168	173	176	154	134	184	168	171	166	133	1627	5.1

NOTE: Dashes denote categories with fewer than three cases.

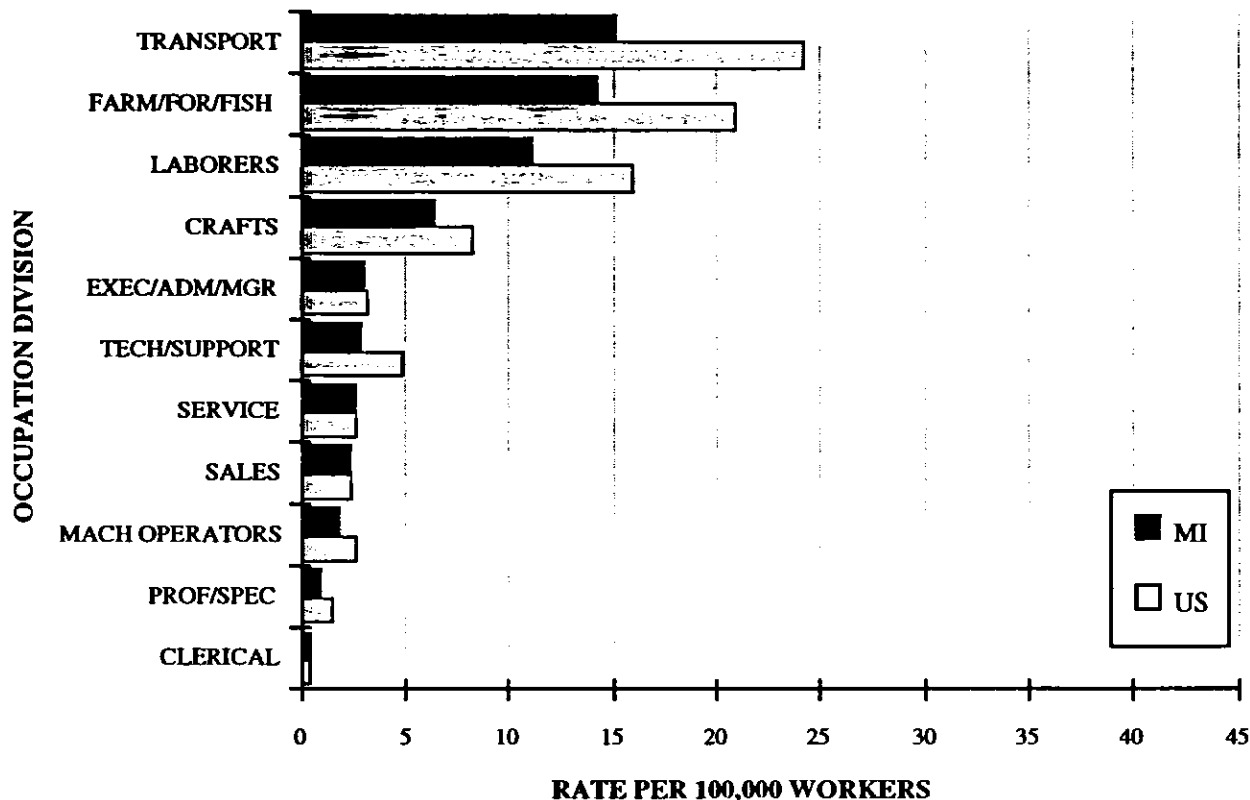


Figure MI-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Michigan, 1983-1989.

Table MI-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Michigan.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	276	15.3
FARM/FOR/FISH	127	14.3
LABORERS	201	11.3
CRAFTS	321	6.5
EXEC/ADM/MGR	136	3.2
TECH/SUPPORT	35	3.1
SERVICE	154	2.7
SALES	127	2.5
MACH OPERATORS	85	2.0
PROF/SPEC	50	1.1
CLERICAL	37	0.6
NOT CLASSIFIED	78	N/A

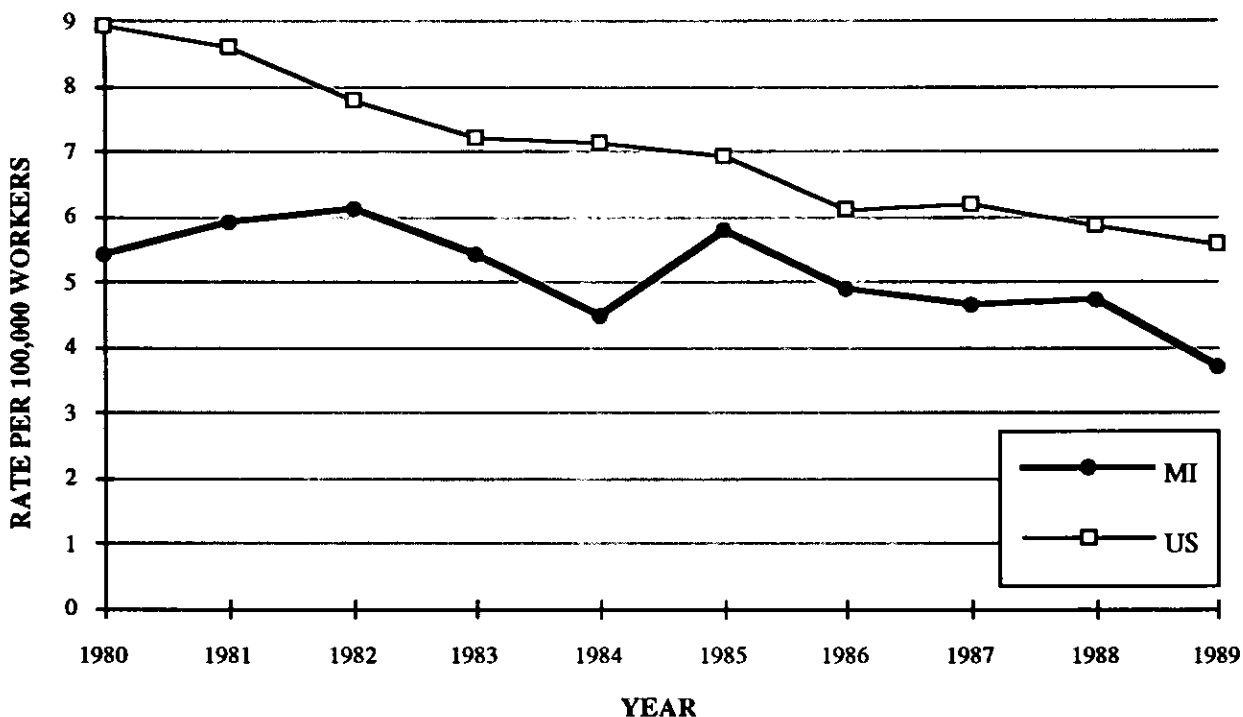


Figure MI-5. Rate of Traumatic Occupational Fatalities by Year, US and Michigan, 1980-1989.

State of Minnesota

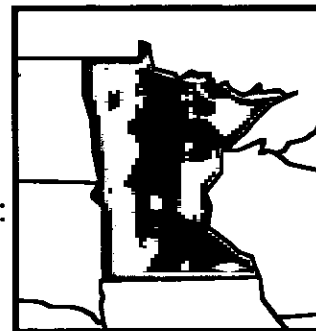
Average Annual Fatal Injuries: **72**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **4.1**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (237)**

Rate: **Construction (22.0)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (232)**

Rate: **Farmers/Foresters/Fishers (14.7)**

The State of Minnesota had 721 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 719 of these deaths. The average annual rate of fatalities per 100,000 workers was 4.1 for Minnesota compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 93.7 per 100,000 workers for Minnesota compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Minnesota and had a fatality rate of 6.0 per 100,000 workers compared to 0.3 for females.

Table MN-1. Traumatic Occupational Fatalities by Race/Ethnicity, Minnesota, 1980-1989.

Race/Ethnicity	Number	Percent
White	707	98.1
Black	7	1.0
Native American	3	0.4
Other	4	0.6

The fatality distribution by race/ethnicity for the State of Minnesota shows that Whites accounted for 98% of the total fatalities and Blacks for 1% as shown in **Table MN-1**. Workers aged 20 to 24, 25 to 29, and 65 years and older each accounted for 12% of the fatalities as shown in **Figure MN-1**. Of all Minnesota occupational fatality victims, 92% were Minnesota residents (**Table MN-2**).

Figure MN-2 presents the distribution of fatalities by external cause of death for the State of Minnesota and for the U.S. The three leading causes of death among employees in Minnesota were machine-related incidents (29%), falls (13%), and suicides (10%).

In Minnesota, the industry divisions in which the largest number of fatalities occurred were agriculture/forestry/fishing (33%), construction (22%), manufacturing (11%), and transportation/communication/public utilities (11%). The construction industry had the highest fatality rate at 22.0 per 100,000 workers, followed by agriculture/forestry/fishing (16.6), and transportation/communication/public utilities (8.9) (**Figure MN-3**). **Table MN-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

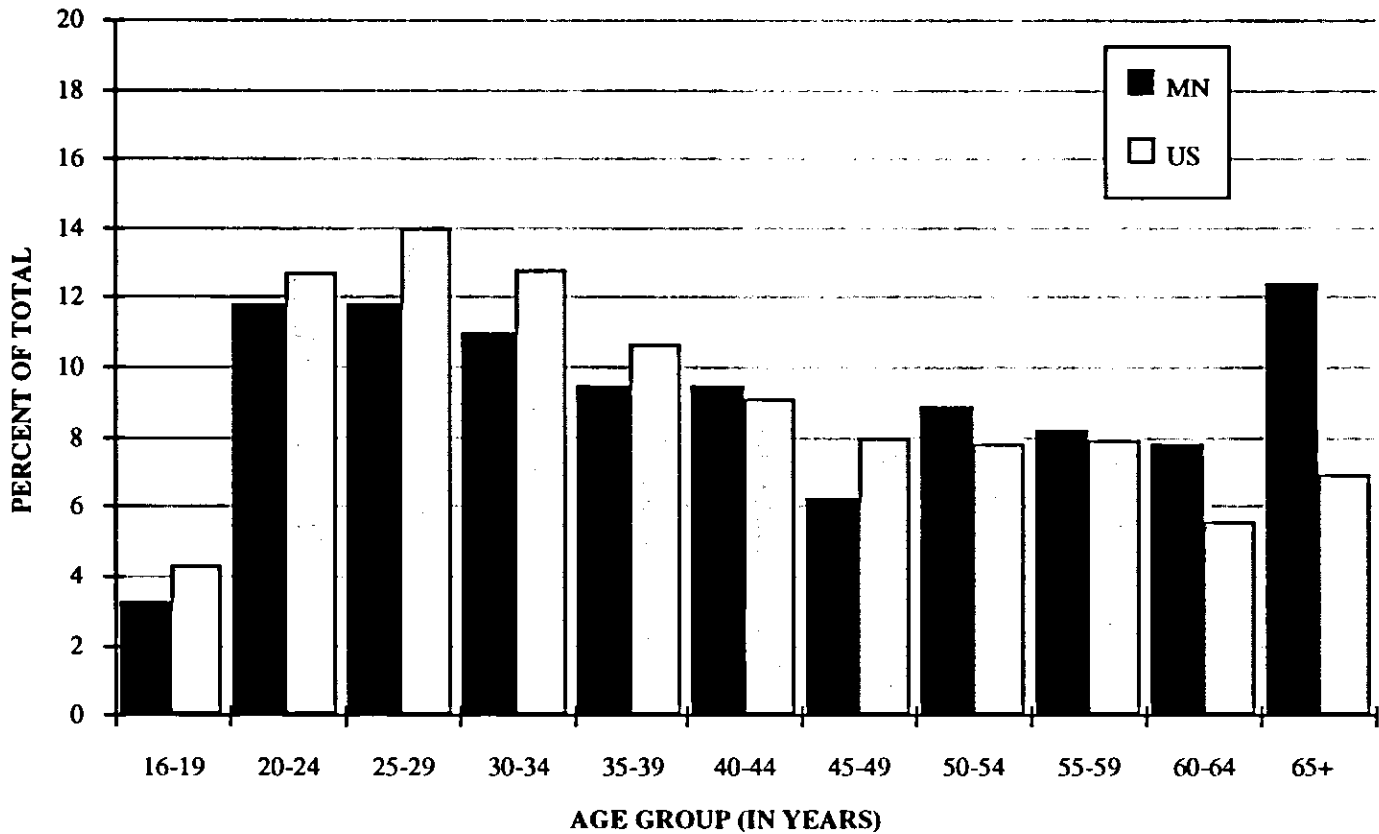


Figure MN-1. Traumatic Occupational Fatalities by Age Group, US and Minnesota, 1980-1989.

Table MN-2. Traumatic Occupational Fatalities by State of Residence, Minnesota, 1980-1989.

State	Number	Percent
Minnesota	665	92.2
Wisconsin	26	3.6
Iowa	11	1.5
Illinois	3	0.4
South Dakota	3	0.4
Other	13	1.8

The **occupation divisions** in Minnesota with the largest number of fatalities were farmers/foresters/fishers (32%), precision production/craft/repair (18%), and transportation/material movers (13%). The occupations with the highest rates were farmers/foresters/fishers (14.7 deaths per 100,000 workers), transportation/material movers (11.4), and laborers (7.9) (**Figure MN-4**). **Table MN-4** provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the **fatality rates** in Minnesota decreased 47%, from a high of 5.7 in 1980 to 3.0 in 1989. A low of 3.0 deaths per 100,000 workers was reported in 1986 and 1989 (**Figure MN-5**).

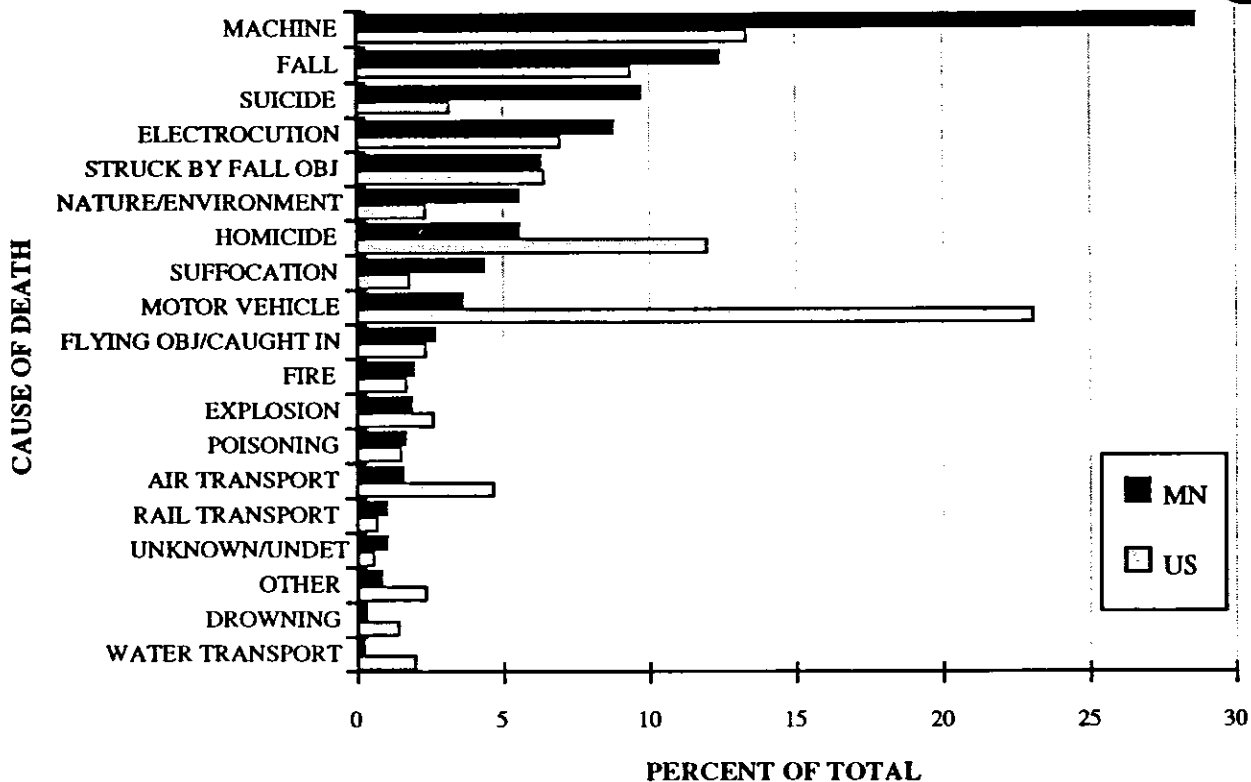


Figure MN-2. Traumatic Occupational Fatalities by Cause of Death, US and Minnesota, 1980-1989.

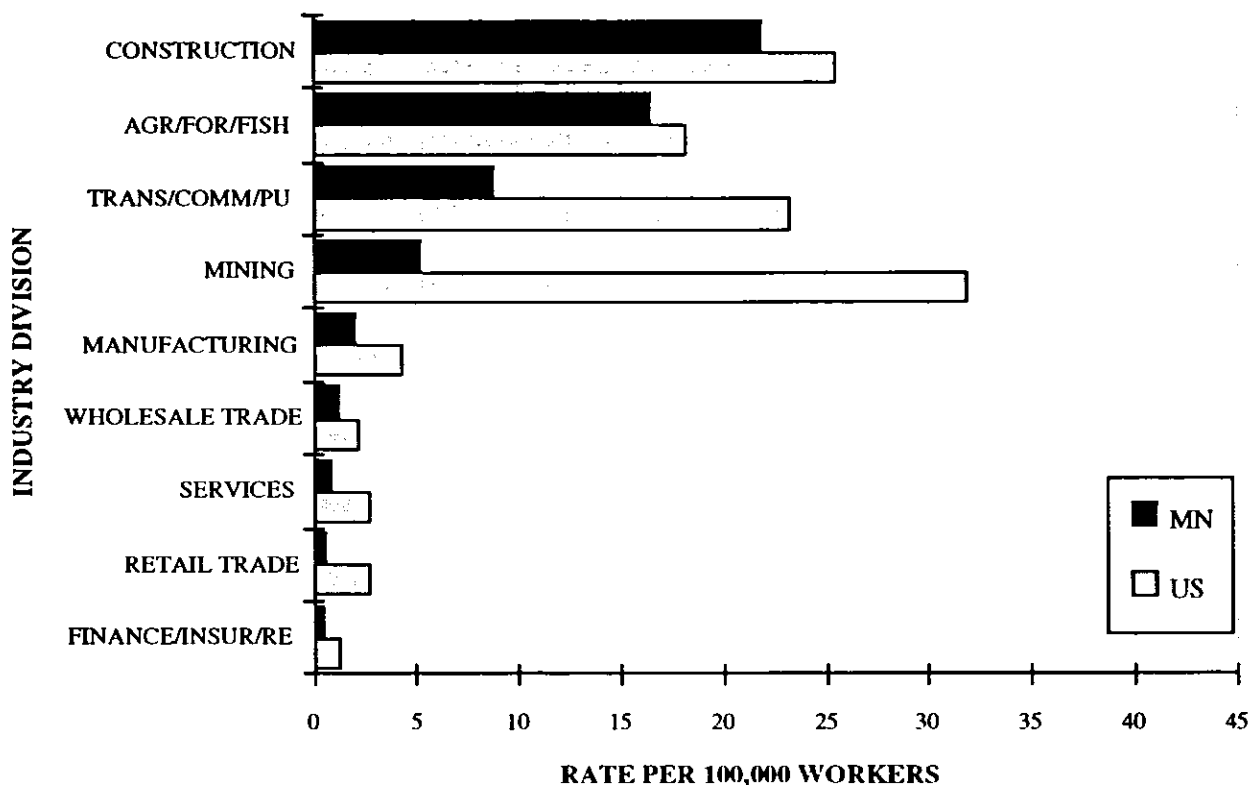


Figure MN-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Minnesota, 1980-1989.

Table MN-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Minnesota, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	20	16	11	11	20	17	7	24	13	16	155	22.0
AGR/FOR/FISH	28	33	25	21	25	26	13	33	17	16	237	16.6
TRANS/COMM/PU	10	12	6	4	11	4	9	6	7	10	79	8.9
MINING	--	--	--	--	--	--	--	--	--	--	5	5.3
MANUFACTURING	11	6	9	11	5	10	7	12	7	4	82	2.2
WHOLESALE TRADE	5	--	--	--	--	--	--	--	--	--	16	1.4
SERVICES	--	--	8	3	4	5	4	4	5	4	41	0.9
RETAIL TRADE	6	5	3	--	--	--	--	--	--	--	23	0.7
FINANCE/INSUR/RE	3	--	--	--	--	--	--	--	--	--	6	0.5
PUBLIC ADMIN	3	--	3	--	--	--	--	--	--	--	15	N/A
NOT CLASSIFIED	6	8	5	8	4	--	9	5	9	6	60	N/A
STATE	95	86	71	63	74	68	54	86	61	61	719	4.1

NOTE: Dashes denote categories with fewer than three cases.

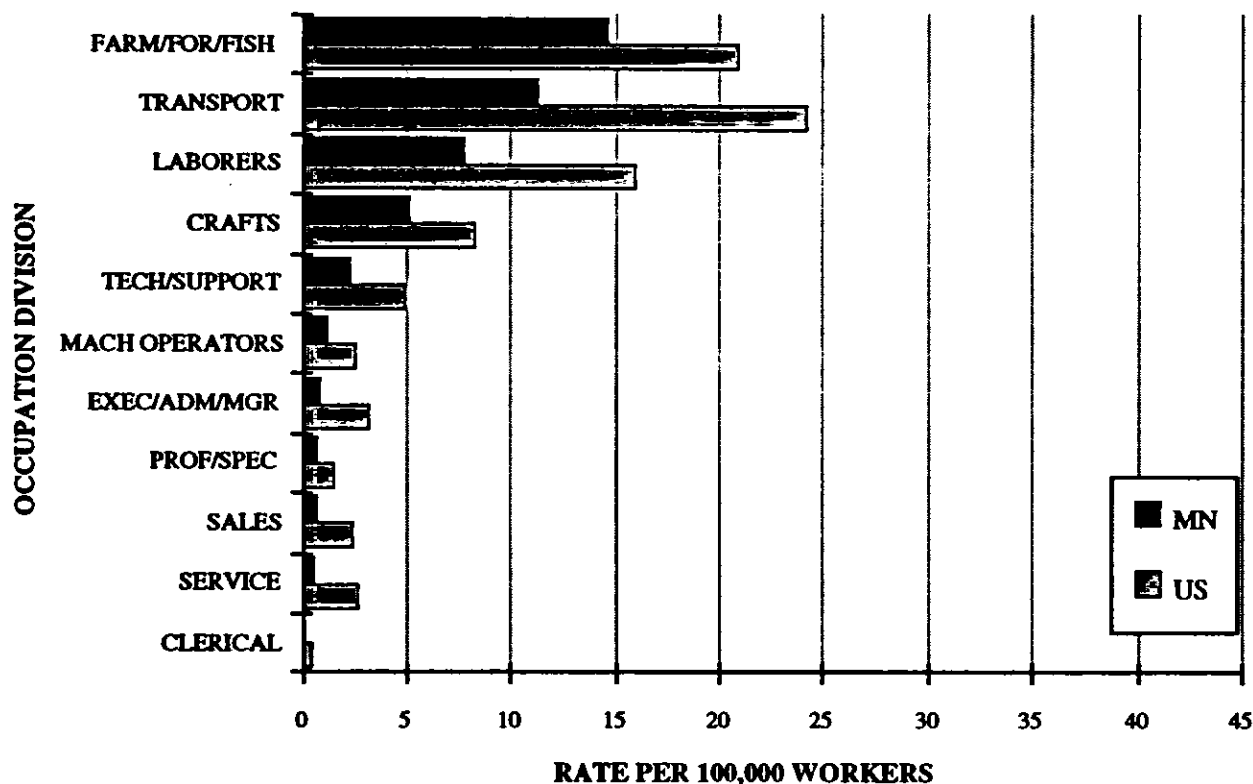


Figure MN-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Minnesota, 1983-1989.

Table MN-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Minnesota.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	232	14.7
TRANSPORT	94	11.4
LABORERS	76	7.9
CRAFTS	126	5.3
TECH/SUPPORT	13	2.4
MACH OPERATORS	21	1.3
EXEC/ADM/MGR	25	1.0
PROF/SPEC	21	0.8
SALES	26	0.8
SERVICE	29	0.7
CLERICAL	5	0.2
NOT CLASSIFIED	51	N/A

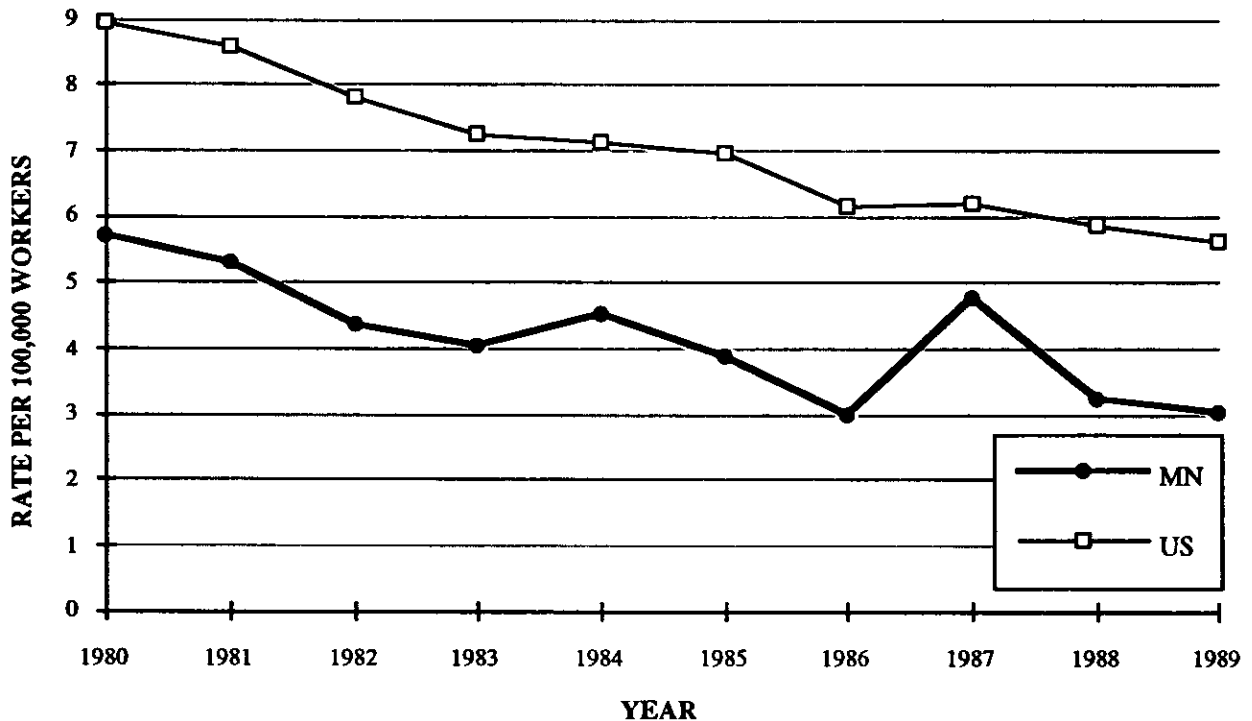


Figure MN-5. Rate of Traumatic Occupational Fatalities by Year, US and Minnesota, 1980-1989.

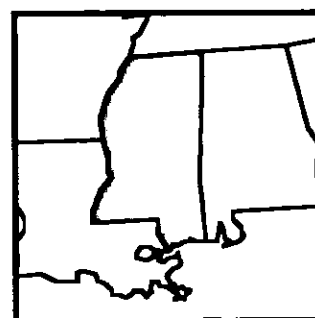
State of Mississippi

Average Annual Fatal Injuries: 107

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): 14.5

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Manufacturing (200)**
Rate: **Transportation/Communication/
Public Utilities (47.8)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (202)**
Rate: **Farmers/Foresters/Fishers (40.3)**

The State of Mississippi had 1,072 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,064 of these deaths. The average annual rate of fatalities per 100,000 workers was 14.5 for Mississippi compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 343.8 per 100,000 workers for Mississippi compared to 175.6 for the United States.

Males accounted for 93% of the civilian occupational fatalities in Mississippi and had a fatality rate of 17.6 per 100,000 workers compared to 1.8 for females. The fatality distribution by race/ethnicity

Table MS-1. Traumatic Occupational Fatalities by Race/Ethnicity, Mississippi, 1980-1989.

Race/Ethnicity	Number	Percent
White	705	65.8
Black	332	31.0
Hispanic	16	1.5
Asian	13	1.2
Other	6	0.6

for the State of Mississippi shows that Whites accounted for 66% of the total fatalities and Blacks for 31% as shown in **Table MS-1**. As shown in **Figure MS-1**, workers aged 25 to 29 and 30 to 34 years old each accounted for 12% of the fatalities. Of all Mississippi occupational fatality victims, 86% were Mississippi residents (**Table MS-2**).

Figure MS-2 presents the distribution of fatalities by external cause of death for the State of Mississippi and for the U.S. The four leading causes of death among employees in Mississippi were motor vehicle incidents (28%), homicides (13%), machine-related incidents (11%), and being struck by falling objects (11%).

In Mississippi, the industry divisions in which the largest number of fatalities occurred were manufacturing (19%), transportation/communication/public utilities (16%), construction (13%), and agriculture/forestry/fishing (13%). The transportation/communication/public utilities industry had the highest fatality rate at 47.8 per 100,000 workers, followed by mining (40.3), and construction (40.3) (**Figure MS-3**). **Table MS-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

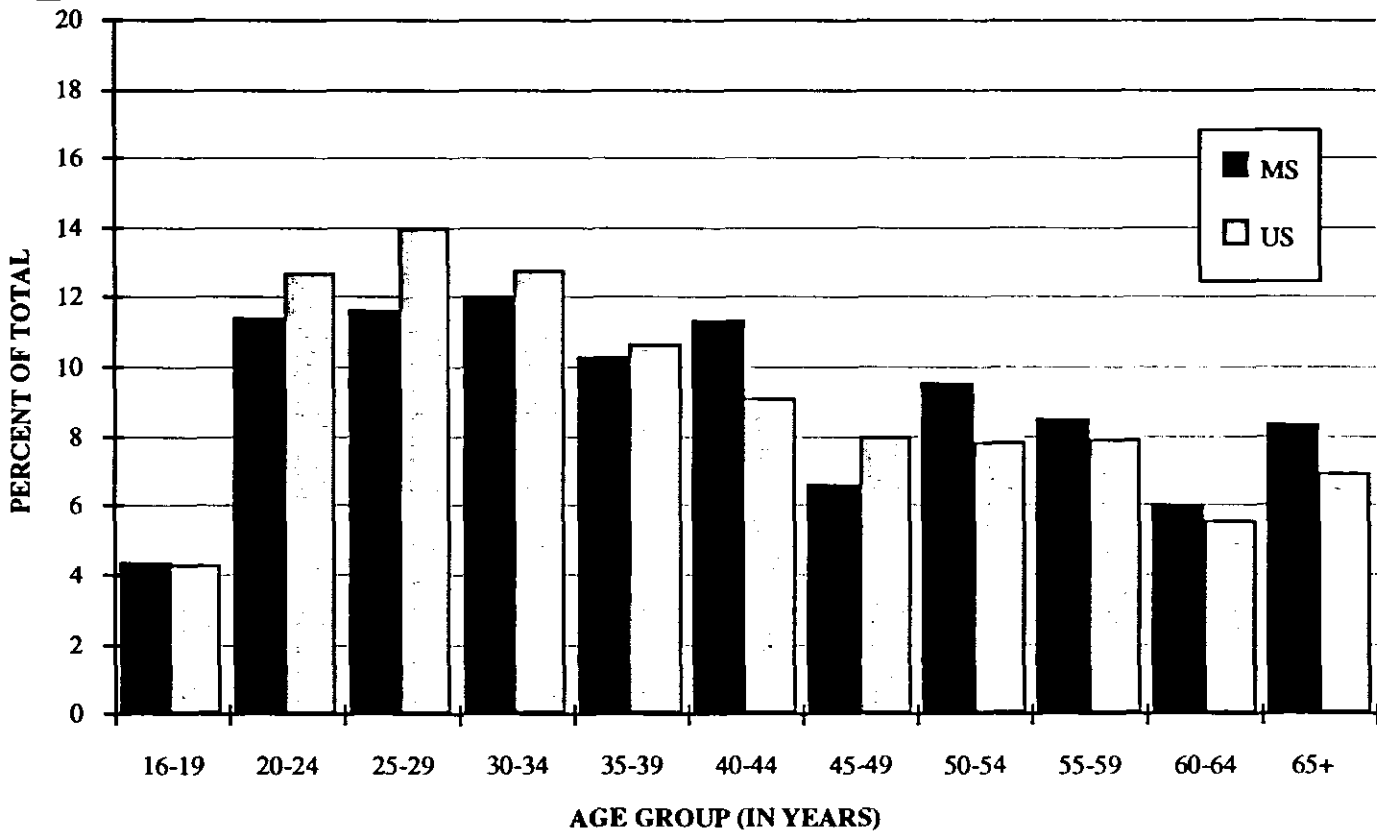


Figure MS-1. Traumatic Occupational Fatalities by Age Group, US and Mississippi, 1980-1989.

Table MS-2. Traumatic Occupational Fatalities by State of Residence, Mississippi, 1980-1989.

State	Number	Percent
Mississippi	924	86.2
Alabama	41	3.8
Louisiana	25	2.3
Tennessee	20	1.9
Arkansas	15	1.4
Florida	9	0.8
Georgia	7	0.7
Texas	4	0.4
Illinois	3	0.3
Kentucky	3	0.3
Other	21	2.0

The **occupation divisions** in Mississippi with the largest number of fatalities were transportation/material movers (19%), laborers (15%), and farmers/foresters/fishers (15%). The occupations with the highest rates were farmers/foresters/fishers (40.3 deaths per 100,000 workers), transportation/material movers (29.0), and laborers (28.8) (**Figure MS-4**). **Table MS-4** provides numbers and rates of work-related deaths for each occupation division.

During the decade, the **fatality rates** in Mississippi decreased 27%, from a high of 19.1 in 1980 to 13.9 in 1989. A low of 12.1 deaths per 100,000 workers was reported in 1984 (**Figure MS-5**).

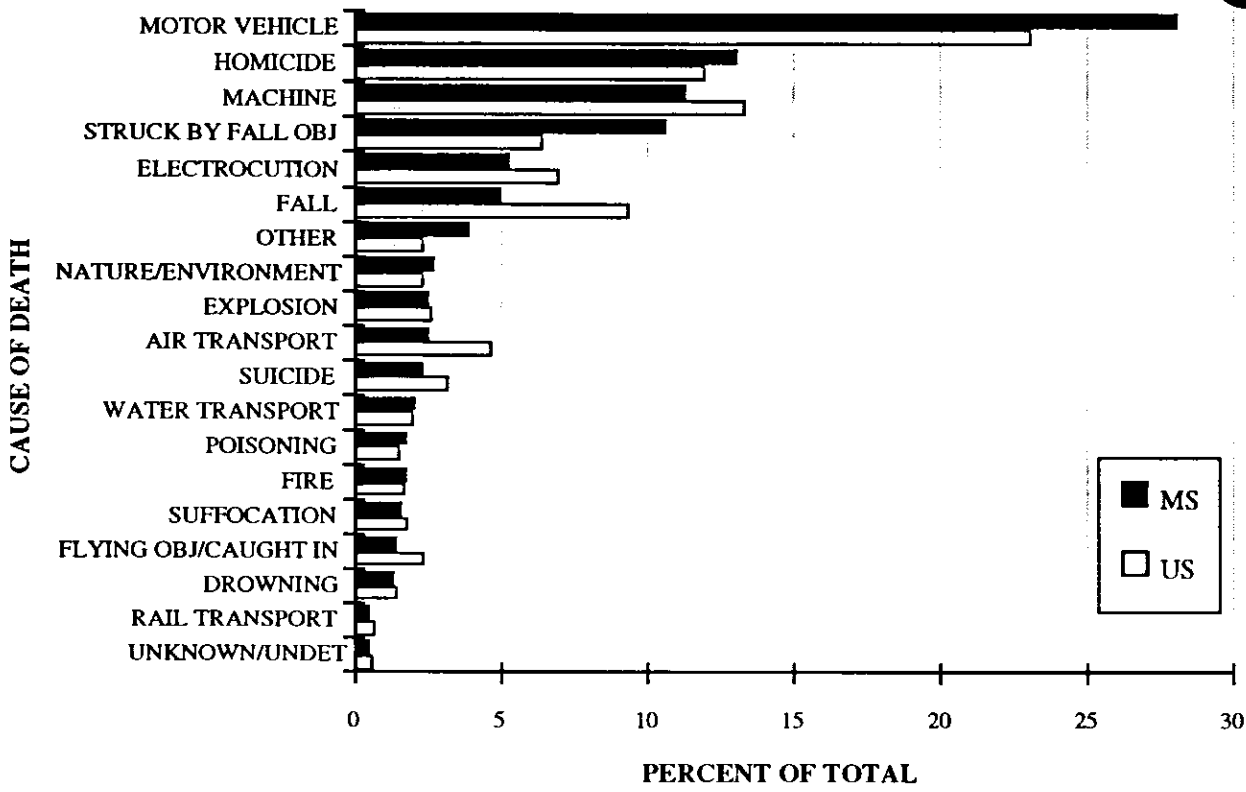


Figure MS-2. Traumatic Occupational Fatalities by Cause of Death, US and Mississippi, 1980-1989.

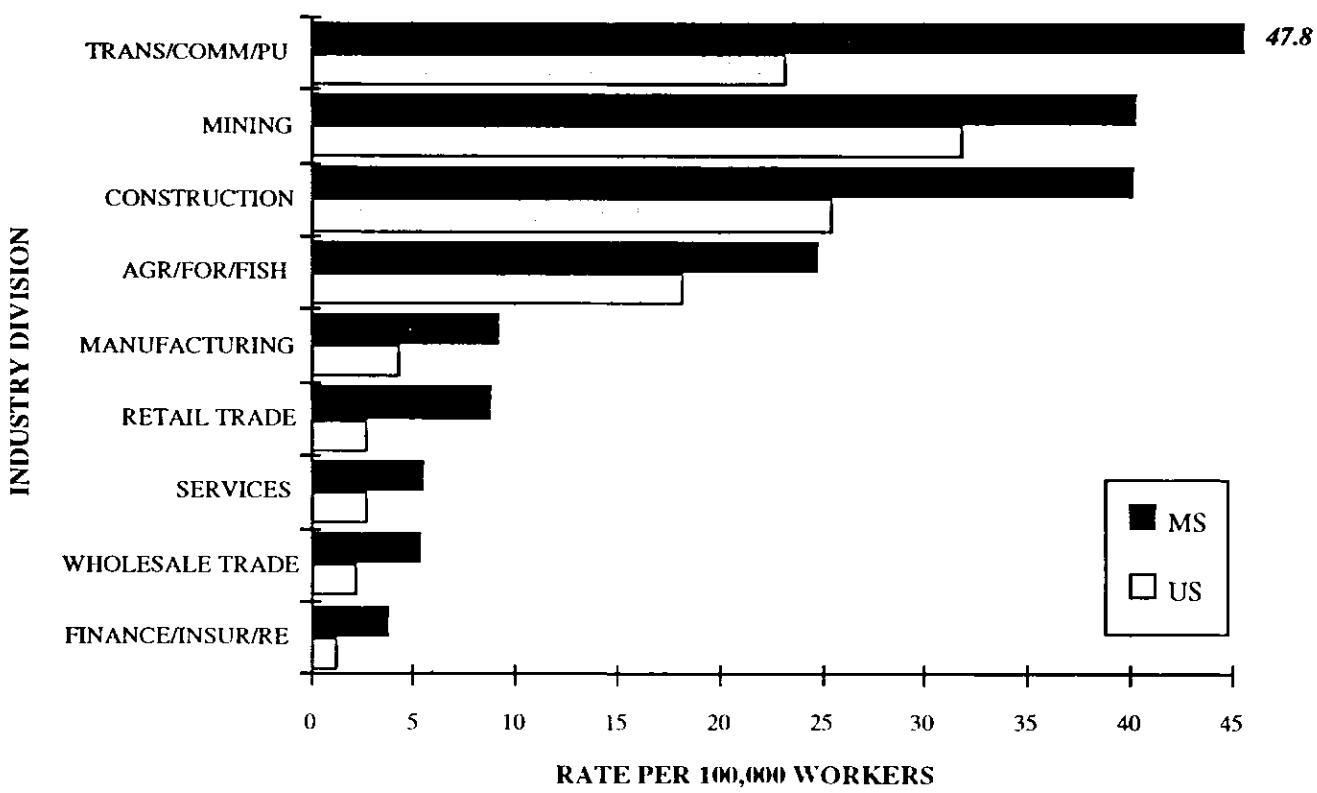


Figure MS-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Mississippi, 1980-1989.

Table MS-3. Distribution and Average Annual Rate (per 100,00 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Mississippi, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	23	16	14	16	15	15	13	21	20	19	172	47.8
MINING	6	4	4	3	6	--	--	--	3	3	32	40.3
CONSTRUCTION	11	17	21	11	7	11	14	19	17	14	142	40.3
AGR/FOR/FISH	15	15	10	13	13	15	15	19	11	15	141	24.9
MANUFACTURING	35	18	18	11	16	15	23	22	20	22	200	9.3
RETAIL TRADE	16	17	14	12	6	8	11	12	8	14	118	8.9
SERVICES	4	7	3	4	9	12	3	9	11	7	69	5.7
WHOLESALE TRADE	--	--	--	3	4	--	4	--	3	--	22	5.5
FINANCE/INSUR/RE	4	--	--	--	--	--	--	3	--	--	14	3.8
PUBLIC ADMIN	8	7	6	6	4	4	6	3	14	13	71	N/A
NOT CLASSIFIED	12	13	8	6	4	10	5	10	5	10	83	N/A
STATE	135	116	100	86	86	93	95	120	114	119	1064	14.5

NOTE: Dashes denote categories with fewer than three cases.

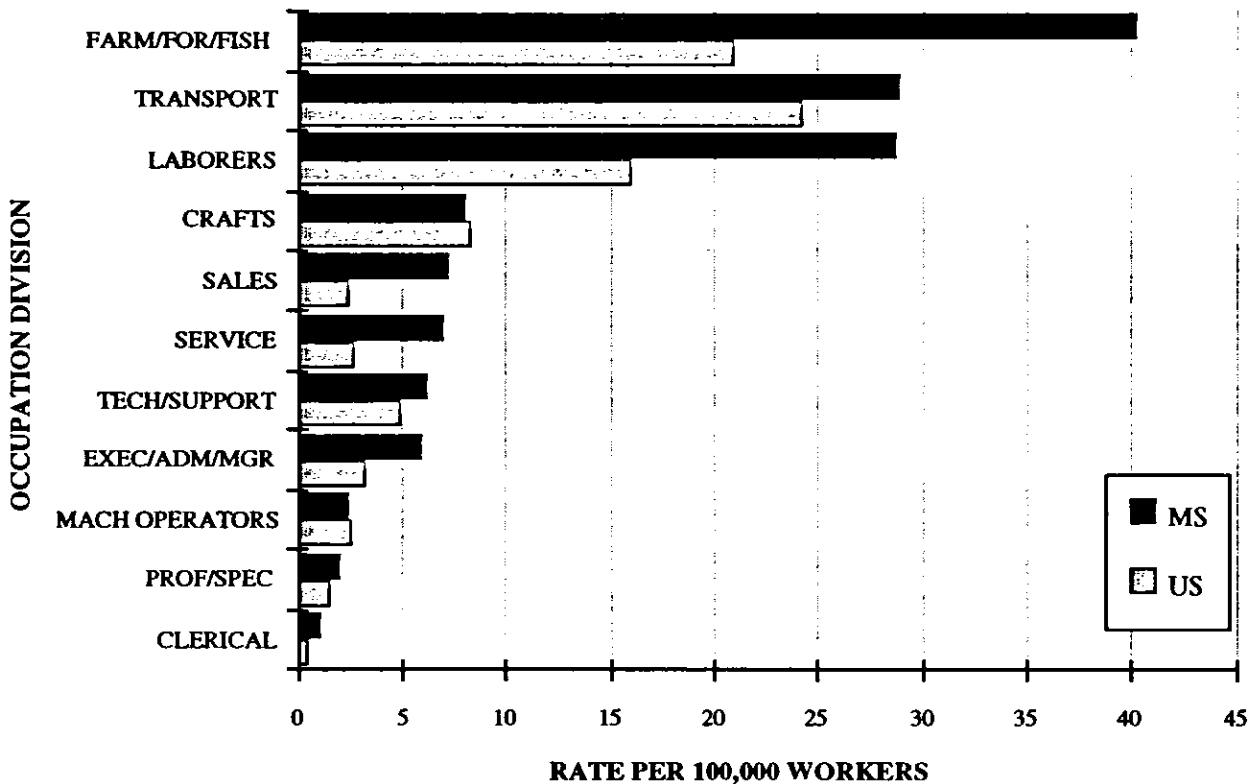


Figure MS-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Mississippi, 1983-1989.

Table MS-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Mississippi.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	159	40.3
TRANSPORT	202	29.0
LABORERS	161	28.8
CRAFTS	123	8.2
SALES	90	7.3
SERVICE	81	7.1
TECH/SUPPORT	20	6.3
EXEC/ADM/MGR	66	6.0
MACH OPERATORS	34	2.5
PROF/SPEC	30	2.2
CLERICAL	18	1.2
NOT CLASSIFIED	80	N/A

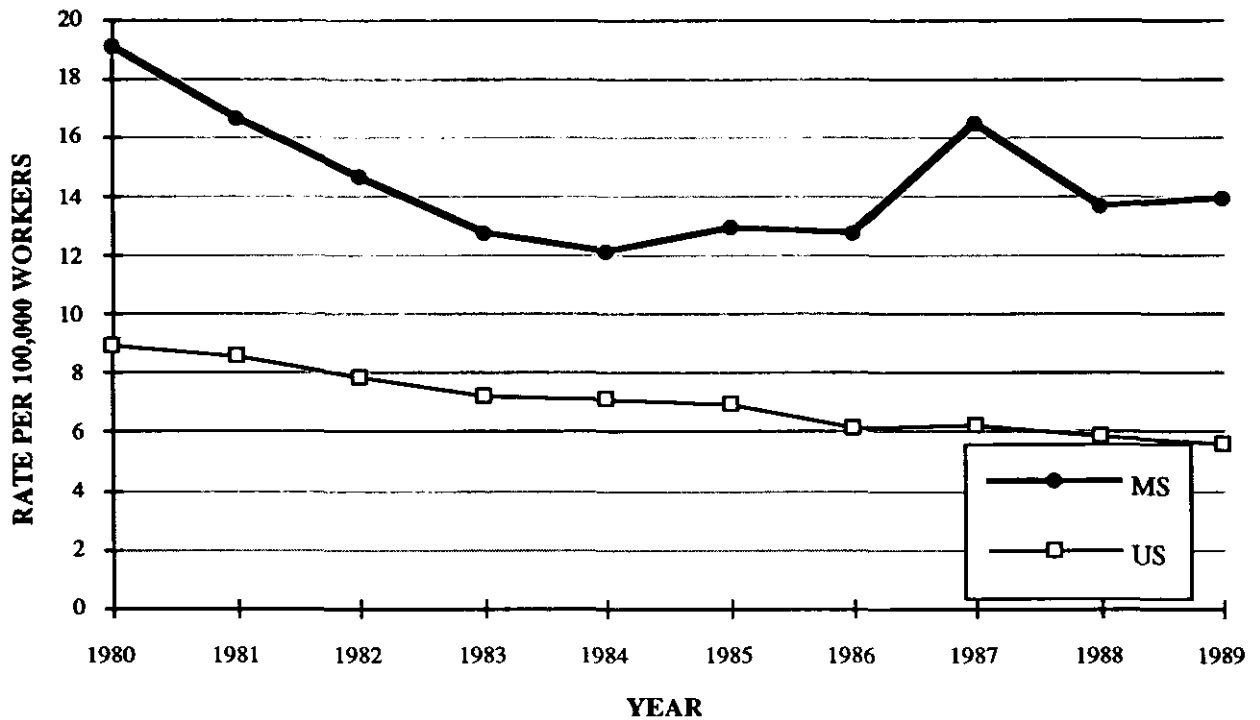


Figure MS-5. Rate of Traumatic Occupational Fatalities by Year, US and Mississippi, 1980-1989.

State of Missouri

Average Annual Fatal Injuries: **106**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **5.3**

Industries with the Highest Number and Rate of Fatal Injuries:

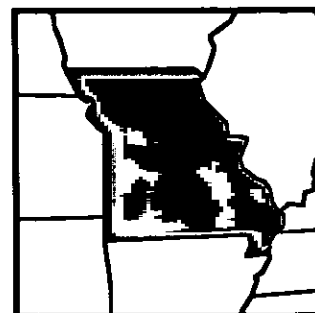
Number: **Agriculture/Forestry/Fishing (215)**

Rate: **Mining (25.4)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (223)**

Rate: **Farmers/Foresters/Fishers (20.5)**



The State of Missouri had 1,059 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,052 of these deaths. The average annual rate of fatalities per 100,000 workers was 5.3 for Missouri compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 110.6 per 100,000 workers for Missouri compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Missouri and had a fatality rate of 7.9 per 100,000 workers compared to 0.6 for females. The fatality distribution by race/ethnicity for the State of Missouri shows that Whites accounted for 89% of the total fatalities and Blacks for 10% as shown in Table MO-1. As shown in Figure MO-1, workers aged 65 years and older accounted for the

Table MO-1. Traumatic Occupational Fatalities by Race/Ethnicity, Missouri, 1980-1989.

Race/Ethnicity	Number	Percent
White	947	89.4
Black	106	10.0
Other	6	0.6

largest number of fatalities (15%). Of all Missouri occupational fatality victims, 87% were Missouri residents (Table MO-2).

Figure MO-2 presents the distribution of fatalities by external cause of death for the State of Missouri and for the U.S. The four leading causes of death among employees in Missouri were machine-related incidents (24%), homicides (18%), falls (11%), and electrocutions (10%).

In Missouri, the industry divisions in which the largest number of fatalities occurred were agriculture/forestry/fishing (20%), construction (19%), and manufacturing (15%). The mining industry had the highest fatality rate at 25.4 per 100,000 workers, followed by construction (22.2), and agriculture/forestry/fishing (15.3) (Figure MO-3). Table MO-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The occupation divisions in Missouri with the largest number of fatalities were farmers/foresters/fishers (21%), precision production/craft/repair (18%), laborers (13%), and transportation/material movers (12%). The occupations with the highest rates were

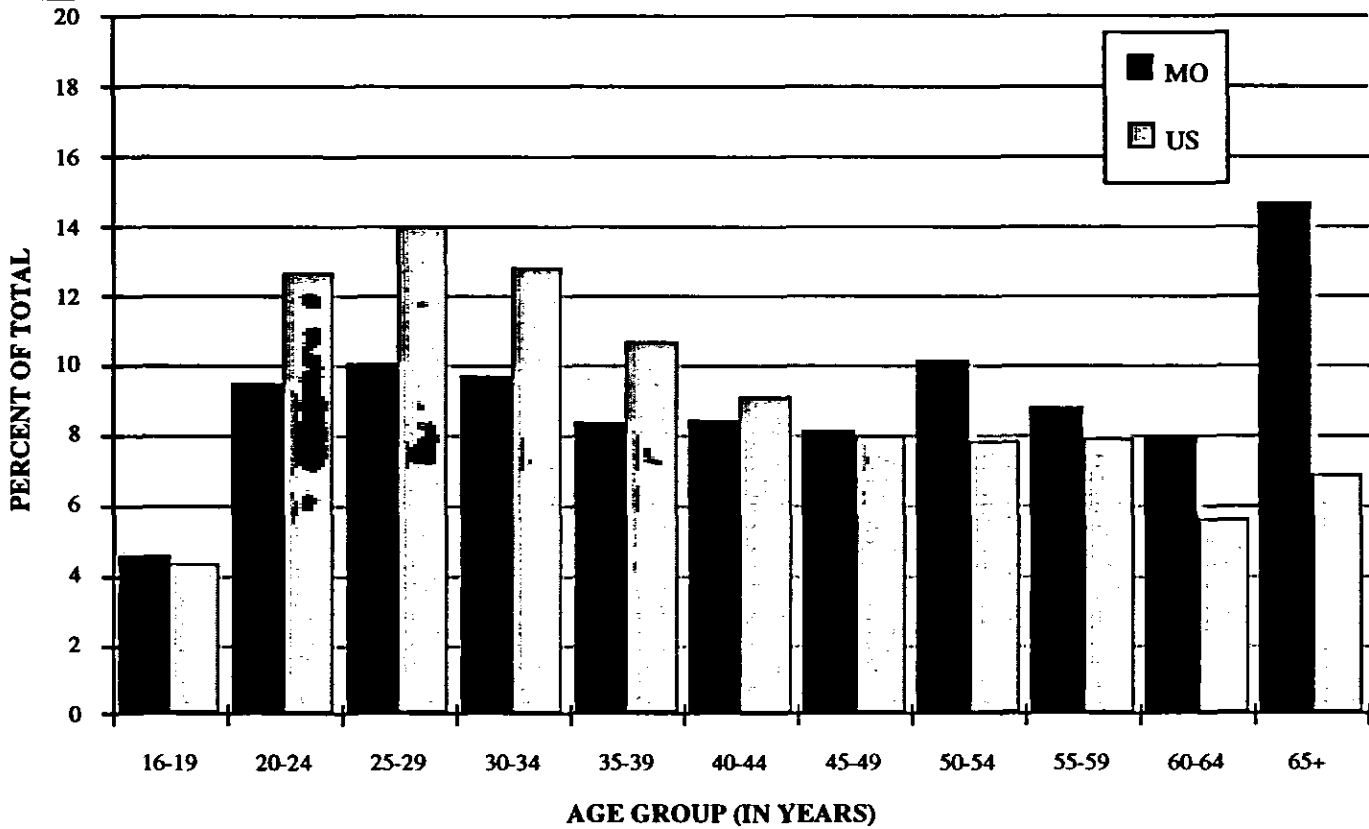


Figure MO-1. Traumatic Occupational Fatalities by Age Group, US and Missouri, 1980-1989.

Table MO-2. Traumatic Occupational Fatalities by State of Residence, Missouri, 1980-1989.

State	Number	Percent
Missouri	925	87.3
Illinois	48	4.5
Kansas	34	3.2
Arkansas	11	1.0
Texas	5	0.5
Iowa	4	0.4
Tennessee	4	0.4
Kentucky	3	0.3
Louisiana	3	0.3
Mississippi	3	0.3
Oklahoma	3	0.3
Other	16	1.5

farmers/foresters/fishers (20.5 deaths per 100,000 workers), transportation/material movers (13.9), and laborers (10.8) (Figure MO-4). Table MO-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Missouri decreased 2%, from 6.1 in 1980 to 6.0 in 1989. A high of 7.0 and a low of 4.0 deaths per 100,000 workers were reported in 1981 and 1987, respectively (Figure MO-5).

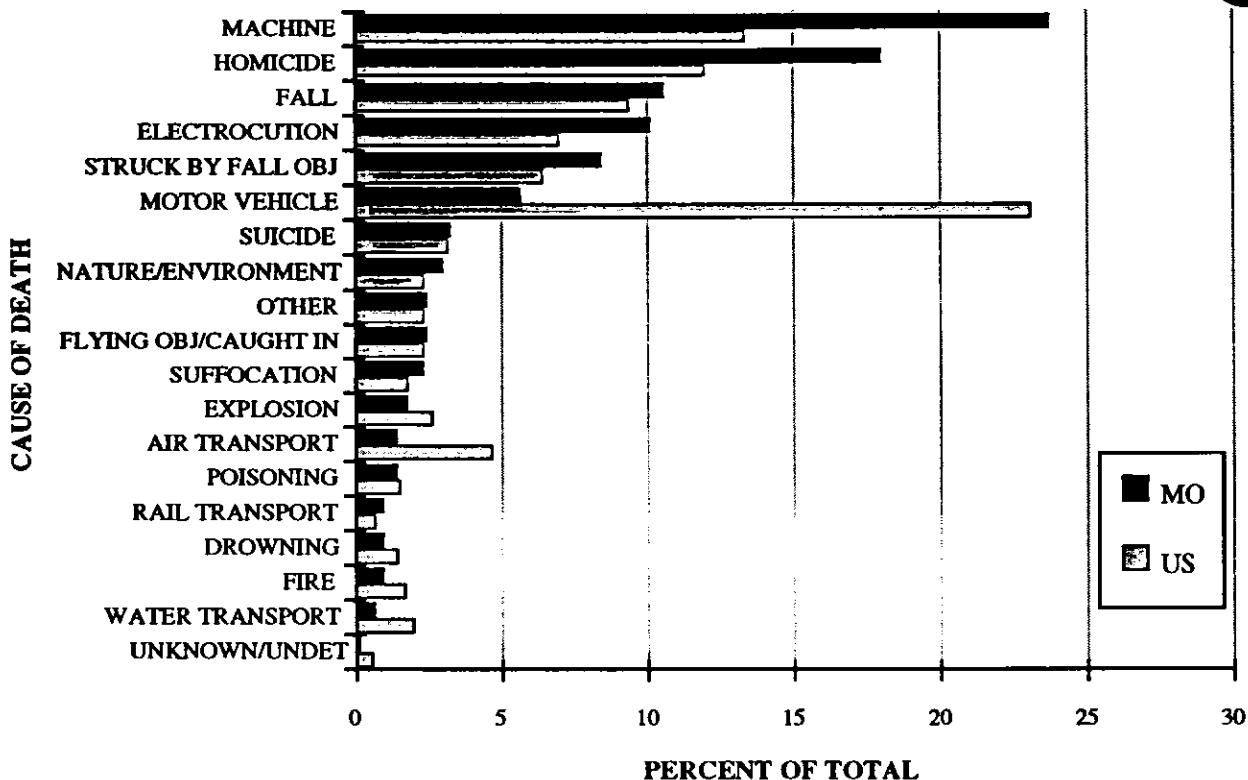


Figure MO-2. Traumatic Occupational Fatalities by Cause of Death, US and Missouri, 1980-1989.

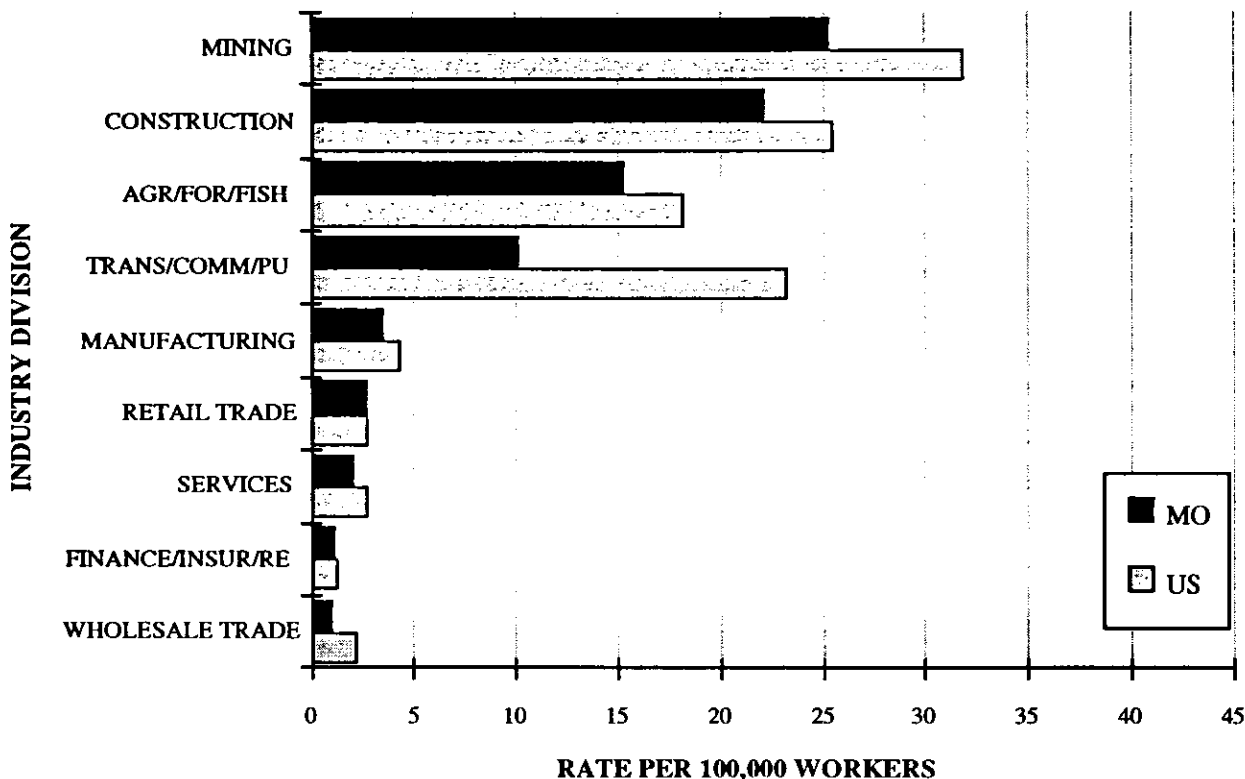


Figure MO-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Missouri, 1980-1989.

Table MO-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Missouri, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	4	3	--	--	--	--	--	--	17	25.4
CONSTRUCTION	23	16	15	20	23	22	20	13	23	22	197	22.2
AGR/FOR/FISH	23	30	28	16	19	18	24	16	19	22	215	15.3
TRANS/COMM/PU	7	14	12	11	5	8	12	17	13	33	132	10.2
MANUFACTURING	14	19	17	15	22	8	10	13	17	21	156	3.6
RETAIL TRADE	13	9	14	5	7	11	15	9	7	11	101	2.8
SERVICES	13	22	--	12	4	7	13	10	10	13	106	2.2
FINANCE/INSUR/RE	--	--	--	3	--	--	--	--	--	--	15	1.2
WHOLESALE TRADE	--	4	--	--	--	--	--	--	--	--	14	1.1
PUBLIC ADMIN	5	5	9	5	--	4	--	6	9	5	50	N/A
NOT CLASSIFIED	11	7	9	4	--	5	5	--	--	3	49	N/A
STATE	114	129	112	96	86	87	104	87	102	135	1052	5.3

NOTE: Dashes denote categories with fewer than three cases.

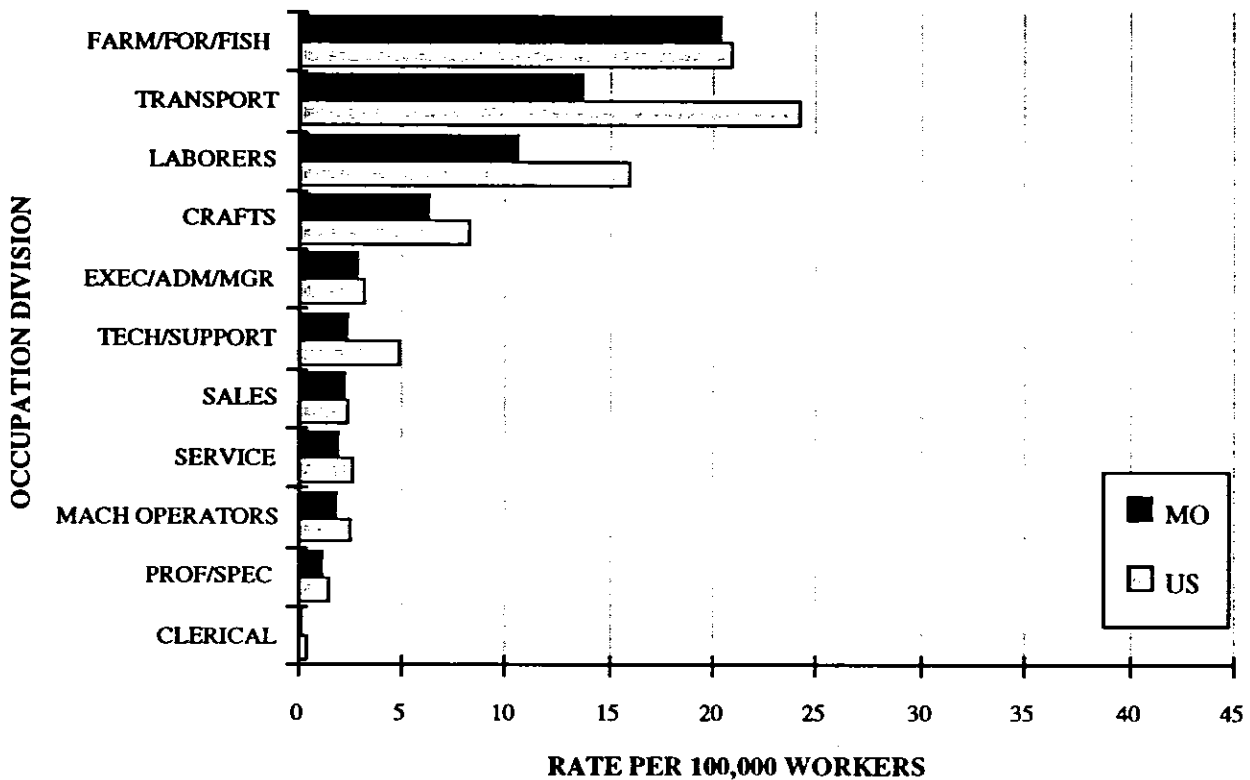


Figure MO-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Missouri, 1983-1989.

Table MO-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Missouri.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	223	20.5
TRANSPORT	129	13.9
LABORERS	137	10.8
CRAFTS	192	6.5
EXEC/ADM/MGR	87	3.1
TECH/SUPPORT	16	2.6
SALES	64	2.4
SERVICE	74	2.1
MACH OPERATORS	37	2.0
PROF/SPEC	35	1.3
CLERICAL	14	0.3
NOT CLASSIFIED	44	N/A

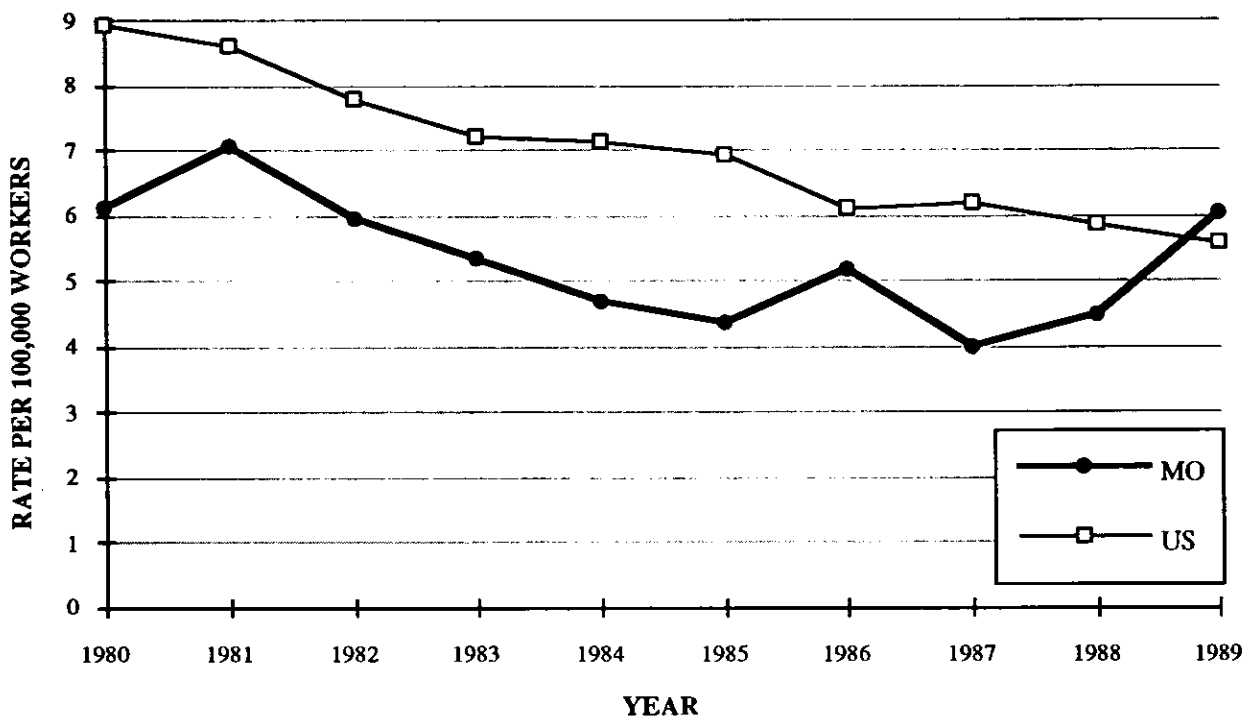


Figure MO-5. Rate of Traumatic Occupational Fatalities by Year, US and Missouri, 1980-1989.

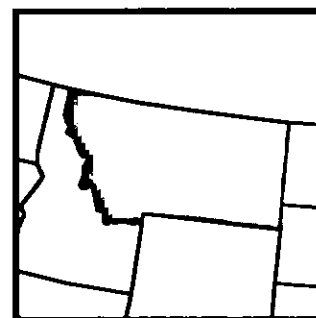
State of Montana

Average Annual Fatal Injuries: 53

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): 20.9

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (120)**
Rate: **Transportation/Communication/
Public Utilities (73.9)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (122)**
Rate: **Transportation/Material Movers (61.8)**

The State of Montana had 527 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 525 of these deaths. The average annual rate of fatalities per 100,000 workers was 20.9 for Montana compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 499.6 per 100,000 workers for Montana compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Montana and had a fatality rate of 23.6 per 100,000 workers compared to 1.8 for females. The fatality distribution by race/ethnicity for

the State of Montana shows that Whites accounted for 86% of the total fatalities, Hispanics for 9%, and Native Americans for 4% as shown in Table MT-1. As shown in Figure MT-1, workers aged 30 to 34 years old accounted for the largest number of fatalities (15%). Of all Montana occupational fatality victims, 83% were Montana residents (Table MT-2).

Figure MT-2 presents the distribution of fatalities by external cause of death for the State of Montana and for the U.S. The three leading causes of death among employees in Montana were motor vehicle incidents (38%), machine-related incidents (15%), and air transportation (8%).

Table MT-1. Traumatic Occupational Fatalities by Race/Ethnicity, Montana, 1980-1989.

Race/Ethnicity	Number	Percent
White	453	86.0
Hispanic	47	8.9
Native American	20	3.8
Black	4	0.8
Other	3	0.6

In Montana, the industry divisions in which the largest number of fatalities occurred were transportation/communication/public utilities (23%), agriculture/forestry/fishing (21%), manufacturing (13%), and construction (13%). The transportation/communication/public utilities industry had the highest fatality rate at 73.9 per 100,000 workers, followed by construction (65.2), and mining (57.1) (Figure MT-3). Table MT-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

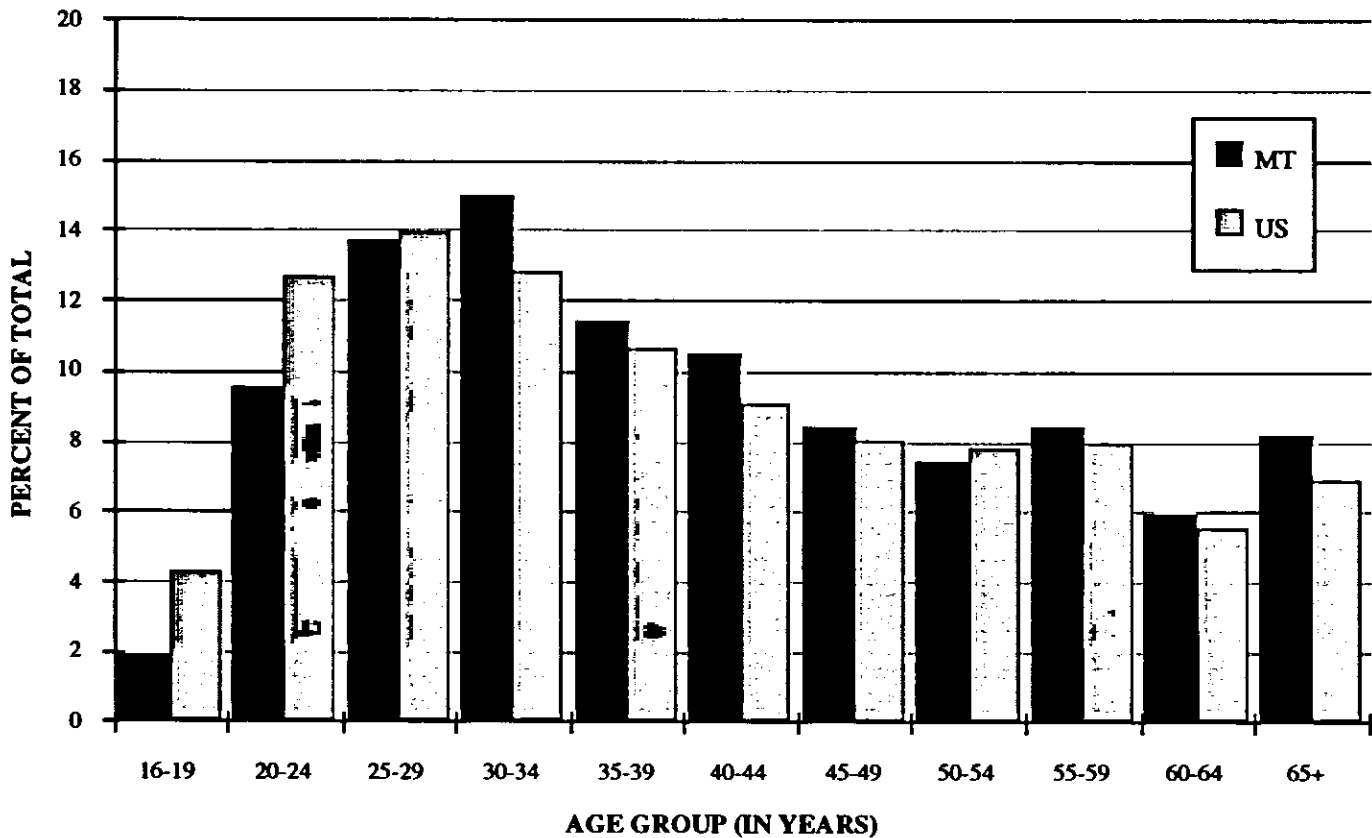


Figure MT-1. Traumatic Occupational Fatalities by Age Group, US and Montana, 1980-1989.

Table MT-2. Traumatic Occupational Fatalities by State of Residence, Montana, 1980-1989.

State	Number	Percent
Montana	437	82.9
Idaho	15	2.8
North Dakota	12	2.3
Washington	9	1.7
Minnesota	6	1.1
South Dakota	5	0.9
Wyoming	5	0.9
Colorado	4	0.8
Oregon	4	0.8
Utah	4	0.8
California	3	0.6
Iowa	3	0.6
Other	20	3.8

The occupation divisions in Montana with the largest number of fatalities were farmers/foresters/fishers (23%), transportation/material movers (23%), and precision production/craft/repair (13%). The occupations with the highest rates were transportation/material movers (61.8 deaths per 100,000 workers), farmers/foresters/fishers (32.4), and technicians/related support (30.3) (Figure MT-4). Table MT-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Montana decreased 36%, from 23.7 in 1980 to a low of 15.2 in 1989. A high of 25.4 deaths per 100,000 workers was reported in 1981 (Figure MT-5).

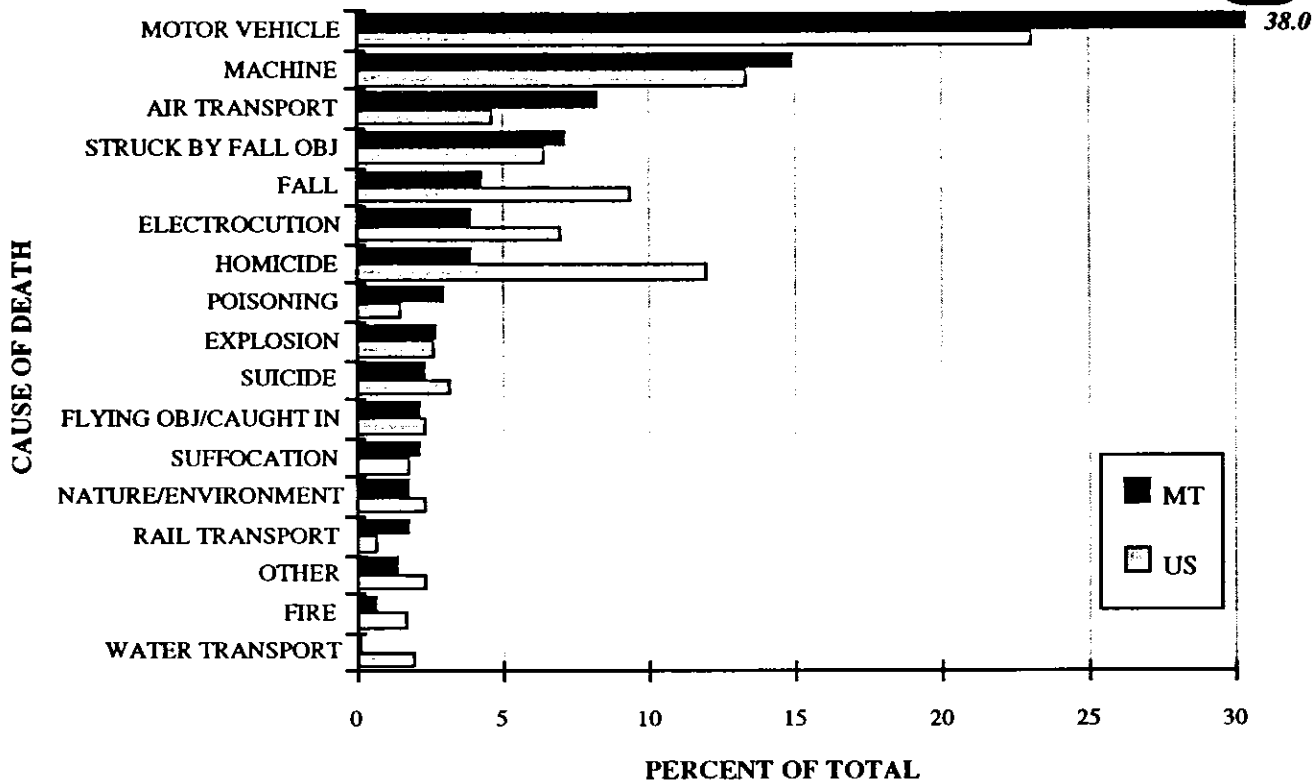


Figure MT-2. Traumatic Occupational Fatalities by Cause of Death, US and Montana, 1980-1989.

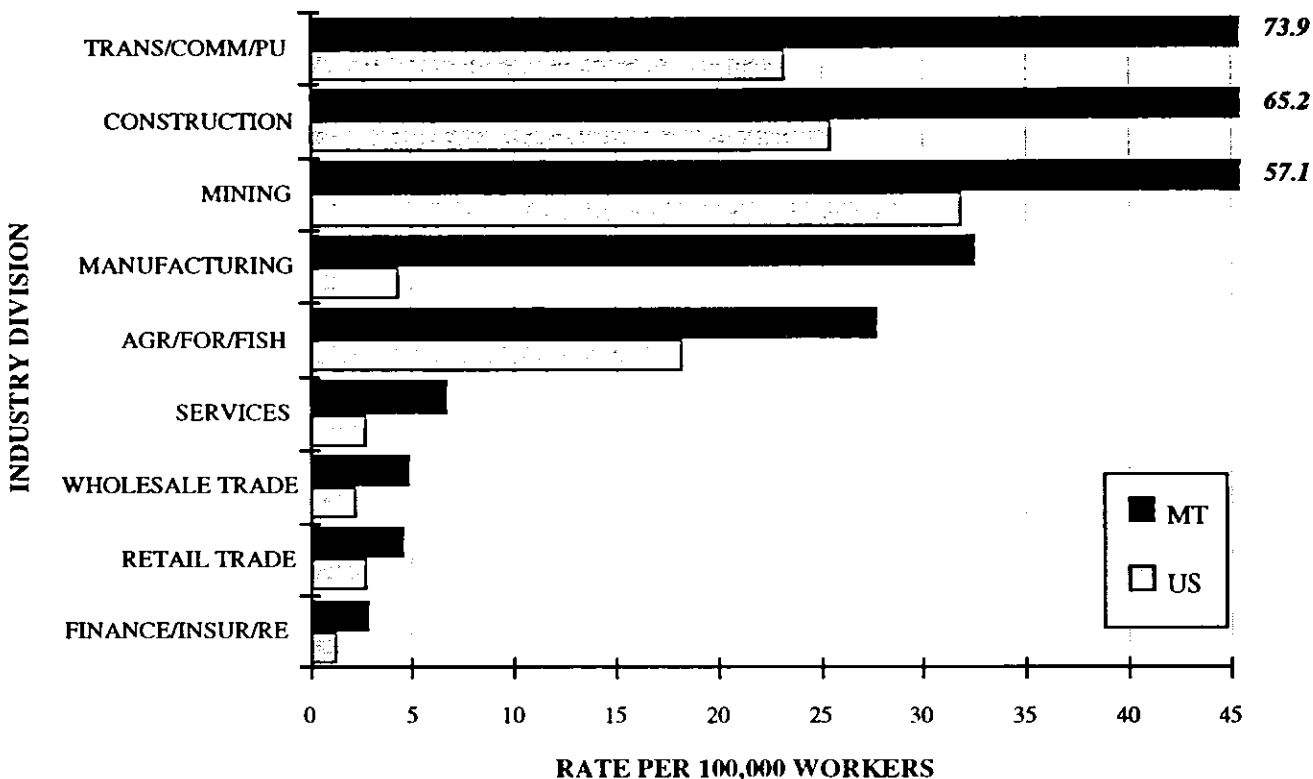


Figure MT-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Montana, 1980-1989.

Table MT-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Montana, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	22	10	15	11	14	9	15	6	11	7	120	73.9
CONSTRUCTION	7	12	7	3	8	--	10	3	10	5	67	65.2
MINING	--	6	4	6	7	8	--	5	3	--	42	57.1
MANUFACTURING	4	5	5	8	10	6	7	11	5	8	69	32.5
AGR/FOR/FISH	11	12	15	9	14	14	11	6	9	7	108	27.8
SERVICES	5	3	--	3	4	--	5	5	5	6	40	6.8
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	8	5.0
RETAIL TRADE	--	--	3	--	3	4	5	--	--	--	26	4.6
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	4	3.0
PUBLIC ADMIN	--	4	--	--	3	--	--	--	--	4	21	N/A
NOT CLASSIFIED	4	8	3	--	--	--	--	--	--	--	20	N/A
STATE	57	65	57	47	65	47	57	39	48	43	525	20.9

NOTE: Dashes denote categories with fewer than three cases.



Figure MT-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Montana, 1983-1989.

Table MT-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Montana.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	121	61.8
FARM/FOR/FISH	122	32.4
TECH/SUPPORT	29	30.3
LABORERS	44	25.3
CRAFTS	68	16.1
MACH OPERATORS	13	11.5
EXEC/ADM/MGR	36	7.1
PROF/SPEC	29	6.2
SALES	21	5.0
SERVICE	19	3.3
CLERICAL	--	N/A
NOT CLASSIFIED	21	N/A

NOTE: Dashes denote categories with fewer than three cases.

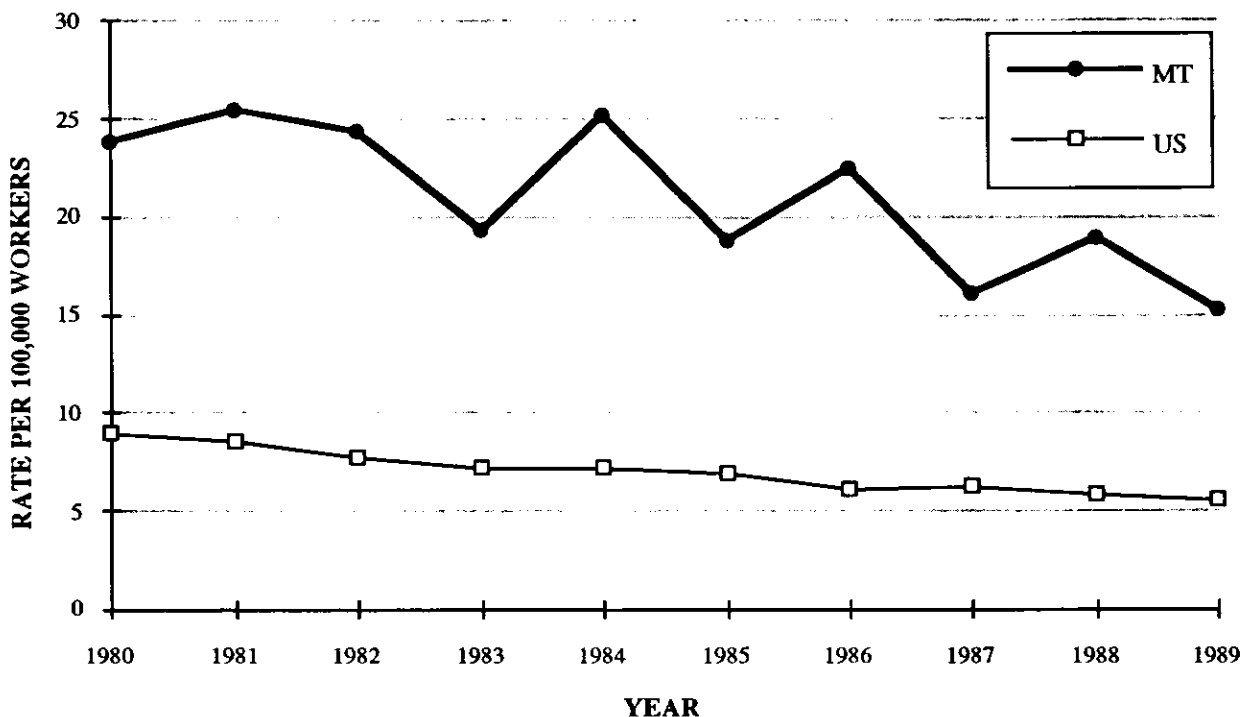


Figure MT-5. Rate of Traumatic Occupational Fatalities by Year, US and Montana, 1980-1989.

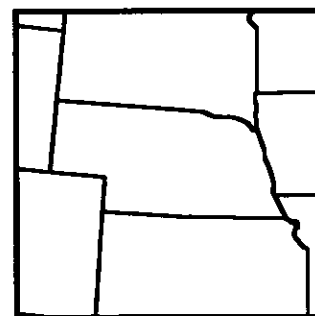
State of Nebraska

Average Annual Fatal Injuries: **65**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **10.9**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (254)**
Rate: **Transportation/Communication/
Public Utilities (36.5)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (230)**
Rate: **Transportation/Material Movers (30.5)**

The State of Nebraska had 654 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 653 of these deaths. The average annual rate of fatalities per 100,000 workers was 10.9 for Nebraska compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 244.7 per 100,000 workers for Nebraska compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Nebraska and had a fatality rate of 14.7 per 100,000 workers compared to 1.1 for fe-

males. The fatality distribution by race/ethnicity for the State of Nebraska shows that Whites accounted for 92% of the total fatalities and Hispanics for 7% as shown in Table NE-1. As shown in Figure NE-1, workers aged 65 years and older accounted for the largest number of fatalities (14%). Of all Nebraska occupational fatality victims, 86% were Nebraska residents (Table NE-2).

Figure NE-2 presents the distribution of fatalities by external cause of death for the State of Nebraska and for the U.S. The four leading causes of death among employees in Nebraska were motor vehicle incidents (28%), machine-related incidents (26%), electrocutions (8%), and falls (8%).

Table NE-1. Traumatic Occupational Fatalities by Race/Ethnicity, Nebraska, 1980-1989.

Race/Ethnicity	Number	Percent
White	600	91.7
Hispanic	43	6.6
Black	6	0.9
Other	5	0.8

In Nebraska, the industry divisions in which the largest number of fatalities occurred were agriculture/forestry/fishing (39%), transportation/communication/public utilities (17%), and construction (12%). The transportation/communication/public utilities industry had the highest fatality rate at 36.5 per 100,000 workers, followed by construction (31.7), mining (30.6), and agriculture/forestry/fishing (29.3) (Figure NE-3). Table NE-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

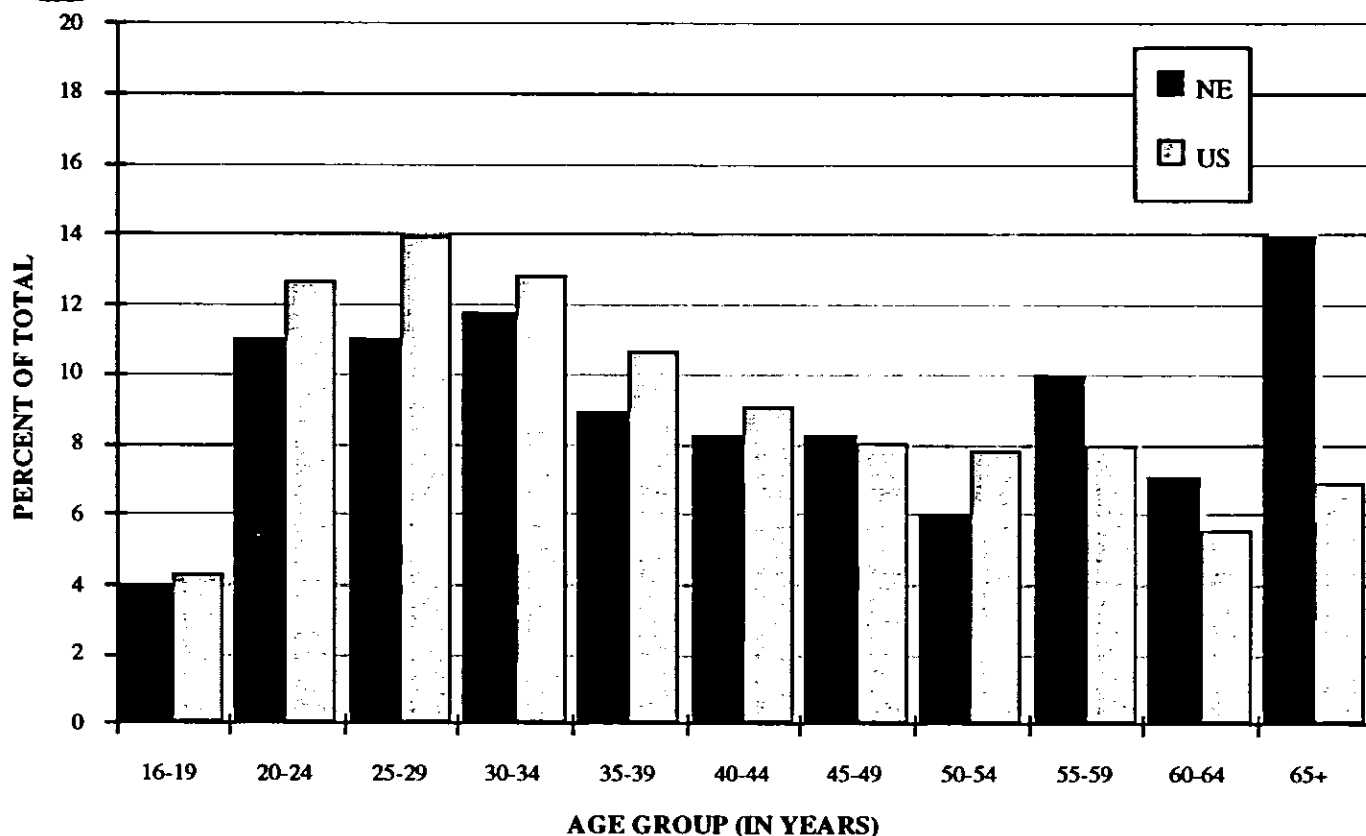


Figure NE-1. Traumatic Occupational Fatalities by Age Group, US and Nebraska, 1980-1989.

Table NE-2. Traumatic Occupational Fatalities by State of Residence, Nebraska, 1980-1989.

State	Number	Percent
Nebraska	564	86.2
Iowa	33	5.0
Kansas	7	1.1
South Dakota	5	0.8
Wyoming	5	0.8
Illinois	4	0.6
Oklahoma	4	0.6
Wisconsin	4	0.6
Colorado	3	0.5
Missouri	3	0.5
Other	22	3.4

The occupation divisions in Nebraska with the largest number of fatalities were farmers/foresters/fishers (35%), transportation/material movers (16%), and precision production/craft/repair (12%). The occupations with the highest rates were transportation/material movers (30.5 deaths per 100,000 workers), farmers/foresters/fishers (28.9), and laborers (15.6) (Figure NE-4). Table NE-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Nebraska decreased 49%, from a high of 15.6 in 1980 to a low of 8.0 in 1989 (Figure NE-5).

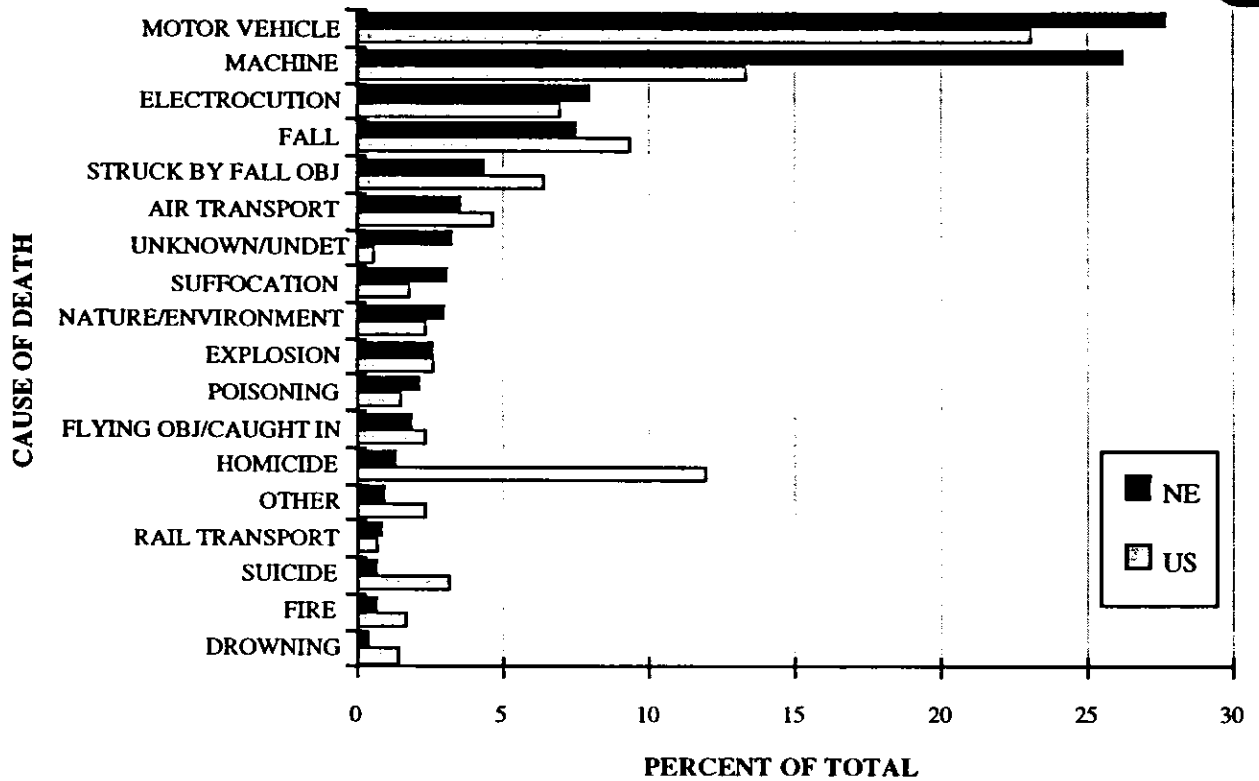


Figure NE-2. Traumatic Occupational Fatalities by Cause of Death, US and Nebraska, 1980-1989.

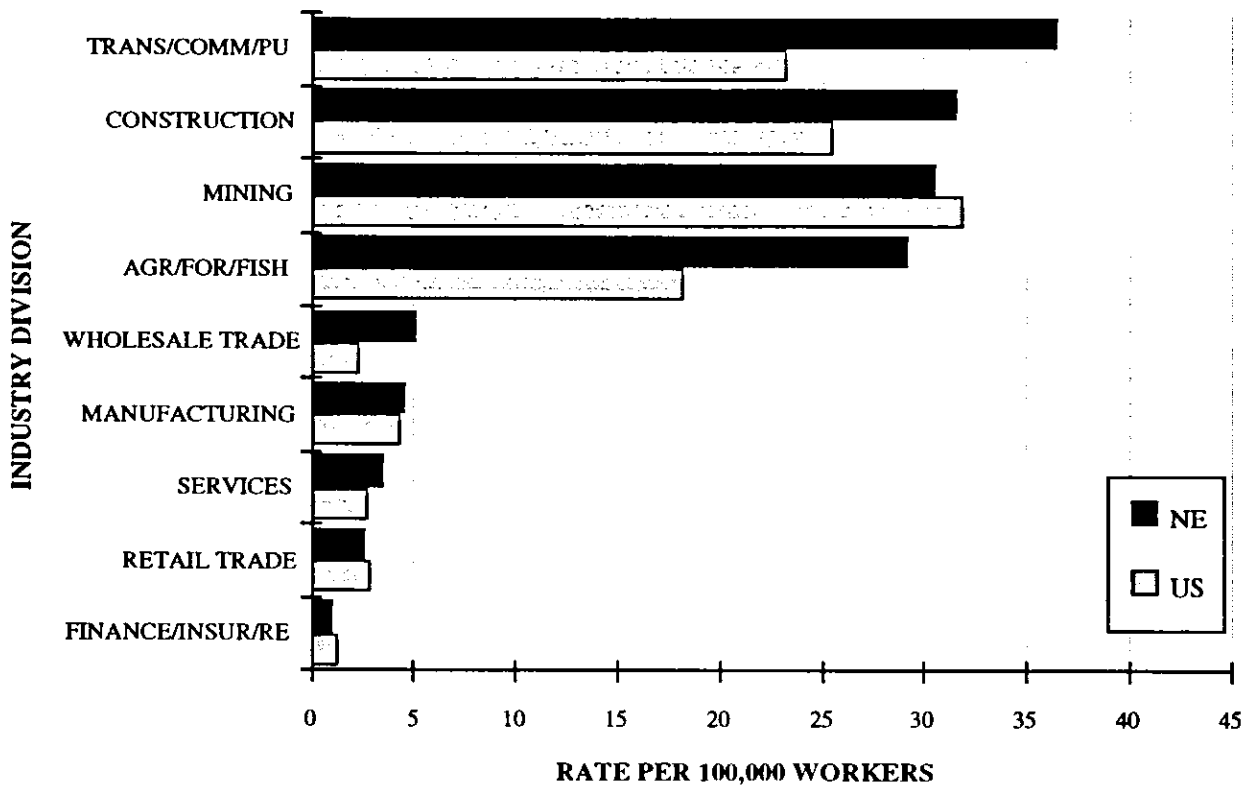


Figure NE-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Nebraska, 1980-1989.

Table NE-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Nebraska, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	14	12	10	8	14	13	12	9	11	10	113	36.5
CONSTRUCTION	13	7	7	10	10	5	--	9	10	8	81	31.7
MINING	--	--	--	--	--	--	--	--	--	--	6	30.6
AGR/FOR/FISH	33	26	25	29	29	29	20	25	22	16	254	29.3
WHOLESALE TRADE	5	--	--	--	--	5	--	--	--	4	23	5.2
MANUFACTURING	10	--	4	4	6	4	--	3	--	7	44	4.7
SERVICES	5	3	11	--	3	8	6	--	7	4	49	3.6
RETAIL TRADE	5	3	--	--	4	3	3	6	3	--	31	2.6
FINANCE/INSUR/RE	--	--	--	--	3	--	--	--	--	--	5	1.1
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	3	13	N/A
NOT CLASSIFIED	--	5	5	--	5	--	3	5	4	3	34	N/A
STATE	89	62	68	59	78	67	50	61	62	57	653	10.9

NOTE: Dashes denote categories with fewer than three cases.

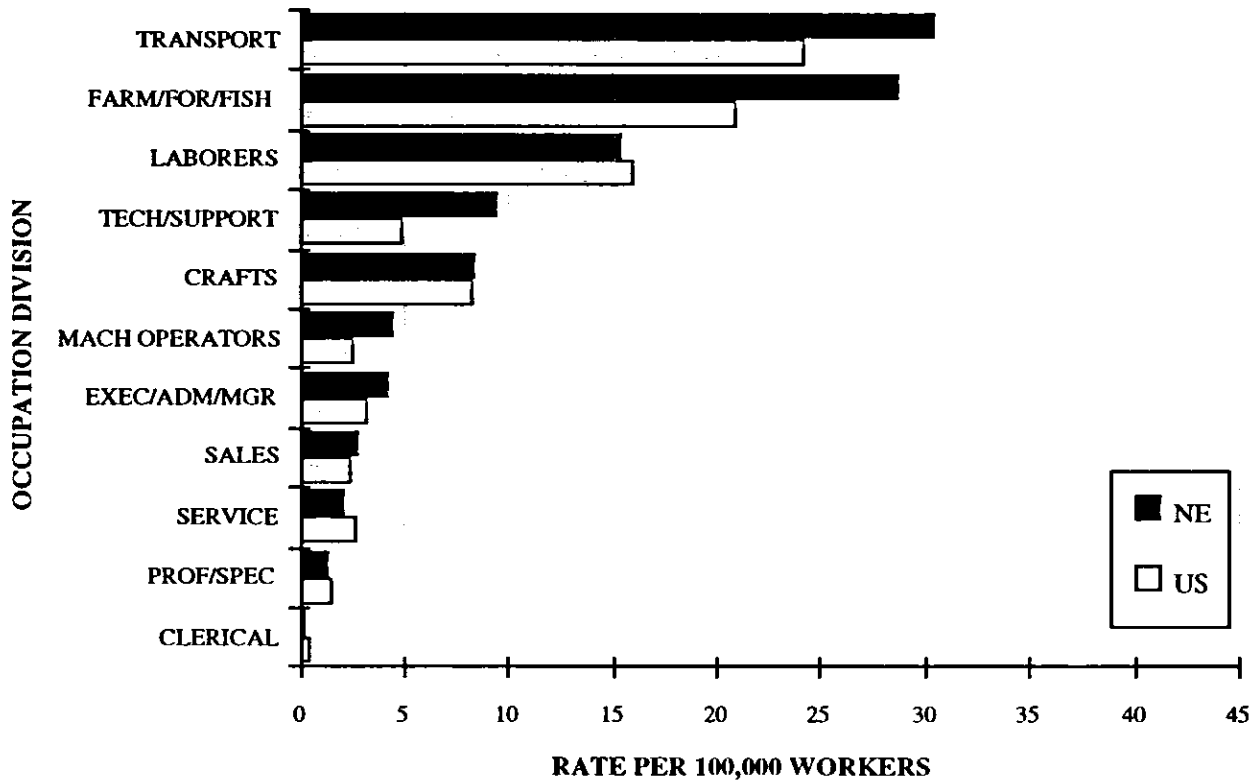


Figure NE-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Nebraska, 1983-1989.

Table NE-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Nebraska.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	103	30.5
FARM/FOR/FISH	230	28.9
LABORERS	65	15.6
TECH/SUPPORT	21	9.5
CRAFTS	77	8.5
MACH OPERATORS	17	4.6
EXEC/ADM/MGR	29	4.4
SALES	27	3.0
SERVICE	31	2.3
PROF/SPEC	14	1.5
CLERICAL	6	0.4
NOT CLASSIFIED	33	N/A

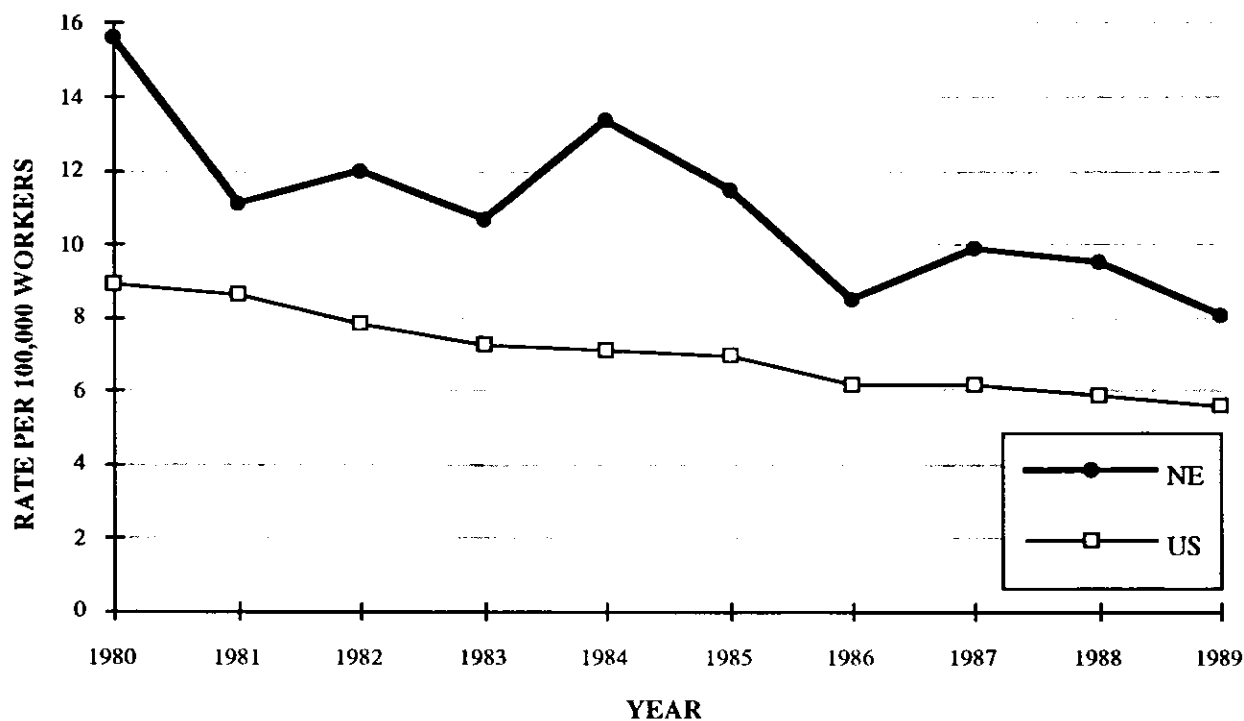


Figure NE-5. Rate of Traumatic Occupational Fatalities by Year, US and Nebraska, 1980-1989.

State of Nevada

Average Annual Fatal Injuries: **52**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **10.8**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (107)**

Rate: **Mining (45.8)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (114)**

Rate: **Transportation/Material Movers (55.2)**

The State of Nevada had 522 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 504 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 10.8 for Nevada compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 276.1 per 100,000 workers for Nevada compared to 175.6 for the United States.

Males accounted for 90% of the civilian occupational fatalities in Nevada and had a fatality rate of

17.3 per 100,000 workers compared to 2.3 for females. The fatality distribution by **race/ethnicity** for the State of Nevada shows that Whites accounted for 81% of the total fatalities, Hispanics for 8%, and Blacks for 7% as shown in **Table NV-1**. As shown in **Figure NV-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (19%). Of all Nevada occupational fatality victims, 64% of the victims were Nevada residents (**Table NV-2**).

Figure NV-2 presents the distribution of fatalities by external cause of death for the State of Nevada and for the U.S. The three leading causes of death among employees in Nevada were air transportation (24%), motor vehicle incidents (23%), and homicides (13%).

Table NV-1. Traumatic Occupational Fatalities by Race/Ethnicity, Nevada, 1980-1989.

Race/Ethnicity	Number	Percent
White	424	81.2
Hispanic	40	7.7
Black	35	6.7
Asian	22	4.2
Other	1	0.2

In Nevada, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (21%), services (18%), and public administration (16%). The mining industry had the highest fatality rate at 45.8 per 100,000 workers, followed by transportation/communication/public utilities (45.1), and agriculture/forestry/fishing (37.2) (**Figure NV-3**). **Table NV-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

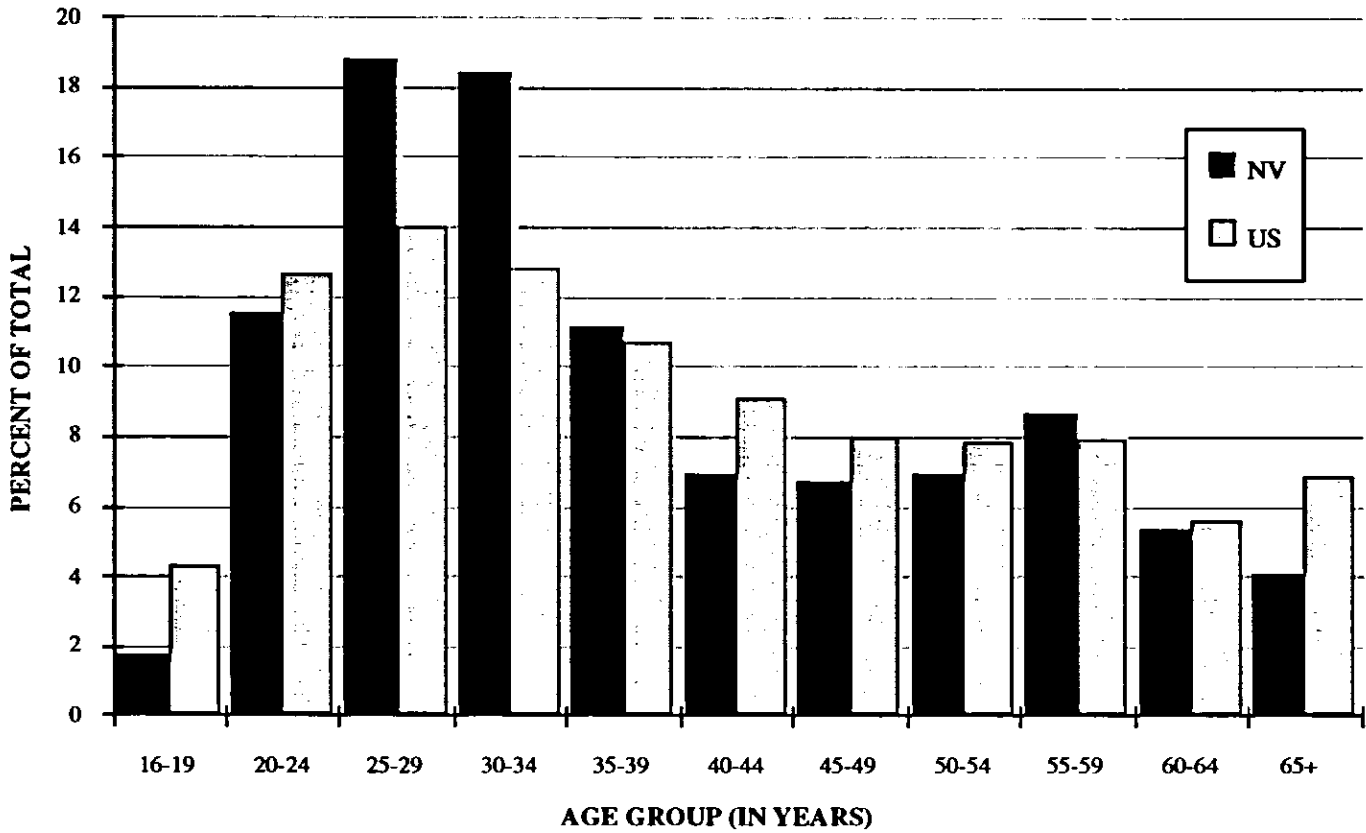


Figure NV-1. Traumatic Occupational Fatalities by Age Group, US and Nevada, 1980-1989.

Table NV-2. Traumatic Occupational Fatalities by State of Residence, Nevada, 1980-1989.

State	Number	Percent
Nevada	335	64.2
California	55	10.5
Texas	16	3.1
Arizona	15	2.9
Utah	13	2.5
Florida	8	1.5
Idaho	7	1.3
Iowa	6	1.1
North Carolina	6	1.1
Colorado	5	1.0
Oregon	5	1.0
Tennessee	5	1.0
Other	46	8.8

The occupation divisions in Nevada with the largest number of fatalities were transportation/material movers (23%), precision production/craft/repair (14%), and technicians/related support (12%). The occupations with the highest rates were transportation/material movers (55.2 deaths per 100,000 workers), technicians/related support (33.5), and farmers/foresters/fishers (26.7) (Figure NV-4). Table NV-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Nevada decreased 58%, from 14.0 in 1980 to a low of 5.9 in 1989. A high of 16.0 deaths per 100,000 workers was reported in 1981 (Figure NV-5).

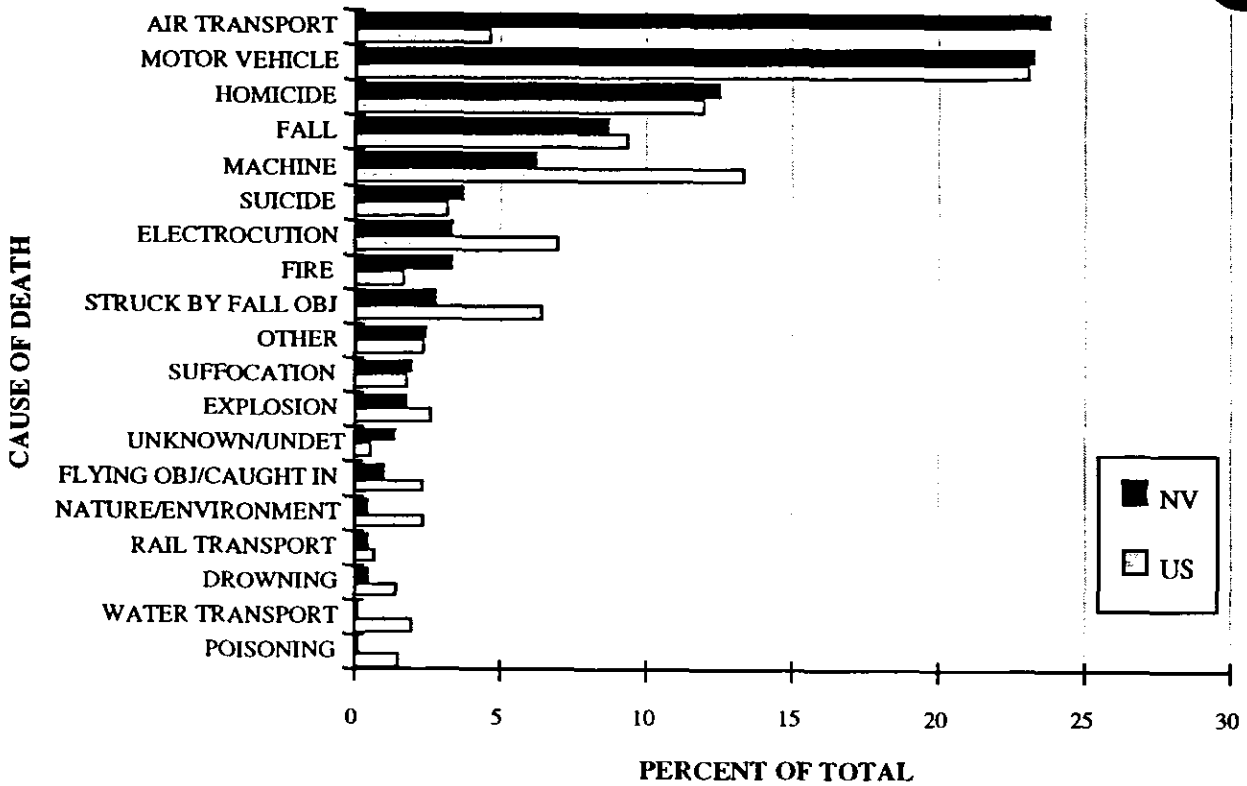


Figure NV-2. Traumatic Occupational Fatalities by Cause of Death, US and Nevada, 1980-1989.

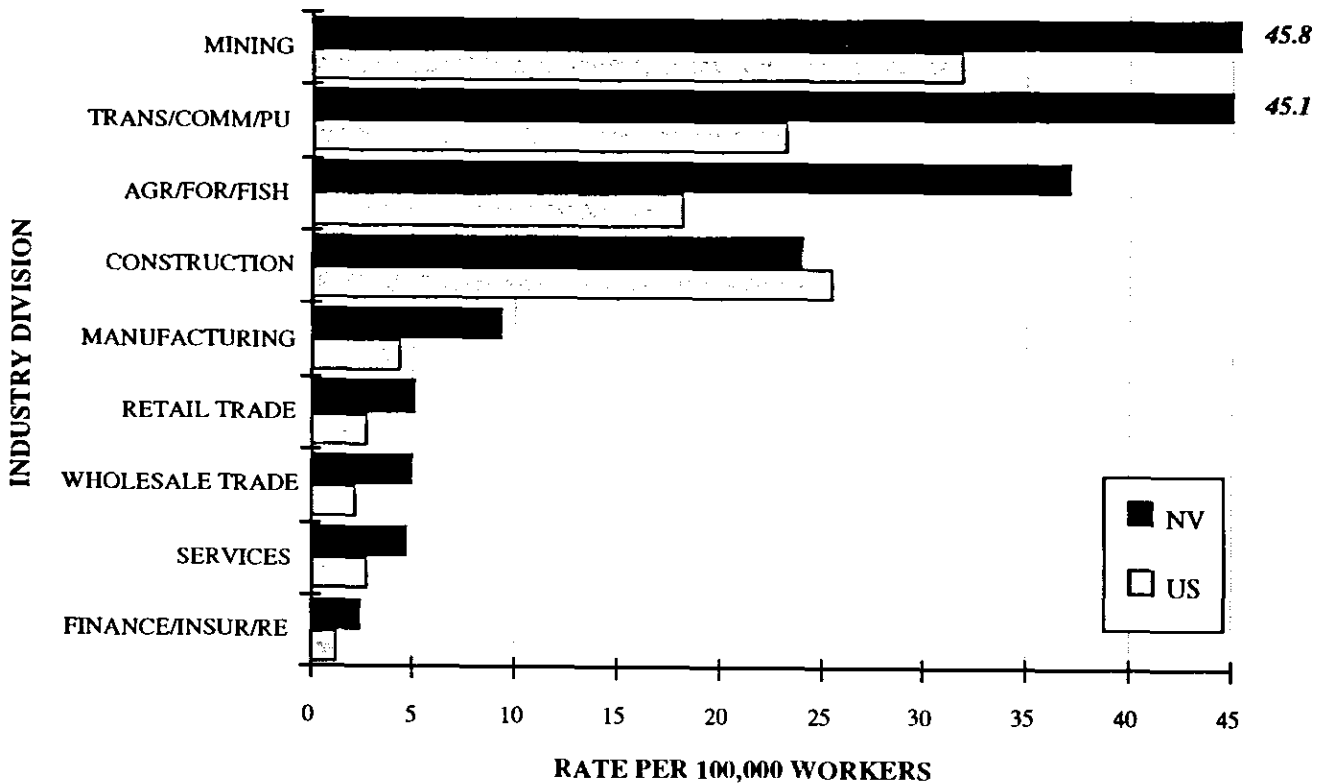


Figure NV-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Nevada, 1980-1989.

Table NV-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Nevada, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	6	3	3	3	--	3	--	3	3	29	45.8
TRANS/COMM/PU	11	14	8	10	7	21	11	12	8	5	107	45.1
AGR/FOR/FISH	--	--	5	--	3	--	3	4	4	--	27	37.2
CONSTRUCTION	5	6	5	7	9	3	15	5	9	8	72	24.1
MANUFACTURING	3	--	3	--	4	--	--	3	3	--	21	9.5
RETAIL TRADE	--	5	4	--	6	3	--	5	5	6	39	5.2
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	8	5.0
SERVICES	16	12	10	12	8	7	--	7	14	5	93	4.9
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	5	2.6
PUBLIC ADMIN	3	19	9	9	10	--	10	4	7	6	79	N/A
NOT CLASSIFIED	4	6	--	--	3	3	--	--	--	--	24	N/A
STATE	51	74	48	49	55	45	47	44	55	36	504	10.8

NOTE: Dashes denote categories with fewer than three cases.



Figure NV-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Nevada, 1983-1989.

Table NV-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Nevada.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	114	55.2
TECH/SUPPORT	60	33.5
FARM/FOR/FISH	21	26.7
LABORERS	41	23.8
CRAFTS	72	14.1
EXEC/ADM/MGR	45	7.4
PROF/SPEC	24	4.1
SERVICE	54	3.7
MACH OPERATORS	6	3.1
SALES	21	2.9
CLERICAL	3	N/A
NOT CLASSIFIED	43	N/A

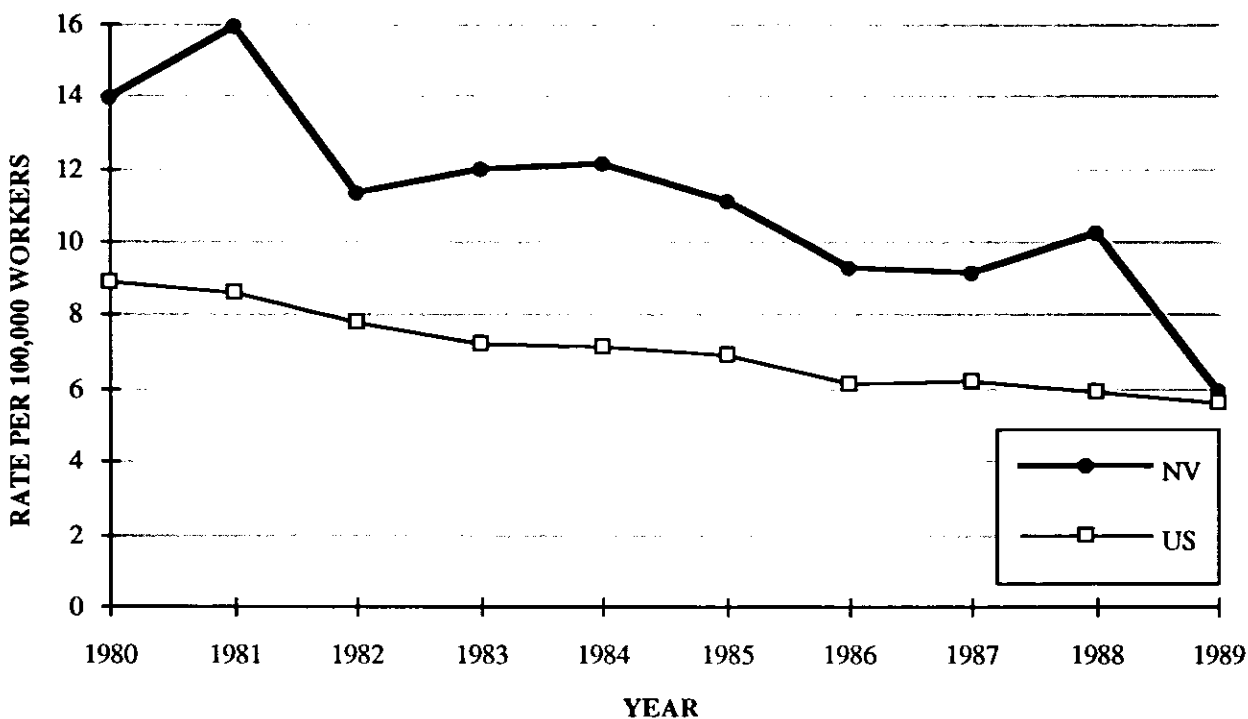


Figure NV-5. Rate of Traumatic Occupational Fatalities by Year, US and Nevada, 1980-1989.

State of New Hampshire

Average Annual Fatal Injuries: **18**

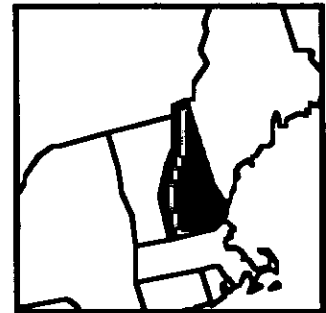
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **4.4**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (42)**
Rate: **Mining (94.9)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (42)**
Rate: **Farmers/Foresters/Fishers (29.1)**



The State of New Hampshire had 182 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 181 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 4.4 for New Hampshire compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 115.7 per 100,000 workers for New Hampshire compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in New Hampshire and had a fatality rate of 6.1 per 100,000 workers compared to 0.4 for females. The fatality distribution by **race/ethnicity** for the State of New Hampshire shows that Whites accounted for 98% of the total fatalities as shown in **Table NH-1**. As shown in **Figure NH-1**, workers

Table NH-1. Traumatic Occupational Fatalities by Race/Ethnicity, New Hampshire, 1980-1989.

Race/Ethnicity	Number	Percent
White	179	98.4
Other	3	1.6

aged 25 to 29 years old accounted for the largest number of fatalities (19%). Of all New Hampshire occupational fatality victims, 74% were New Hampshire residents (**Table NH-2**).

Figure NH-2 presents the distribution of fatalities by external cause of death for the State of New Hampshire and for the U.S. The three leading causes of death among employees in New Hampshire were motor vehicle incidents (23%), machine-related incidents (15%), and falls (15%).

In New Hampshire, the **industry divisions** in which the largest number of fatalities occurred were construction (23%), manufacturing (17%), and transportation/communication/public utilities (15%). The mining industry had the highest fatality rate at 94.9 per 100,000 workers, followed by agriculture/forestry/fishing (19.8), and construction (17.0) (**Figure NH-3**). **Table NH-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in New Hampshire with the largest number of fatalities were precision production/craft/repair (23%), transportation/material movers (17%), and farmers/foresters/fishers (12%).

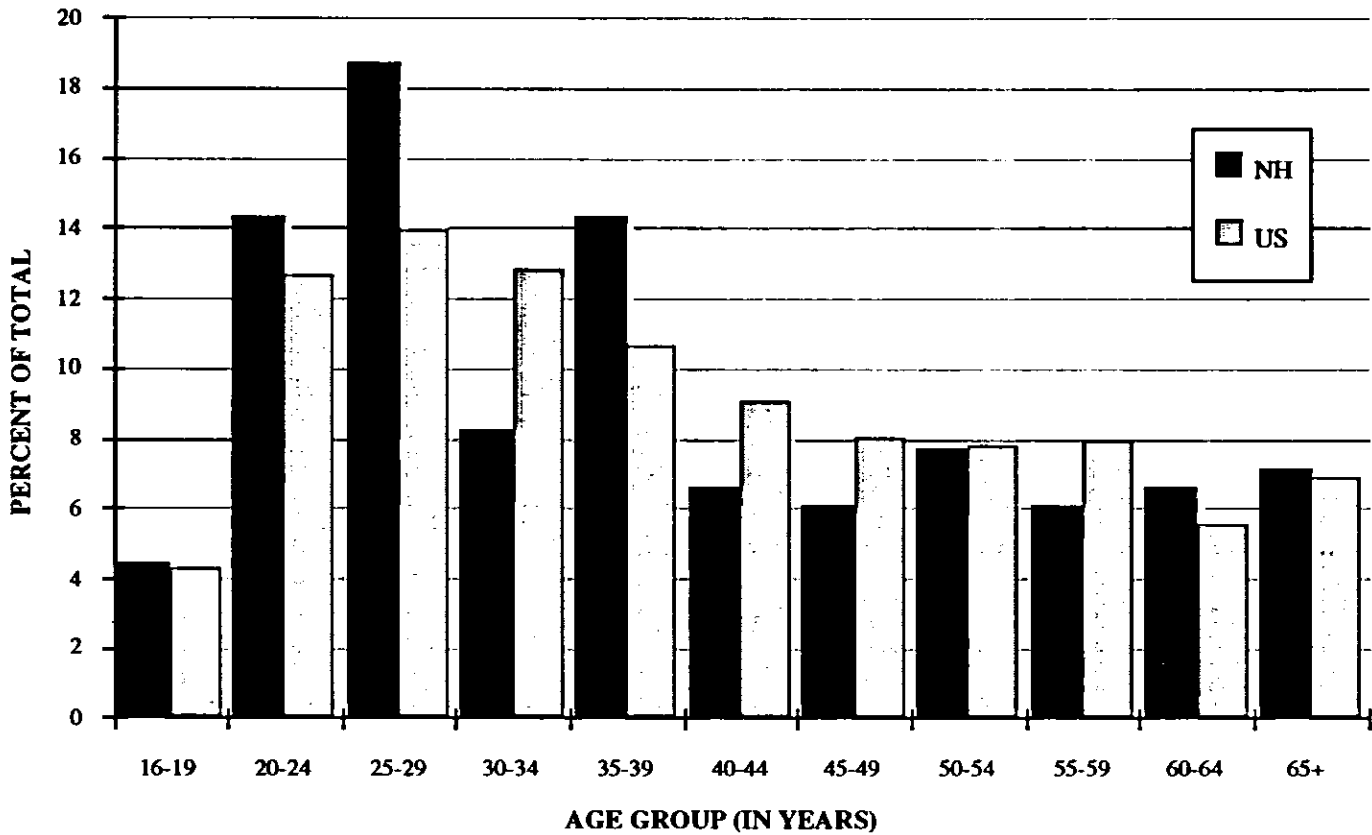


Figure NH-1. Traumatic Occupational Fatalities by Age Group, US and New Hampshire, 1980-1989.

Table NH-2. Traumatic Occupational Fatalities by State of Residence, New Hampshire, 1980-1989.

State	Number	Percent
New Hampshire	135	74.2
Massachusetts	18	9.9
Vermont	15	8.2
Maine	5	2.7
Other	9	4.9

The occupations with the highest rates were farmers/foresters/fishers (29.1 deaths per 100,000 workers), transportation/material movers (16.4), and laborers (6.1) (Figure NH-4). Table NH-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in New Hampshire decreased 49%, from 7.1 in 1980 to 3.6 in 1989. A high of 7.4 and a low of 2.9 deaths per 100,000 workers were reported in 1981 and 1986, respectively (Figure NH-5).

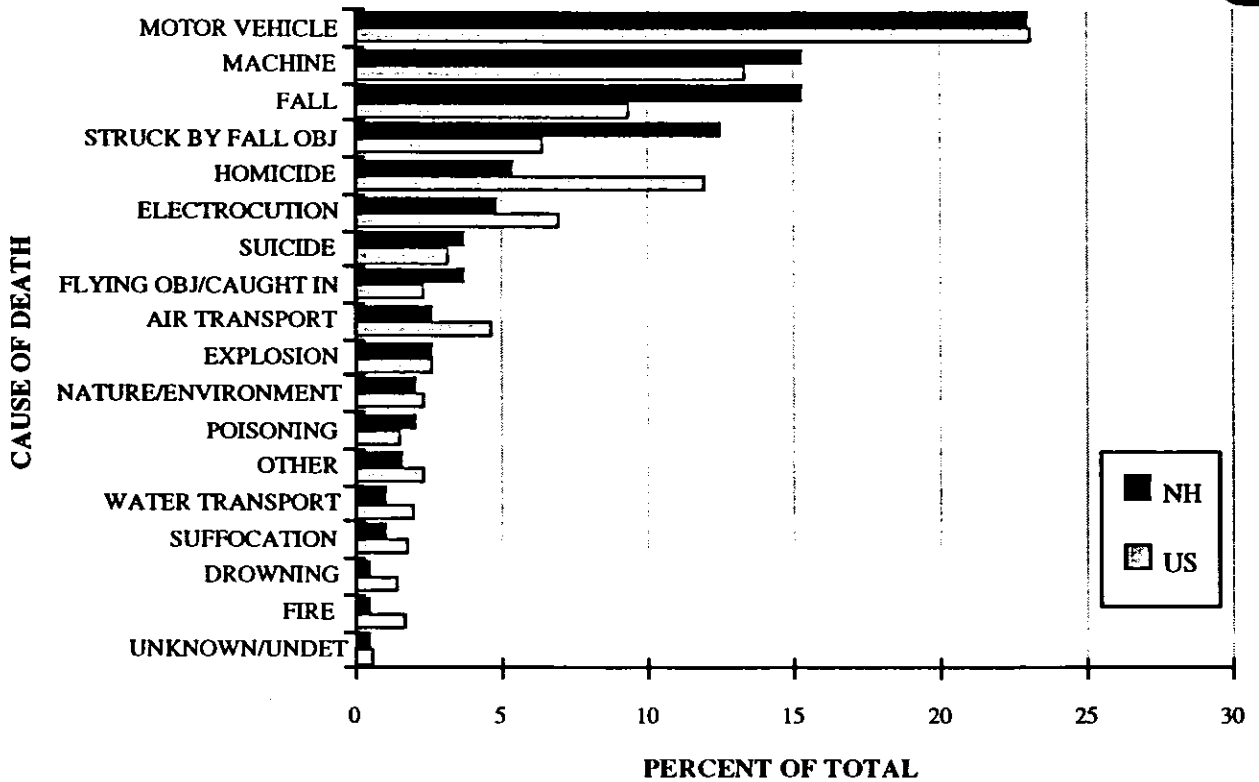


Figure NH-2. Traumatic Occupational Fatalities by Cause of Death, US and New Hampshire, 1980-1989.

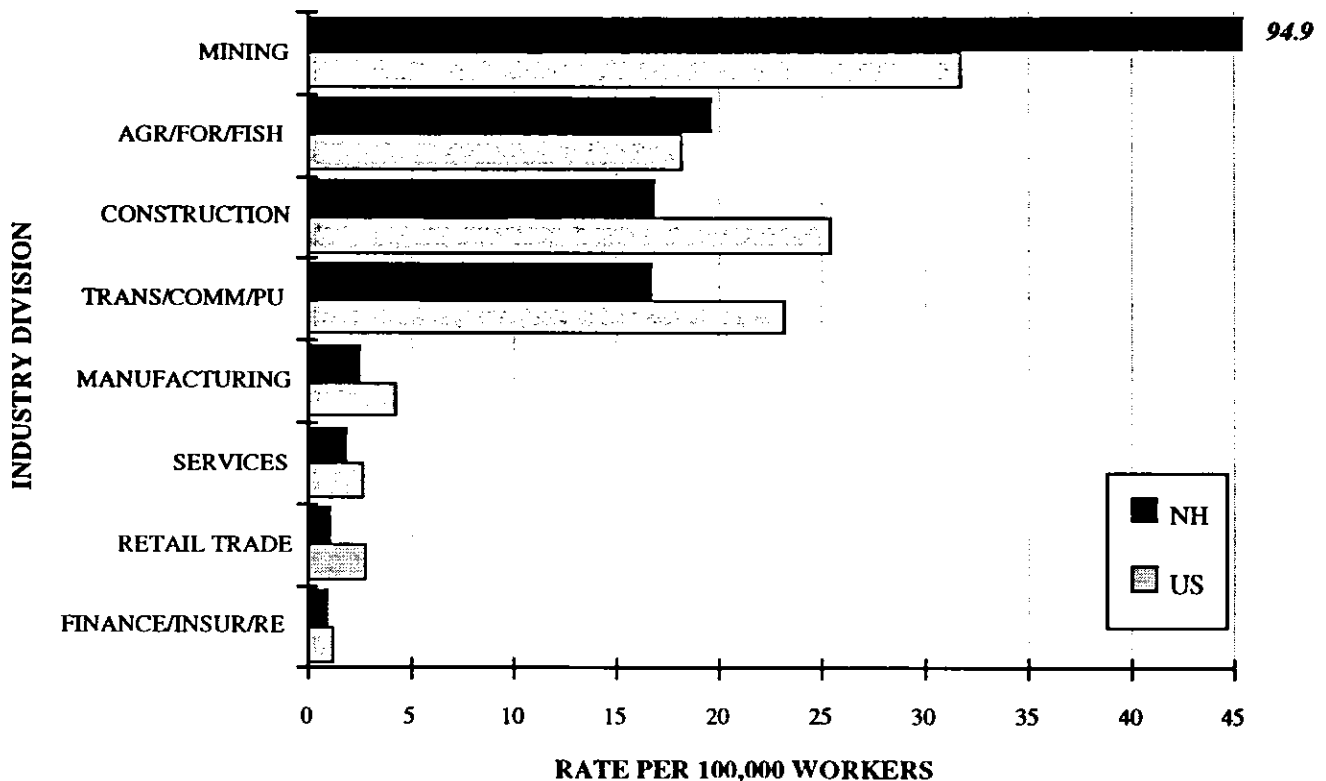


Figure NH-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and New Hampshire, 1980-1989.

Table NH-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, New Hampshire, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	--	--	--	--	--	--	3	94.9
AGR/FOR/FISH	--	--	--	3	--	--	3	--	--	--	15	19.8
CONSTRUCTION	4	8	4	4	3	3	4	3	6	3	42	17.0
TRANS/COMM/PU	5	4	--	3	3	3	--	--	3	4	28	16.9
MANUFACTURING	5	4	4	3	--	--	5	3	--	--	30	2.7
SERVICES	--	--	6	--	--	3	--	--	--	--	18	2.0
RETAIL TRADE	3	--	--	--	--	--	--	--	--	--	11	1.3
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	3	1.2
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	4	10	N/A
NOT CLASSIFIED	--	4	--	3	--	3	--	--	--	4	19	N/A
STATE	23	26	17	17	12	17	12	17	19	21	181	4.4

NOTE: Dashes denote categories with fewer than three cases.

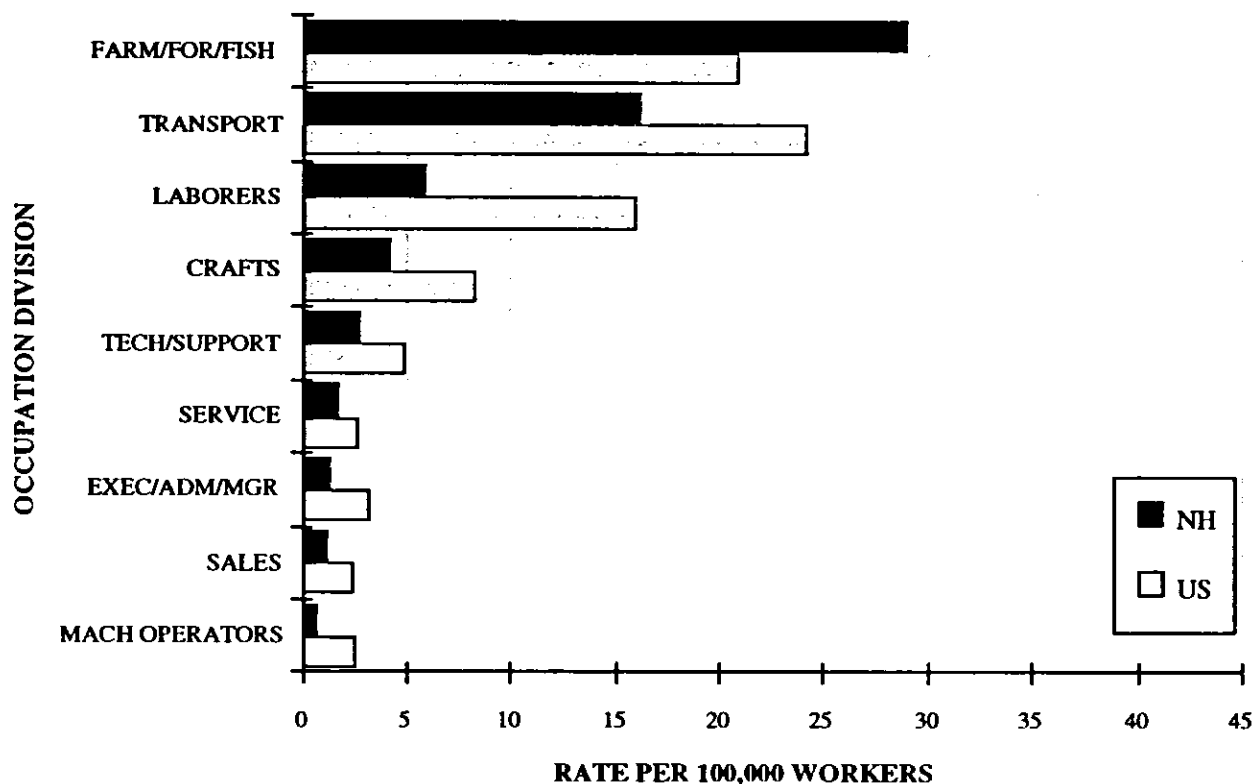


Figure NH-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and New Hampshire, 1983-1989.

Table NH-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, New Hampshire.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	22	29.1
TRANSPORT	31	16.4
LABORERS	11	6.1
CRAFTS	42	4.3
TECH/SUPPORT	6	2.9
SERVICE	14	1.9
EXEC/ADM/MGR	15	1.5
SALES	11	1.3
MACH OPERATORS	6	0.8
PROF/SPEC	7	N/A
CLERICAL	3	N/A
NOT CLASSIFIED	13	N/A

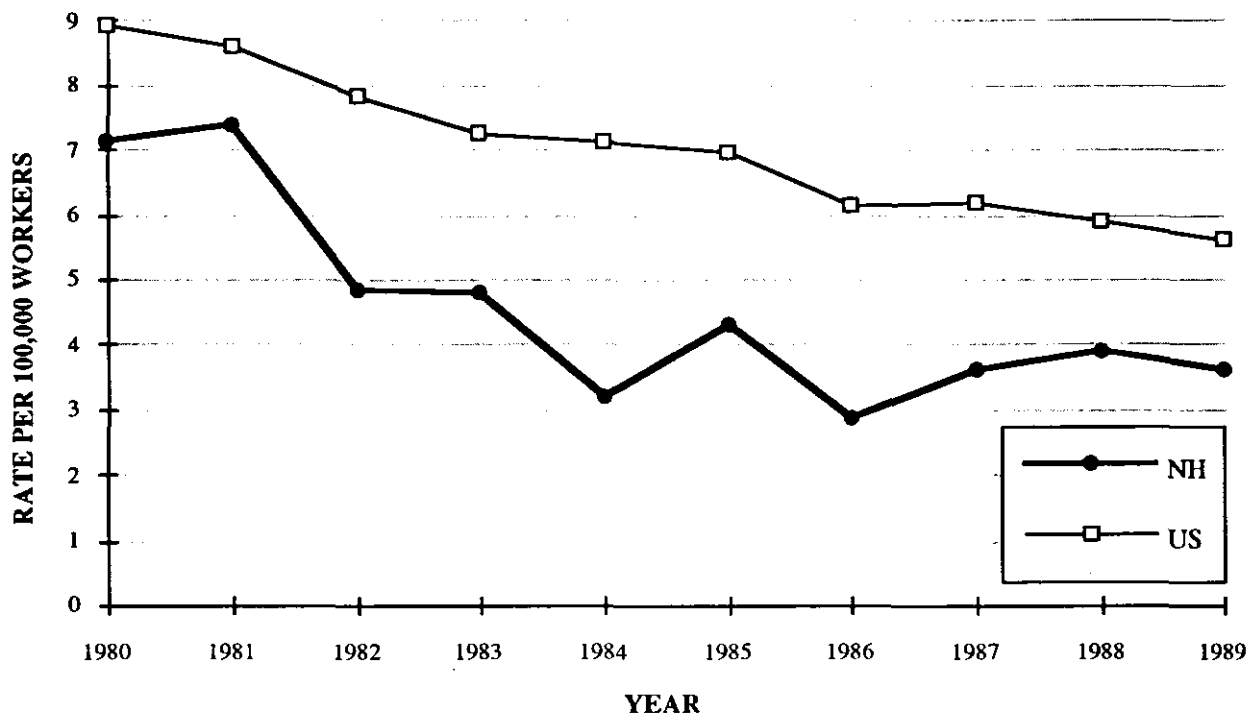


Figure NH-5. Rate of Traumatic Occupational Fatalities by Year, US and New Hampshire, 1980-1989.

State of New Jersey

Average Annual Fatal Injuries: **102**

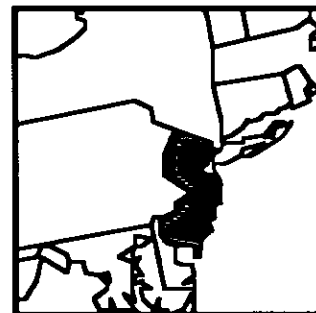
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **3.3**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (232)**
Rate: **Construction (17.5)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (226)**
Rate: **Laborers (12.0)**



The State of New Jersey had 1,024 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,009 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 3.3 for New Jersey compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 77.6 for New Jersey compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in New Jersey and had a fatality rate

of 4.8 per 100,000 workers compared to 0.3 for females. The fatality distribution by **race/ethnicity** for the State of New Jersey shows that Whites accounted for 70% of the total fatalities, Blacks for 16%, and Hispanics for 12% as shown in **Table NJ-1**. As shown in **Figure NJ-1**, workers aged 30 to 34 and 35 to 39 years old each accounted for 12% of the fatalities. Of all New Jersey occupational fatality victims, 82% were New Jersey residents (**Table NJ-2**).

Figure NJ-2 presents the distribution of fatalities by external cause of death for the State of New Jersey and for the U.S. The three leading causes of death among employees in New Jersey were motor vehicle incidents (18%), homicides (16%), and falls (15%).

Table NJ-1. Traumatic Occupational Fatalities by Race/Ethnicity, New Jersey, 1980-1989.

Race/Ethnicity	Number	Percent
White	712	69.5
Black	167	16.3
Hispanic	119	11.6
Asian	14	1.4
Other	12	1.2

In New Jersey, the **industry divisions** in which the largest number of fatalities occurred were construction (23%) and transportation/communication/public utilities (20%). The construction industry had the highest fatality rate at 17.5 per 100,000 workers, followed by mining (13.9), and agriculture/forestry/fishing (11.9) (**Figure NJ-3**). **Table NJ-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

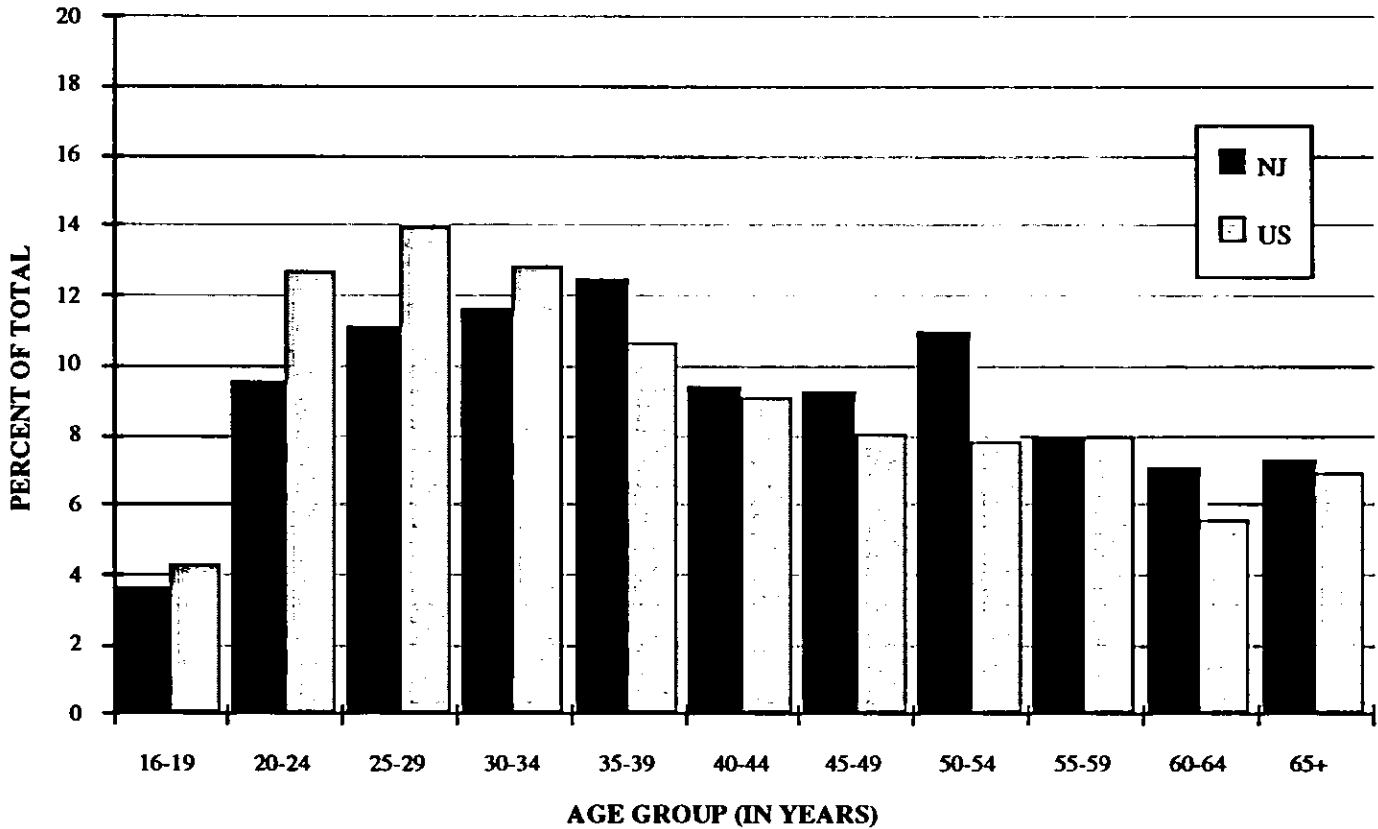


Figure NJ-1. Traumatic Occupational Fatalities by Age Group, US and New Jersey, 1980-1989.

Table NJ-2. Traumatic Occupational Fatalities by State of Residence, New Jersey, 1980-1989.

State	Number	Percent
New Jersey	844	82.4
Pennsylvania	67	6.5
New York	48	4.7
North Carolina	7	0.7
Delaware	6	0.6
Maryland	6	0.6
Connecticut	4	0.4
Georgia	3	0.3
Illinois	3	0.3
Texas	3	0.3
Virginia	3	0.3
Other	30	2.9

The occupation divisions in New Jersey with the largest number of fatalities were precision production/craft/repair (22%), transportation/material movers (15%), and laborers (14%). The occupations with the highest rates were laborers (12.0 deaths per 100,000 workers), farmers/foresters/fishers (11.8), and transportation/material movers (10.7) (Figure NJ-4). Table NJ-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in New Jersey increased 12%, from 2.5 in 1980 to 2.8 in 1989. A high of 4.9 and low of 2.3 deaths per 100,000 workers were reported in 1981 and 1988, respectively (Figure NJ-5).

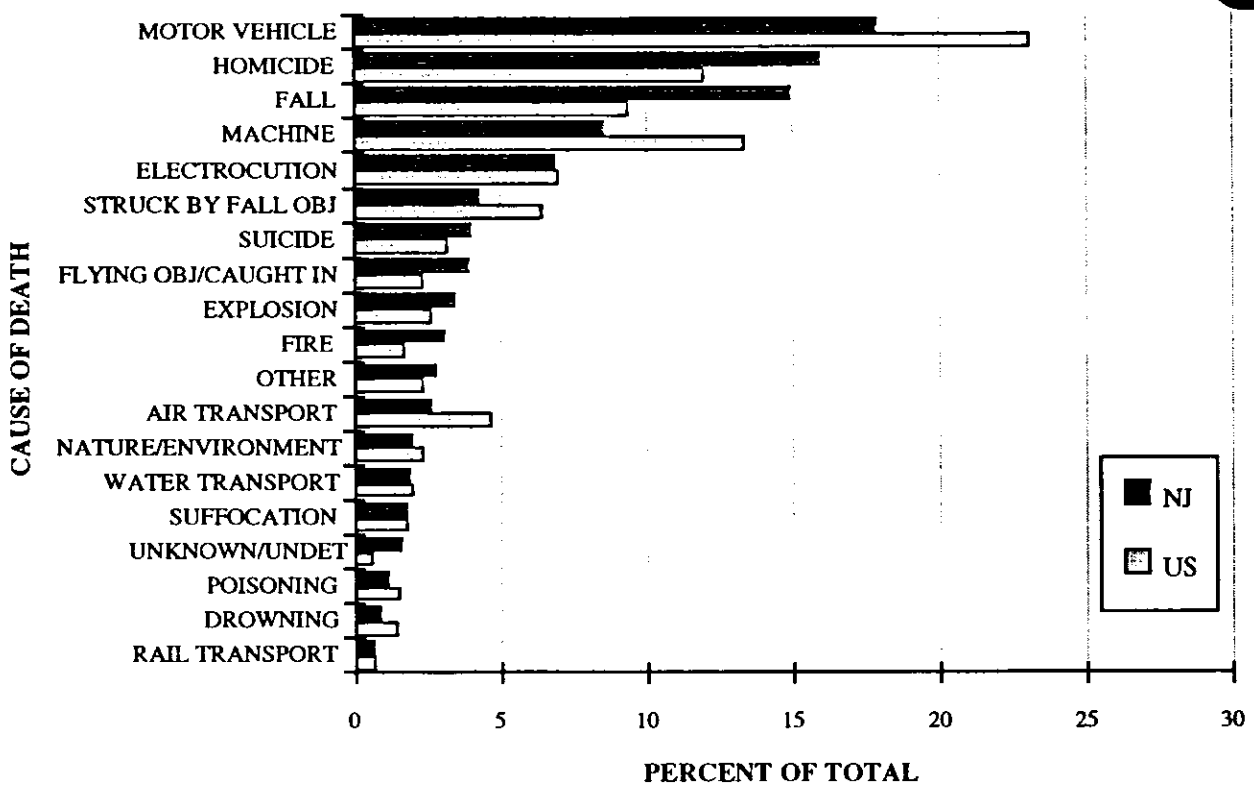


Figure NJ-2. Traumatic Occupational Fatalities by Cause of Death, US and New Jersey, 1980-1989.

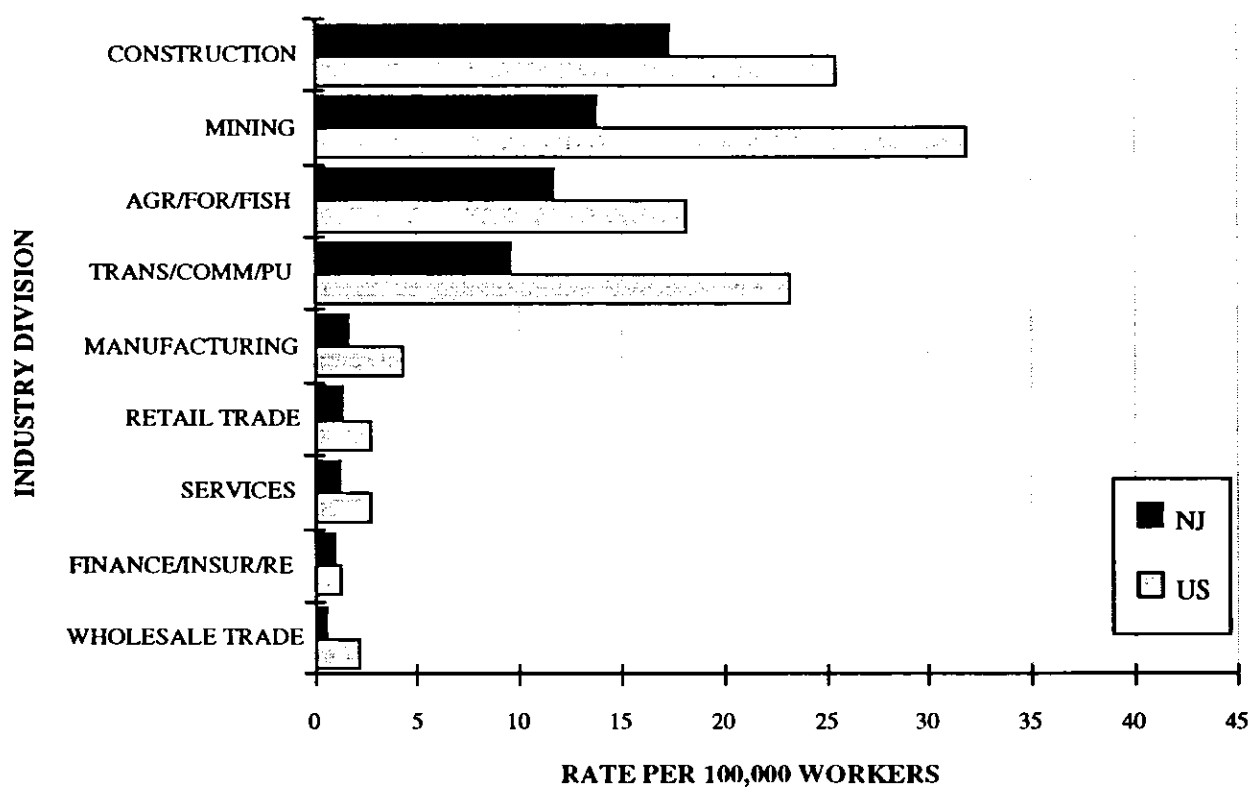


Figure NJ-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and New Jersey, 1980-1989.

Table NJ-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, New Jersey, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	10	30	13	17	20	30	25	29	25	33	232	17.5
MINING	--	--	--	--	--	--	--	--	--	--	6	13.9
AGR/FOR/FISH	3	--	3	11	--	--	7	--	5	3	37	11.9
TRANS/COMM/PU	11	29	21	14	27	22	20	19	16	24	203	9.7
MANUFACTURING	9	18	10	13	12	11	7	19	17	9	125	1.7
RETAIL TRADE	9	12	9	7	11	11	16	6	--	--	81	1.5
SERVICES	8	12	15	11	10	9	11	8	5	13	102	1.4
FINANCE/INSUR/RE	--	--	--	--	3	4	7	--	--	--	21	1.1
WHOLESALE TRADE	--	--	--	4	4	--	4	--	--	3	19	0.8
PUBLIC ADMIN	6	5	7	--	7	6	11	8	6	3	61	N/A
NOT CLASSIFIED	11	19	20	15	15	10	12	9	5	6	122	N/A
STATE	68	130	100	96	110	107	121	102	79	96	1009	3.3

NOTE: Dashes denote categories with fewer than three cases.

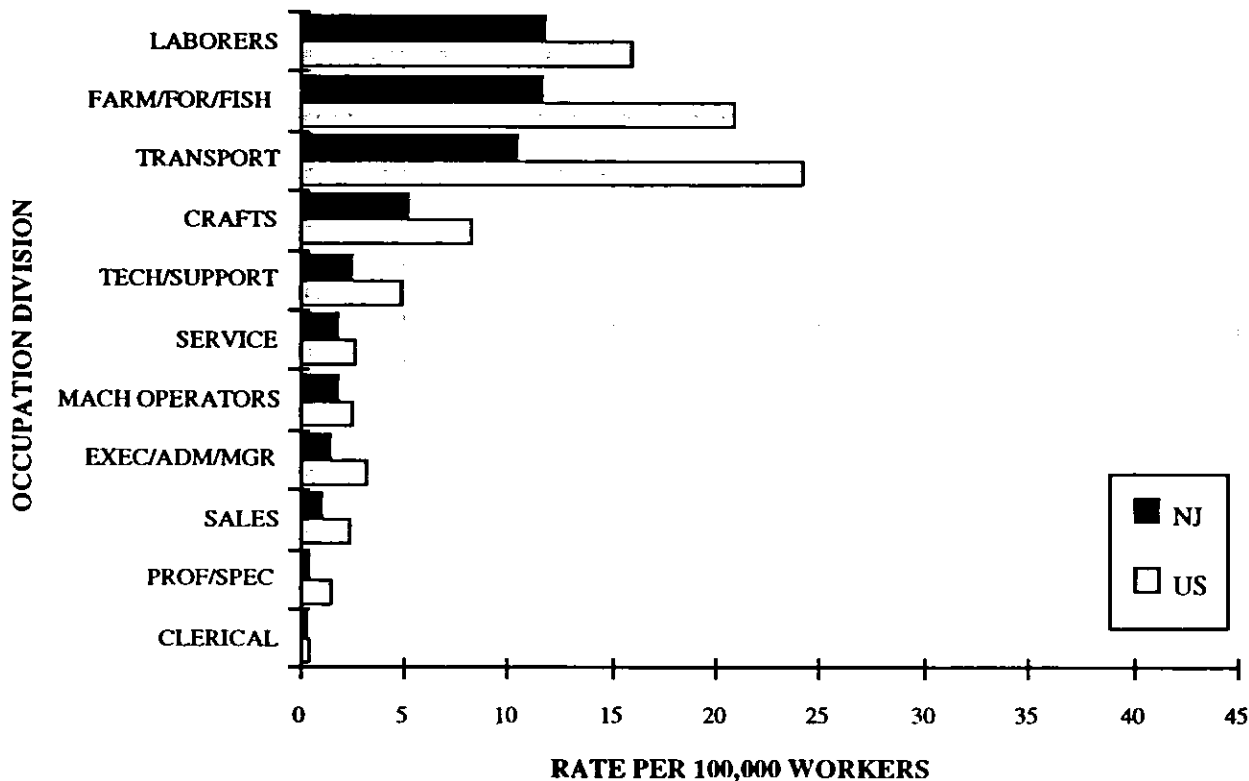


Figure NJ-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and New Jersey, 1983-1989.

Table NJ-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, New Jersey.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
LABORERS	141	12.0
FARM/FOR/FISH	43	11.8
TRANSPORT	152	10.7
CRAFTS	226	5.4
TECH/SUPPORT	32	2.6
SERVICE	90	2.0
MACH OPERATORS	47	2.0
EXEC/ADM/MGR	83	1.7
SALES	58	1.2
PROF/SPEC	32	0.5
CLERICAL	26	0.4
NOT CLASSIFIED	79	N/A

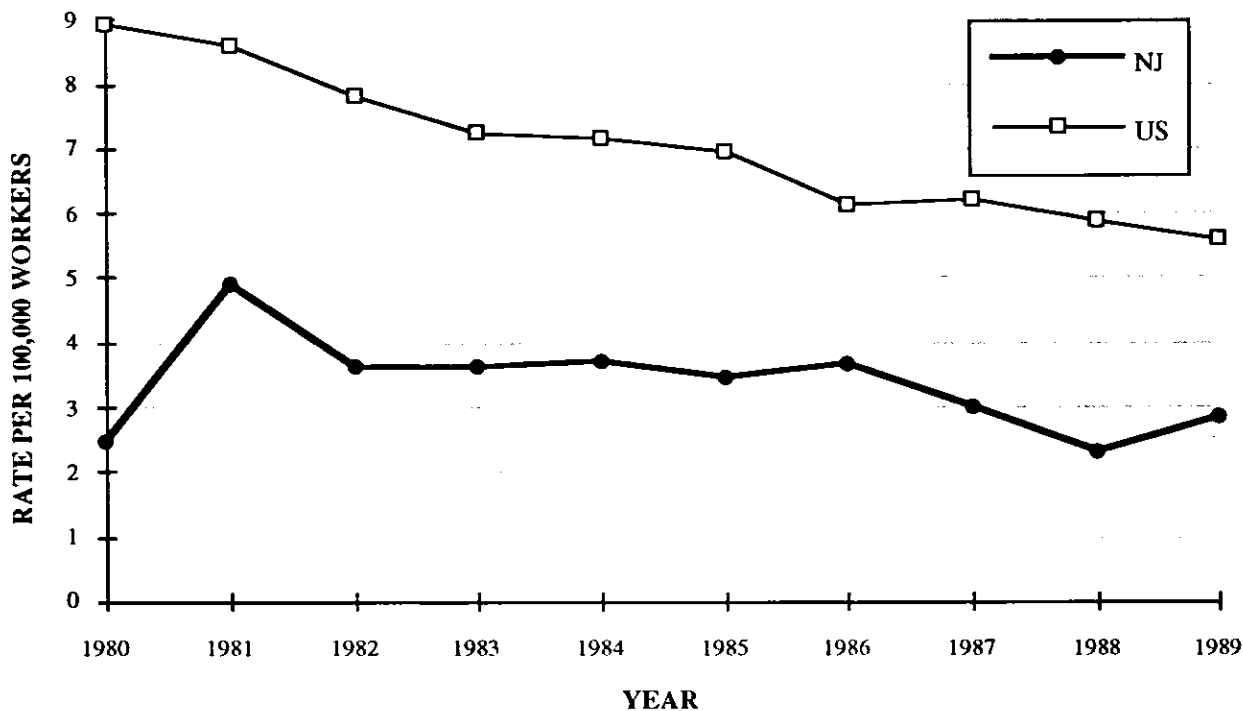


Figure NJ-5. Rate of Traumatic Occupational Fatalities by Year, US and New Jersey, 1980-1989.

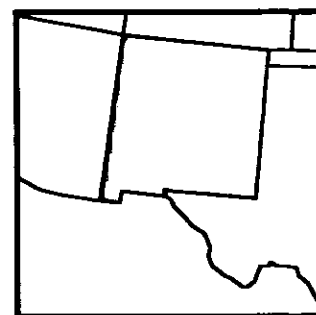
State of New Mexico

Average Annual Fatal Injuries: **53**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **11.8**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (115)**
Rate: **Transportation/Communication/
Public Utilities (47.1)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (119)**
Rate: **Transportation/Material Movers (43.5)**

The State of New Mexico had 525 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 498 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 11.8 for New Mexico compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 303.7 per 100,000 workers for New Mexico compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in New Mexico and had a fatality rate of 14.2 per 100,000 workers compared to 0.9 for

females. The fatality distribution by **race/ethnicity** for the State of New Mexico shows that Whites accounted for 71% of the total fatalities, Hispanics for 22%, and Native Americans for 4% as shown in **Table NM-1**. As shown in **Figure NM-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (16%). Of all New Mexico occupational fatality victims, 76% were New Mexico residents (**Table NM-2**).

Figure NM-2 presents the distribution of fatalities by external cause of death for the State of New Mexico and for the U.S. The four leading causes of death among employees in New Mexico were motor vehicle incidents (31%), machine-related incidents (13%), air transportation (12%), and homicides (11%).

Table NM-1. Traumatic Occupational Fatalities by Race/Ethnicity, New Mexico, 1980-1989.

Race/Ethnicity	Number	Percent
White	372	70.9
Hispanic	114	21.7
Native American	22	4.2
Black	12	2.3
Asian	3	0.6
Other	2	0.4

In New Mexico, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (23%), construction (16%), and mining (12%). The transportation/communication/public utilities industry had the highest fatality rate at 47.1 per 100,000 workers, followed by mining (26.6), and construction (23.9) (**Figure NM-3**). **Table NM-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

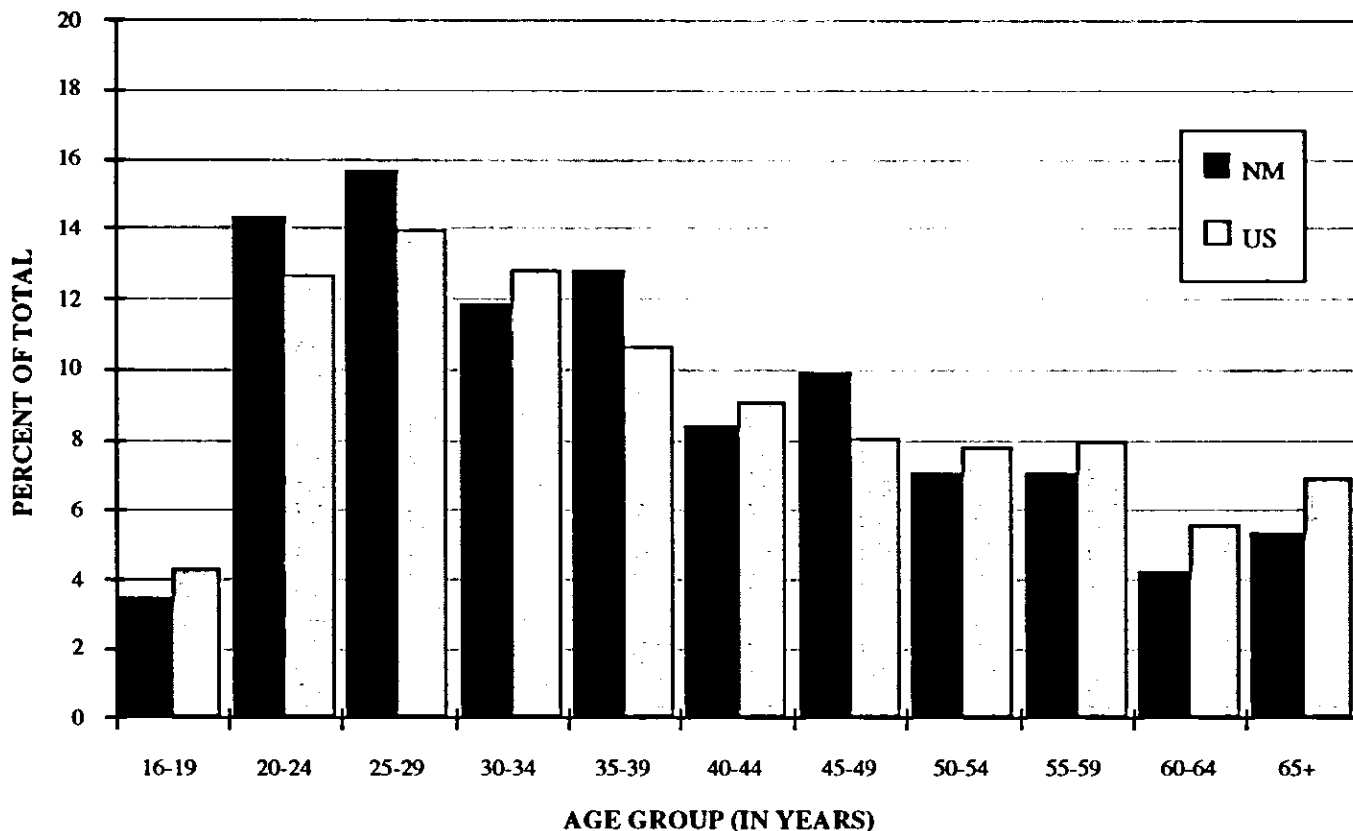


Figure NM-1. Traumatic Occupational Fatalities by Age Group, US and New Mexico, 1980-1989.

Table NM-2. Traumatic Occupational Fatalities by State of Residence, New Mexico, 1980-1989.

State	Number	Percent
New Mexico	398	75.8
Texas	39	7.4
Oklahoma	13	2.5
Colorado	10	1.9
Arizona	7	1.3
California	6	1.1
Missouri	6	1.1
Kansas	5	1.0
Arkansas	4	0.8
Other	37	7.0

The occupation divisions in New Mexico with the largest number of fatalities were transportation/material movers (24%), precision production/craft/repair (19%), and laborers (10%). The occupations with the highest rates were transportation/material movers (43.5 deaths per 100,000 workers), laborers (18.7), and farmers/foresters/fishers (16.0) (Figure NM-4). Table NM-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in New Mexico decreased 21%, from 13.0 in 1980 to 10.3 in 1989. A high of 16.6 and a low of 6.8 deaths per 100,000 workers were reported in 1981 and 1987, respectively (Figure NM-5).

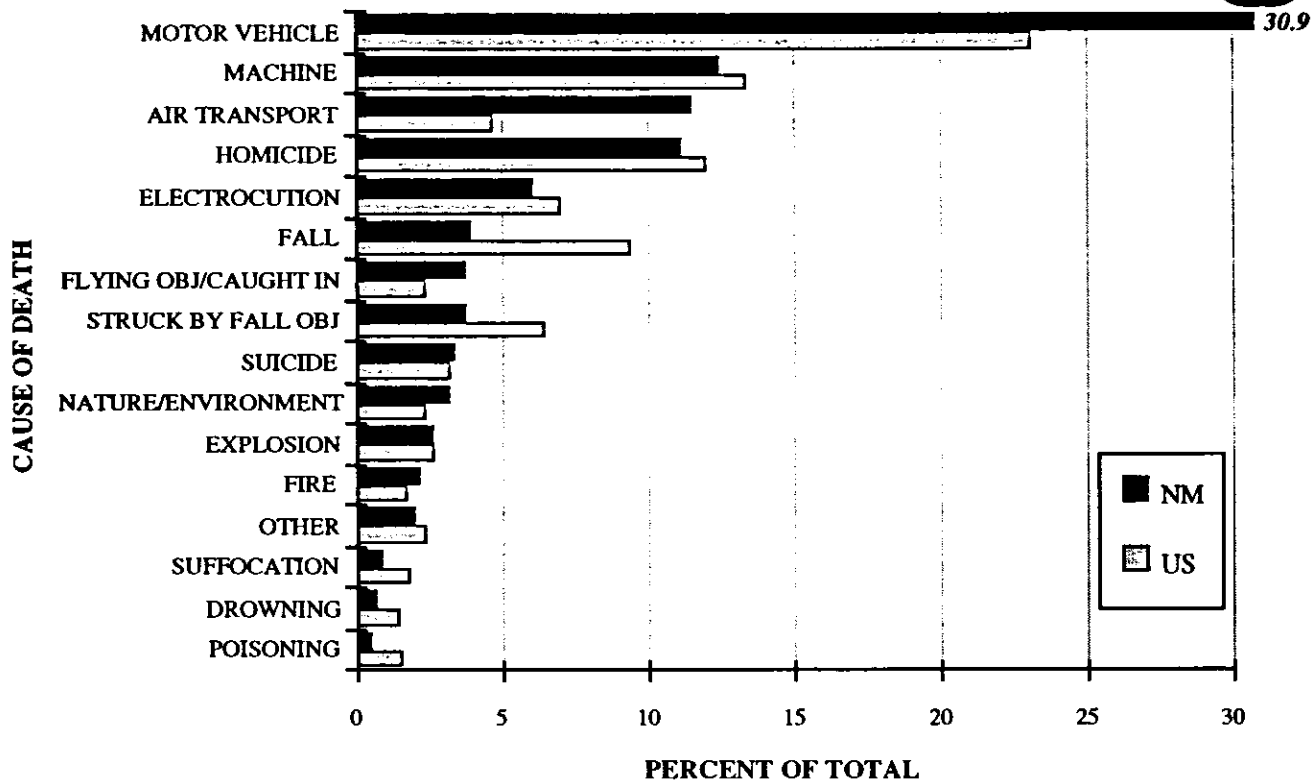


Figure NM-2. Traumatic Occupational Fatalities by Cause of Death, US and New Mexico, 1980-1989.



Figure NM-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and New Mexico, 1980-1989.

Table NM-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, New Mexico, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	16	10	11	20	13	10	4	7	12	12	115	47.1
MINING	8	9	--	10	9	8	4	--	6	3	61	26.6
CONSTRUCTION	6	10	15	7	8	10	9	--	6	5	78	23.9
AGR/FOR/FISH	6	6	4	6	3	5	5	3	7	9	54	21.7
MANUFACTURING	--	6	3	--	--	--	--	4	3	--	25	7.3
WHOLESALE TRADE	--	3	--	--	--	3	--	--	--	--	15	7.0
SERVICES	3	6	3	5	7	--	5	3	6	--	42	4.1
RETAIL TRADE	--	4	4	3	--	5	--	3	4	5	33	3.5
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	5	2.1
PUBLIC ADMIN	6	3	3	4	7	3	4	5	3	5	43	N/A
NOT CLASSIFIED	3	5	6	--	--	--	3	3	3	--	27	N/A
STATE	52	62	53	59	53	49	38	33	50	49	498	11.8

NOTE: Dashes denote categories with fewer than three cases.

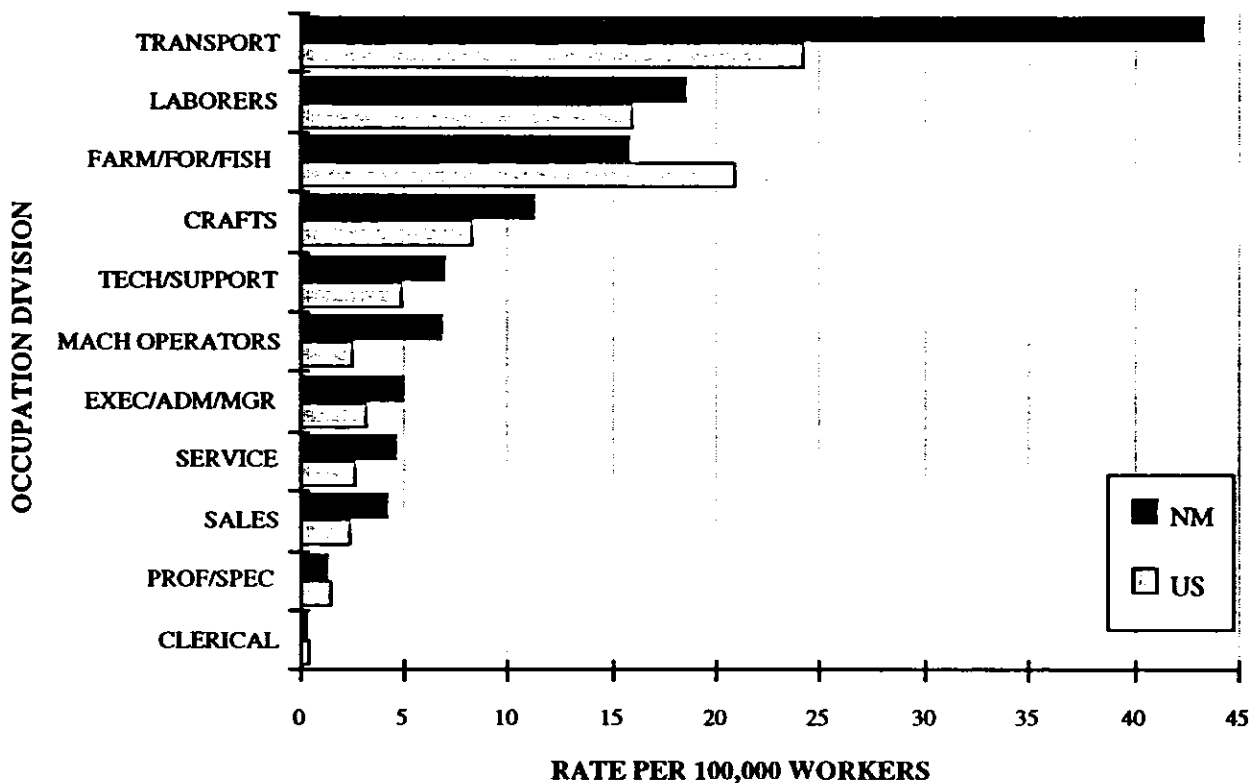


Figure NM-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and New Mexico, 1983-1989.

Table NM-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, New Mexico.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	119	43.5
LABORERS	50	18.7
FARM/FOR/FISH	48	16.0
CRAFTS	95	11.5
TECH/SUPPORT	19	7.1
MACH OPERATORS	16	7.0
EXEC/ADM/MGR	39	5.1
SERVICE	32	4.8
SALES	31	4.3
PROF/SPEC	15	1.5
CLERICAL	7	0.5
NOT CLASSIFIED	27	N/A

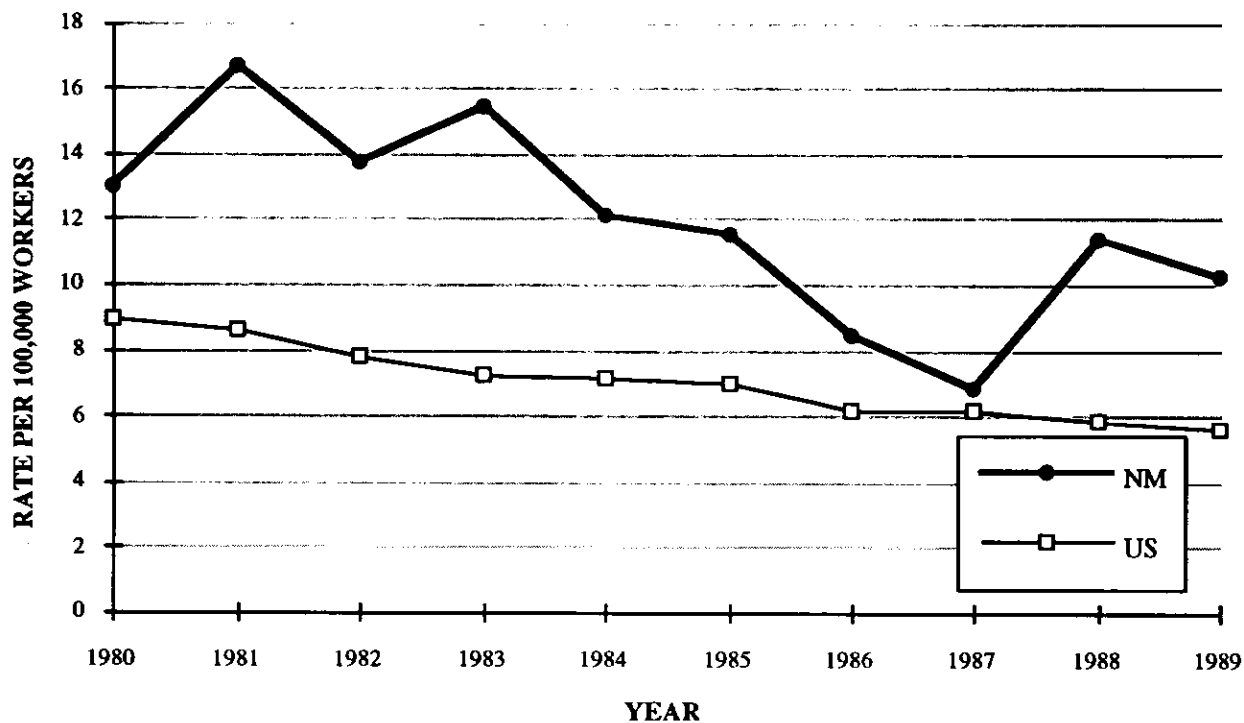


Figure NM-5. Rate of Traumatic Occupational Fatalities by Year, US and New Mexico, 1980-1989.

State of New York

Average Annual Fatal Injuries: **180**

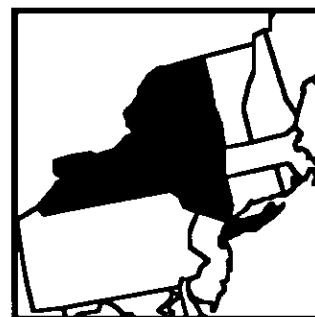
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **2.6**

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (481)**
Rate: **Construction (19.3)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (428)**
Rate: **Farmers/Foresters/Fishers (14.3)**



The State of New York had 1,795 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,783 of these deaths. The average annual rate of fatalities per 100,000 workers was 2.6 for New York compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 61.9 per 100,000 workers for New York compared to 175.6 for the United States.

The State of New York and New York City maintain separate vital statistics units. Data are collected from each system and are combined for the purpose of analysis. From 1980 through 1987, New York State did not report work-related homicides or suicides. New York City did not add the "Injury at Work?" item to the death certificate until 1988. For the years

prior to the addition of this item, certificates were reviewed for narratives which specified that the event occurred at work. Therefore, NTOF likely underenumerates occupational injury fatalities in New York.

Males accounted for 96% of the civilian occupational fatalities in New York and had a fatality rate of 3.9 per 100,000 workers compared to 0.2 for females. The fatality distribution by race/ethnicity for the State of New York shows that Whites accounted for 69% of the total fatalities, Blacks for 6%, and Hispanics for 4% as shown in Table NY-1. As shown in Figure NY-1, workers aged 25 to 29 years old accounted for the largest number of fatalities (13%). Of all New York occupational fatality victims, 89% were New York residents (Table NY-2).

Table NY-1. Traumatic Occupational Fatalities by Race/Ethnicity, New York, 1980-1989.

Race/Ethnicity	Number	Percent
White	1240	69.1
Black	107	6.0
Hispanic	63	3.5
Asian	9	0.5
Native American	7	0.4
Other	369	20.6

Figure NY-2 presents the distribution of fatalities by external cause of death for the State of New York and for the U.S. The three leading causes of death among employees in New York were falls (19%), motor vehicle incidents (18%), and machine-related incidents (14%). As previously described, homicides were not reported by the State of New York for 8 of the 10 reporting years and only for the City of New York when the narrative explicitly stated that the event occurred at work. Assuming that New York is similar to the rest of the U.S., there were an estimated 867.1 ± 74.9 (99% CI) occupational homicides during this 10-year period. This estimate was not used in any of the analyses for the State of New York.

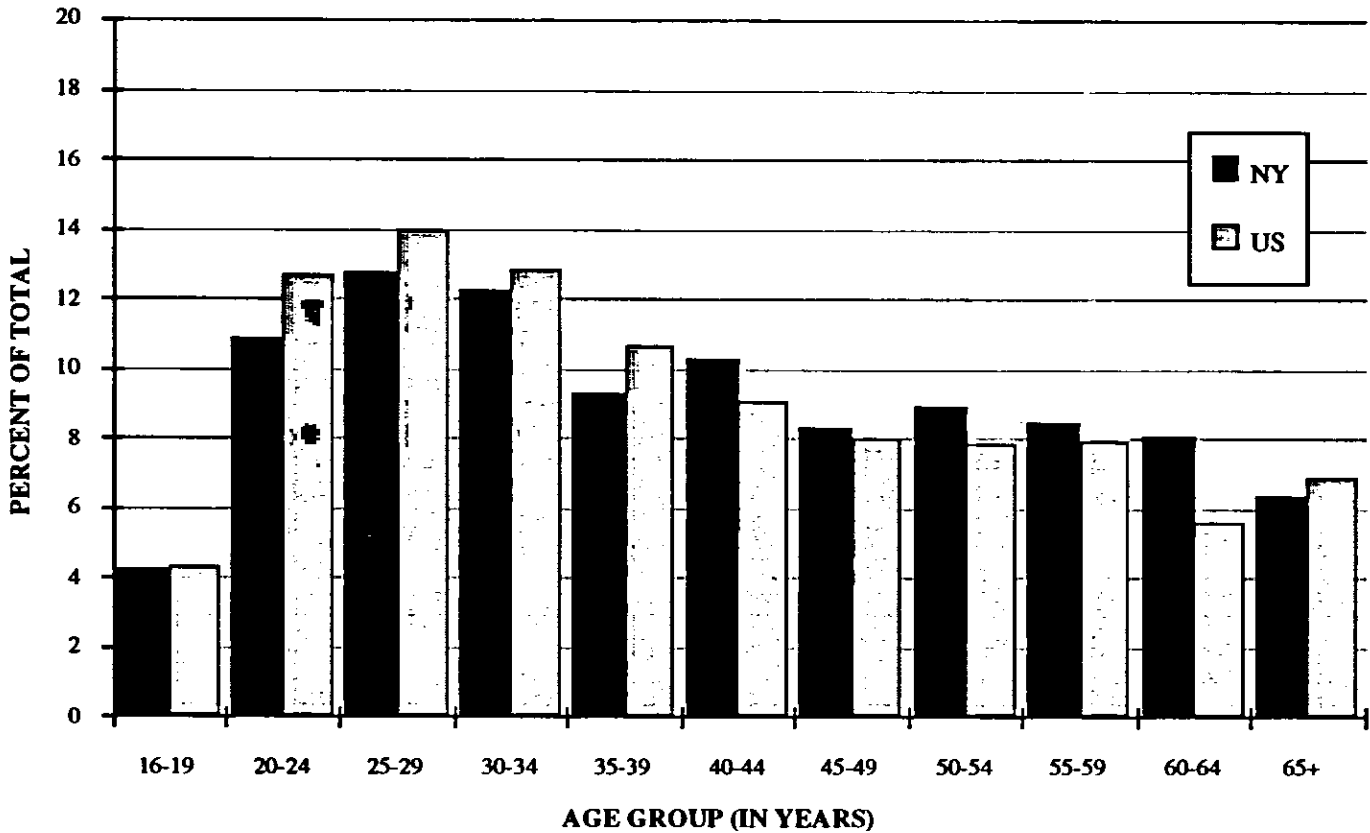


Figure NY-1. Traumatic Occupational Fatalities by Age Group, US and New York, 1980-1989.

Table NY-2. Traumatic Occupational Fatalities by State of Residence, New York, 1980-1989.

State	Number	Percent
New York	1598	89.0
New Jersey	52	2.9
Pennsylvania	39	2.2
Connecticut	9	0.5
Massachusetts	8	0.4
Florida	6	0.3
Indiana	6	0.3
Ohio	6	0.3
Maryland	4	0.2
New Hampshire	4	0.2
Rhode Island	4	0.2
Other	59	3.3

In New York, the industry divisions in which the largest number of fatalities occurred were construction (27%), transportation/communication/public utilities (17%), and manufacturing (15%). The construction industry had the highest fatality rate at 19.3

per 100,000 workers, followed by mining (17.0), and agriculture/forestry/fishing (15.1) (Figure NY-3). Table NY-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The occupation divisions in New York with the largest number of fatalities were precision production/craft/repair (24%), laborers (16%), and transportation/material movers (15%). The occupations with the highest rates were farmers/foresters/fishers (14.3 deaths per 100,000 workers), laborers (10.7), and transportation/material movers (9.0) (Figure NY-4). Table NY-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in New York increased 20%, from 3.0 in 1980 to a high of 3.6 in 1989. This increase may be due in part to increased reporting of work-related deaths in New York over the decade. A low of 1.8 deaths per 100,000 workers was reported in 1987 (Figure NY-5).

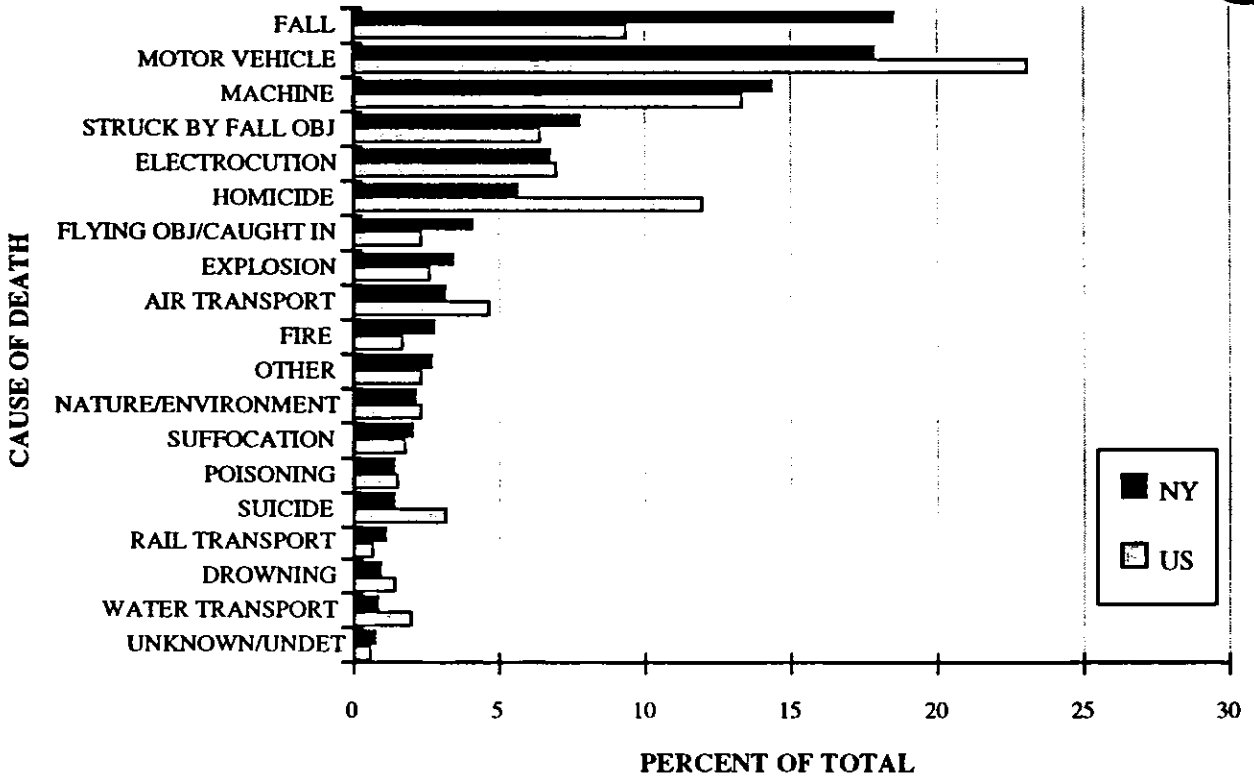


Figure NY-2. Traumatic Occupational Fatalities by Cause of Death, US and New York, 1980-1989.

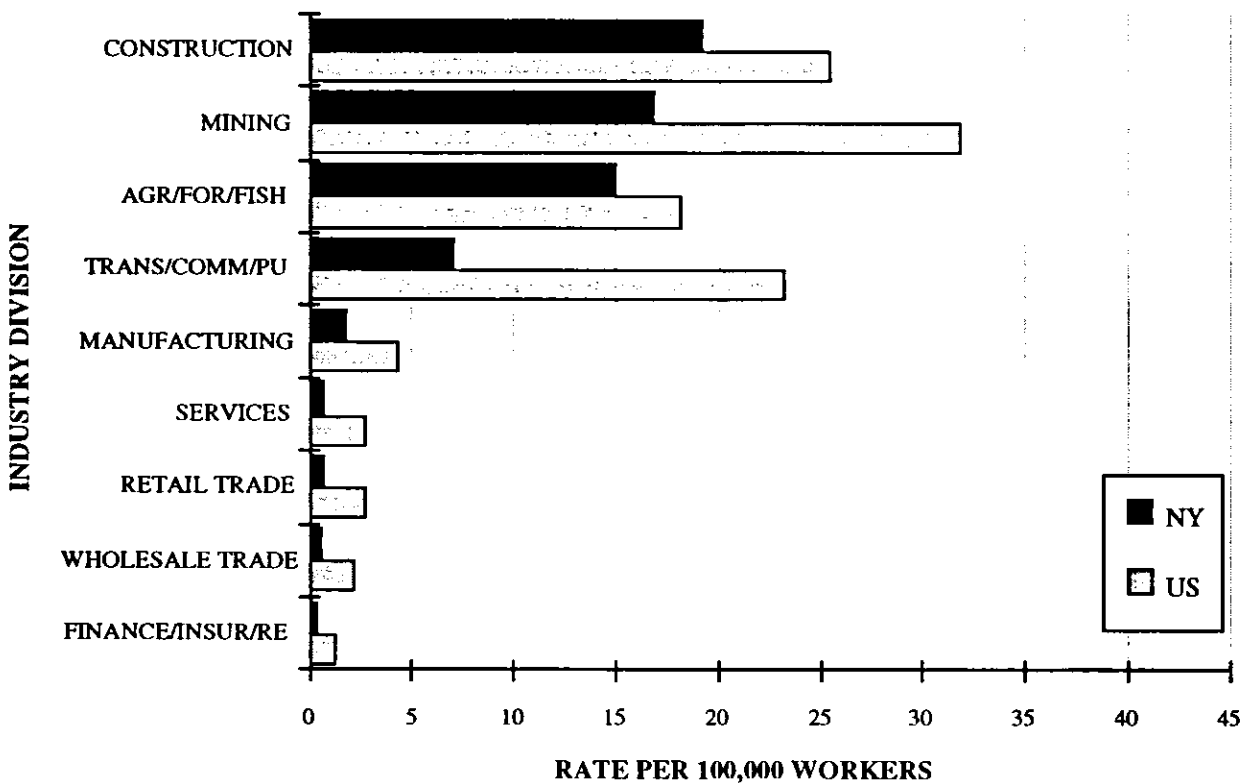


Figure NY-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and New York, 1980-1989.

Table NY-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, New York, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	56	47	49	55	37	40	64	35	56	42	481	19.3
MINING	--	--	3	--	3	--	--	--	--	--	15	17.0
AGR/FOR/FISH	12	21	17	13	14	23	11	16	7	18	152	15.1
TRANS/COMM/PU	38	26	30	30	36	24	28	16	18	53	299	7.1
MANUFACTURING	32	25	48	33	16	21	22	18	20	27	262	1.9
SERVICES	23	15	13	14	15	6	15	19	21	40	181	0.9
RETAIL TRADE	6	--	6	13	6	7	3	10	13	31	97	0.9
WHOLESALE TRADE	4	3	--	4	--	5	3	4	3	--	32	0.7
FINANCE/INSUR/RE	--	7	4	--	--	--	--	--	3	13	30	0.4
PUBLIC ADMIN	13	6	6	8	6	11	7	7	8	17	89	N/A
NOT CLASSIFIED	9	11	18	13	16	14	11	5	15	33	145	N/A
STATE	194	164	196	185	152	152	166	132	165	277	1783	2.6

NOTE: Dashes denote categories with fewer than three cases.

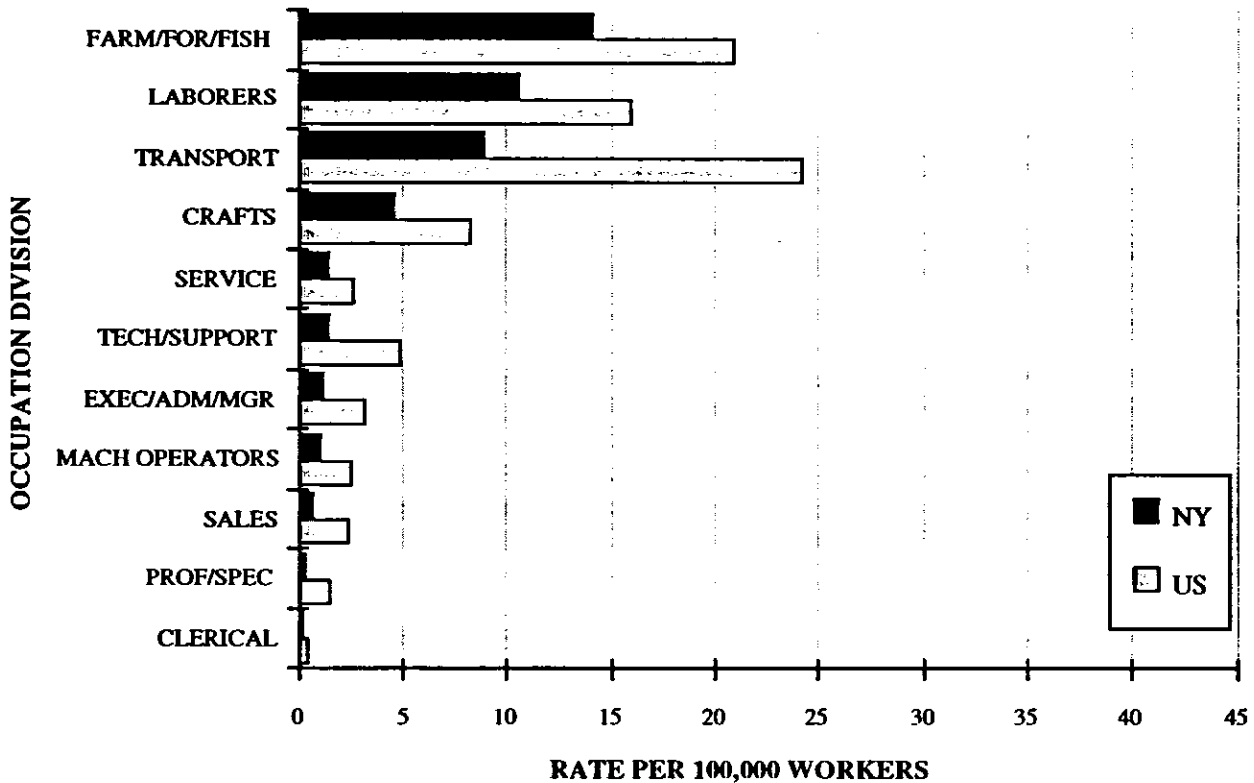


Figure NY-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and New York, 1983-1989.

Table NY-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, New York.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	168	14.3
LABORERS	285	10.7
TRANSPORT	267	9.0
CRAFTS	428	4.8
SERVICE	163	1.6
TECH/SUPPORT	41	1.6
EXEC/ADM/MGR	126	1.4
MACH OPERATORS	58	1.2
SALES	68	0.8
PROF/SPEC	52	0.4
CLERICAL	37	0.3
NOT CLASSIFIED	90	N/A

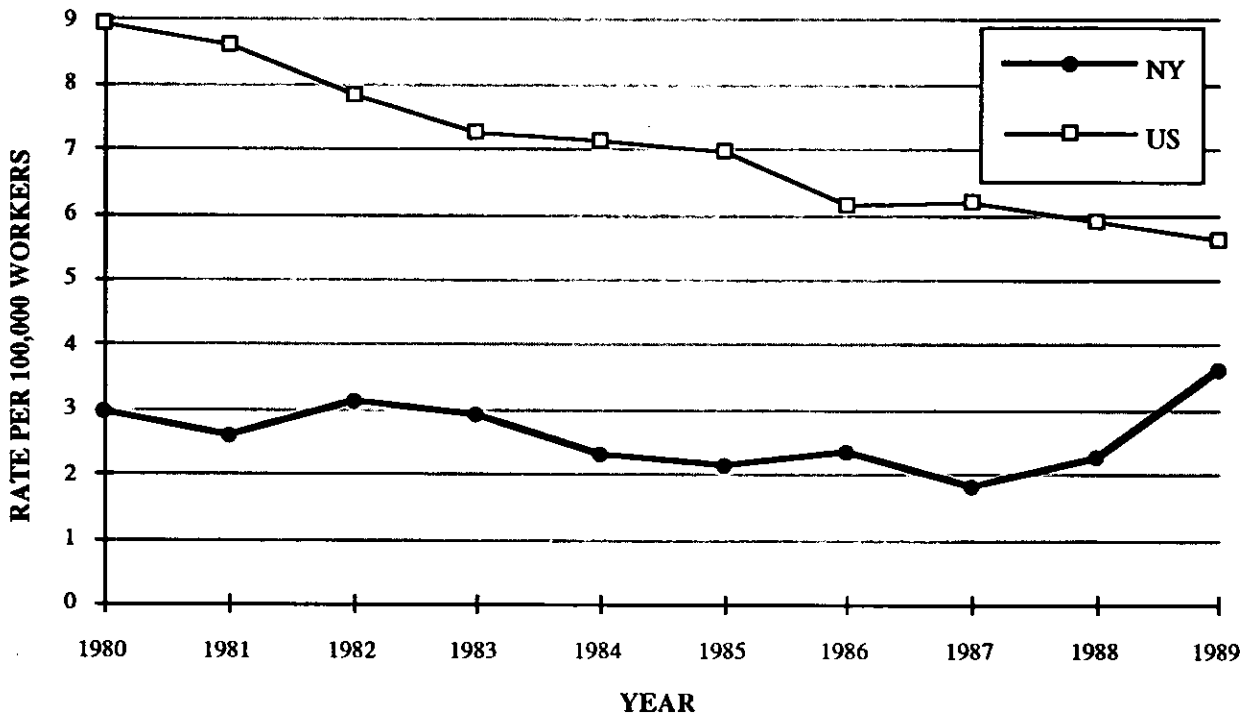


Figure NY-5. Rate of Traumatic Occupational Fatalities by Year, U.S. and New York, 1980-1989.

State of North Carolina

Average Annual Fatal Injuries: **183**

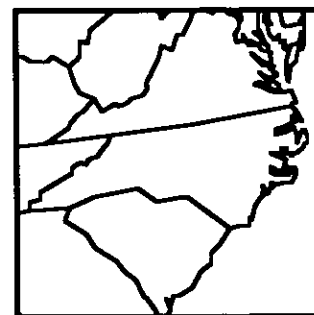
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **7.0**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (354)**
Rate: **Mining (35.3)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (323)**
Rate: **Farmers/Foresters/Fishers (27.6)**



The State of North Carolina had 1,827 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,749 of these deaths. The average annual rate of fatalities per 100,000 workers was 7.0 for North Carolina which was the same as that for the United States. The average annual rate for years of potential life lost (YPLL) was 167.2 per 100,000 workers for North Carolina compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in North Carolina and had a fatality

Table NC-1. Traumatic Occupational Fatalities by Race/Ethnicity, North Carolina, 1980-1989.

Race/Ethnicity	Number	Percent
White	1369	74.9
Black	406	22.2
Native American	23	1.3
Hispanic	18	1.0
Asian	5	0.3
Other	6	0.3

rate of 10.4 per 100,000 workers compared to 0.7 for females. The fatality distribution by race/ethnicity for the State of North Carolina shows that Whites accounted for 75% of the total fatalities and Blacks for 22% as shown in Table NC-1. As shown in Figure NC-1, workers aged 20 to 24 years old accounted for the largest number of fatalities (14%). Of all North Carolina occupational fatality victims, 89% were North Carolina residents (Table NC-2).

Figure NC-2 presents the distribution of fatalities by external cause of death for the State of North Carolina and for the U.S. The three leading causes of death among employees in North Carolina were motor vehicle incidents (24%), machine-related incidents (14%), and homicides (12%).

In North Carolina, the industry divisions in which the largest number of fatalities occurred were construction (20%), manufacturing (18%), and transportation/communication/public utilities (17%). The mining industry had the highest fatality rate at 35.3 per 100,000 workers, followed by construction (27.0), and transportation/communication/public utilities (23.0) (Figure NC-3). Table NC-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

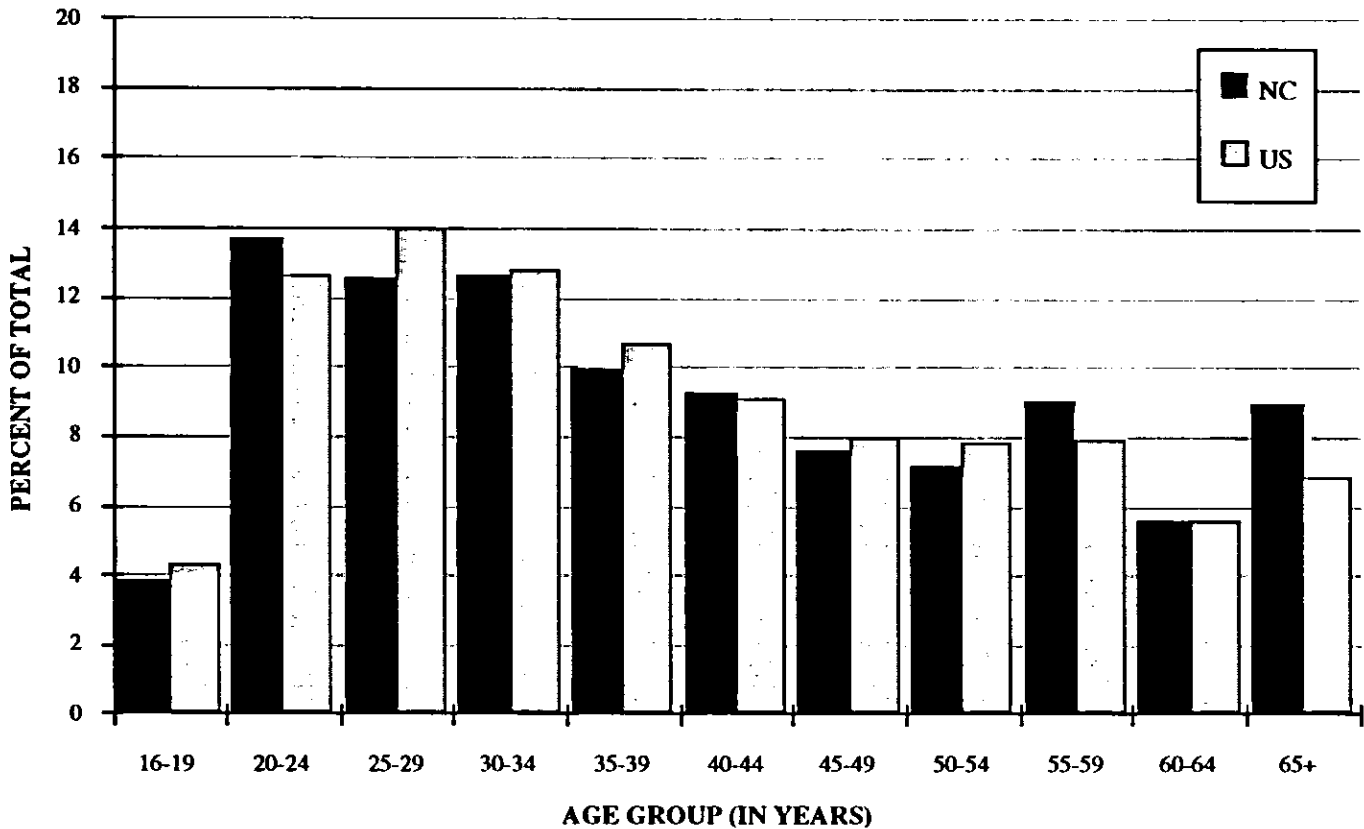


Figure NC-1. Traumatic Occupational Fatalities by Age Group, US and North Carolina, 1980-1989.

Table NC-2. Traumatic Occupational Fatalities by State of Residence, North Carolina, 1980-1989.

State	Number	Percent
North Carolina	1629	89.2
South Carolina	55	3.0
Virginia	50	2.7
Georgia	11	0.6
Florida	10	0.5
Pennsylvania	10	0.5
Tennessee	9	0.5
Michigan	6	0.3
Other	47	2.6

The occupation divisions in North Carolina with the largest number of fatalities were transportation/material movers (18%), precision production/craft/repair (17%), and farmers/foresters/fishers (16%). The occupations with the highest rates were farmers/foresters/fishers (27.6 deaths per 100,000 workers), transportation/material movers (25.8), and laborers (12.5) (Figure NC-4). Table NC-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in North Carolina decreased 35%, from a high of 9.9 in 1980 to 6.4 in 1989. A low of 3.4 deaths per 100,000 workers was reported in 1986 (Figure NC-5).

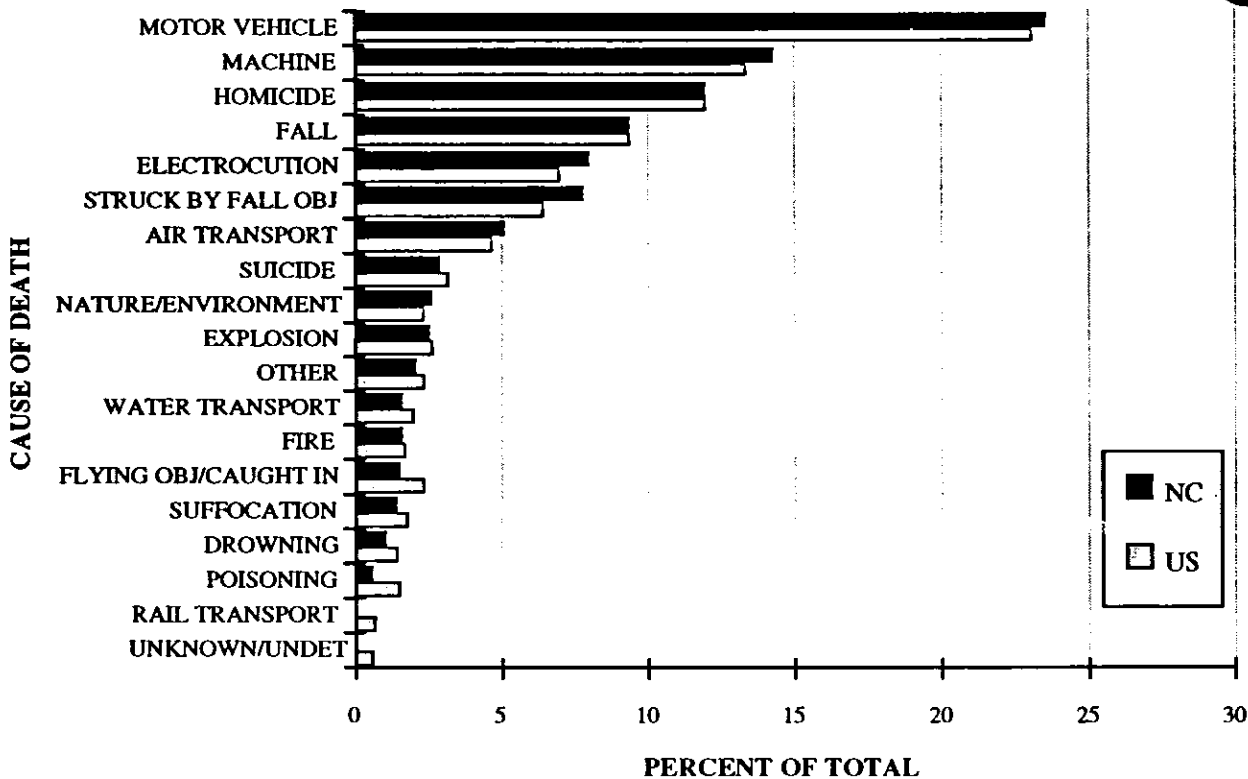


Figure NC-2. Traumatic Occupational Fatalities by Cause of Death, US and North Carolina, 1980-1989.

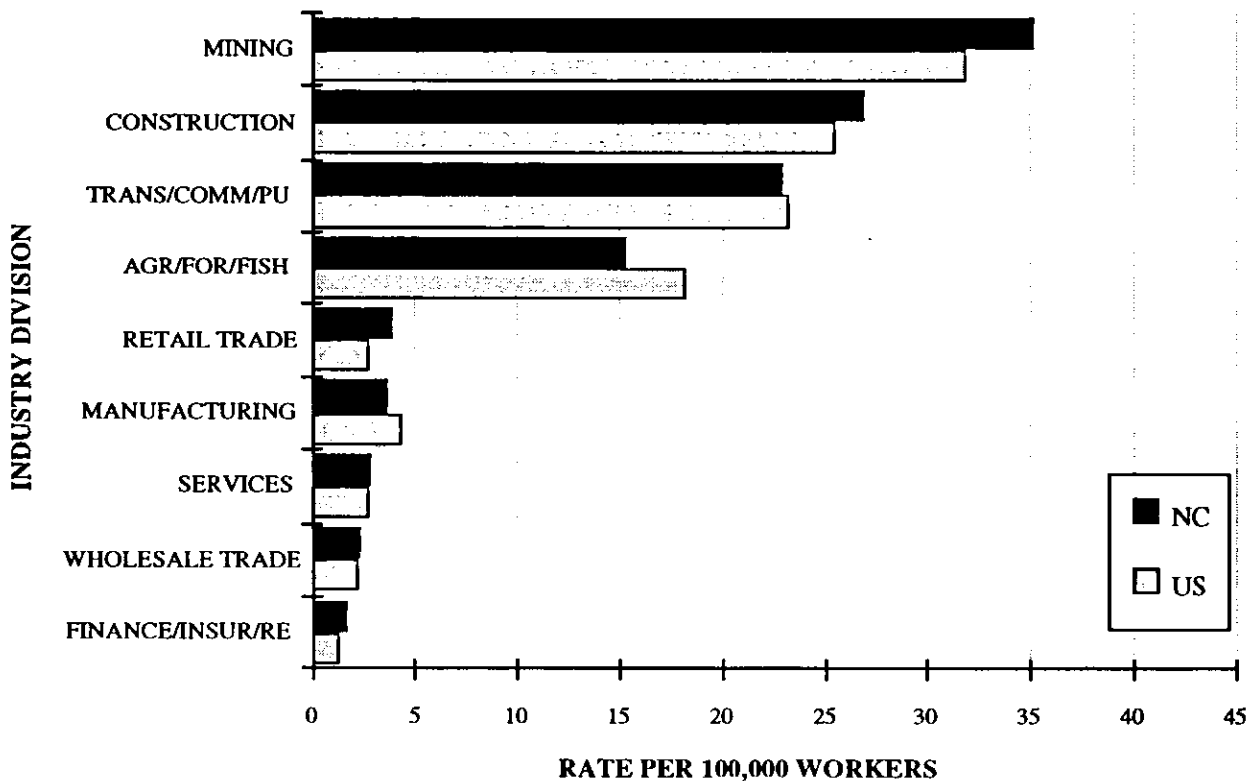


Figure NC-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and North Carolina, 1980-1989.

Table NC-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, North Carolina, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	3	--	--	--	--	3	--	--	--	--	13	35.3
CONSTRUCTION	48	38	26	25	28	37	23	49	42	38	354	27.0
TRANS/COMM/PU	22	24	28	29	38	42	15	32	30	33	293	23.0
AGR/FOR/FISH	35	25	22	24	30	35	15	21	29	18	254	15.3
RETAIL TRADE	20	18	24	26	11	16	--	21	14	18	169	4.0
MANUFACTURING	31	24	33	28	35	34	20	32	38	35	310	3.7
SERVICES	18	12	13	13	5	12	5	12	14	18	122	2.9
WHOLESALE TRADE	6	--	--	5	--	4	3	4	4	--	33	2.5
FINANCE/INSUR/RE	4	3	--	--	--	--	--	3	3	4	20	1.8
PUBLIC ADMIN	14	6	12	8	7	13	3	9	10	7	89	N/A
NOT CLASSIFIED	19	8	17	11	6	7	--	3	6	13	92	N/A
STATE	220	161	178	171	165	203	88	186	190	187	1749	7.0

NOTE: Dashes denote categories with fewer than three cases.

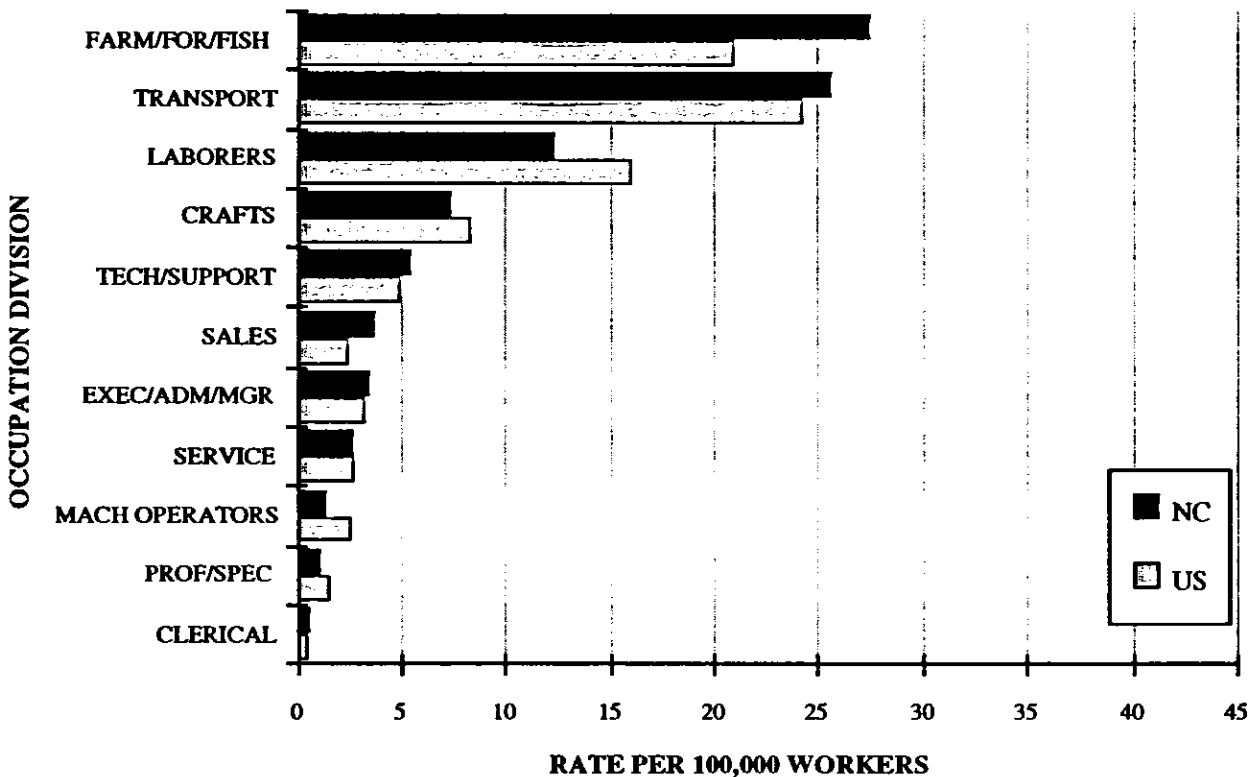


Figure NC-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and North Carolina, 1983-1989.

Table NC-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, North Carolina.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	274	27.6
TRANSPORT	323	25.8
LABORERS	228	12.5
CRAFTS	295	7.5
TECH/SUPPORT	41	5.5
SALES	145	3.8
EXEC/ADM/MGR	110	3.6
SERVICE	98	2.8
MACH OPERATORS	68	1.5
PROF/SPEC	46	1.2
CLERICAL	28	0.7
NOT CLASSIFIED	93	N/A

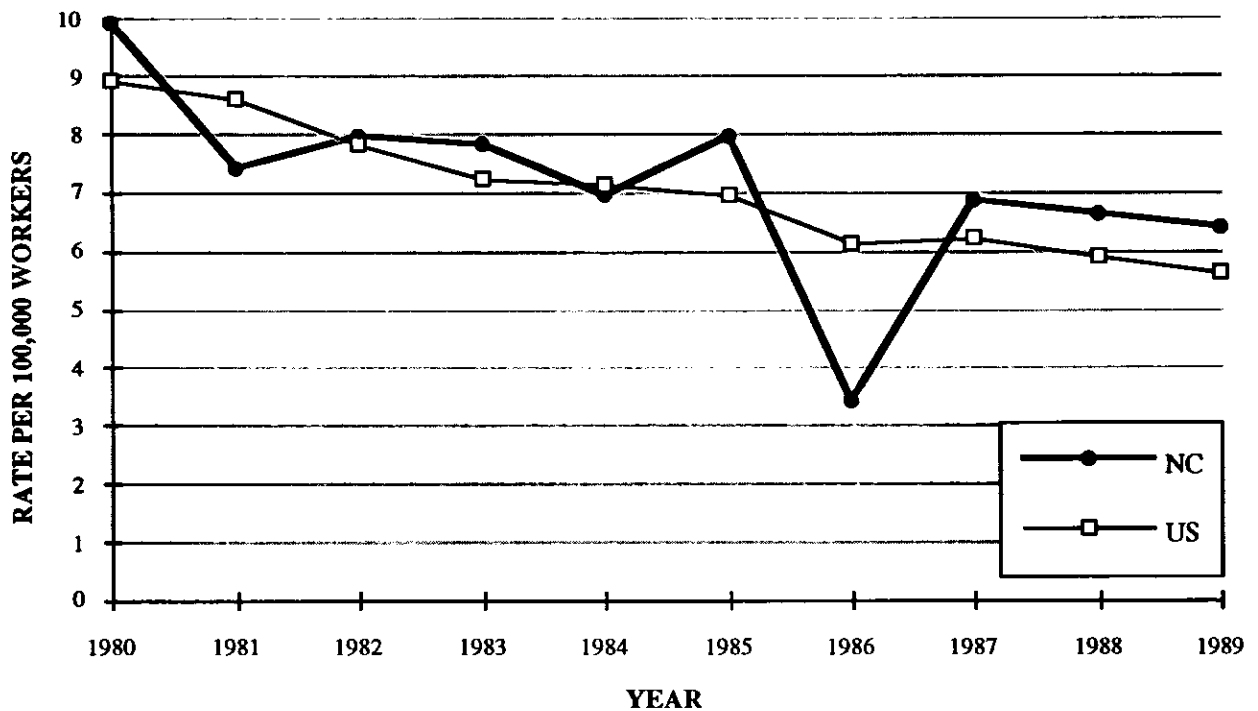


Figure NC-5. Rate of Traumatic Occupational Fatalities by Year, US and North Carolina, 1980-1989.

State of North Dakota

Average Annual Fatal Injuries: **31**

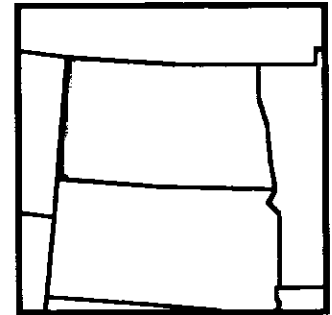
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **13.5**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Agriculture/Forestry/Fishing (121)**
Rate: **Mining (43.6)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (113)**
Rate: **Laborers (26.1)**



The State of North Dakota had 307 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 304 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 13.5 for North Dakota compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 316.1 per 100,000 workers for North Dakota compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in North Dakota and had a fatality rate of 16.2 per 100,000 workers compared to 1.5 for

females. The fatality distribution by **race/ethnicity** for the State of North Dakota shows that Whites accounted for 90% of the total fatalities and Hispanics for 8% as shown in **Table ND-1**. As shown in **Figure ND-1**, workers aged 20 to 24 years old accounted for the largest number of fatalities (16%). Of all North Dakota occupational fatality victims, 78% were North Dakota residents (**Table ND-2**).

Figure ND-2 presents the distribution of fatalities by external cause of death for the State of North Dakota and for the U.S. The three leading causes of death among employees in North Dakota were machine-related incidents (25%), motor vehicle incidents (24%), and falls (9%).

Table ND-1. Traumatic Occupational Fatalities by Race/Ethnicity, North Dakota, 1980-1989.

Race/Ethnicity	Number	Percent
White	276	89.9
Hispanic	25	8.1
Native American	4	1.3
Other	2	0.7

In North Dakota, the **industry divisions** in which the largest number of fatalities occurred were agriculture/forestry/fishing (40%), transportation/communication/public utilities (16%), and construction (12%). The mining industry had the highest fatality rate at 43.6 per 100,000 workers, followed by transportation/communication/public utilities (38.6), and construction (38.1) (**Figure ND-3**). **Table ND-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

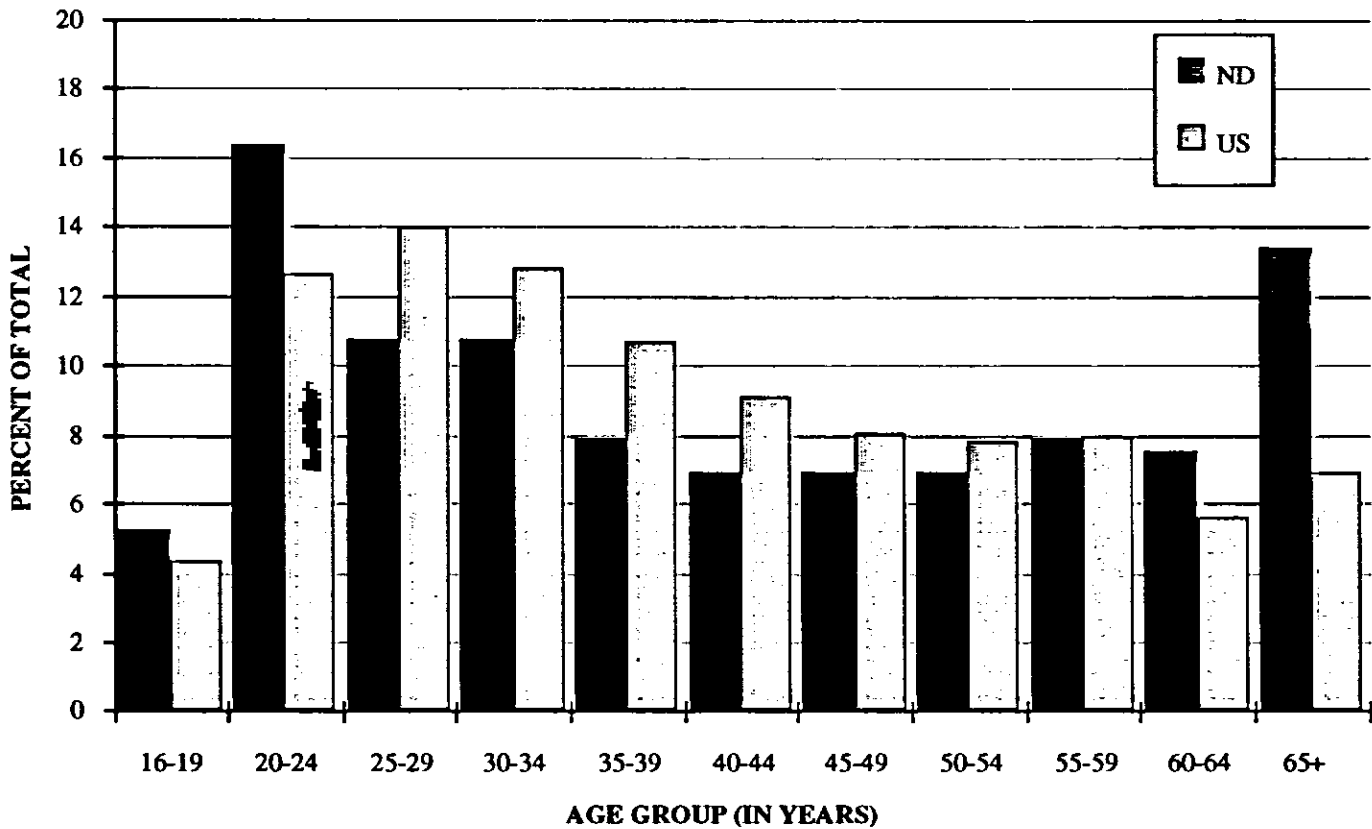


Figure ND-1. Traumatic Occupational Fatalities by Age Group, US and North Dakota, 1980-1989.

Table ND-2. Traumatic Occupational Fatalities by State of Residence, North Dakota, 1980-1989.

State	Number	Percent
North Dakota	239	77.9
Minnesota	27	8.8
Montana	19	6.2
South Dakota	7	2.3
Other	15	4.9

The occupation divisions in North Dakota with the largest number of fatalities were farmers/foresters/fishers (37%), precision production/craft/repair (17%), and laborers (13%). The occupations with the highest rates were laborers (26.1 deaths per 100,000 workers), farmers/foresters/fishers (22.8), and transportation/material movers (19.8) (Figure ND-4). Table ND-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in North Dakota decreased 19%, from 16.6 in 1980 to 13.4 in 1989. A high of 17.4 and a low of 9.7 deaths per 100,000 workers were reported in 1981 and 1983, respectively (Figure ND-5).

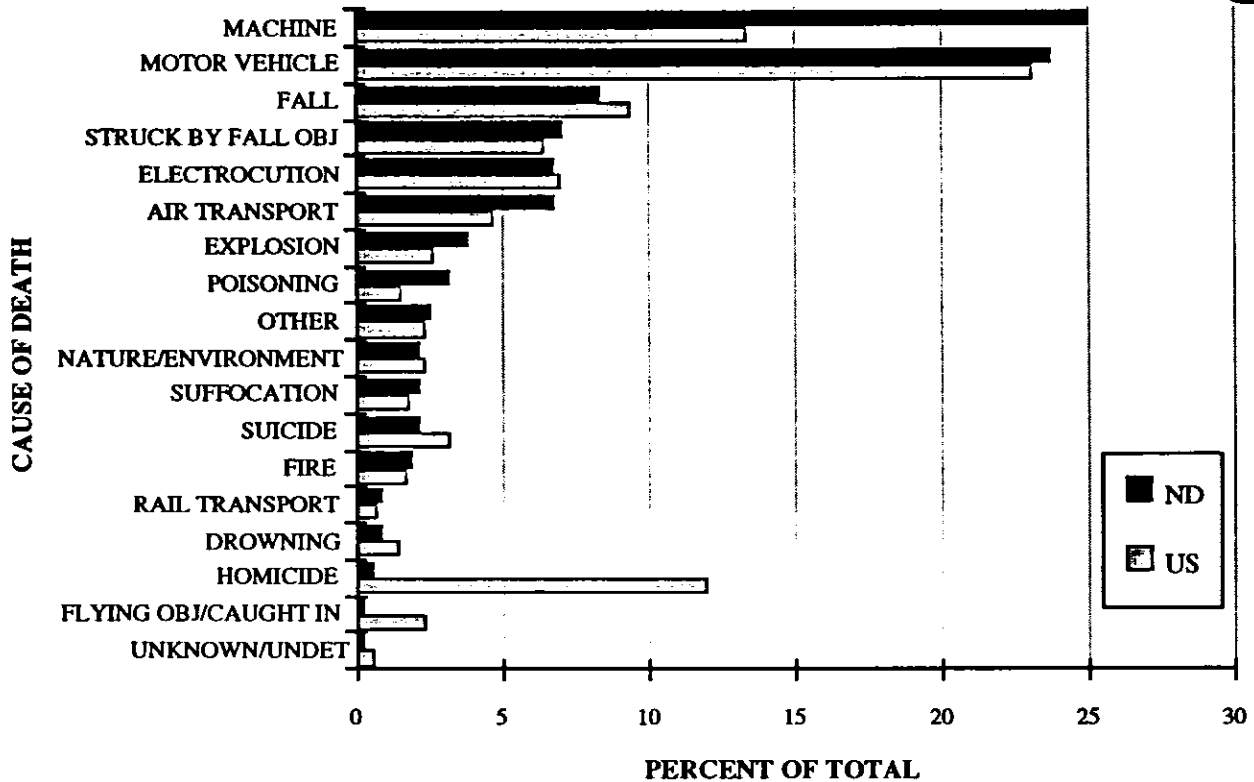


Figure ND-2. Traumatic Occupational Fatalities by Cause of Death, US and North Dakota, 1980-1989.

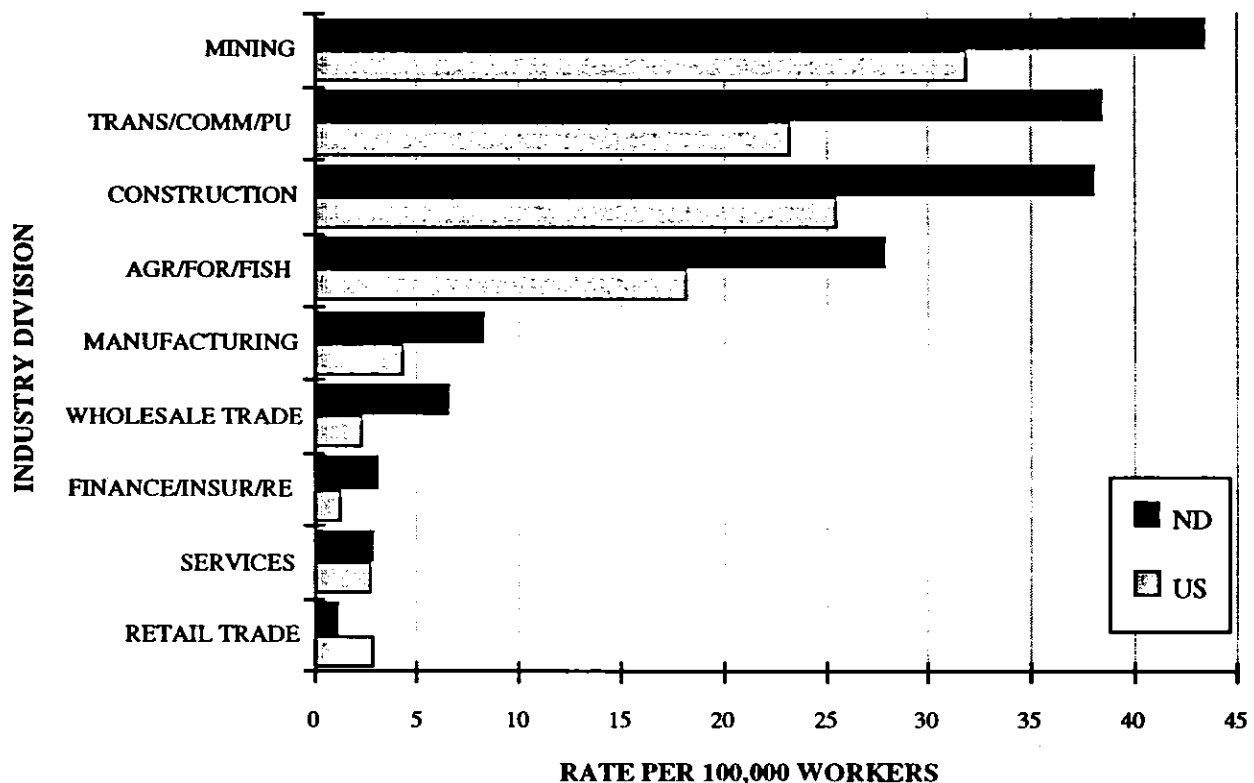


Figure ND-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and North Dakota, 1980-1989.

Table ND-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, North Dakota, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	3	10	6	--	--	--	--	--	--	--	25	43.6
TRANS/COMM/PU	9	4	5	6	5	5	5	4	--	6	50	38.6
CONSTRUCTION	4	--	4	4	7	--	--	4	4	4	37	38.1
AGR/FOR/FISH	17	8	14	8	13	10	14	11	11	15	121	27.9
MANUFACTURING	--	3	--	--	--	--	--	--	--	--	13	8.4
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	12	6.6
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	4	3.2
SERVICES	--	3	--	--	--	--	3	--	3	--	16	2.9
RETAIL TRADE	--	--	--	--	--	--	--	--	--	--	6	1.3
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	--	5	N/A
NOT CLASSIFIED	--	4	--	--	--	--	--	4	--	--	15	N/A
STATE	35	37	35	23	32	25	29	31	25	32	304	13.5

NOTE: Dashes denote categories with fewer than three cases.

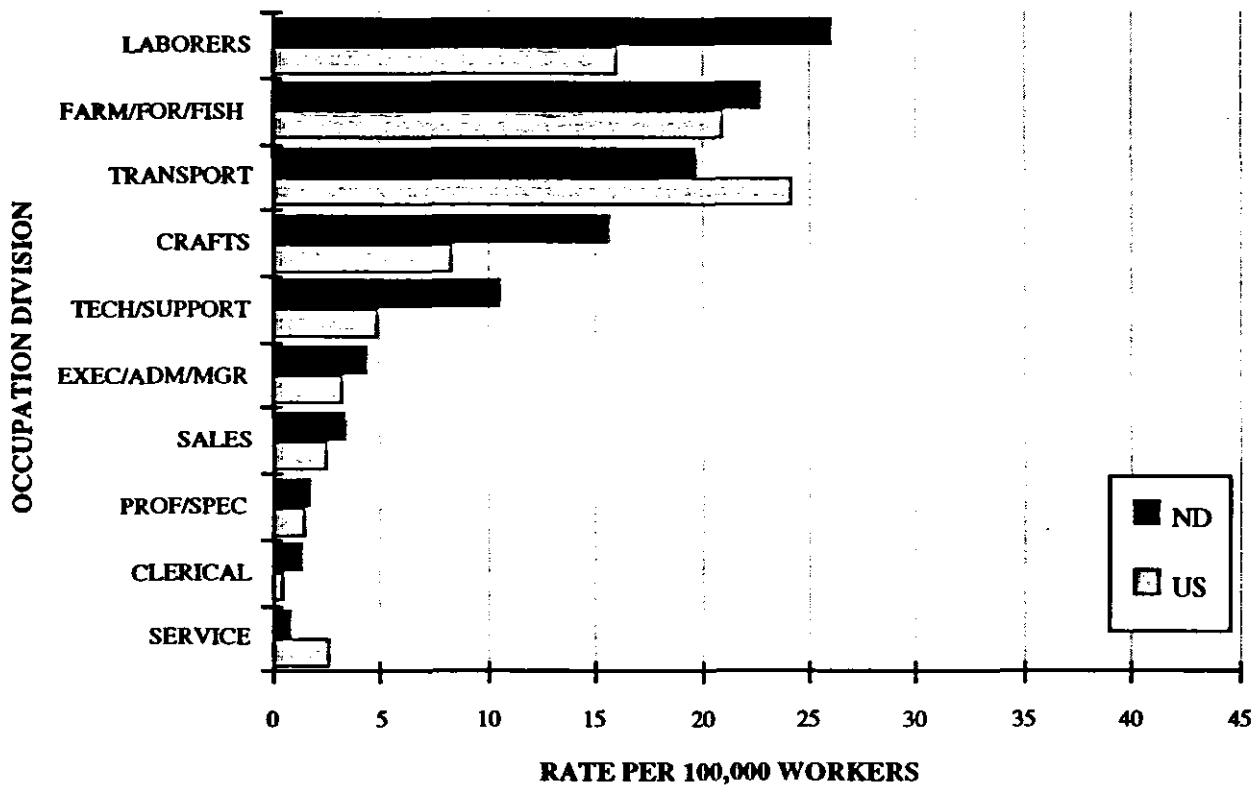


Figure ND-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and North Dakota, 1983-1989.

Table ND-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, North Dakota.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
LABORERS	38	26.1
FARM/FOR/FISH	113	22.8
TRANSPORT	32	19.8
CRAFTS	52	15.8
TECH/SUPPORT	11	10.7
EXEC/ADM/MGR	9	4.5
SALES	13	3.5
PROF/SPEC	9	1.8
CLERICAL	4	1.4
SERVICE	3	0.9
MACH OPERATORS	5	N/A
NOT CLASSIFIED	15	N/A

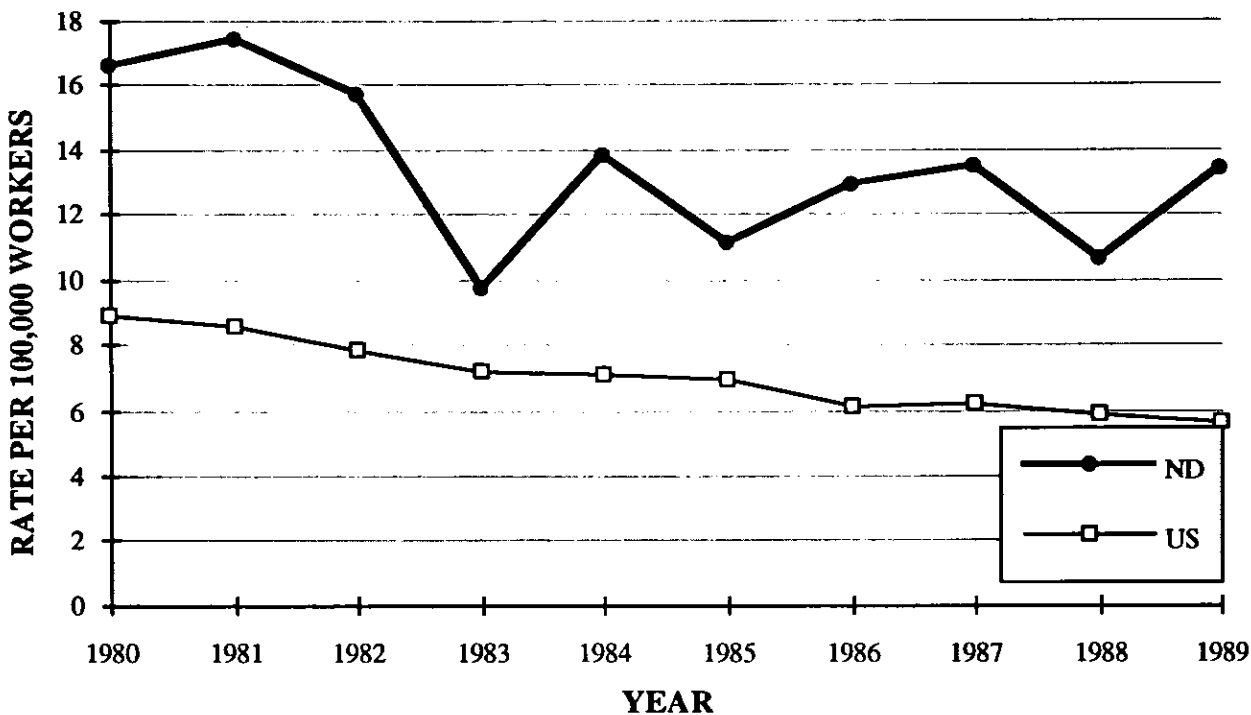


Figure ND-5. Rate of Traumatic Occupational Fatalities by Year, US and North Dakota, 1980-1989.

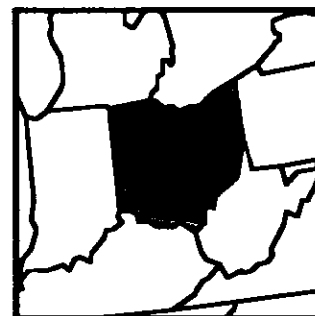
State of Ohio

Average Annual Fatal Injuries: **185**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **4.6**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (419)**
Rate: **Construction (24.7)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (427)**
Rate: **Transportation/Material Movers (19.0)**

The State of Ohio had 1,849 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,841 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 4.6 for Ohio compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 112.1 per 100,000 workers for Ohio compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Ohio and had a fatality rate of 6.7 per 100,000 workers compared to 0.3 for females. The fatality distribution by **race/ethnicity** for the State of Ohio shows that Whites accounted for 89% of the total fatalities, Blacks for 7%, and Hispanics

Table OH-1. Traumatic Occupational Fatalities by Race/Ethnicity, Ohio, 1980-1989.

Race/Ethnicity	Number	Percent
White	1647	89.1
Black	132	7.1
Hispanic	59	3.2
Asian	3	0.2
Other	8	0.4

for 3% as shown in **Table OH-1**. As shown in **Figure OH-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (13%). Of all Ohio occupational fatality victims, 86% were Ohio residents (**Table OH-2**).

Figure OH-2 presents the distribution of fatalities by external cause of death for the State of Ohio and for the U.S. The three leading causes of death among employees in Ohio were motor vehicle incidents (27%), machine-related incidents (19%), and falls (11%). It should be noted that there may be an underenumeration of homicides in Ohio. From 1980 through 1989, fewer than 10 homicides were documented in the NTOF data for the State of Ohio. A study of workers' compensation data reported 50 work-related homicides in the State of Ohio from 1983 to 1985.*

In Ohio, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (23%), construction (20%), and manufacturing (20%). The construction industry had the highest fatality rate at 24.7 per 100,000 workers, followed by mining (22.6), and

*Hales et al. (1988). Occupational injuries due to violence. *Journal of Occupational Medicine* 30:483-487.

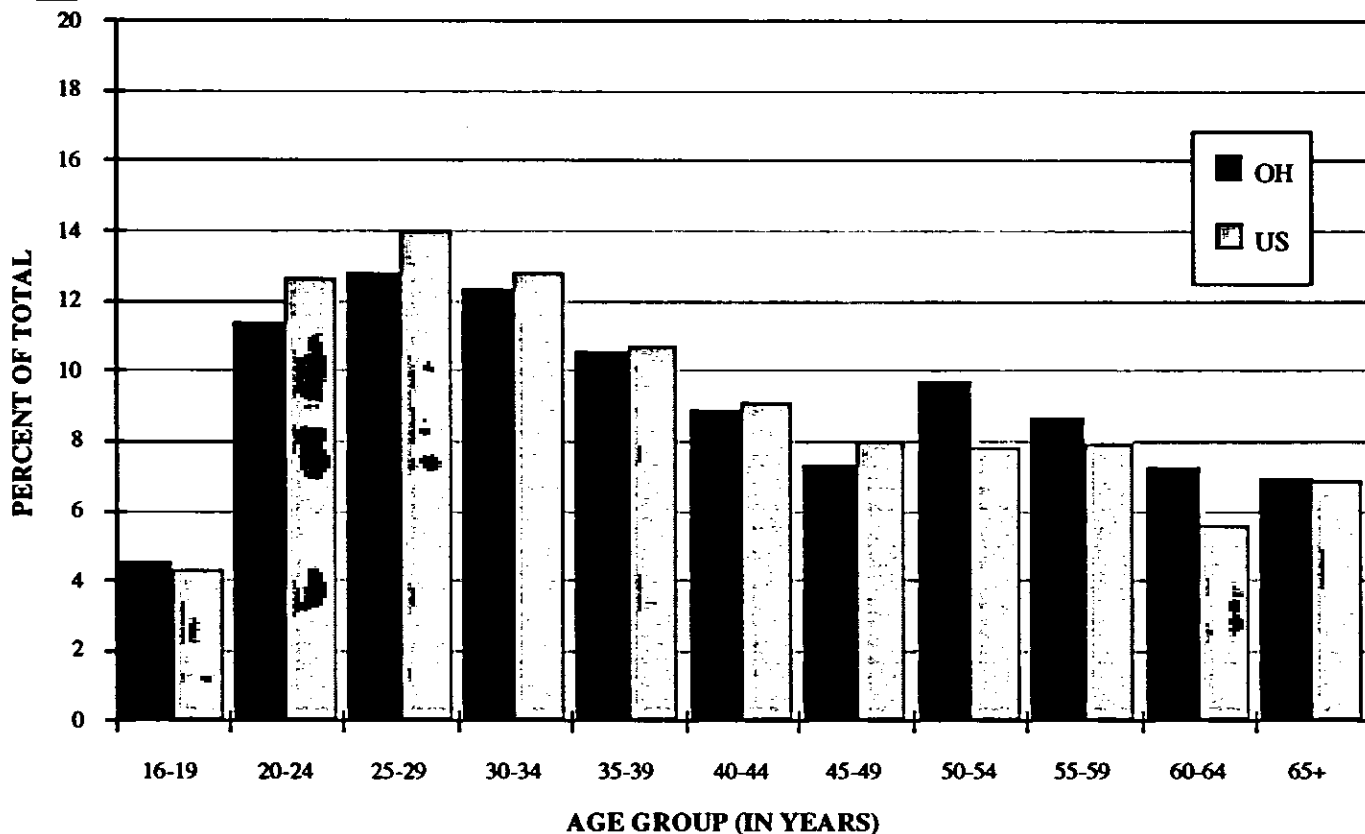


Figure OH-1. Traumatic Occupational Fatalities by Age Group, US and Ohio, 1980-1989.

Table OH-2. Traumatic Occupational Fatalities by State of Residence, Ohio, 1980-1989.

State	Number	Percent
Ohio	1593	86.2
Kentucky	49	2.7
Michigan	42	2.3
Indiana	35	1.9
Pennsylvania	30	1.6
West Virginia	20	1.1
Illinois	15	0.8
Florida	8	0.4
New York	6	0.3
Virginia	6	0.3
North Carolina	5	0.3
Other	40	2.2

transportation/communication/public utilities (22.1) (Figure OH-3). Table OH-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The occupation divisions in Ohio with the largest number of fatalities were transportation/material movers (23%), precision production/craft/repair (23%), and laborers (15%). The occupations with the highest rates were transportation/material movers (19.0 deaths per 100,000 workers), farmers/foresters/fishers (14.8), and laborers (12.1) (Figure OH-4). Table OH-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Ohio decreased 40%, from a high of 5.7 in 1980 to a low of 3.4 in 1989 (Figure OH-5).

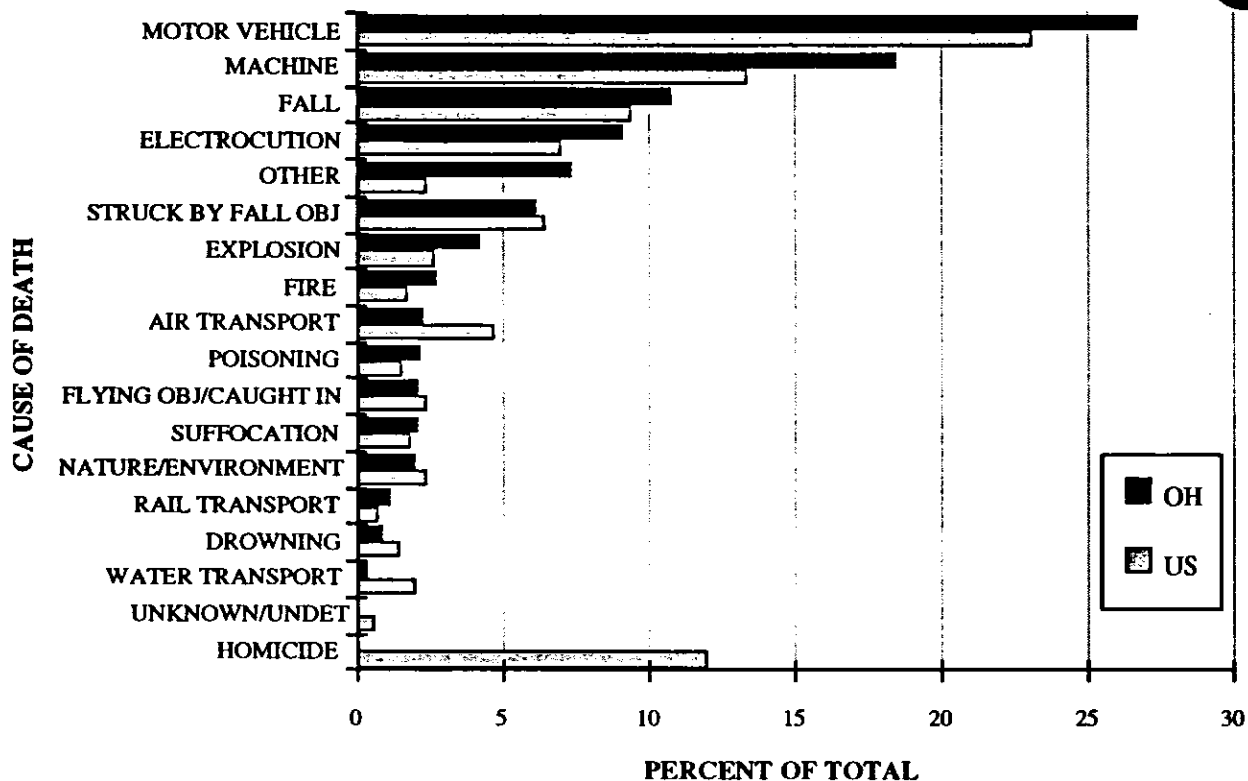


Figure OH-2. Traumatic Occupational Fatalities by Cause of Death, US and Ohio, 1980-1989.

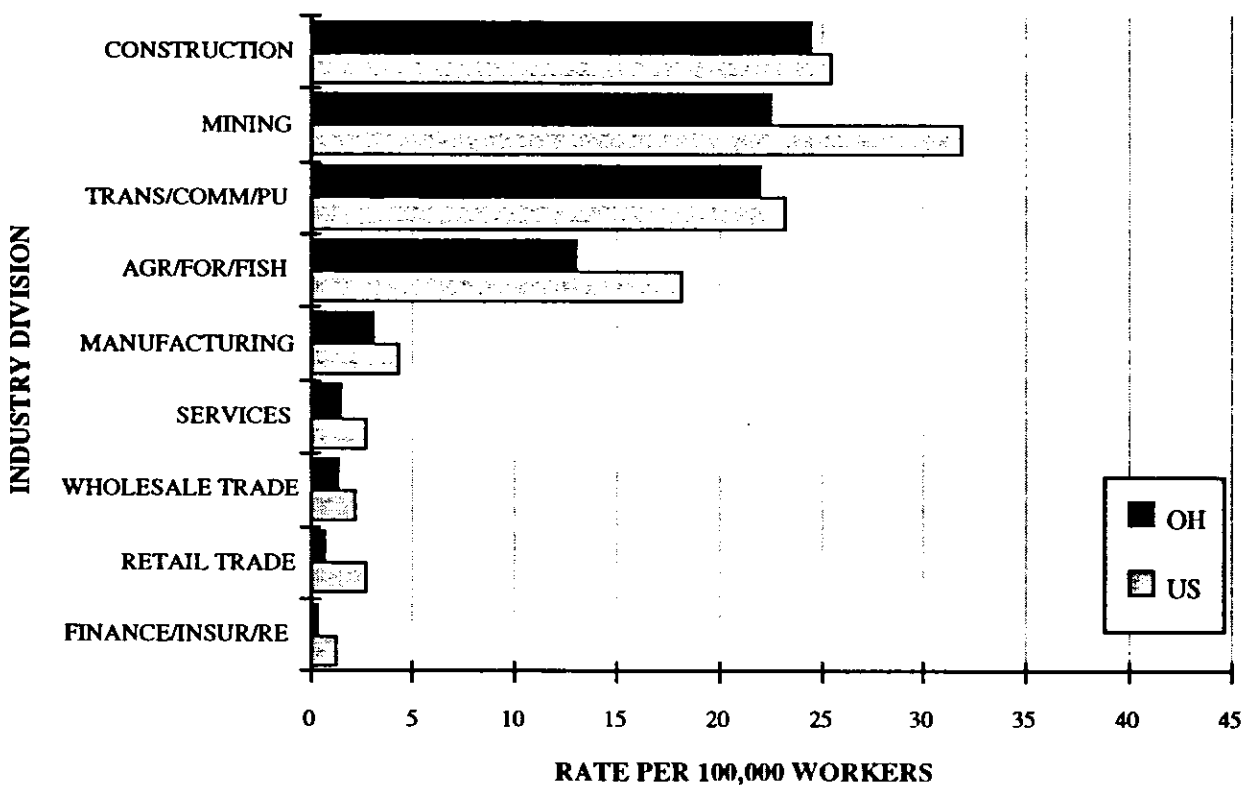


Figure OH-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Ohio, 1980-1989.

Table OH-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Ohio, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	48	42	31	37	31	42	31	32	39	44	377	24.7
MINING	11	5	6	5	8	5	5	4	4	8	61	22.6
TRANS/COMM/PU	48	53	46	30	43	51	37	37	47	27	419	22.1
AGR/FOR/FISH	19	15	21	17	12	20	13	19	15	15	166	13.2
MANUFACTURING	51	46	33	34	34	38	40	35	29	31	371	3.2
SERVICES	13	14	19	18	22	15	14	13	15	9	152	1.6
WHOLESALE TRADE	3	4	8	--	3	--	3	--	6	4	37	1.5
RETAIL TRADE	8	6	9	5	3	16	5	--	6	--	62	0.8
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	9	0.4
PUBLIC ADMIN	9	6	13	12	5	4	6	4	8	3	70	N/A
NOT CLASSIFIED	16	12	9	15	16	14	10	7	11	7	117	N/A
STATE	228	203	196	176	177	208	165	155	182	151	1841	4.6

NOTE: Dashes denote categories with fewer than three cases.

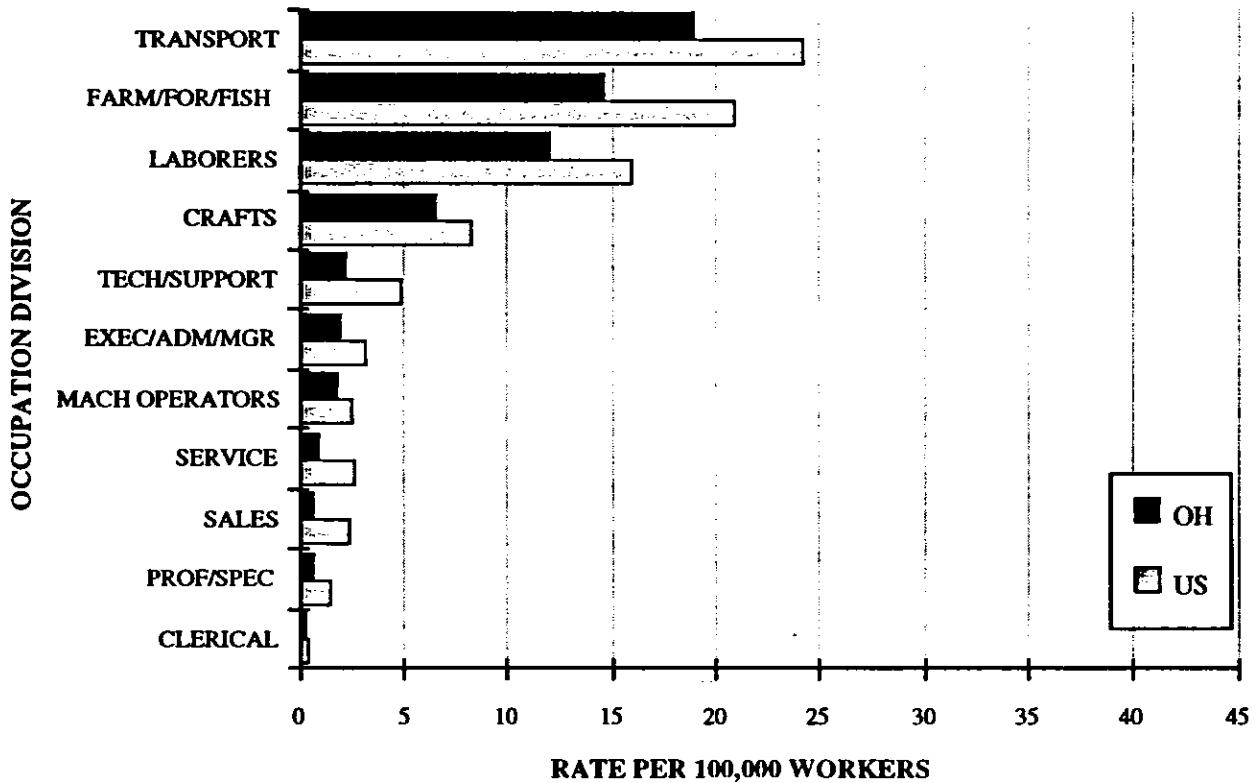


Figure OH-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Ohio, 1983-1989.

Table OH-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Ohio.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	427	19.0
FARM/FOR/FISH	162	14.8
LABORERS	272	12.1
CRAFTS	415	6.7
TECH/SUPPORT	37	2.4
EXEC/ADM/MGR	106	2.1
MACH OPERATORS	115	2.1
SERVICE	84	1.1
SALES	50	0.8
PROF/SPEC	51	0.8
CLERICAL	22	0.4
NOT CLASSIFIED	100	N/A

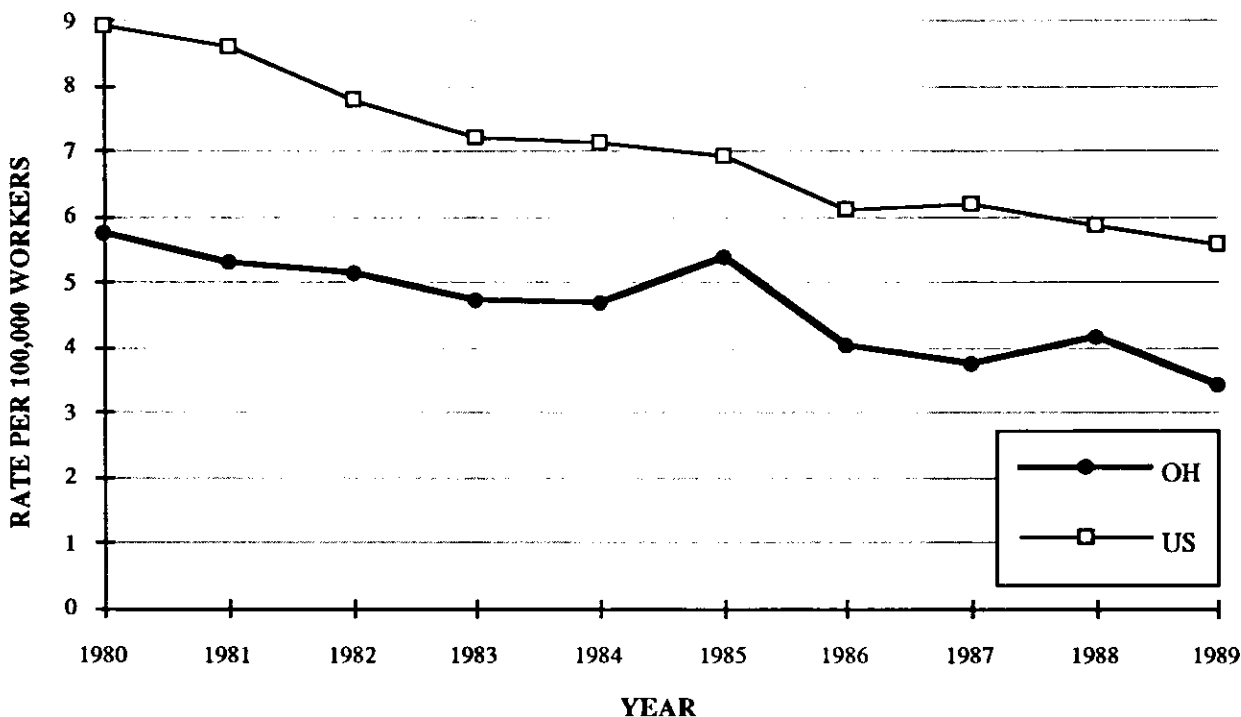


Figure OH-5. Rate of Traumatic Occupational Fatalities by Year, US and Ohio, 1980-1989.

State of Oklahoma

Average Annual Fatal Injuries: **91**

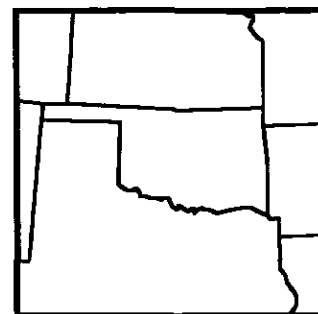
Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **8.6**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Mining (167)**
Rate: **Construction (34.3)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (229)**
Rate: **Laborers (24.8)**



The State of Oklahoma had 907 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 894 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 8.6 for Oklahoma compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 235.7 per 100,000 workers for Oklahoma compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Oklahoma and had a fatality rate of 10.7 per 100,000 workers compared to 0.8 for fe-

Table OK-1. Traumatic Occupational Fatalities by Race/Ethnicity, Oklahoma, 1980-1989.

Race/Ethnicity	Number	Percent
White	827	91.2
Black	32	3.5
Hispanic	25	2.8
Native American	12	1.3
Asian	5	0.6
Other	6	0.7

males. The fatality distribution by **race/ethnicity** for the State of Oklahoma shows that Whites accounted for 91% of the total fatalities, Blacks for 4%, and Hispanics for 3% as shown in **Table OK-1**. As shown in **Figure OK-1**, workers aged 20 to 24 years old accounted for the largest number of fatalities (15%). Of all Oklahoma occupational fatality victims, 95% were Oklahoma residents (**Table OK-2**).

Figure OK-2 presents the distribution of fatalities by external cause of death for the State of Oklahoma and for the U.S. The three leading causes of death among employees in Oklahoma were machine-related incidents (18%), motor vehicle incidents (15%), and electrocutions (14%). From 1980 through 1984, Oklahoma did not report work-related homicides or suicides. An estimate of the number of homicides was made assuming that Oklahoma is similar to the rest of the U.S.; there were an estimated 121.1 ± 28.1 (99% CI) occupational homicides during this 10-year period. This estimate was not used for any of the analyses for the State of Oklahoma.

In Oklahoma, the **industry divisions** in which the largest number of fatalities occurred were mining (19%), construction (19%), and transportation/communication/public utilities (15%). The construction industry had the highest fatality rate at 34.3 per

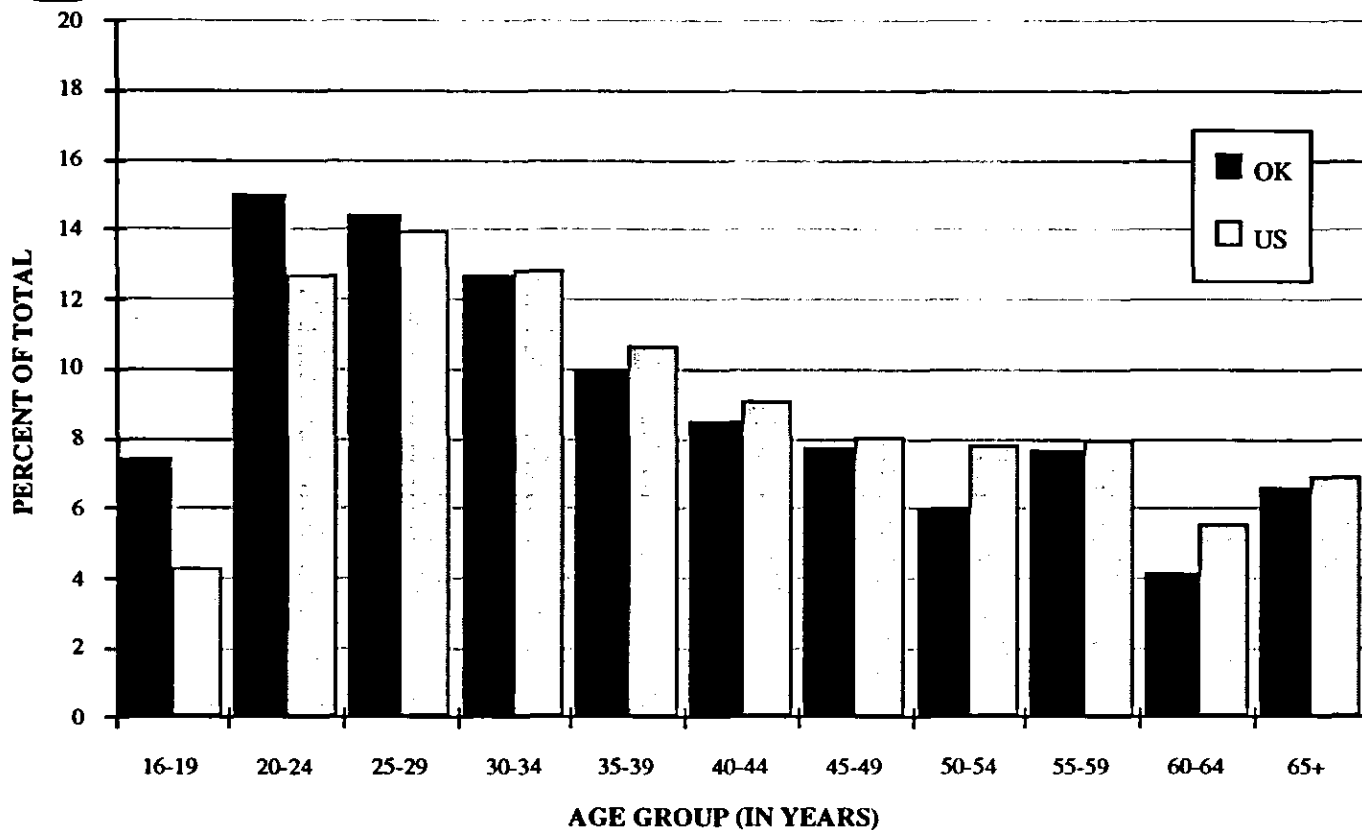


Figure OK-1. Traumatic Occupational Fatalities by Age Group, US and Oklahoma, 1980-1989.

Table OK-2. Traumatic Occupational Fatalities by State of Residence, Oklahoma, 1980-1989.

State	Number	Percent
Oklahoma	862	95.0
Texas	13	1.4
Arkansas	5	0.6
Kansas	4	0.4
Missouri	4	0.4
Other	19	2.1

100,000 workers, followed by mining (25.5), and transportation/communication/public utilities (20.6) (Figure OK-3). Table OK-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The occupation divisions in Oklahoma with the largest number of fatalities were precision production/craft/repair (26%), transportation/material movers (16%), and laborers (16%). The occupations with the highest rates were laborers (24.8 deaths per 100,000 workers), transportation/material movers (24.4), and precision production/craft/repair (11.2) (Figure OK-4). Table OK-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Oklahoma increased 16%, from 7.4 in 1980 to 8.6 in 1989. This increase may be due in part to increased reporting of work-related deaths in Oklahoma over the decade. A high of 11.5 and a low of 6.7 deaths per 100,000 workers were reported in 1985 and 1983, respectively (Figure OK-5).

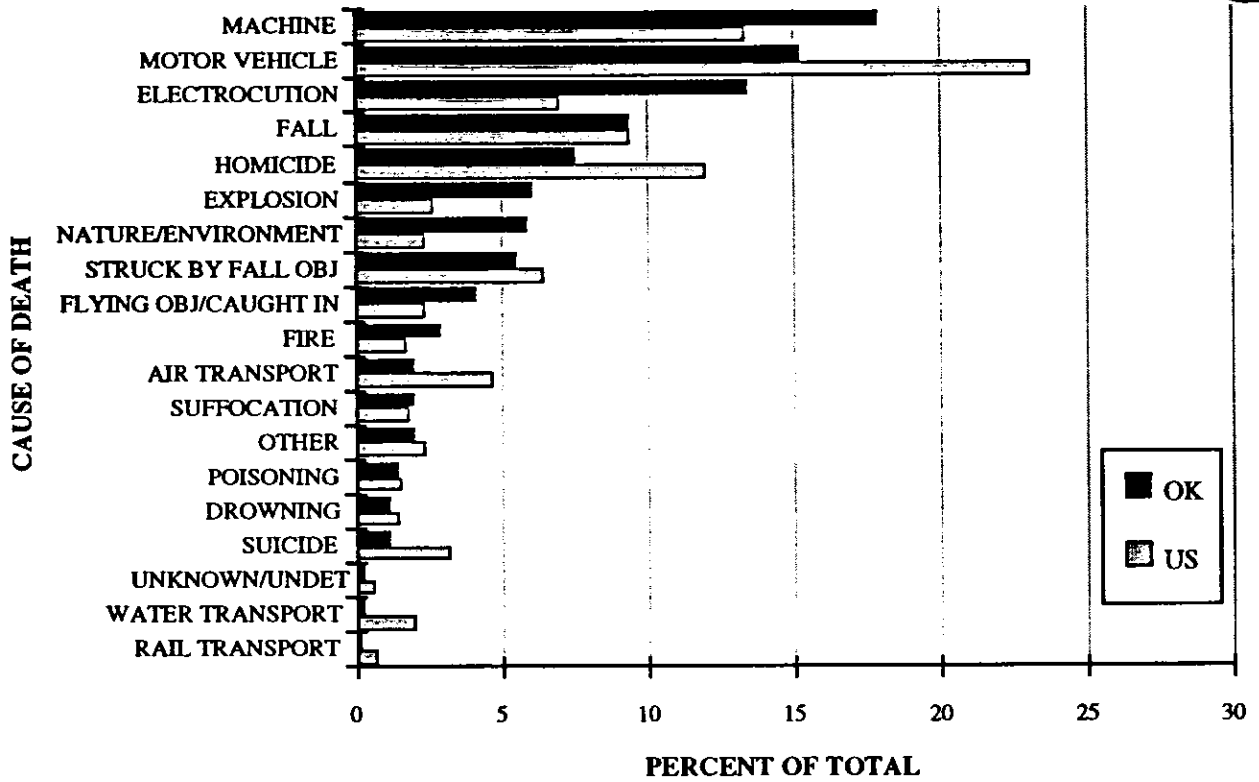


Figure OK-2. Traumatic Occupational Fatalities by Cause of Death, US and Oklahoma, 1980-1989.

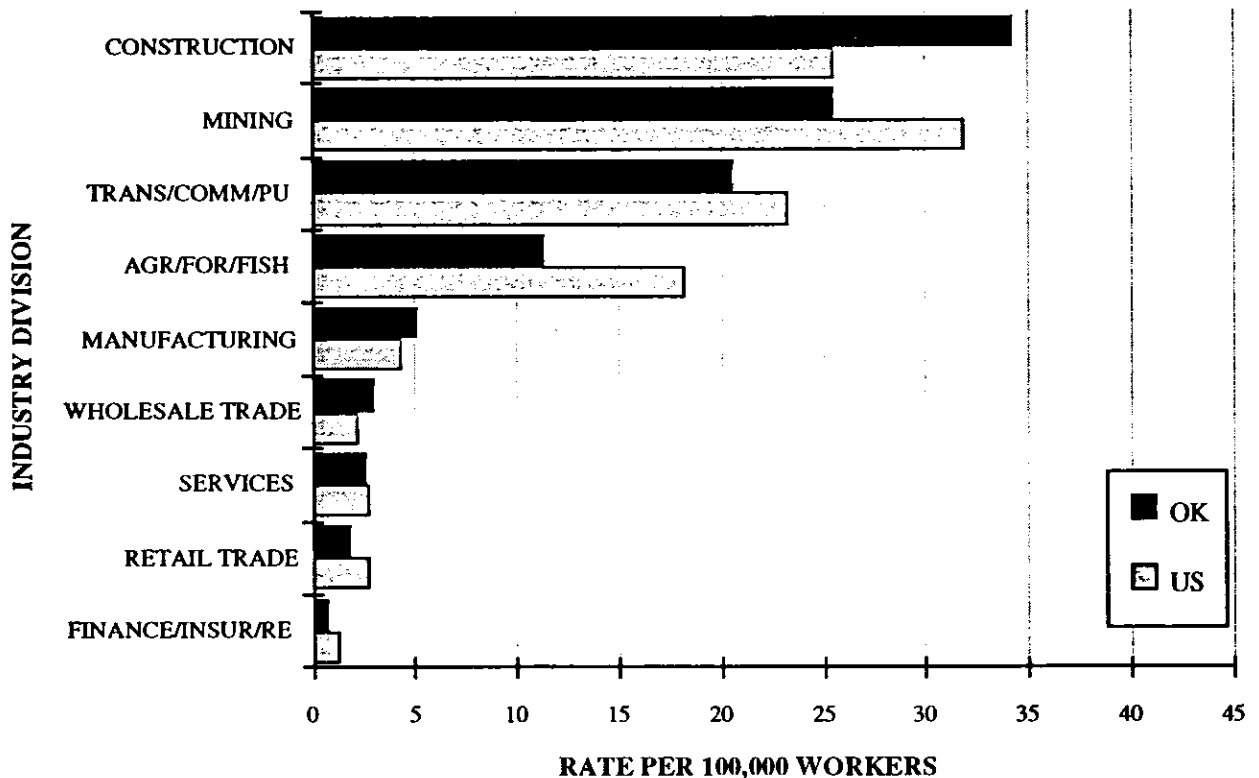


Figure OK-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Oklahoma, 1980-1989.

Table OK-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Oklahoma, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	16	18	23	15	22	11	20	11	12	18	166	34.3
MINING	22	43	25	14	16	9	13	7	8	10	167	25.5
TRANS/COMM/PU	8	4	8	11	11	21	21	16	15	20	135	20.6
AGR/FOR/FISH	8	7	7	7	6	8	8	12	7	7	77	11.4
MANUFACTURING	8	9	6	9	8	23	12	8	7	--	92	5.3
WHOLESALE TRADE	--	3	3	--	3	4	3	--	3	--	21	3.1
SERVICES	--	6	7	--	5	7	5	4	15	7	58	2.7
RETAIL TRADE	--	--	3	3	--	10	4	--	6	9	41	2.0
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	5	0.8
PUBLIC ADMIN	4	--	--	--	6	10	8	5	4	8	48	N/A
NOT CLASSIFIED	4	5	9	7	5	21	7	5	11	10	84	N/A
STATE	74	99	91	67	84	126	101	72	88	92	894	8.6

NOTE: Dashes denote categories with fewer than three cases.

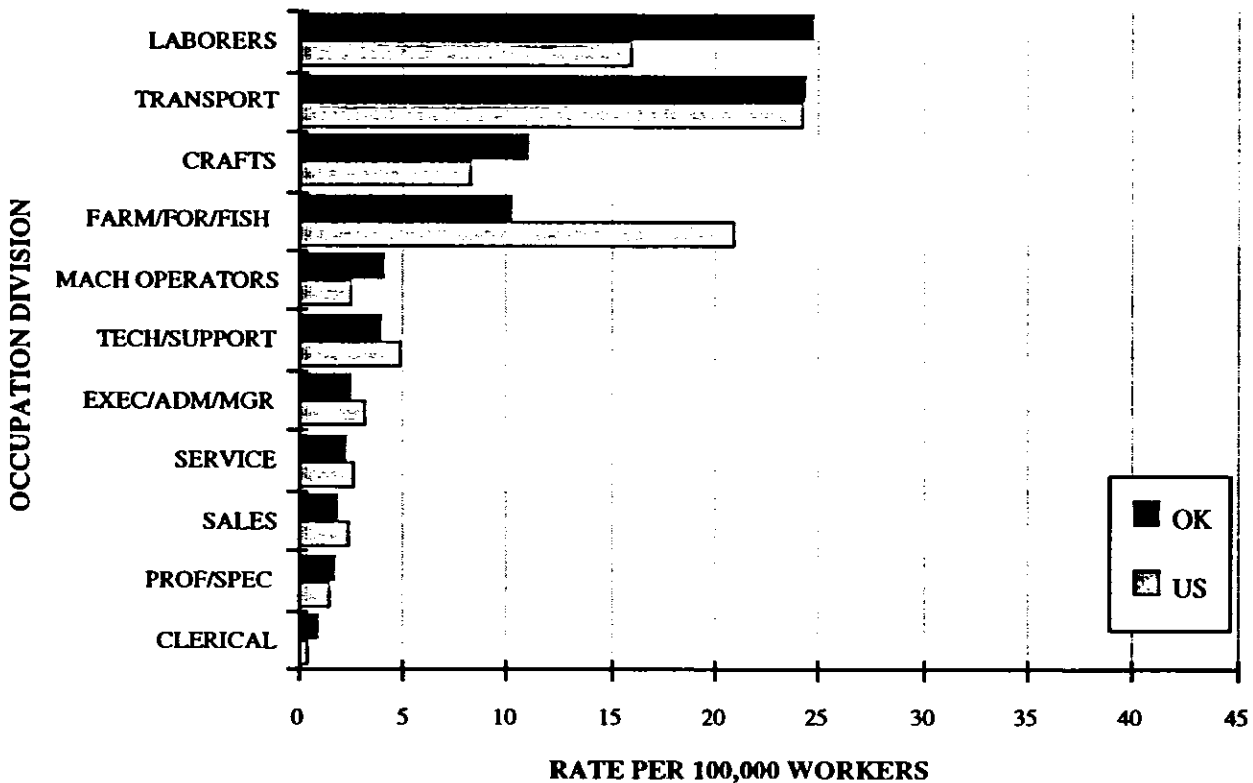


Figure OK-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Oklahoma, 1983-1989.

Table OK-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Oklahoma.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
LABORERS	142	24.8
TRANSPORT	145	24.4
CRAFTS	229	11.2
FARM/FOR/FISH	79	10.4
MACH OPERATORS	40	4.3
TECH/SUPPORT	16	4.1
EXEC/ADM/MGR	45	2.7
SERVICE	36	2.4
SALES	28	2.0
PROF/SPEC	27	1.9
CLERICAL	20	1.1
NOT CLASSIFIED	87	N/A

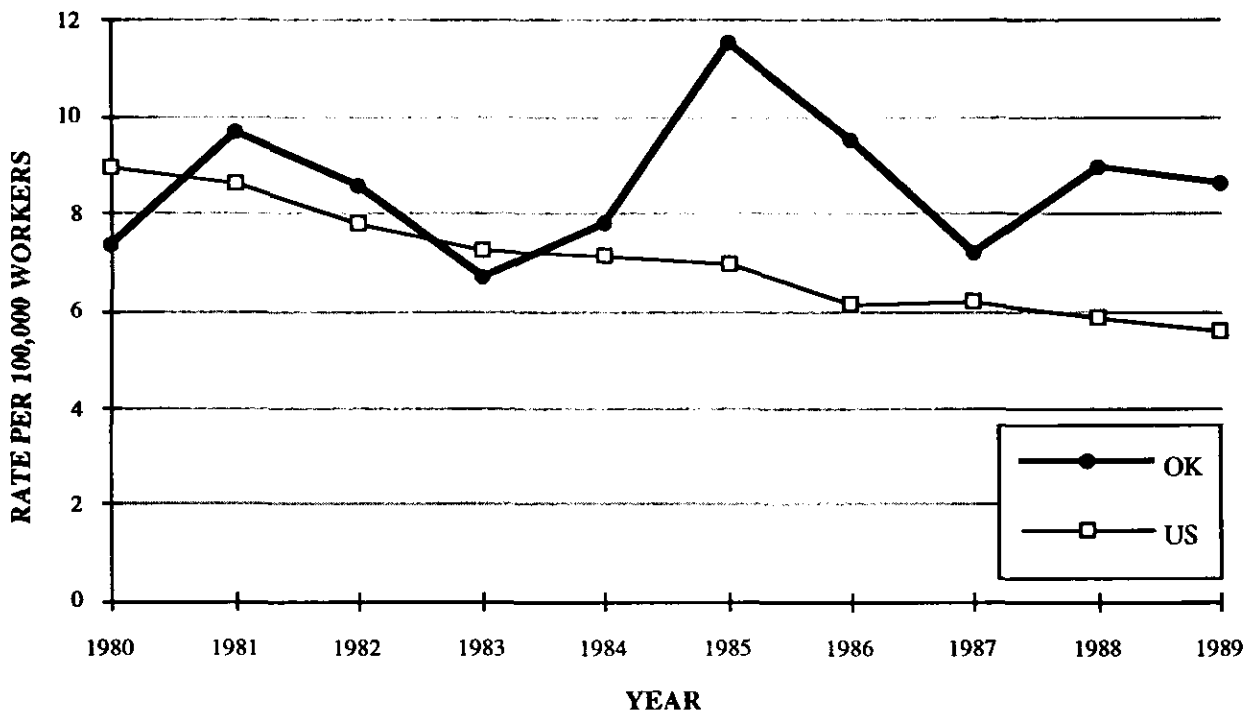


Figure OK-5. Rate of Traumatic Occupational Fatalities by Year, US and Oklahoma, 1980-1989.

State of Oregon

Average Annual Fatal Injuries: **105**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **10.9**

Industries with the Highest Number and Rate of Fatal Injuries:

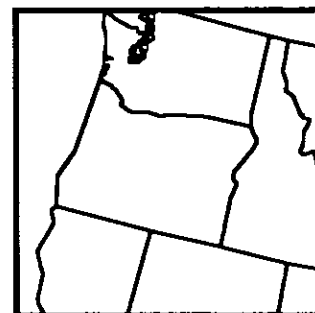
Number: **Manufacturing (305)**

Rate: **Mining (55.9)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (296)**

Rate: **Farmers/Foresters/Fishers (47.4)**



The State of Oregon had 1,051 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,050 of these deaths. The average annual rate of fatalities per 100,000 workers was 10.9 for Oregon compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 277.6 per 100,000 workers for Oregon compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Oregon and had a fatality rate of 14.3 per 100,000 workers compared to 1.0 for fe-

Table OR-1. Traumatic Occupational Fatalities by Race/Ethnicity, Oregon, 1980-1989.

Race/Ethnicity	Number	Percent
White	1000	95.1
Hispanic	21	2.0
Asian	14	1.3
Native American	9	0.9
Black	4	0.4
Other	3	0.3

males. The fatality distribution by race/ethnicity for the State of Oregon shows that Whites accounted for 95% of the total fatalities and Hispanics for 2% as shown in Table OR-1. As shown in Figure OR-1, workers aged 25 to 29 and 30 to 34 years old each accounted for 14% of the fatalities. Of all Oregon occupational fatality victims, 85% were Oregon residents (Table OR-2).

Figure OR-2 presents the distribution of fatalities by external cause of death for the State of Oregon and for the U.S. The three leading causes of death among employees in Oregon were motor vehicle incidents (25%), machine-related incidents (17%), and being struck by falling objects (12%).

In Oregon, the industry divisions in which the largest number of fatalities occurred were manufacturing (29%), transportation/communication/public utilities (19%), and agriculture/forestry/fishing (16%). The mining industry had the highest fatality rate at 55.9 per 100,000 workers, followed by transportation/communication/public utilities (36.1), and construction (35.1) (Figure OR-3). Table OR-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

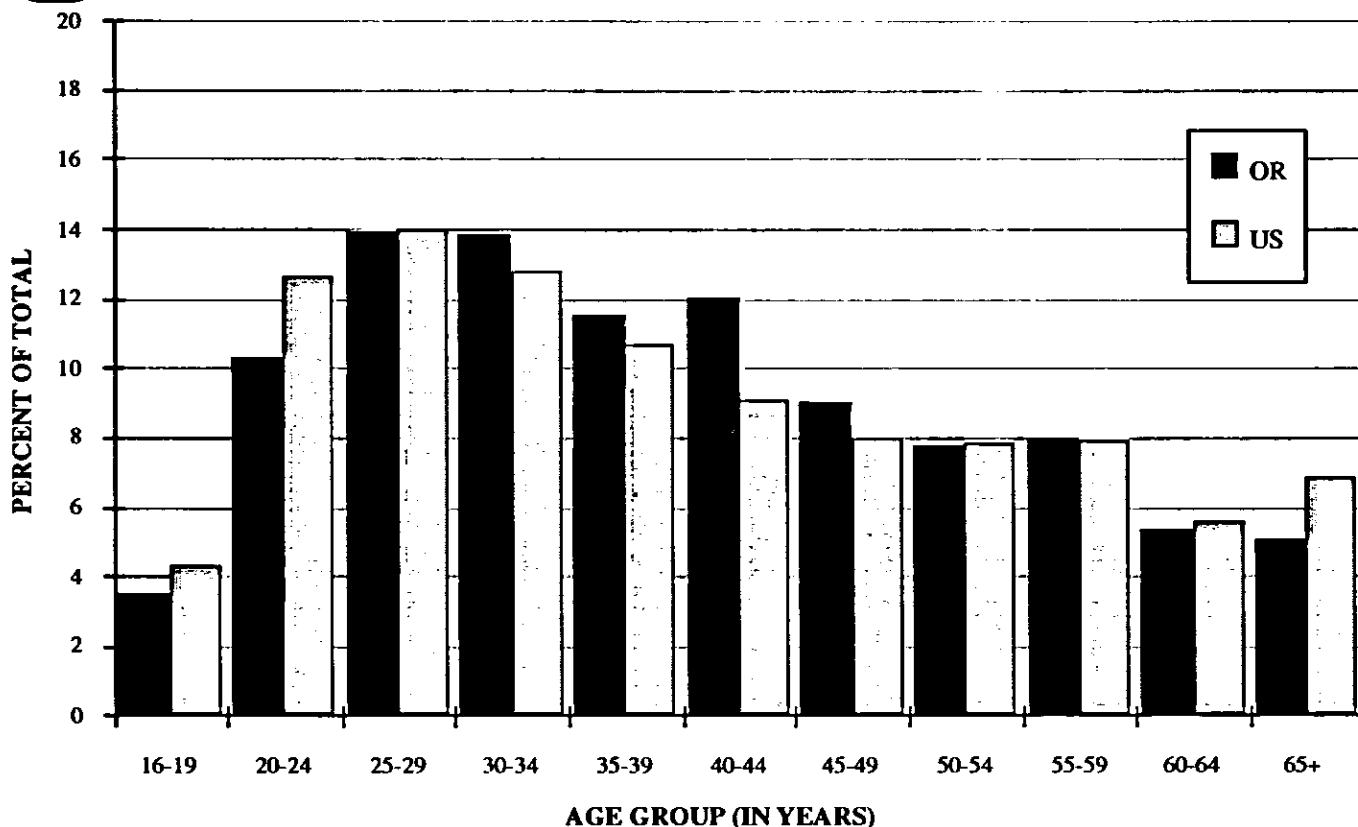


Figure OR-1. Traumatic Occupational Fatalities by Age Group, US and Oregon, 1980-1989.

Table OR-2. Traumatic Occupational Fatalities by State of Residence, Oregon, 1980-1989.

State	Number	Percent
Oregon	891	84.8
Washington	69	6.6
California	28	2.7
Idaho	23	2.2
Minnesota	3	0.3
Other	37	3.5

The occupation divisions in Oregon with the largest number of fatalities were farmers/ foresters/fishers (28%), transportation/material movers (22%), and precision production/craft/repair (12%). The occupations with the highest rates were farmers/foresters/fishers (47.4 deaths per 100,000 workers), transportation/material movers (40.0), and technicians/related support (13.6) (Figure OR-4). Table OR-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Oregon decreased 10%, from 11.9 in 1980 to 10.7 in 1989. A high of 13.6 and low of 7.8 deaths per 100,000 workers were reported in 1983 and 1988, respectively (Figure OR-5).

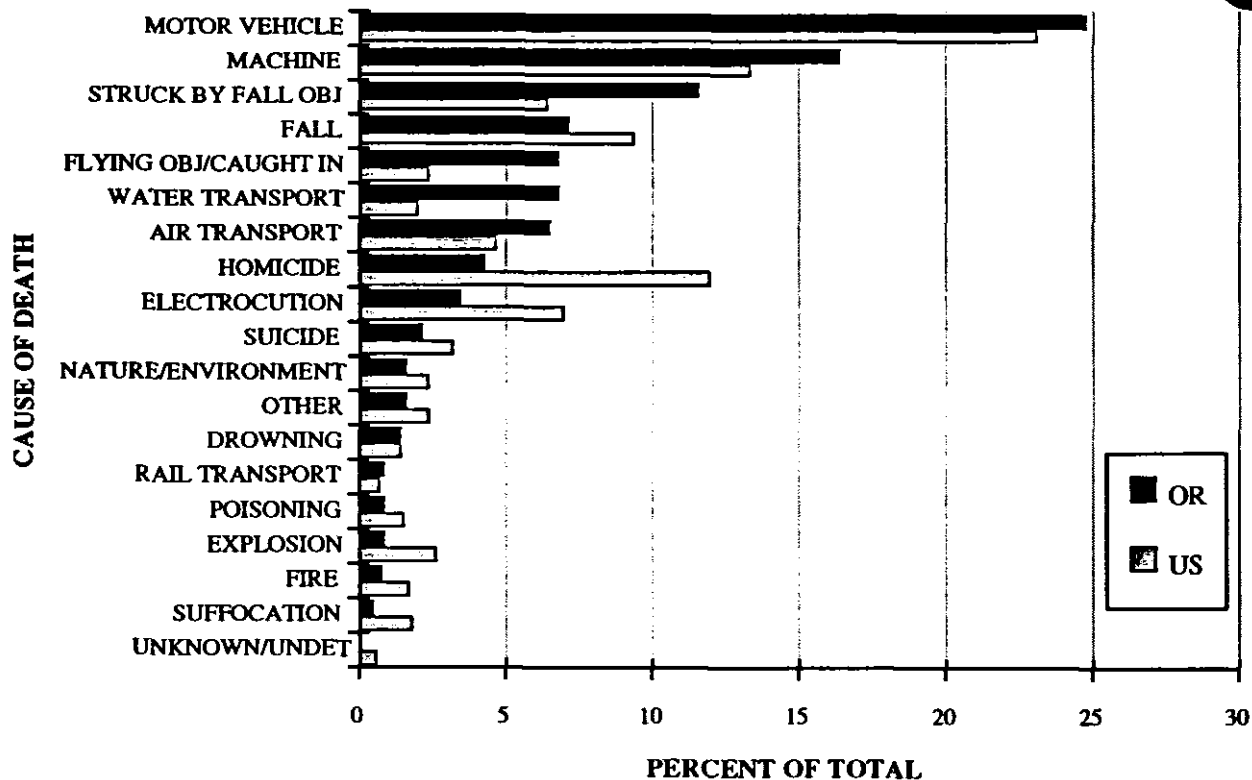


Figure OR-2. Traumatic Occupational Fatalities by Cause of Death, US and Oregon, 1980-1989.

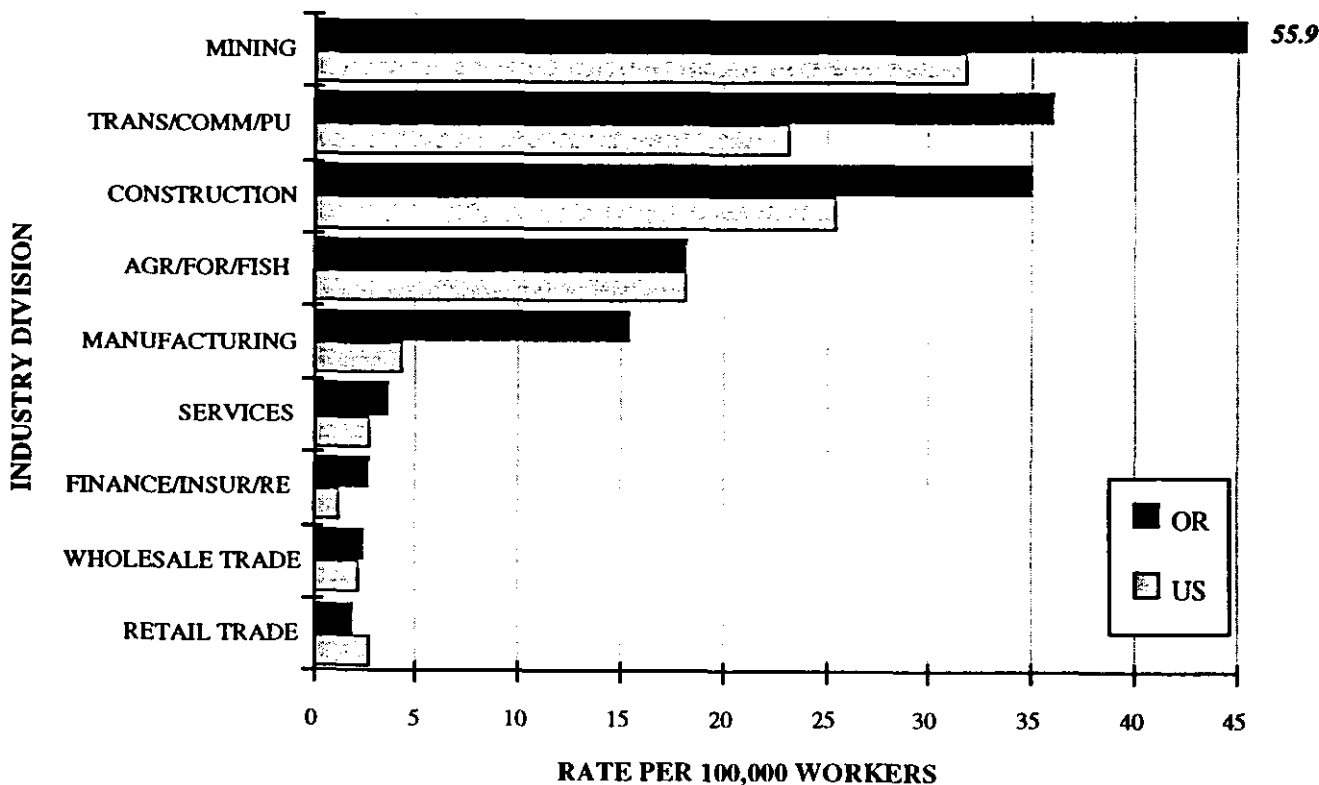


Figure OR-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Oregon, 1980-1989.

Table OR-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Oregon, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	4	--	--	--	--	--	--	9	55.9
TRANS/COMM/PU	26	22	11	21	18	20	29	12	11	25	195	36.1
CONSTRUCTION	16	14	8	12	15	18	14	6	16	11	130	35.1
AGR/FOR/FISH	14	20	14	21	22	18	19	9	9	17	163	18.3
MANUFACTURING	29	27	21	34	31	30	32	32	31	38	305	15.5
SERVICES	10	12	5	6	5	15	10	8	--	8	81	3.7
FINANCE/INSUR/RE	--	--	--	--	3	--	3	--	--	--	17	2.9
WHOLESALE TRADE	--	--	--	--	--	3	--	--	4	--	17	2.6
RETAIL TRADE	3	3	3	7	6	3	--	4	3	5	39	2.0
PUBLIC ADMIN	6	3	--	3	7	5	8	--	3	4	40	N/A
NOT CLASSIFIED	8	7	9	3	4	5	3	5	--	8	54	N/A
STATE	116	111	75	114	112	119	121	80	83	119	1050	10.9

NOTE: Dashes denote categories with fewer than three cases.

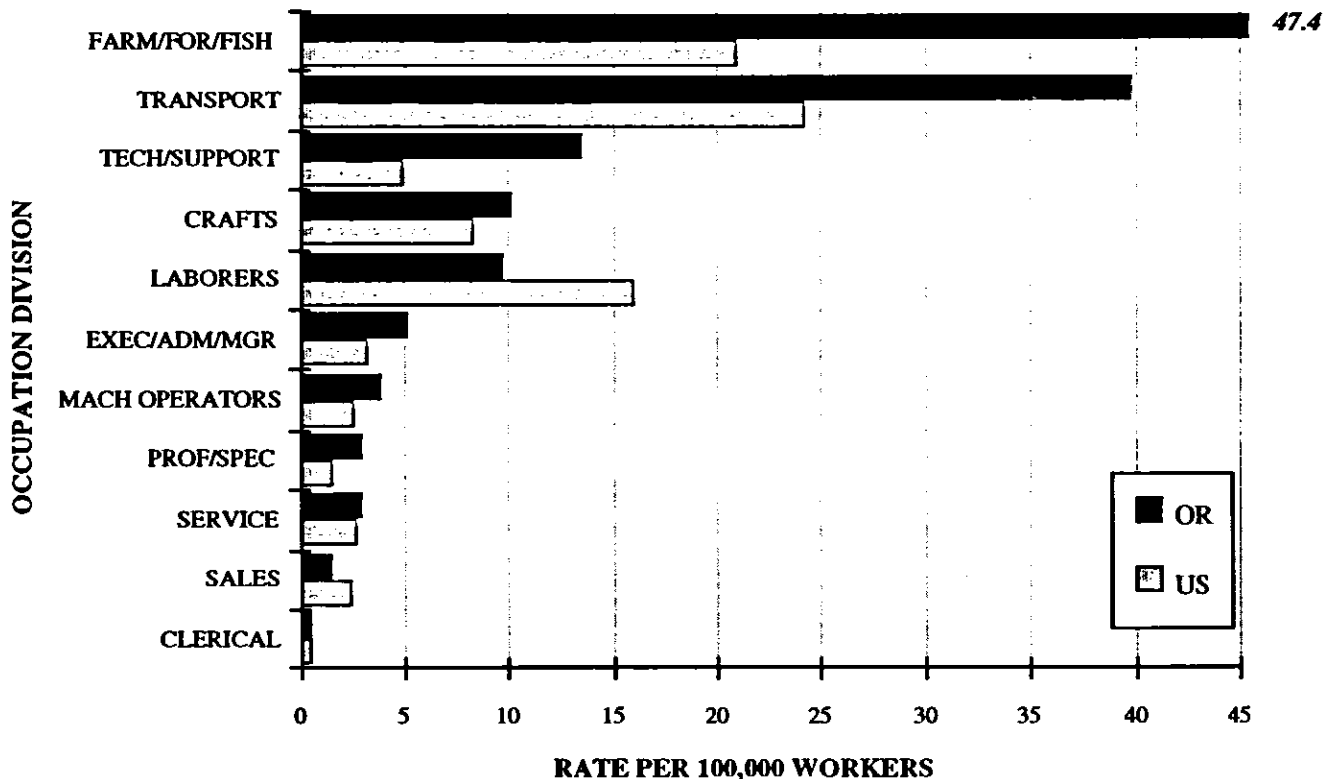


Figure OR-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Oregon, 1983-1989.

Table OR-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Oregon.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	296	47.4
TRANSPORT	229	40.0
TECH/SUPPORT	34	13.6
CRAFTS	130	10.2
LABORERS	66	9.9
EXEC/ADM/MGR	73	5.3
MACH OPERATORS	30	3.9
PROF/SPEC	50	3.0
SERVICE	52	3.0
SALES	32	1.7
CLERICAL	12	0.5
NOT CLASSIFIED	46	N/A

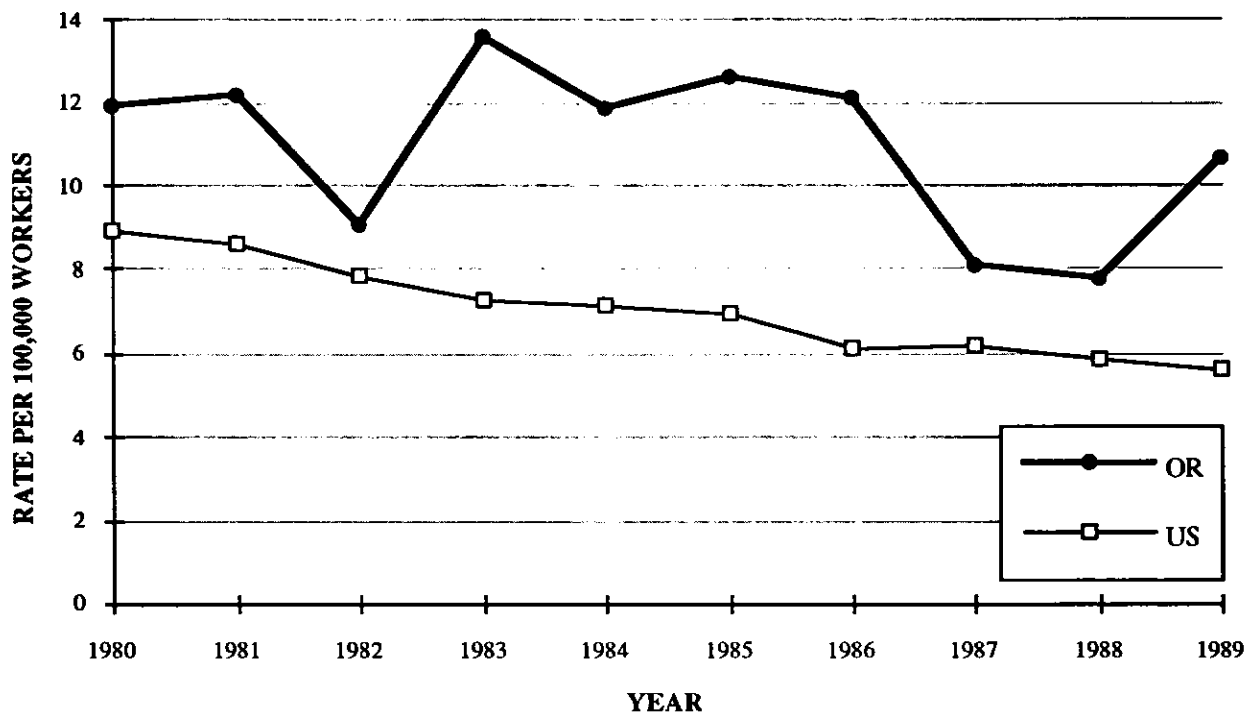


Figure OR-5. Rate of Traumatic Occupational Fatalities by Year, US and Oregon, 1980-1989.

State of Pennsylvania

Average Annual Fatal Injuries: **258**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **5.9**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (452)**
Rate: **Mining (29.1)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (522)**
Rate: **Farmers/Foresters/Fishers (21.7)**



The State of Pennsylvania had 2,576 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 2,564 of these deaths. The average annual rate of fatalities per 100,000 workers was 5.9 for Pennsylvania compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 136.4 per 100,000 workers for Pennsylvania compared to 175.6 for the United States.

Males accounted for 93% of the civilian occupational fatalities in Pennsylvania and had a fatality rate

Table PA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Pennsylvania, 1980-1989.

Race/Ethnicity	Number	Percent
White	2266	88.0
Black	269	10.4
Hispanic	20	0.8
Asian	13	0.5
Other	8	0.3

of 8.2 per 100,000 workers compared to 0.8 for females. The fatality distribution by race/ethnicity for the State of Pennsylvania shows that Whites accounted for 88% of the total fatalities and Blacks for 10% as shown in Table PA-1. As shown in Figure PA-1, workers aged 25 to 29 years old accounted for the largest number of fatalities (12%). Of all Pennsylvania occupational fatality victims, 99.7% were Pennsylvania residents (Table PA-2).

Figure PA-2 presents the distribution of fatalities by external cause of death for the State of Pennsylvania and for the U.S. The three leading causes of death among employees in Pennsylvania were motor vehicle incidents (25%), machine-related incidents (13%), and falls (12%).

In Pennsylvania, the industry divisions in which the largest number of fatalities occurred were construction (18%), manufacturing (17%), and transportation/communication/public utilities (16%). The mining industry had the highest fatality rate at 29.1 per 100,000 workers, followed by construction (23.0), and agriculture/forestry/fishing (19.5) (Figure PA-3). Table PA-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

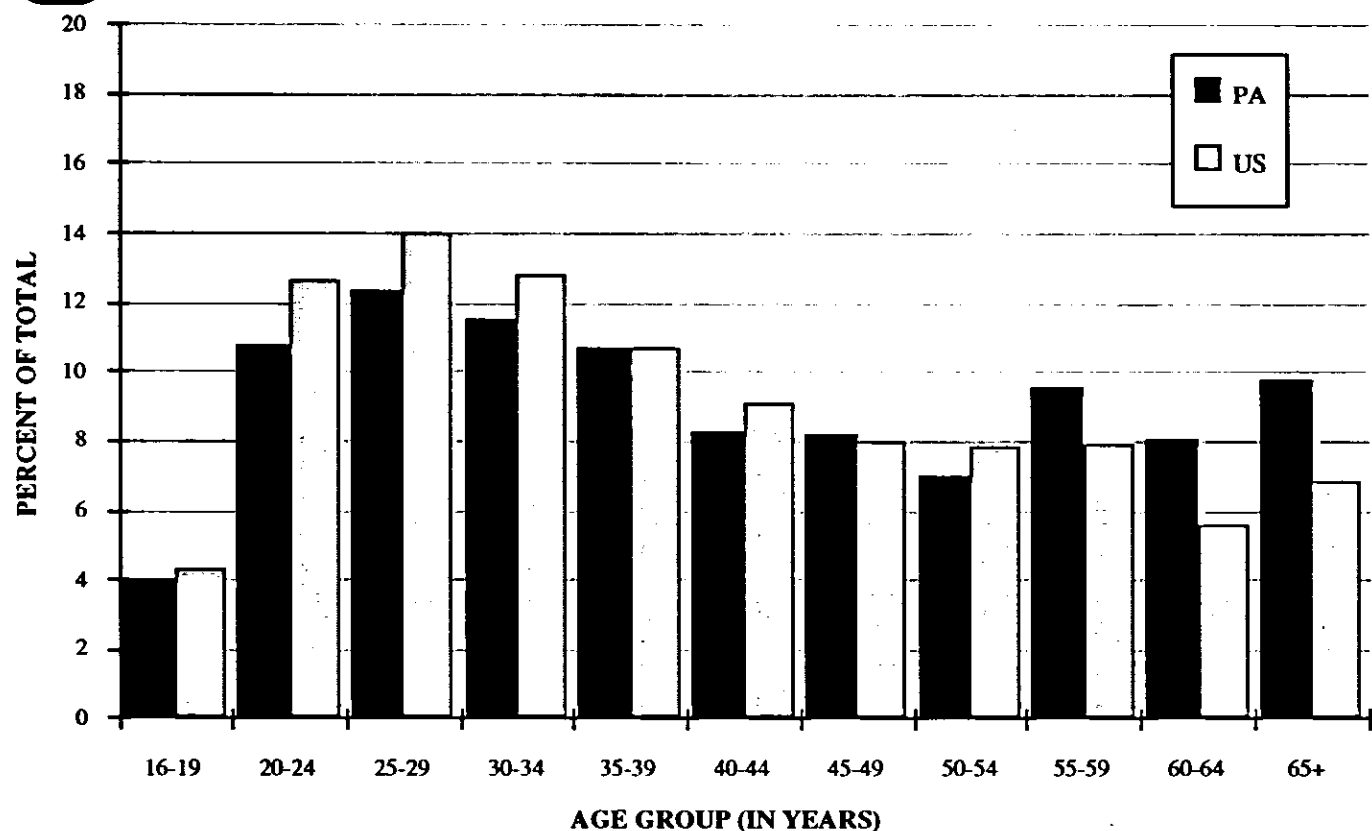


Figure PA-1. Traumatic Occupational Fatalities by Age Group, US and Pennsylvania, 1980-1989.

Table PA-2. Traumatic Occupational Fatalities by State of Residence, Pennsylvania, 1980-1989.

State	Number	Percent
Pennsylvania	2569	99.7
Other	7	0.3

The occupation divisions in Pennsylvania with the largest number of fatalities were precision production/craft/repair (20%), transportation/material movers (16%), and laborers (14%). The occupations with the highest rates were farmers/foresters/fishers (21.7 deaths per 100,000 workers), transportation/material movers (18.5), and laborers (13.0) (Figure PA-4). Table PA-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Pennsylvania decreased 42%, from a high of 7.7 in 1980 to a low of 4.5 in 1989 (Figure PA-5).

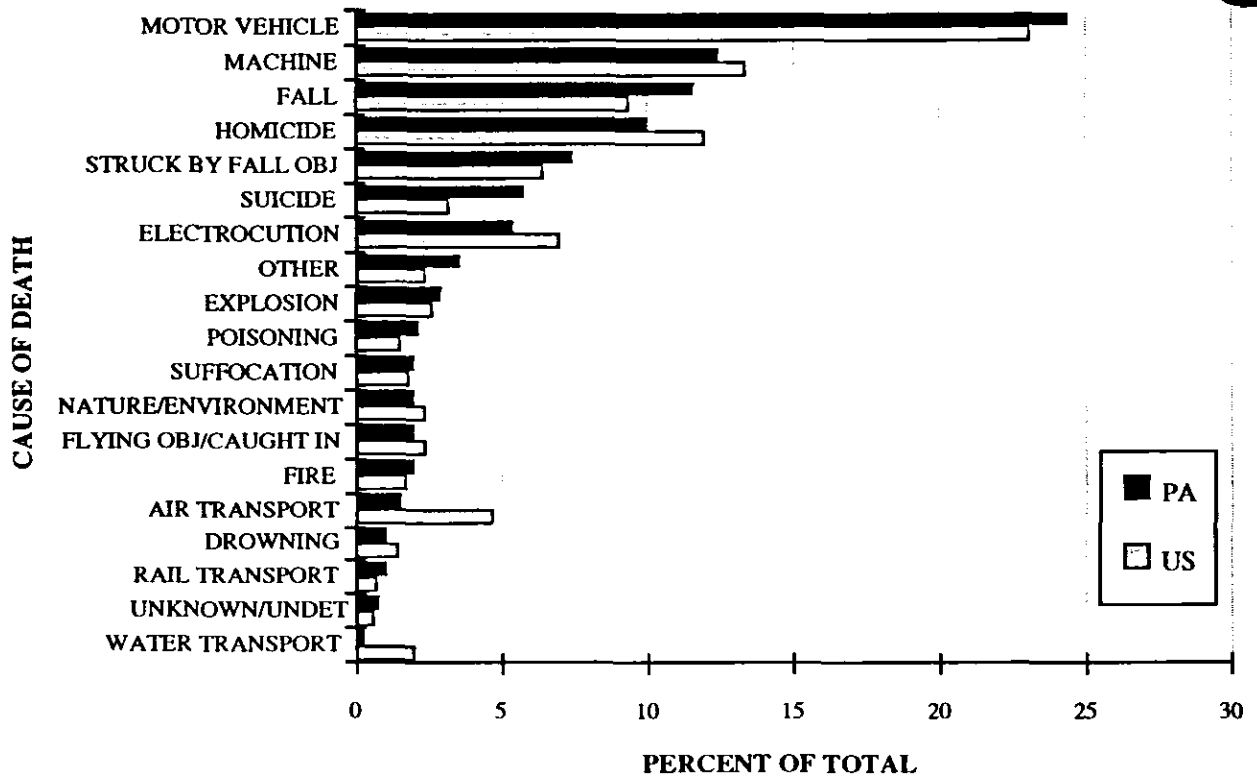


Figure PA-2. Traumatic Occupational Fatalities by Cause of Death, US and Pennsylvania, 1980-1989.

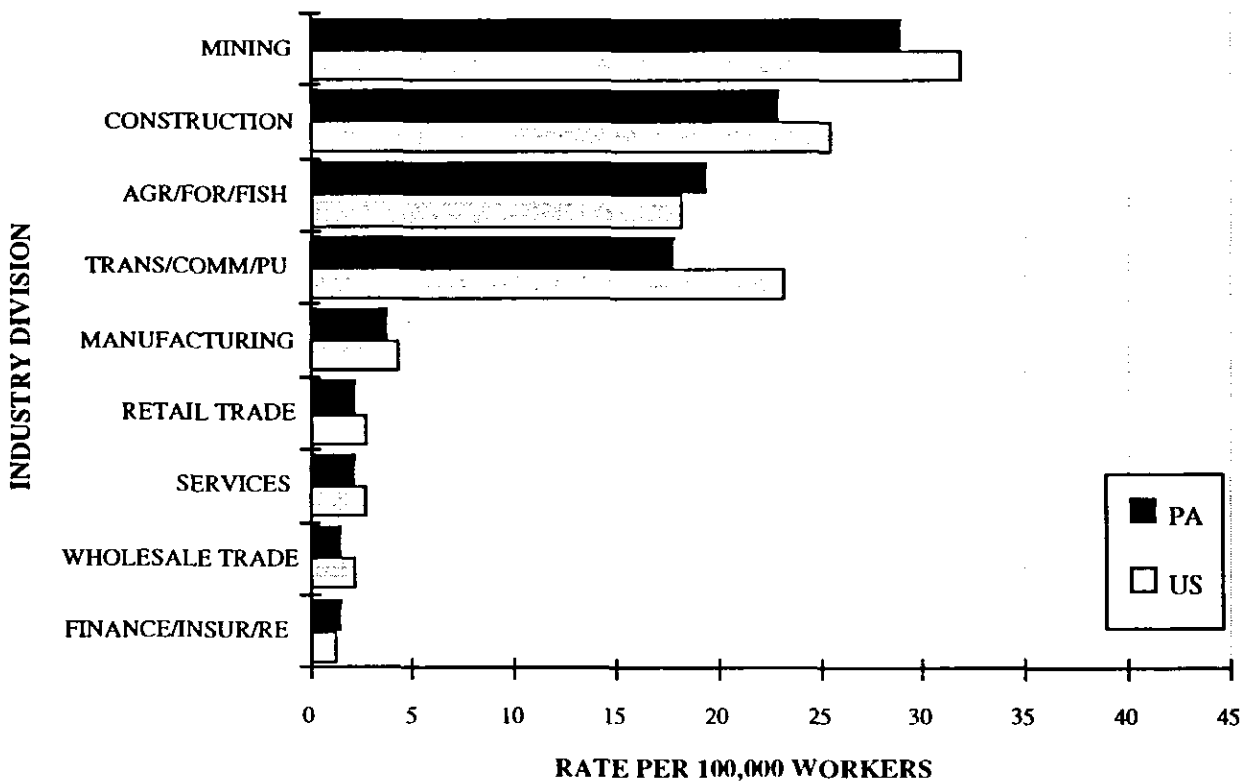


Figure PA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Pennsylvania, 1980-1989.

Table PA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Pennsylvania, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	25	16	9	13	11	13	14	8	5	5	119	29.1
CONSTRUCTION	46	54	36	37	50	45	32	58	49	45	452	23.0
AGR/FOR/FISH	16	24	18	19	21	28	19	17	14	22	198	19.5
TRANS/COMM/PU	44	44	34	41	45	44	31	31	48	42	404	17.9
MANUFACTURING	55	47	37	38	45	48	43	45	49	36	443	3.9
RETAIL TRADE	30	21	23	16	23	15	14	23	14	8	187	2.3
SERVICES	36	28	32	26	23	23	24	27	28	17	264	2.3
WHOLESALE TRADE	5	7	3	7	--	3	5	3	4	3	42	1.7
FINANCE/INSUR/RE	4	5	3	4	3	4	6	5	4	6	44	1.6
PUBLIC ADMIN	16	11	5	17	11	10	10	13	6	7	106	N/A
NOT CLASSIFIED	55	37	35	34	27	23	30	19	20	25	305	N/A
STATE	332	294	235	252	261	256	228	249	241	216	2564	5.9

NOTE: Dashes denote categories with fewer than three cases.

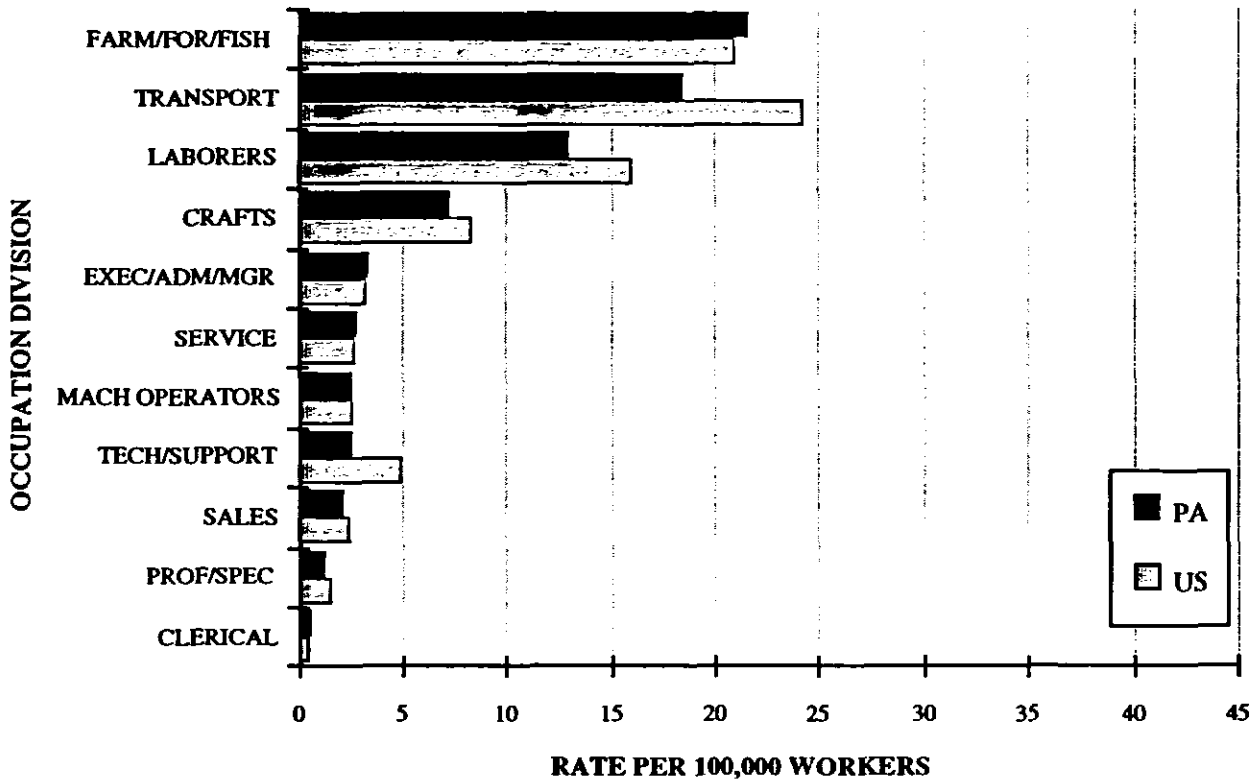


Figure PA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Pennsylvania, 1983-1989.

Table PA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Pennsylvania.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	213	21.7
TRANSPORT	422	18.5
LABORERS	370	13.0
CRAFTS	522	7.3
EXEC/ADM/MGR	189	3.4
SERVICE	217	2.9
MACH OPERATORS	141	2.7
TECH/SUPPORT	41	2.6
SALES	137	2.3
PROF/SPEC	83	1.3
CLERICAL	62	0.7
NOT CLASSIFIED	167	N/A

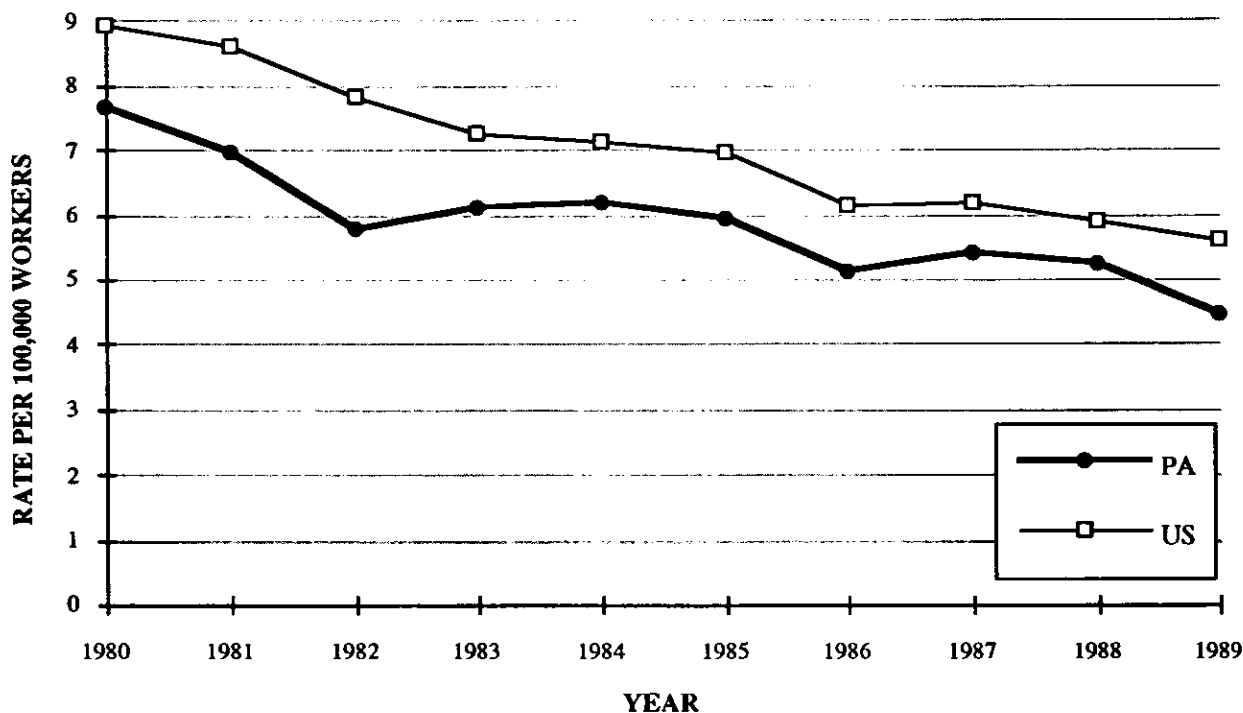


Figure PA-5. Rate of Traumatic Occupational Fatalities by Year, US and Pennsylvania, 1980-1989.

State of Rhode Island

Average Annual Fatal Injuries: 13

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): 3.3

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (26)**
Rate: **Agriculture/Forestry/Fishing (45.9)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (27)**
Rate: **Farmers/Foresters/Fishers (17.5)**



The State of Rhode Island had 128 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 125 of these deaths. The average annual rate of fatalities per 100,000 workers was 3.3 for Rhode Island compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 80.6 per 100,000 workers for Rhode Island compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Rhode Island and had a fatality rate of 4.7 per 100,000 workers compared to 0.3 for

females. The fatality distribution by race/ethnicity for the State of Rhode Island shows that Whites accounted for 87% of the total fatalities, Blacks for 6%, and Hispanics for 6% as shown in **Table RI-1**. As shown in **Figure RI-1**, workers aged 20 to 24 years old accounted for the largest number of fatalities (15%). Of all Rhode Island occupational fatality victims, 79% were Rhode Island residents (**Table RI-2**).

Figure RI-2 presents the distribution of fatalities by external cause of death for the State of Rhode Island and for the U.S. The three leading causes of death among employees in Rhode Island were motor vehicle incidents (17%), falls (16%), and suicides (10%).

Table RI-1. Traumatic Occupational Fatalities by Race/Ethnicity, Rhode Island, 1980-1989.

Race/Ethnicity	Number	Percent
White	111	86.7
Black	8	6.3
Hispanic	8	6.3
Other	1	0.8

In Rhode Island, the industry divisions in which the largest number of fatalities occurred were construction (21%), services (16%), manufacturing (14%), and transportation/communication/public utilities (14%). The agriculture/forestry/fishing industry had the highest fatality rate at 45.9 per 100,000 workers, followed by construction (16.5), and transportation/communication/public utilities (12.6) (**Figure RI-3**). **Table RI-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

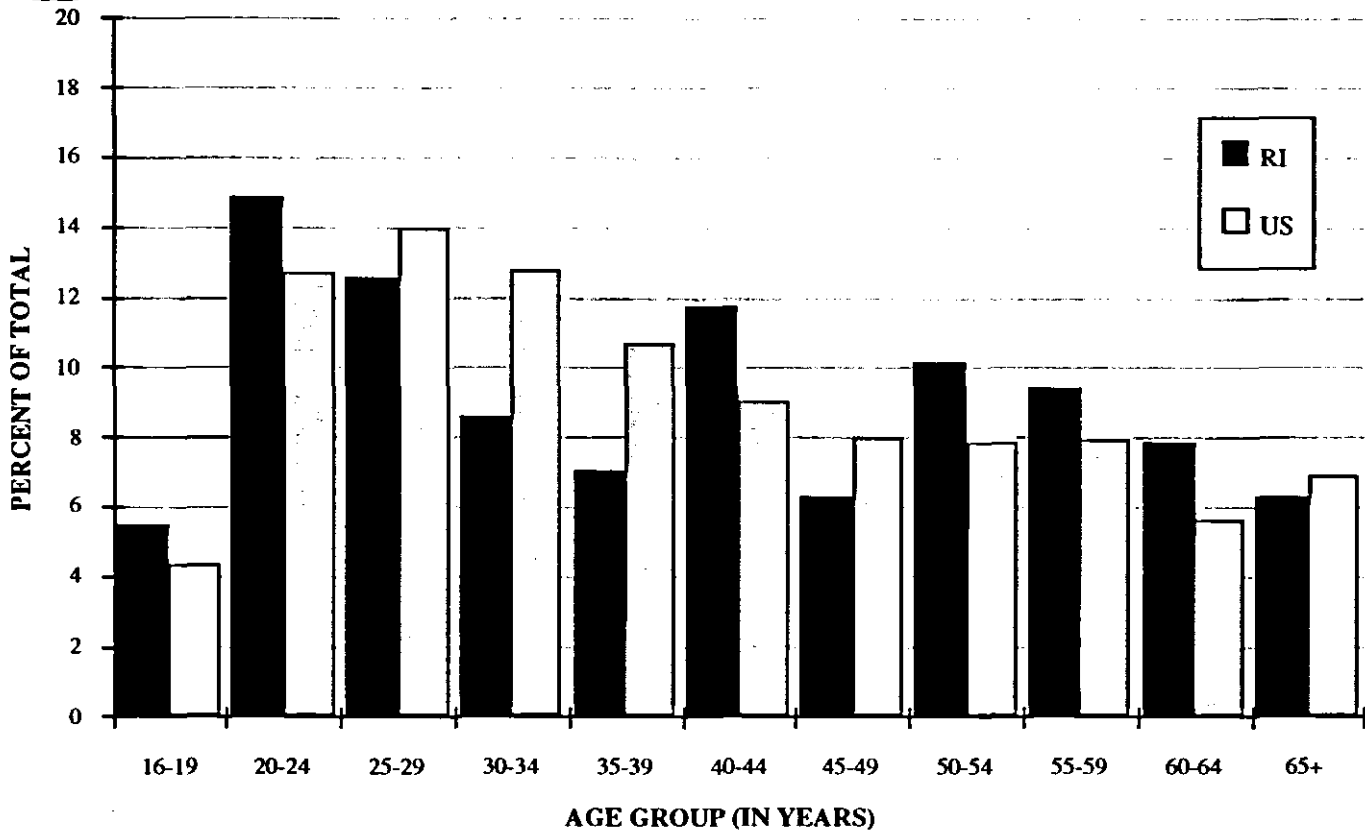


Figure RI-1. Traumatic Occupational Fatalities by Age Group, US and Rhode Island, 1980-1989.

Table RI-2. Traumatic Occupational Fatalities by State of Residence, Rhode Island, 1980-1989.

State	Number	Percent
Rhode Island	101	78.9
Massachusetts	13	10.2
Connecticut	3	2.3
New Jersey	3	2.3
Other	8	6.3

The occupation divisions in Rhode Island with the largest number of fatalities were precision production/craft/repair (22%), executives/administrators/managers (18%), and laborers (16%). The occupations with the highest rates were farmers/foresters/fishers (17.5 deaths per 100,000 workers), laborers (12.8), and transportation/material movers (8.0) (Figure RI-4). Table RI-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Rhode Island decreased 3%, from 3.7 in 1980 to 3.6 in 1989. A high of 4.6 and a low of 0.9 deaths per 100,000 workers were reported in 1985 and 1983, respectively (Figure RI-5).

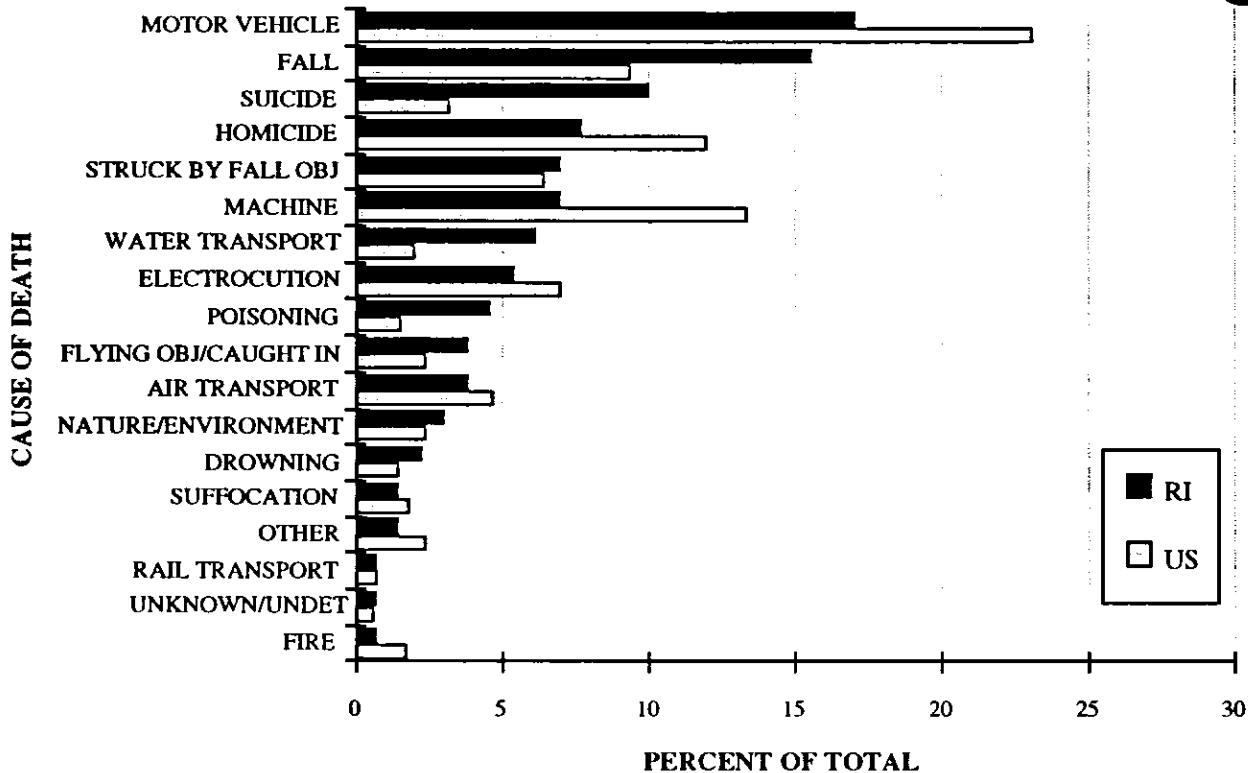


Figure RI-2. Traumatic Occupational Fatalities by Cause of Death, US and Rhode Island, 1980-1989.

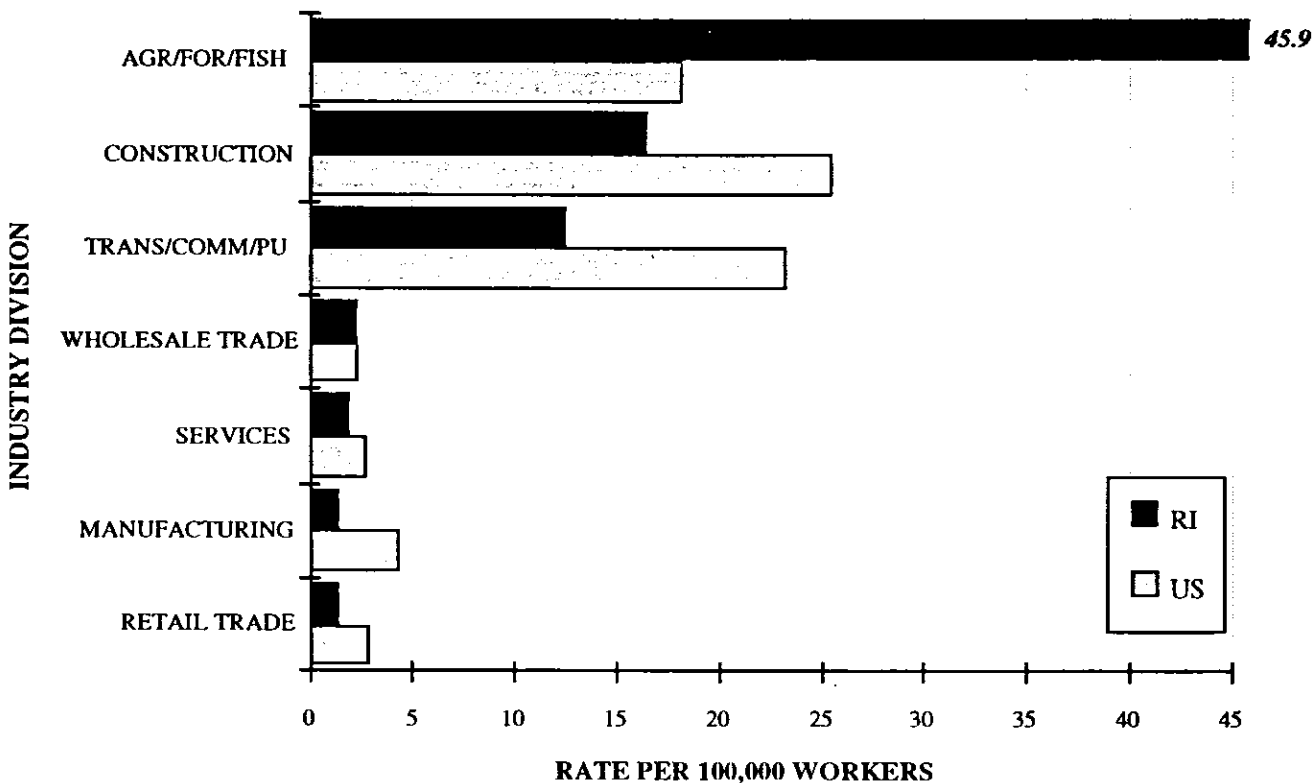


Figure RI-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Rhode Island, 1980-1989.

Table RI-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Rhode Island, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	--	--	--	--	--	--	--	N/A
AGR/FOR/FISH	--	--	--	--	--	--	3	--	--	--	13	45.9
CONSTRUCTION	3	--	--	--	--	5	--	5	--	5	26	16.5
TRANS/COMM/PU	3	--	--	--	--	5	--	--	--	--	17	12.6
WHOLESALE TRADE	--	--	--	--	--	--	3	--	--	--	5	2.4
SERVICES	--	--	3	--	--	--	--	5	4	3	20	2.0
MANUFACTURING	5	--	--	--	--	--	4	--	--	4	18	1.5
RETAIL TRADE	--	--	--	--	--	3	--	--	--	--	11	1.5
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	--	4	N/A
NOT CLASSIFIED	--	--	--	--	--	--	--	--	--	--	9	N/A
STATE	14	13	10	3	6	19	16	17	12	15	125	3.3

NOTE: Dashes denote categories with fewer than three cases.

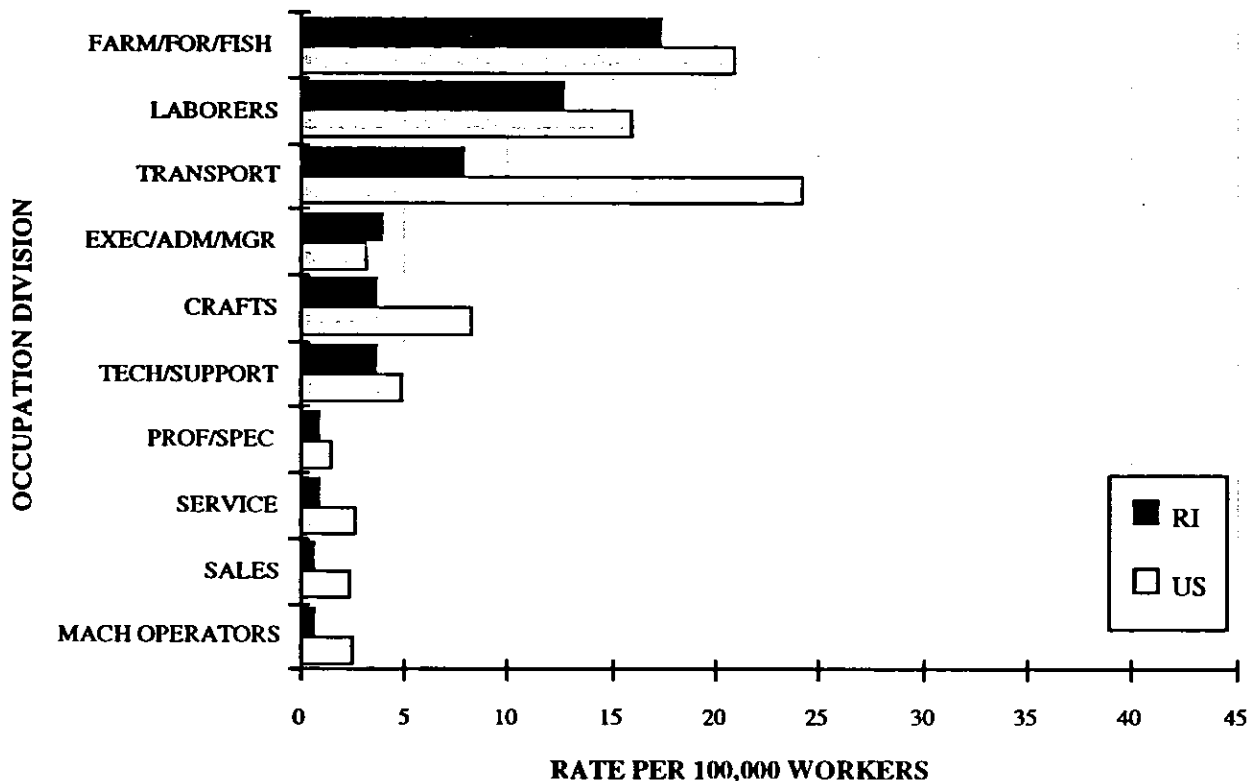


Figure RI-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Rhode Island, 1983-1989.

Table RI-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Rhode Island.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	10	17.5
LABORERS	20	12.8
TRANSPORT	13	7.9
EXEC/ADM/MGR	22	4.1
CRAFTS	27	3.9
TECH/SUPPORT	4	3.8
PROF/SPEC	6	1.1
SERVICE	7	1.1
SALES	4	0.8
MACH OPERATORS	6	0.8
CLERICAL	--	N/A
NOT CLASSIFIED	5	N/A

NOTE: Dashes denote categories with fewer than three cases.

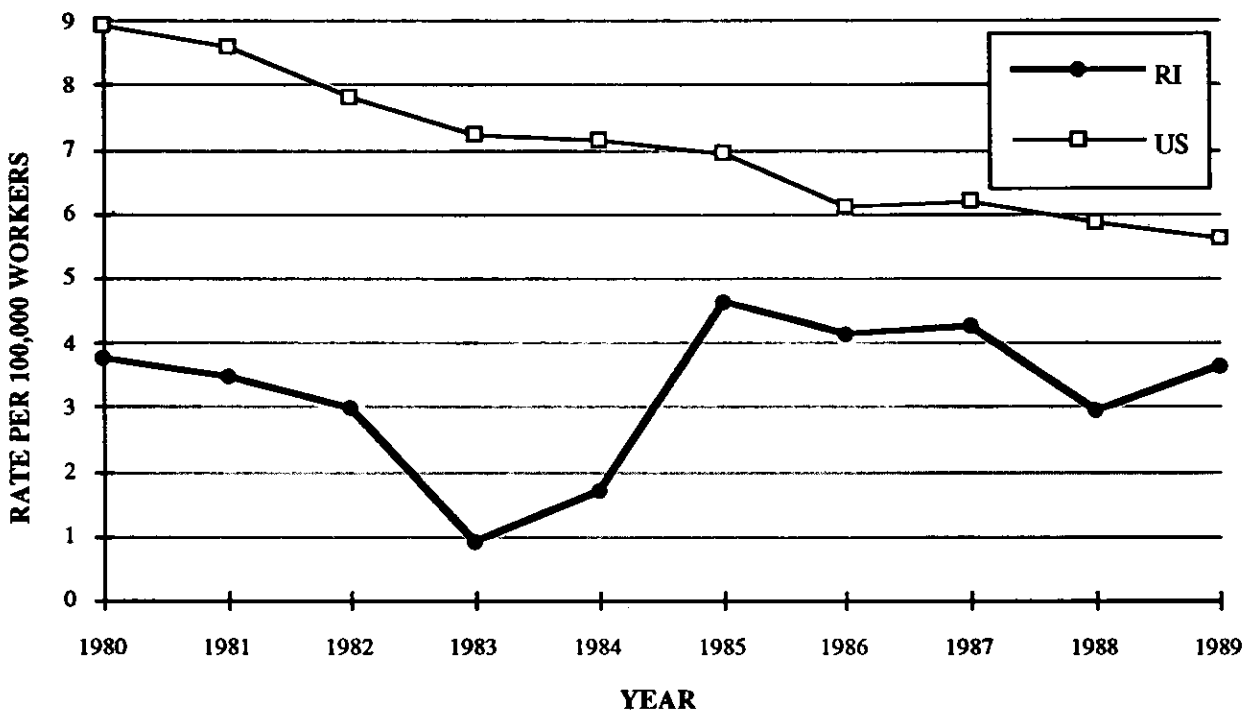


Figure RI-5. Rate of Traumatic Occupational Fatalities by Year, US and Rhode Island, 1980-1989.

State of South Carolina

Average Annual Fatal Injuries: **80**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **6.8**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Manufacturing (171)**
Rate: **Mining (35.9)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (173)**
Rate: **Farmers/Foresters/Fishers (21.9)**



The State of South Carolina had 803 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 784 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 6.8 for South Carolina compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 170.7 per 100,000 workers for South Carolina compared to 175.6 for the United States.

Males accounted for 93% of the civilian occupational fatalities in South Carolina and had a fatality

rate of 9.3 per 100,000 workers compared to 0.9 for females. The fatality distribution by **race/ethnicity** for the State of South Carolina shows that Whites accounted for 68% of the total fatalities and Blacks for 30% as shown in **Table SC-1**. As shown in **Figure SC-1**, workers aged 20 to 24 years old accounted for the largest number of fatalities (14%). Of all South Carolina occupational fatality victims, 90% were South Carolina residents (**Table SC-2**).

Figure SC-2 presents the distribution of fatalities by external cause of death for the State of South Carolina and for the U.S. The three leading causes of death among employees in South Carolina were homicides (20%), machine-related incidents (16%), and being struck by falling objects (12%).

Table SC-1. Traumatic Occupational Fatalities by Race/Ethnicity, South Carolina, 1980-1989.

Race/Ethnicity	Number	Percent
White	549	68.4
Black	242	30.1
Hispanic	6	0.7
Asian	4	0.5
Other	2	0.2

In South Carolina, the **industry divisions** in which the largest number of fatalities occurred were manufacturing (22%), construction (20%), and retail trade (13%). The mining industry had the highest fatality rate at 35.9 per 100,000 workers, followed by transportation/communication/public utilities (17.7), and construction (15.7) (**Figure SC-3**). **Table SC-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

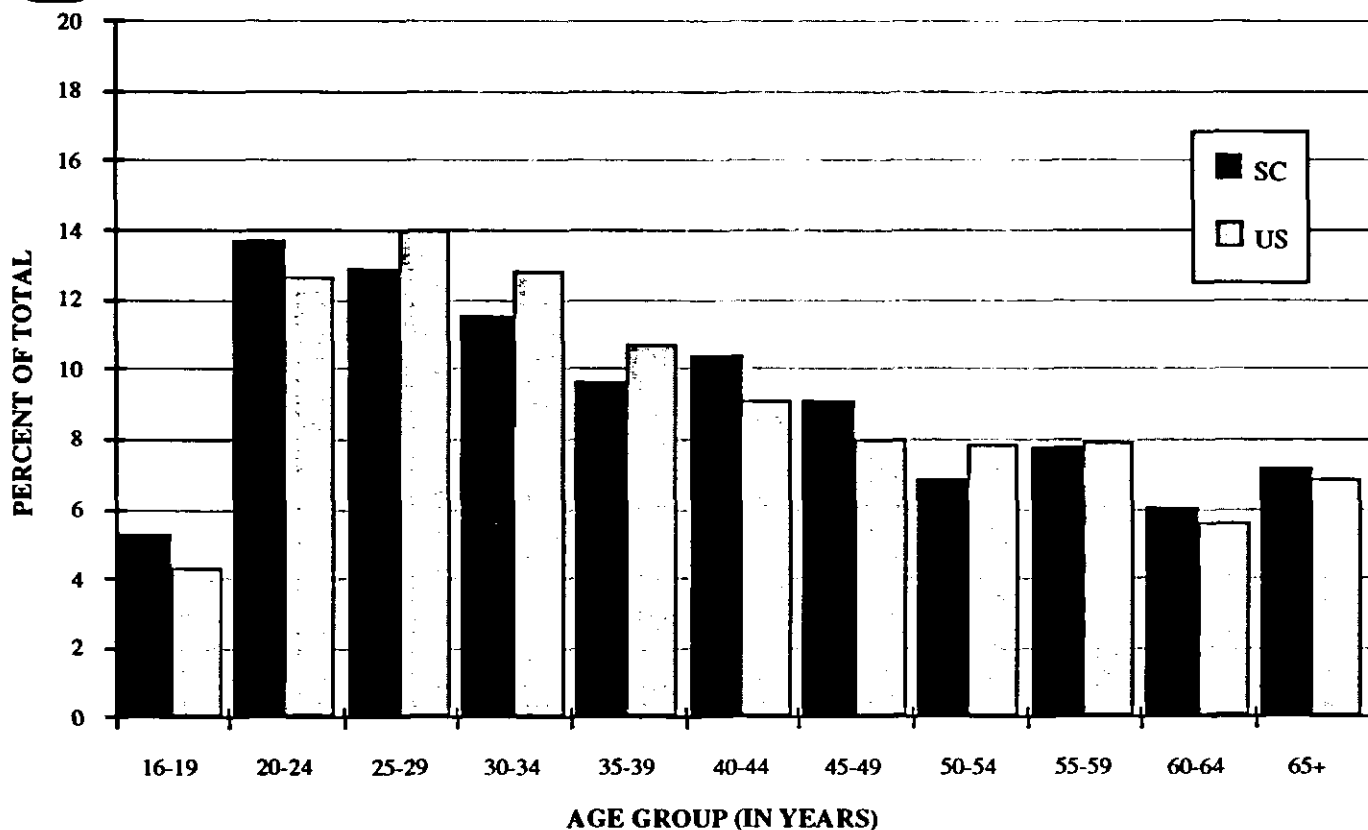


Figure SC-1. Traumatic Occupational Fatalities by Age Group, US and South Carolina, 1980-1989.

Table SC-2. Traumatic Occupational Fatalities by State of Residence, South Carolina, 1980-1989.

State	Number	Percent
South Carolina	723	90.0
North Carolina	23	2.9
Georgia	17	2.1
Florida	5	0.6
Louisiana	4	0.5
Other	31	3.9

The occupation divisions in South Carolina with the largest number of fatalities were precision production/craft/repair (22%), laborers (14%), transportation/material movers (11%), and farmers/foresters/fishers (11%). The occupations with the highest rates were farmers/foresters/fishers (21.9 deaths per 100,000 workers), transportation/material movers (14.3), and laborers (12.7) (Figure SC-4). Table SC-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in South Carolina decreased 5%, from a high of 8.6 in 1980 to 8.2 in 1989. A low of 5.4 deaths per 100,000 workers was reported in 1988 (Figure SC-5).

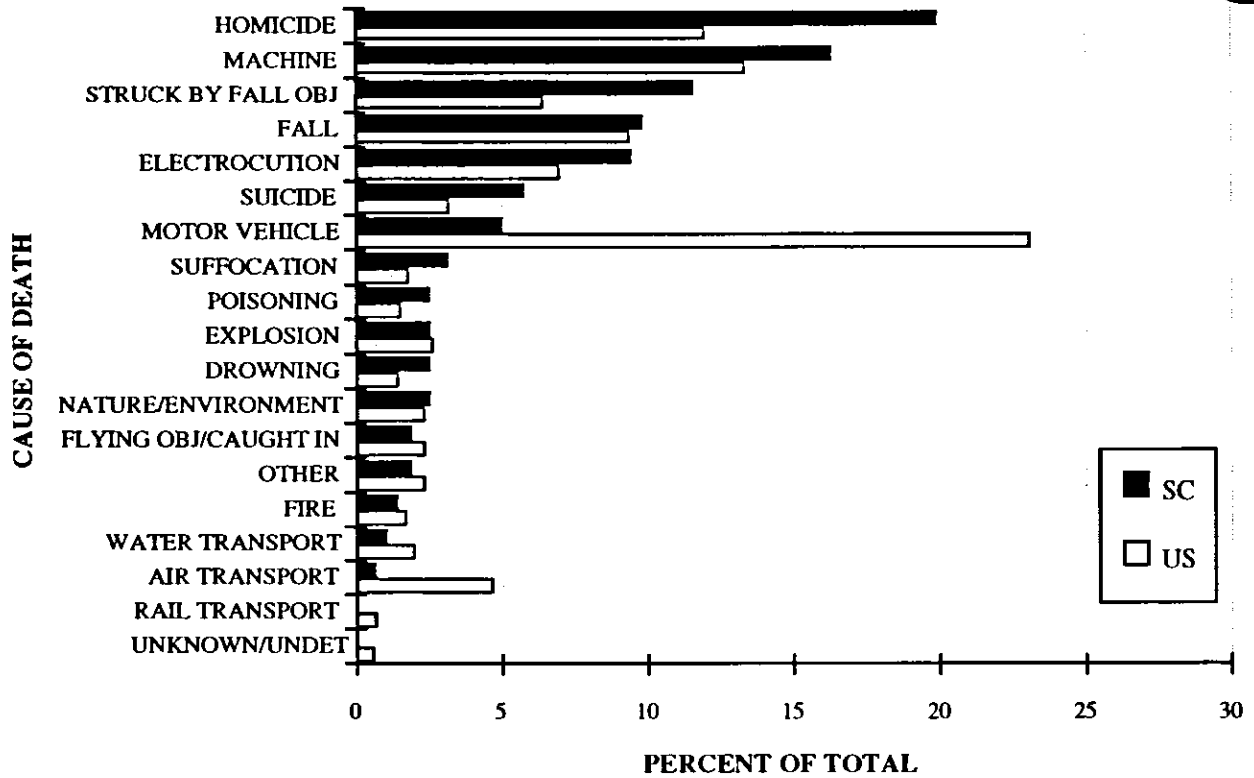


Figure SC-2. Traumatic Occupational Fatalities by Cause of Death, US and South Carolina, 1980-1989.

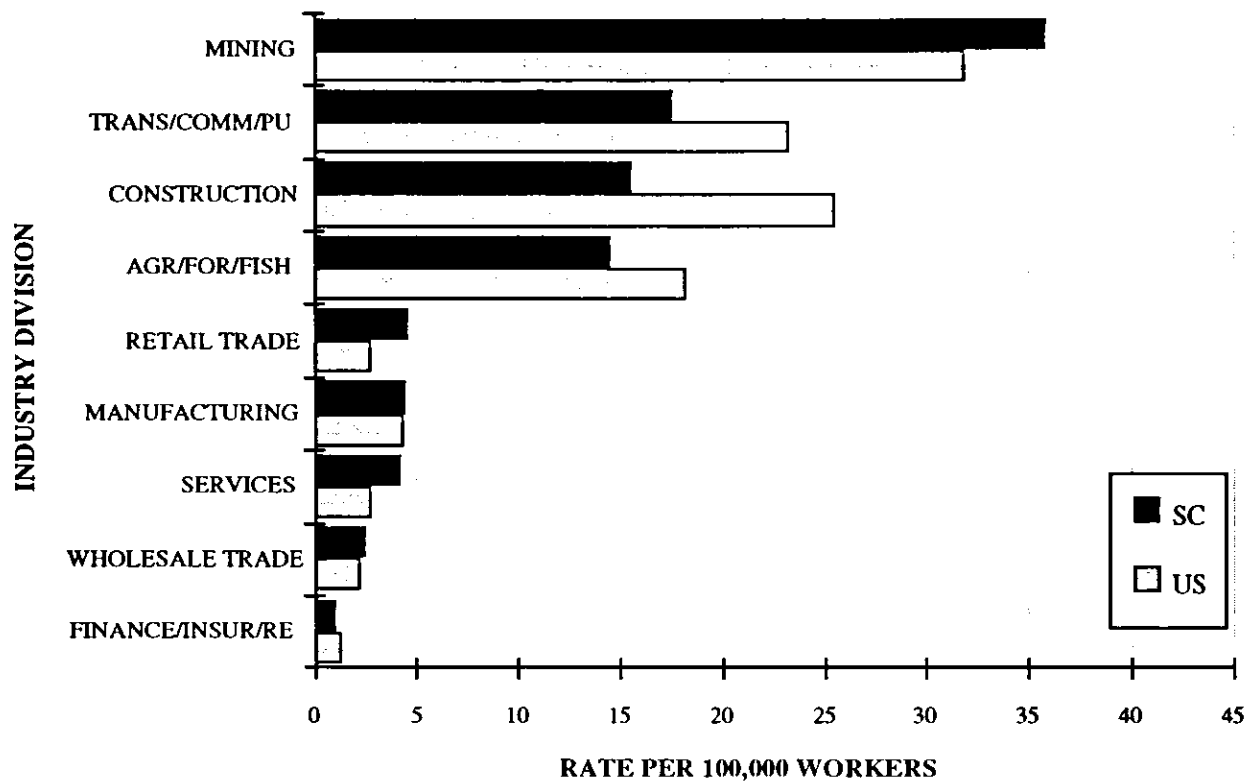


Figure SC-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and South Carolina, 1980-1989.

Table SC-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, South Carolina, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	--	--	--	--	--	--	6	35.9
TRANS/COMM/PU	9	5	4	6	8	6	7	6	4	24	79	17.7
CONSTRUCTION	15	12	15	19	7	11	15	23	17	24	158	15.7
AGR/FOR/FISH	3	11	8	6	4	7	7	9	--	10	67	14.6
RETAIL TRADE	16	11	5	8	12	7	10	9	9	11	98	4.7
MANUFACTURING	18	17	14	16	16	15	21	18	22	14	171	4.6
SERVICES	9	5	11	5	10	10	5	11	5	13	84	4.2
WHOLESALE TRADE	--	--	--	--	3	--	--	--	4	--	13	2.5
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	3	6	1.1
PUBLIC ADMIN	3	--	3	3	--	7	--	6	4	9	40	N/A
NOT CLASSIFIED	15	9	10	6	--	5	4	8	--	3	62	N/A
STATE	89	74	70	71	65	70	71	92	69	113	784	6.8

NOTE: Dashes denote categories with fewer than three cases.

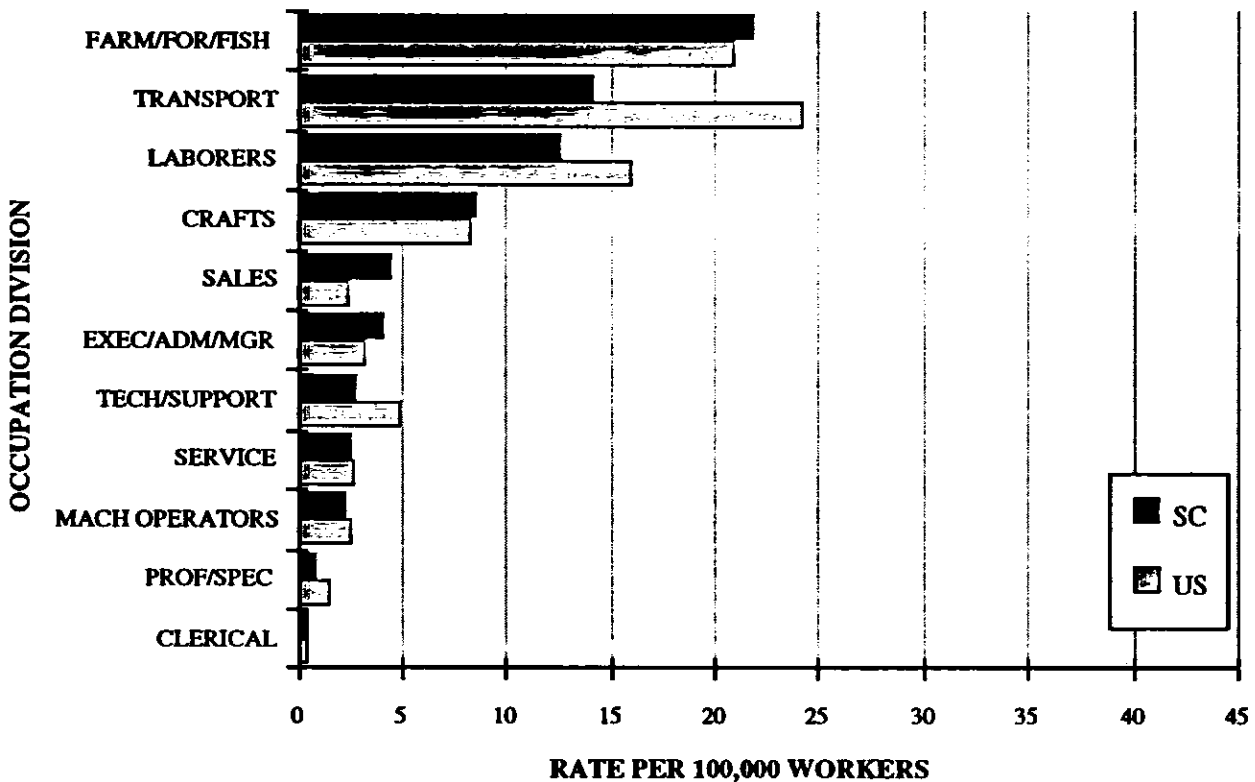


Figure SC-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and South Carolina, 1983-1989.

Table SC-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, South Carolina.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	86	21.9
TRANSPORT	86	14.3
LABORERS	112	12.7
CRAFTS	173	8.6
SALES	75	4.6
EXEC/ADM/MGR	53	4.2
TECH/SUPPORT	9	3.0
SERVICE	49	2.7
MACH OPERATORS	49	2.4
PROF/SPEC	16	1.0
CLERICAL	13	0.6
NOT CLASSIFIED	63	N/A

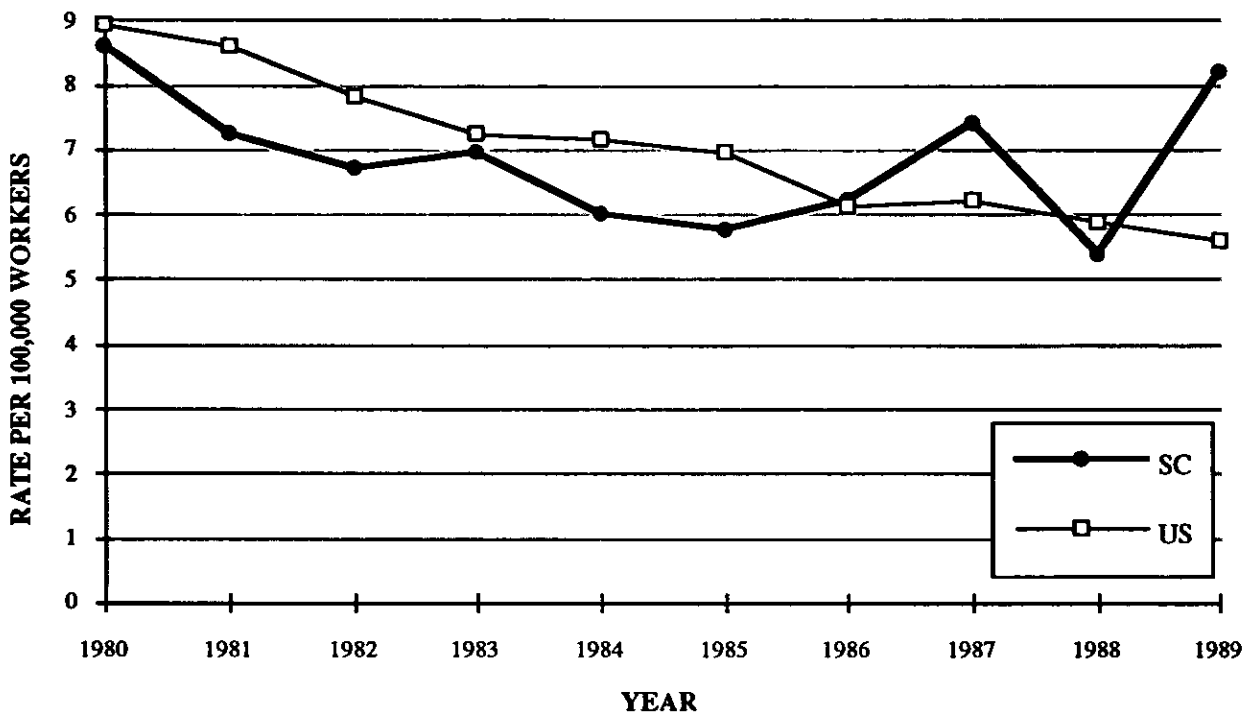


Figure SC-5. Rate of Traumatic Occupational Fatalities by Year, US and South Carolina, 1980-1989.

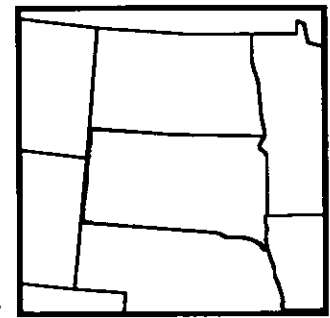
State of South Dakota

Average Annual Fatal Injuries: **34**

Average Annual Fatal Injury Rate (deaths per 100,000 workers): **14.2**

Industries with the Highest Number and Rate of Fatal Injuries:
 Number: **Agriculture/Forestry/Fishing (151)**
 Rate: **Construction (60.1)**

Occupations with the Highest Number and Rate of Fatal Injuries:
 Number: **Farmers/Foresters/Fishers (142)**
 Rate: **Transportation/Material Movers (33.5)**



The State of South Dakota had 338 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 331 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 14.2 for South Dakota compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 310.9 per 100,000 workers for South Dakota compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in South Dakota and had a fatality rate of 17.1 per 100,000 workers compared to 1.3 for females. The fatality distribution by **race/ethnicity**

Table SD-1. Traumatic Occupational Fatalities by Race/Ethnicity, South Dakota, 1980-1989.

Race/Ethnicity	Number	Percent
White	330	97.6
Native American	7	2.1
Other	1	0.3

for the State of South Dakota shows that Whites accounted for 98% of the total fatalities and Native Americans for 2% as shown in **Table SD-1**. As shown in **Figure SD-1**, workers aged 65 years and older accounted for the largest number of fatalities (14%). Of all South Dakota occupational fatality victims, 88% were South Dakota residents (**Table SD-2**).

Figure SD-2 presents the distribution of fatalities by external cause of death for the State of South Dakota and for the U.S. The three leading causes of death among employees in South Dakota were machine-related incidents (31%), motor vehicle incidents (25%), and air transportation (7%).

In South Dakota, the **industry divisions** in which the largest number of fatalities occurred were agriculture/forestry/fishing (46%), construction (15%), and transportation/communication/public utilities (14%). The construction industry had the highest fatality rate at 60.1 per 100,000 workers, followed by transportation/communication/public utilities (37.6), and mining (33.3) (**Figure SD-3**). **Table SD-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

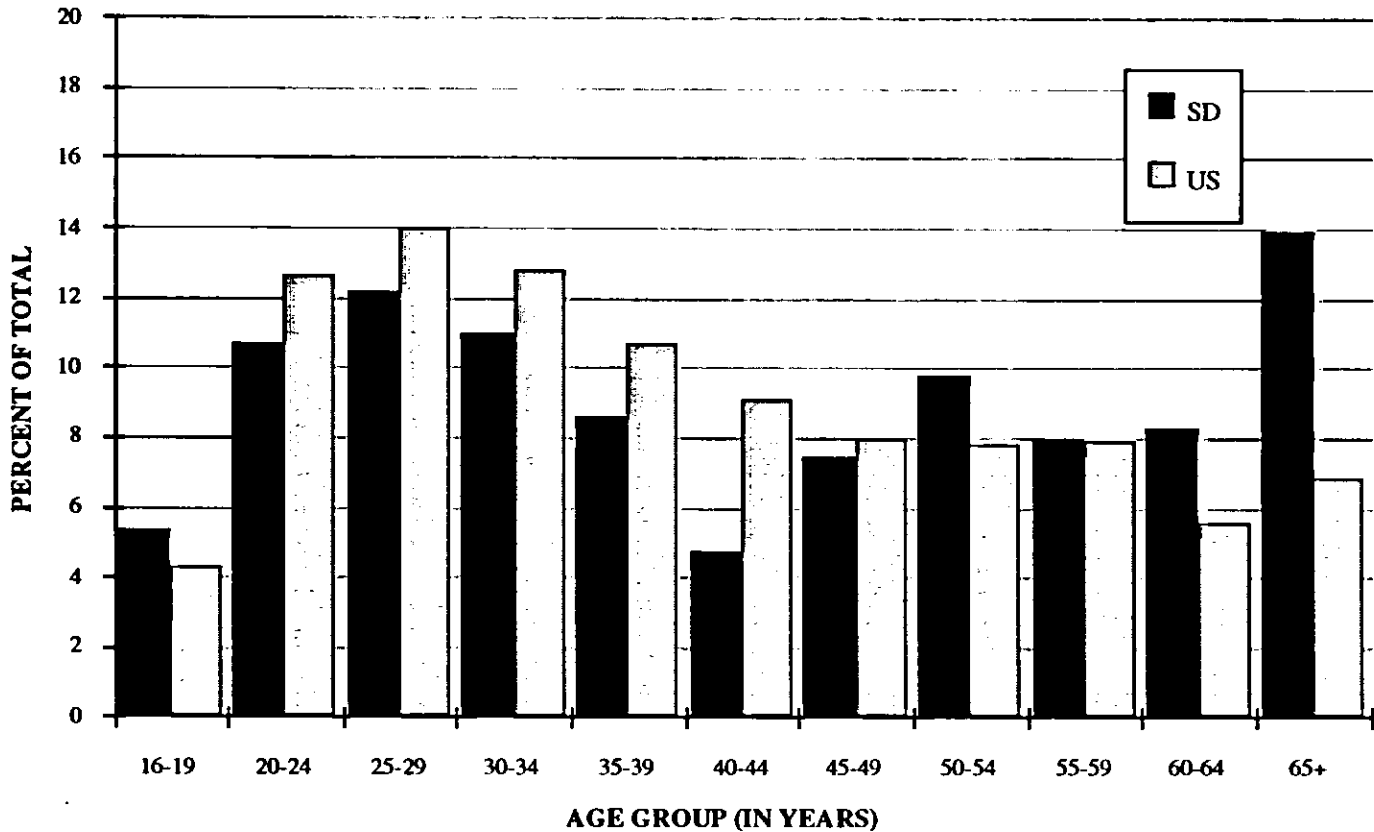


Figure SD-1. Traumatic Occupational Fatalities by Age Group, US and South Dakota, 1980-1989.

Table SD-2. Traumatic Occupational Fatalities by State of Residence, South Dakota, 1980-1989.

State	Number	Percent
South Dakota	296	87.6
Minnesota	17	5.0
Iowa	5	1.5
Colorado	3	0.9
North Dakota	3	0.9
Wyoming	3	0.9
Other	11	3.3

The occupation divisions in South Dakota with the largest number of fatalities were farmers/foresters/fishers (43%), transportation/material movers (14%), and laborers (12%). The occupations with the highest rates were transportation/material movers (33.5 deaths per 100,000 workers), laborers (32.0), and farmers/foresters/fishers (29.6) (Figure SD-4). Table SD-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in South Dakota decreased 25%, from 17.5 in 1980 to 13.2 in 1989. A high of 17.8 and a low of 10.0 deaths per 100,000 workers was reported in 1984 and 1988, respectively (Figure SD-5).

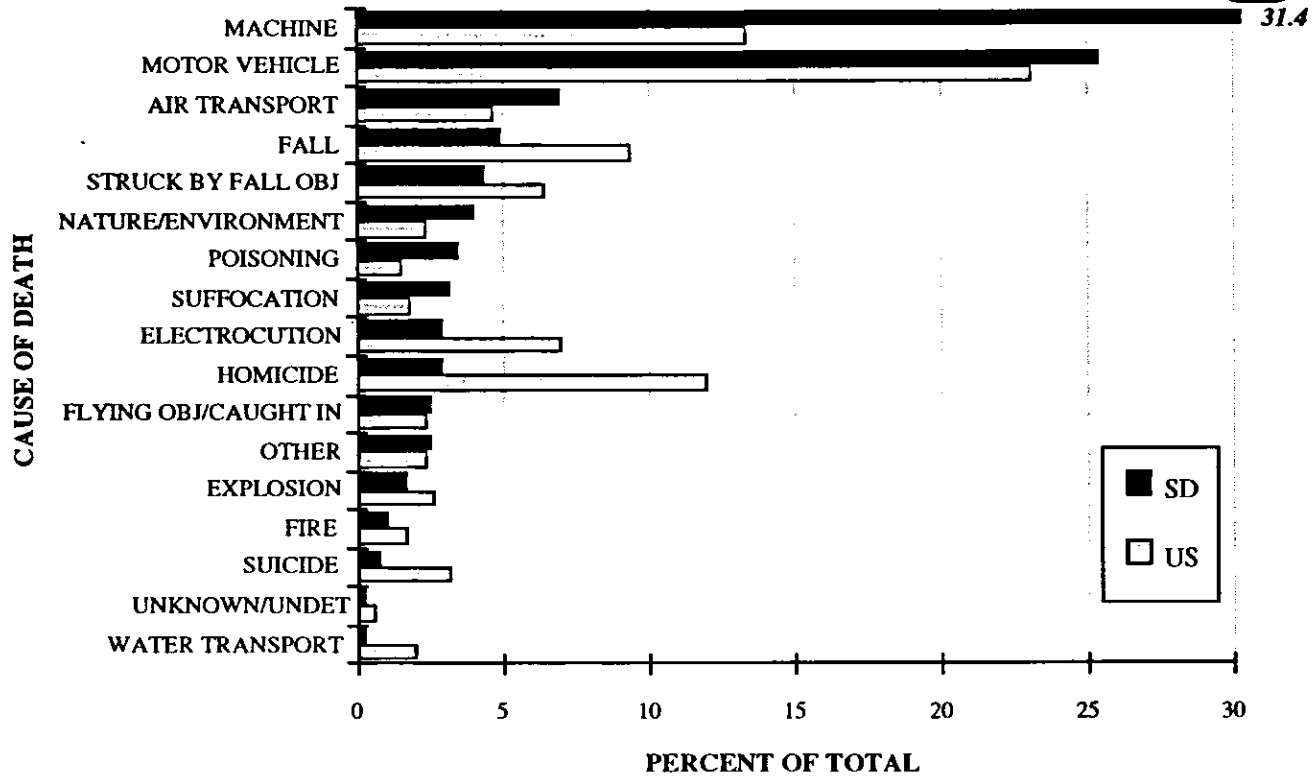


Figure SD-2. Traumatic Occupational Fatalities by Cause of Death, US and South Dakota, 1980-1989.

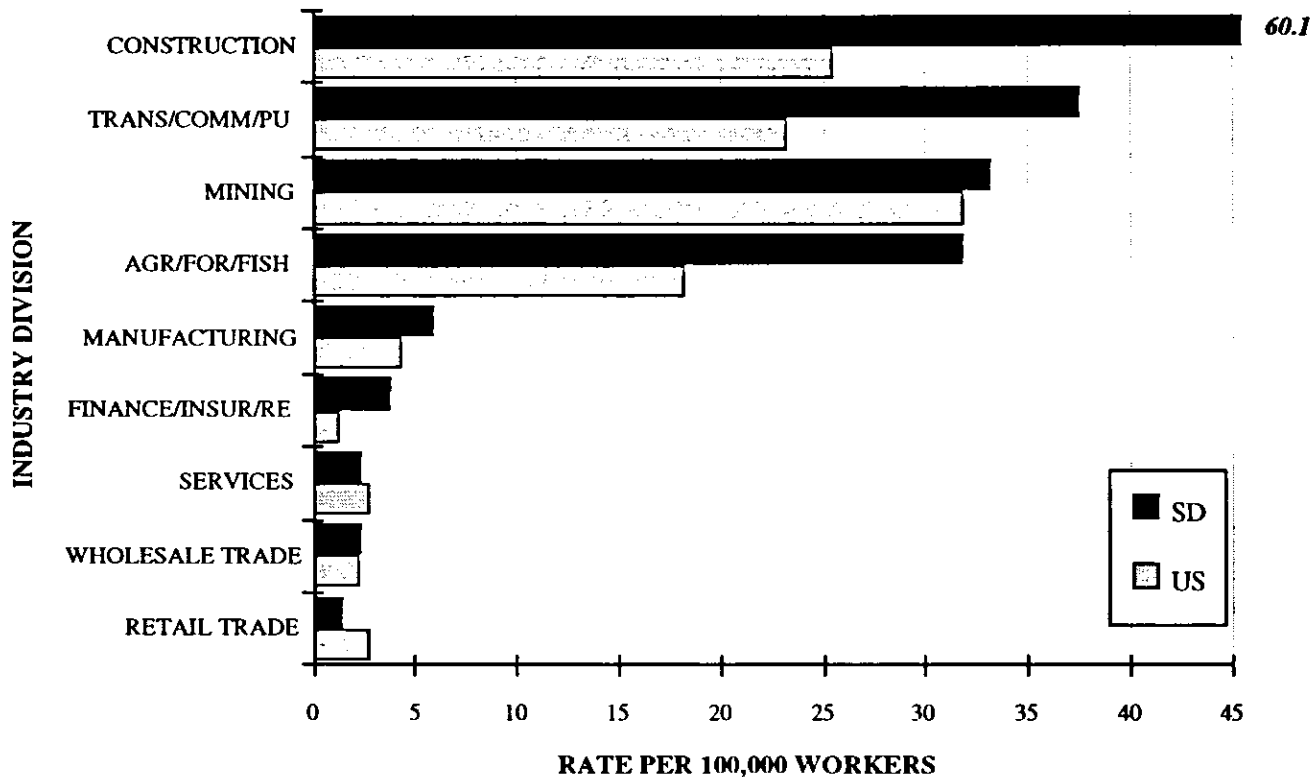


Figure SD-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and South Dakota, 1980-1989.

Table SD-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, South Dakota, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
CONSTRUCTION	5	6	3	3	7	9	--	3	5	5	48	60.1
TRANS/COMM/PU	5	4	5	5	6	3	8	5	--	5	47	37.6
MINING	--	--	--	--	--	--	--	--	--	--	8	33.3
AGR/FOR/FISH	16	11	18	17	20	13	15	16	9	16	151	31.9
MANUFACTURING	3	--	--	--	--	--	--	3	--	--	16	6.0
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	5	3.8
SERVICES	--	--	--	--	--	3	--	3	--	--	13	2.5
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	4	2.5
RETAIL TRADE	--	--	--	--	--	--	--	--	--	--	7	1.5
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	--	8	N/A
NOT CLASSIFIED	3	--	--	--	4	5	--	--	--	--	24	N/A
STATE	39	26	34	32	41	36	31	34	25	33	331	14.2

NOTE: Dashes denote categories with fewer than three cases.

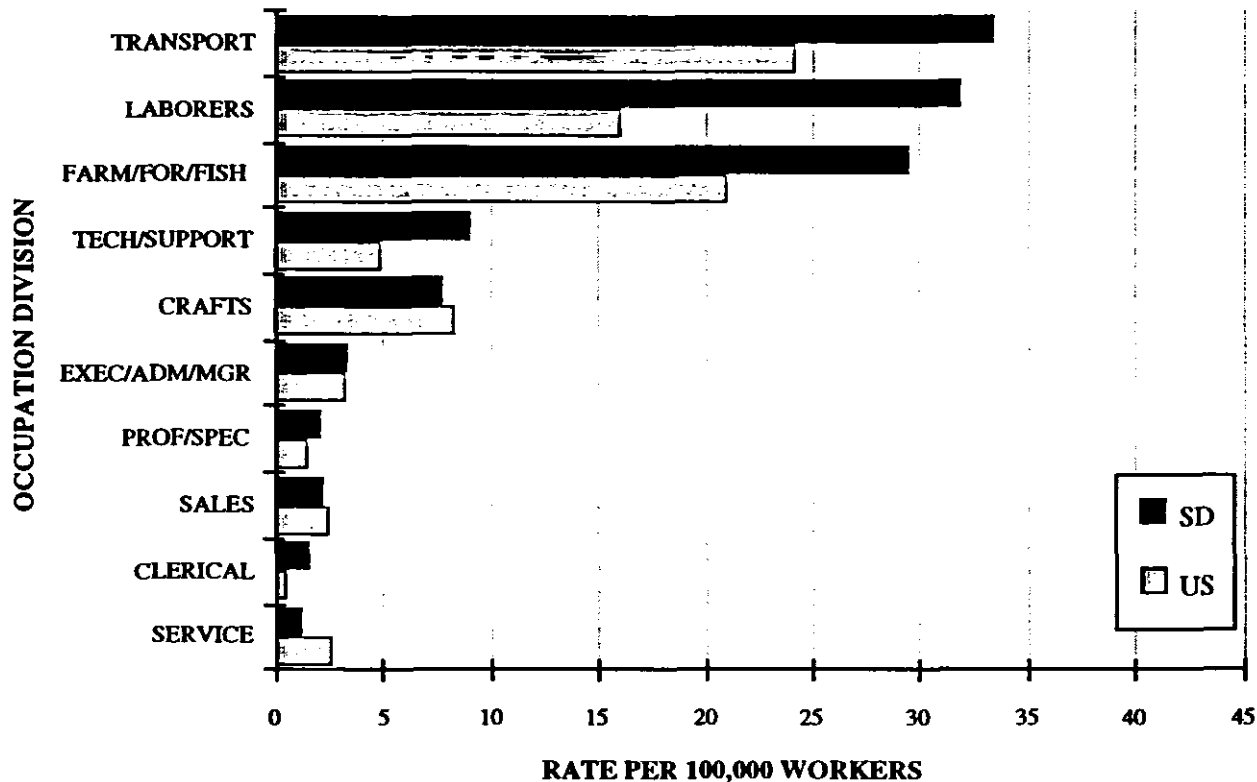


Figure SD-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and South Dakota, 1983-1989.

Table SD-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, South Dakota.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	45	33.5
LABORERS	40	32.0
FARM/FOR/FISH	142	29.6
TECH/SUPPORT	6	9.2
CRAFTS	26	7.9
EXEC/ADM/MGR	15	3.4
SALES	8	2.3
PROF/SPEC	9	2.2
CLERICAL	6	1.6
SERVICE	10	1.4
MACH OPERATORS	--	N/A
NOT CLASSIFIED	22	N/A

NOTE: Dashes denote categories with fewer than three cases.

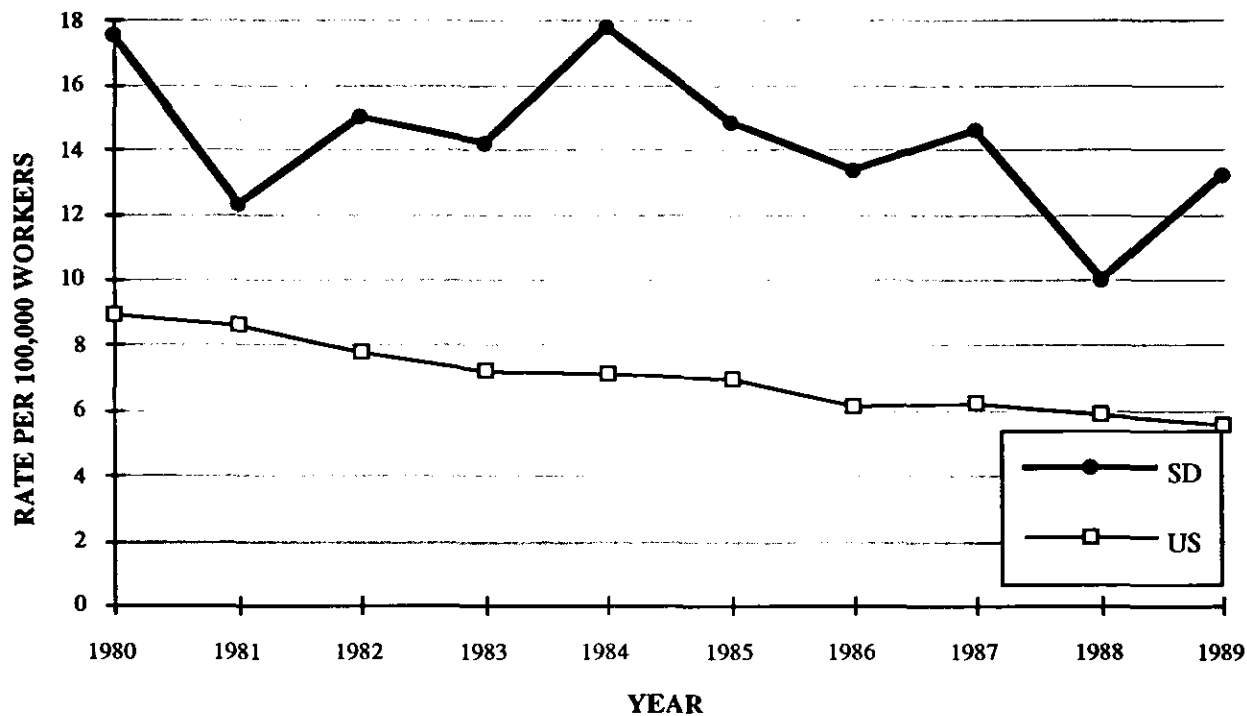


Figure SD-5. Rate of Traumatic Occupational Fatalities by Year, US and South Dakota, 1980-1989.

State of Tennessee

Average Annual Fatal Injuries: **144**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **7.8**

Industries with the Highest Number and Rate of Fatal Injuries:

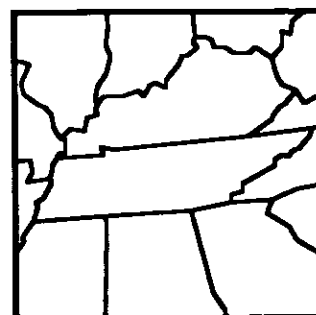
Number: **Construction (266)**

Rate: **Mining (68.5)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (280)**

Rate: **Transportation/Material Movers (25.9)**



The State of Tennessee had 1,435 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,392 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 7.8 for Tennessee compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 185.2 per 100,000 workers for Tennessee compared to 175.6 for the United States.

Males accounted for 95% of the civilian occupational fatalities in Tennessee and had a fatality rate of

11.6 per 100,000 workers compared to 0.8 for females. The fatality distribution by **race/ethnicity** for the State of Tennessee shows that Whites accounted for 87% of the total fatalities and Blacks for 11% as shown in **Table TN-1**. As shown in **Figure TN-1**, workers aged 35 to 39 years old accounted for the largest number of fatalities (13%). Of all Tennessee occupational fatality victims, 81% were Tennessee residents (**Table TN-2**).

Figure TN-2 presents the distribution of fatalities by external cause of death for the State of Tennessee and for the U.S. The three leading causes of death among employees in Tennessee were motor vehicle incidents (20%), machine-related incidents (16%), and homicides (13%).

Table TN-1. Traumatic Occupational Fatalities by Race/Ethnicity, Tennessee, 1980-1989.

Race/Ethnicity	Number	Percent
White	1251	87.2
Black	163	11.4
Hispanic	10	0.7
Asian	6	0.4
Other	5	0.3

In Tennessee, the **industry divisions** in which the largest number of fatalities occurred were construction (19%), transportation/communication/public utilities (18%), and manufacturing (15%). The mining industry had the highest fatality rate at 68.5 per 100,000 workers, followed by construction (32.0), and transportation/communication/public utilities (29.7) (**Figure TN-3**). **Table TN-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

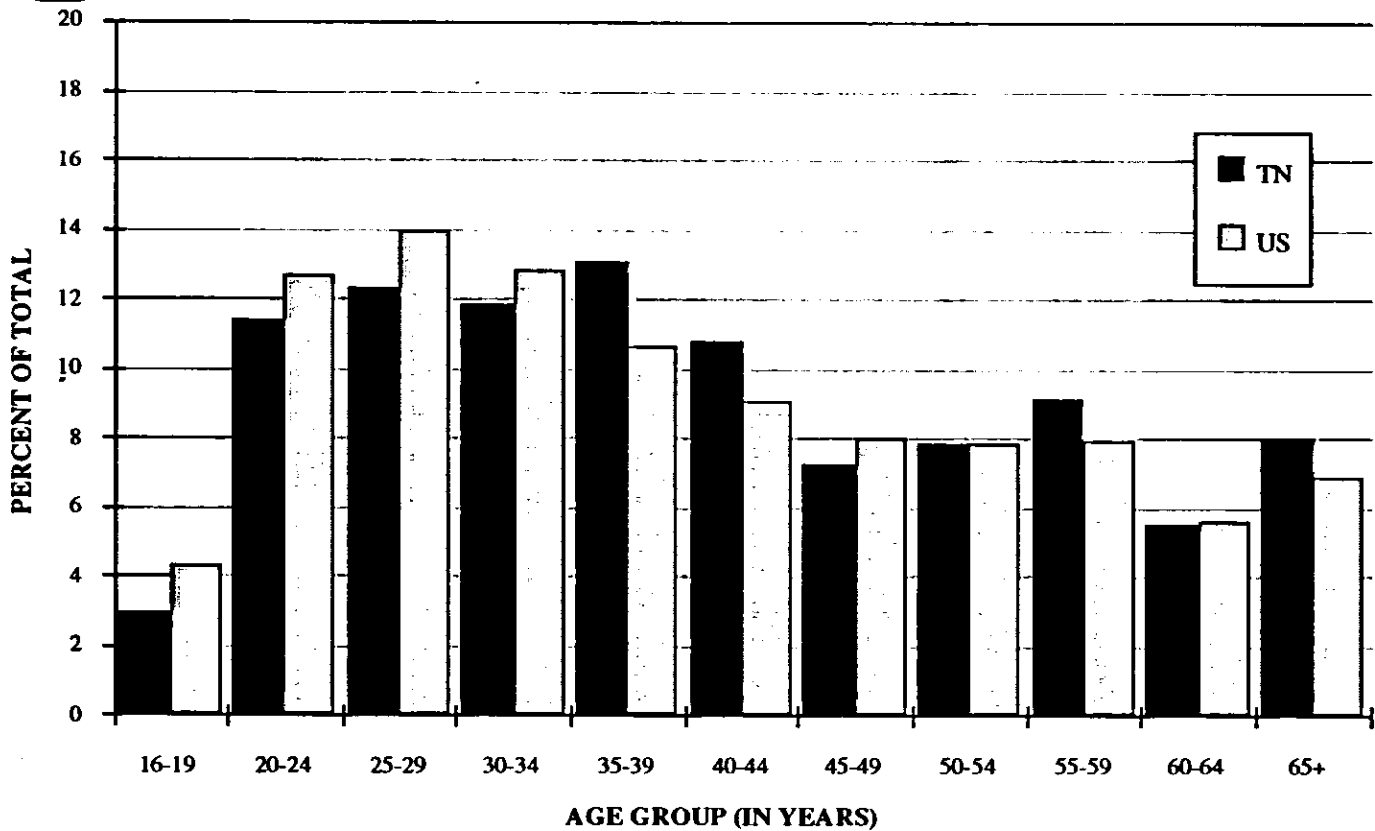


Figure TN-1. Traumatic Occupational Fatalities by Age Group, US and Tennessee, 1980-1989.

Table TN-2. Traumatic Occupational Fatalities by State of Residence, Tennessee, 1980-1989.

State	Number	Percent
Tennessee	1156	80.6
Kentucky	51	3.6
Mississippi	30	2.1
Georgia	29	2.0
Arkansas	26	1.8
Virginia	21	1.5
Alabama	20	1.4
South Carolina	17	1.2
North Carolina	16	1.1
Illinois	10	0.7
Texas	10	0.7
Ohio	8	0.6
Other	41	2.9

The occupation divisions in Tennessee with the largest number of fatalities were precision production/craft/repair (20%), transportation/material movers (18%), and laborers (14%). The occupations with the highest rates were transportation/material movers (25.9 deaths per 100,000 workers), farmers/foresters/fishers (22.3), and laborers (18.2) (Figure TN-4). Table TN-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Tennessee decreased 25%, from 8.9 in 1980 to 6.7 in 1989. A high of 9.9 deaths per 100,000 workers was reported in 1981; a low of 6.7 deaths per 100,000 workers was reported in 1987, 1988, and 1989 (Figure TN-5).

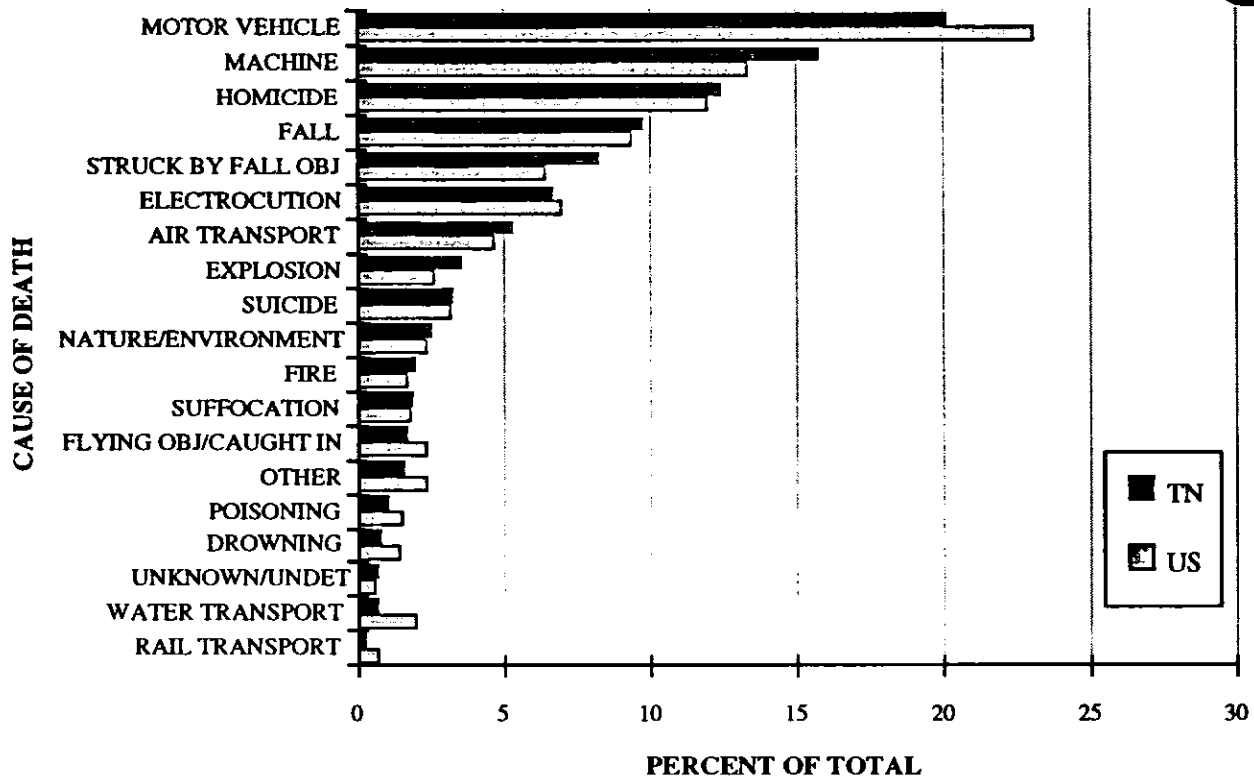


Figure TN-2. Traumatic Occupational Fatalities by Cause of Death, US and Tennessee, 1980-1989.

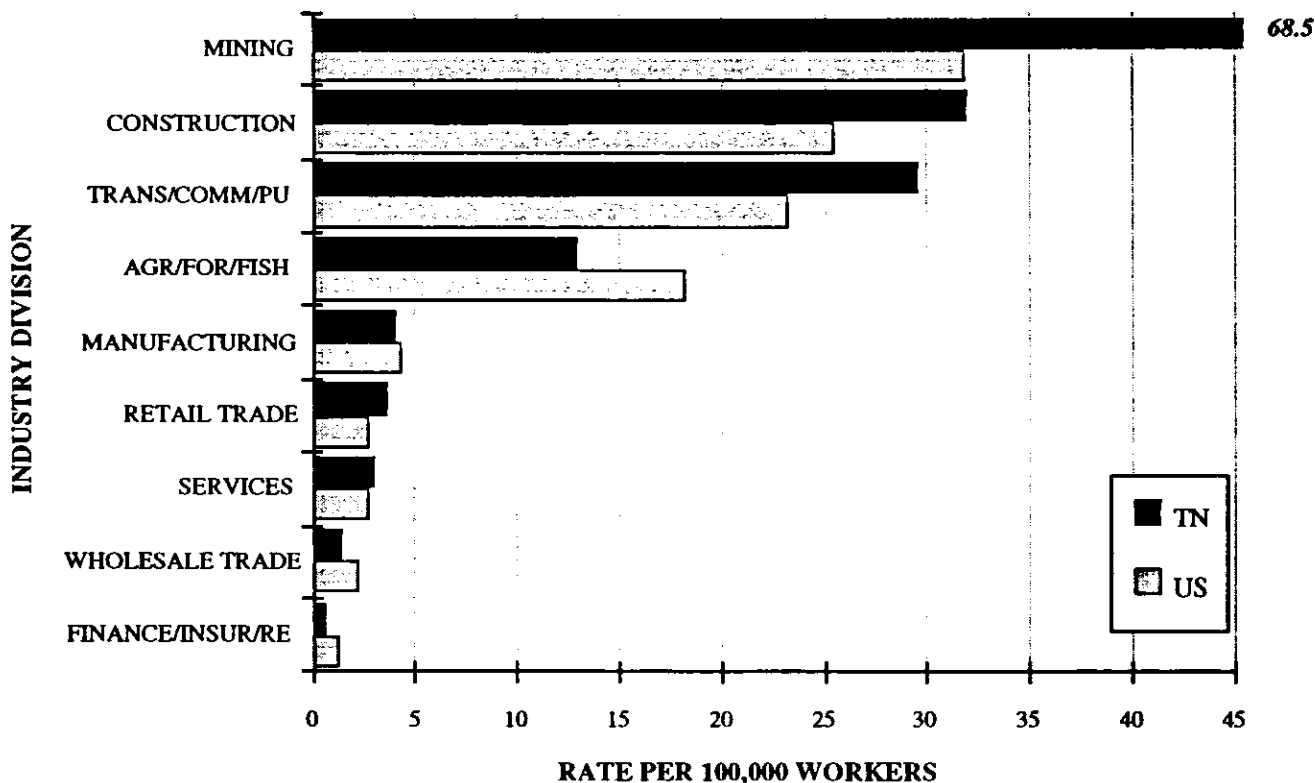


Figure TN-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Tennessee, 1980-1989.

Table TN-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Tennessee, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	5	17	5	6	5	--	5	5	3	3	56	68.5
CONSTRUCTION	35	34	27	19	17	22	22	29	21	40	266	32.0
TRANS/COMM/PU	25	23	23	24	14	32	34	20	30	20	245	29.7
AGR/FOR/FISH	23	20	21	9	16	19	11	20	14	16	169	13.0
MANUFACTURING	19	18	23	21	23	24	26	13	17	19	203	4.2
RETAIL TRADE	11	14	9	14	13	10	13	11	12	10	117	3.8
SERVICES	7	12	10	12	9	9	12	9	16	18	114	3.1
WHOLESALE TRADE	3	--	--	--	--	3	--	--	4	--	17	1.5
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	7	0.8
PUBLIC ADMIN	4	8	17	--	13	4	12	4	8	5	77	N/A
NOT CLASSIFIED	8	11	15	19	14	10	14	14	9	7	121	N/A
STATE	140	157	151	130	125	136	151	127	136	139	1392	7.8

NOTE: Dashes denote categories with fewer than three cases.

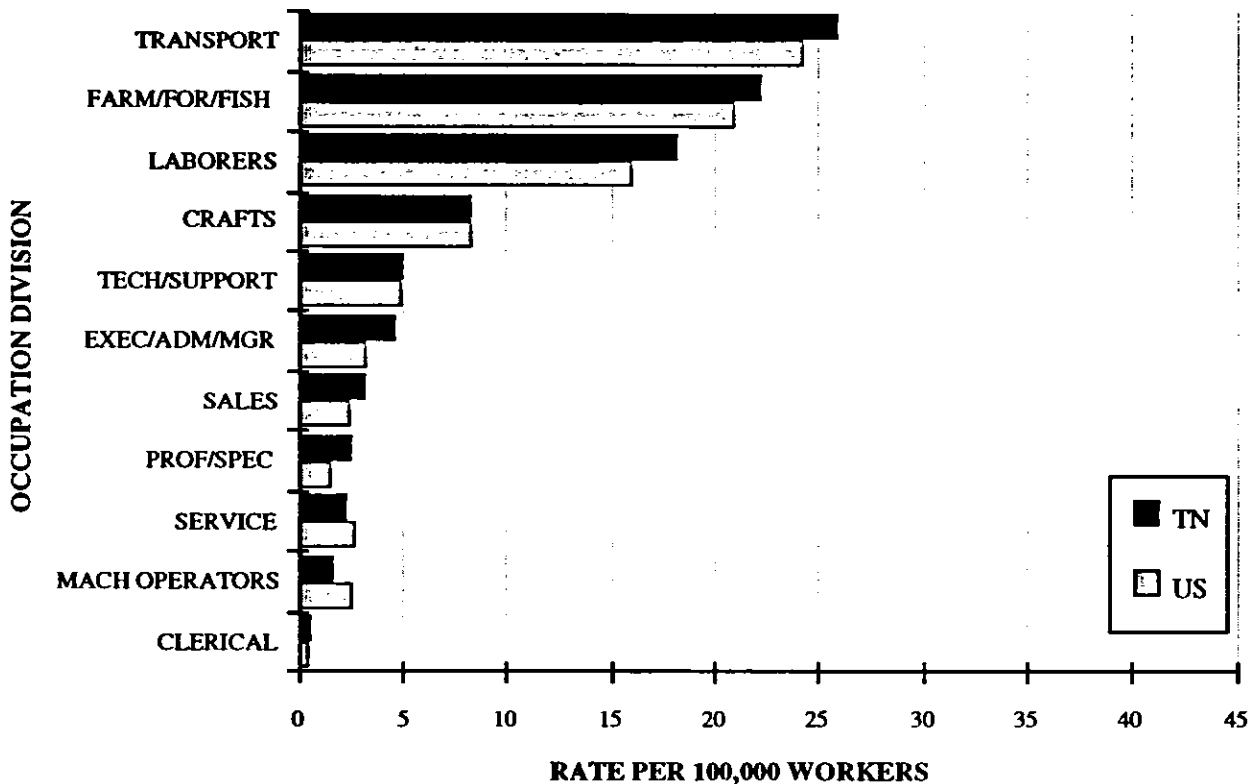


Figure TN-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Tennessee, 1983-1989.

Table TN-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Tennessee.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	255	25.9
FARM/FOR/FISH	175	22.3
LABORERS	195	18.2
CRAFTS	280	8.4
TECH/SUPPORT	29	5.1
EXEC/ADM/MGR	90	4.7
SALES	74	3.3
PROF/SPEC	51	2.6
SERVICE	70	2.4
MACH OPERATORS	52	1.7
CLERICAL	18	0.7
NOT CLASSIFIED	103	N/A

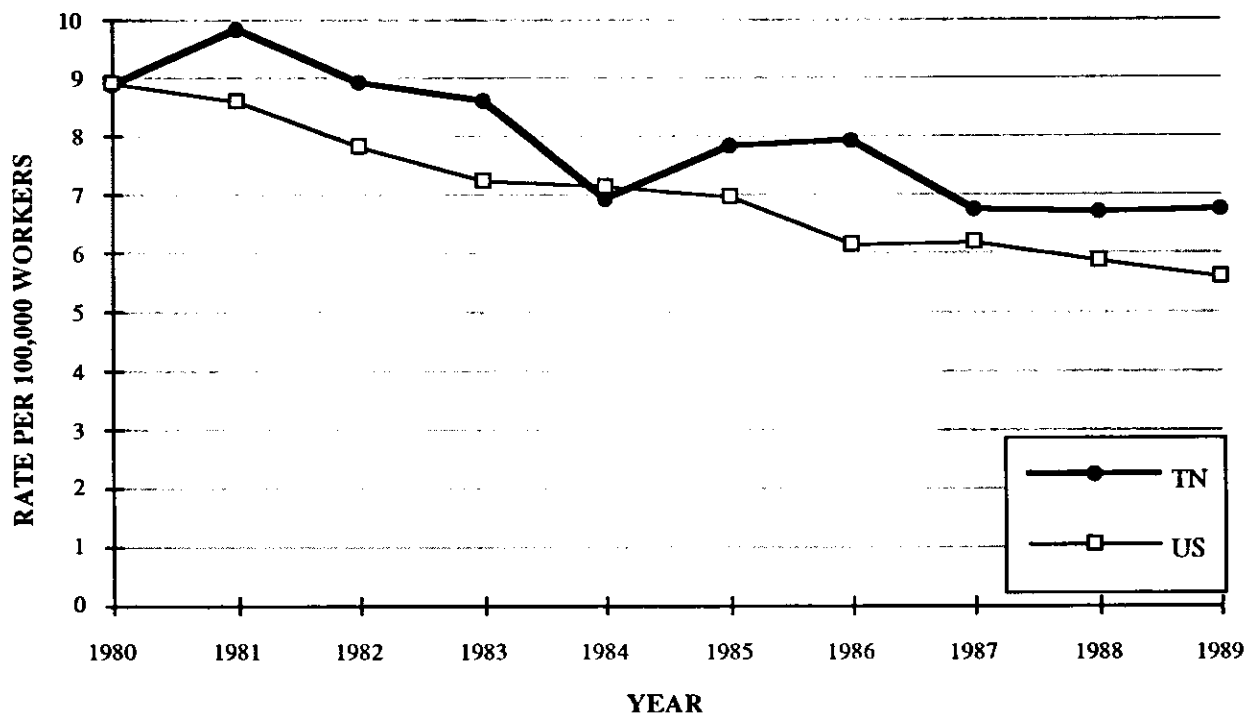


Figure TN-5. Rate of Traumatic Occupational Fatalities by Year, US and Tennessee, 1980-1989.

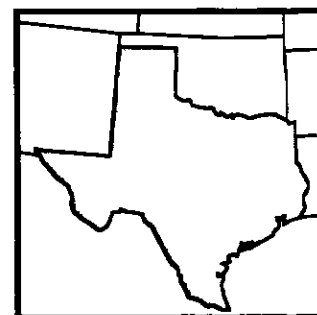
State of Texas

Average Annual Fatal Injuries: **682**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **11.3**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (1,436)**
Rate: **Transportation/Communication/
Public Utilities (35.6)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (1,402)**
Rate: **Transportation/Material Movers (36.4)**

The State of Texas had 6,816 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 6,664 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 11.3 for Texas compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 311.6 per 100,000 workers for Texas compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Texas and had a fatality rate of 15.1

Table TX-1. Traumatic Occupational Fatalities by Race/Ethnicity, Texas, 1980-1989.

Race/Ethnicity	Number	Percent
White	4756	69.8
Hispanic	1260	18.5
Black	667	9.8
Asian	106	1.6
Native American	8	0.1
Other	19	0.2

per 100,000 workers compared to 1.4 for females. The fatality distribution by **race/ethnicity** for the State of Texas shows that Whites accounted for 70% of the total fatalities, Hispanics for 19%, and Blacks for 10% as shown in **Table TX-1**. As shown in **Figure TX-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (16%). Of all Texas occupational fatality victims, 90% were Texas residents (**Table TX-2**).

Figure TX-2 presents the distribution of fatalities by external cause of death for the State of Texas and for the U.S. The three leading causes of death among employees in Texas were motor vehicle incidents (26%), homicides (14%), and machine-related incidents (11%).

In Texas, the **industry divisions** in which the largest number of fatalities occurred were construction (22%) and transportation/communication/public utilities (19%). The transportation/communication/public utilities industry had the highest fatality rate at 35.6 per 100,000 workers, followed by construction (33.7), and mining (26.8) (**Figure TX-3**). **Table TX-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

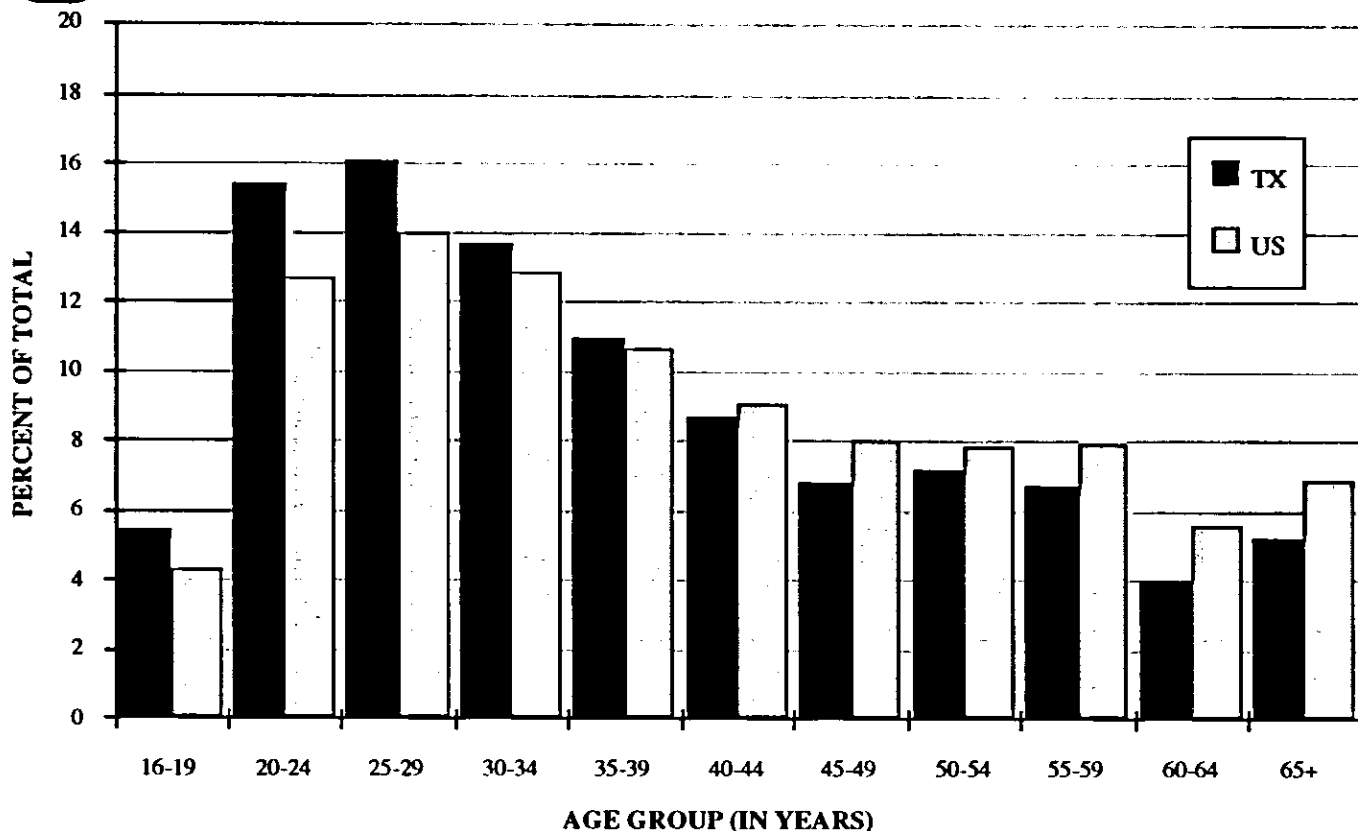


Figure TX-1. Traumatic Occupational Fatalities by Age Group, US and Texas, 1980-1989.

Table TX-2. Traumatic Occupational Fatalities by State of Residence, Texas, 1980-1989.

State	Number	Percent
Texas	6097	89.5
Louisiana	101	1.5
Oklahoma	76	1.1
Arkansas	51	0.7
New Mexico	47	0.7
Florida	31	0.5
Mississippi	29	0.4
California	26	0.4
Alabama	21	0.3
Missouri	20	0.3
Kansas	16	0.2
Other	301	4.4

The **occupation divisions** in Texas with the largest number of fatalities were precision production/craft/repair (21%), transportation/material movers (20%), and laborers (16%). The occupations with the highest rates were transportation/material movers (36.4 deaths per 100,000 workers), laborers (28.7), and farmers/foresters/fishers (18.3) (Figure TX-4). Table TX-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the **fatality rates** in Texas decreased 46%, from a high of 16.3 in 1980 to 8.8 in 1989. A low of 8.2 deaths per 100,000 workers was reported in 1986 (Figure TX-5).

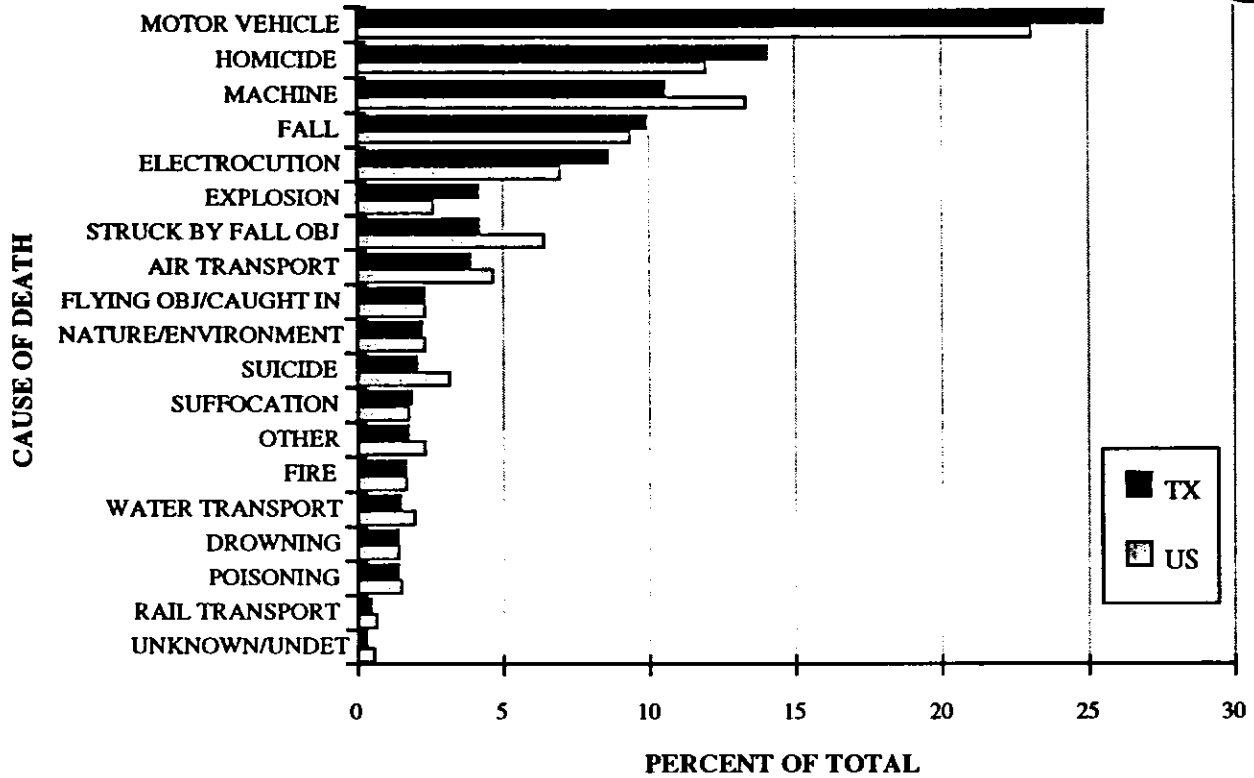


Figure TX-2. Traumatic Occupational Fatalities by Cause of Death, US and Texas, 1980-1989.

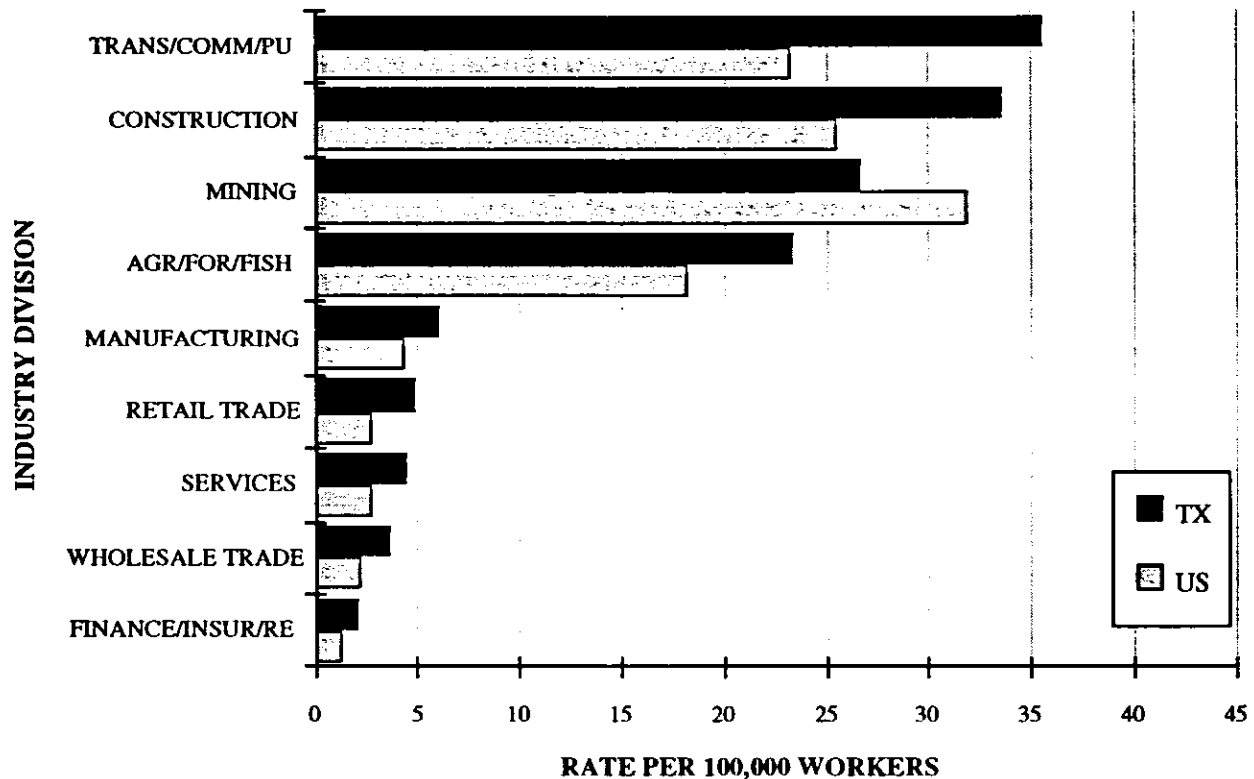


Figure TX-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Texas, 1980-1989.

Table TX-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Texas, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	194	157	149	122	135	146	85	92	108	91	1279	35.6
CONSTRUCTION	158	164	173	151	155	160	114	112	127	122	1436	33.7
MINING	80	103	64	74	70	73	37	32	36	32	601	26.8
AGR/FOR/FISH	58	58	56	43	49	58	61	44	52	62	541	23.4
MANUFACTURING	92	90	84	44	72	36	43	46	43	63	613	6.1
RETAIL TRADE	75	56	75	61	57	67	40	45	51	44	571	4.9
SERVICES	73	57	63	62	62	65	46	58	55	51	592	4.6
WHOLESALE TRADE	22	27	20	20	15	15	11	12	8	11	161	3.8
FINANCE/INSUR/RE	8	7	9	16	12	7	9	9	7	--	86	2.1
PUBLIC ADMIN	36	38	41	34	29	36	17	31	27	32	321	N/A
NOT CLASSIFIED	66	65	55	44	68	43	31	39	15	37	463	N/A
STATE	862	822	789	671	724	706	494	520	529	547	6664	11.3

NOTE: Dashes denote categories with fewer than three cases.

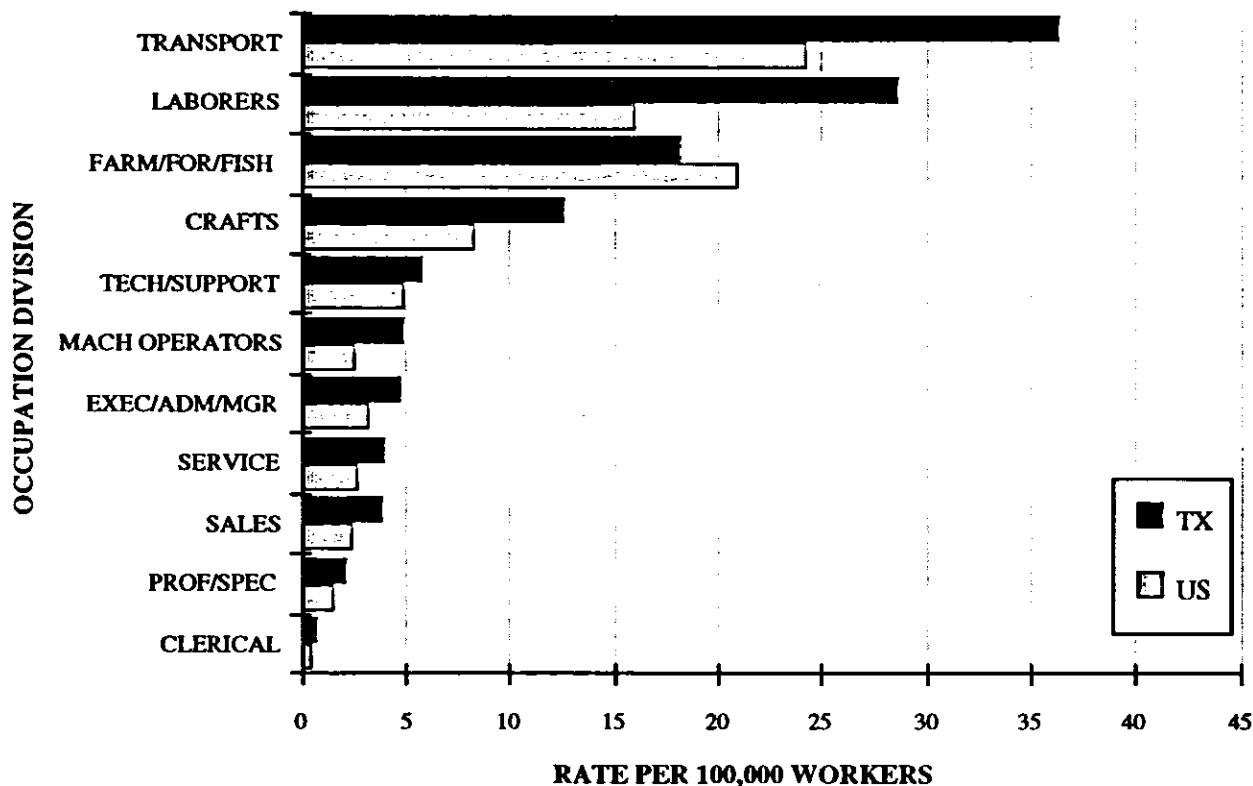


Figure TX-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Texas, 1983-1989.

Table TX-4. Distribution and Average Annual-Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Texas.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	1363	36.4
LABORERS	1066	28.7
FARM/FOR/FISH	463	18.3
CRAFTS	1402	12.7
TECH/SUPPORT	167	5.9
MACH OPERATORS	253	4.9
EXEC/ADM/MGR	454	4.9
SERVICE	421	4.1
SALES	422	3.9
PROF/SPEC	213	2.3
CLERICAL	113	0.8
NOT CLASSIFIED	327	N/A

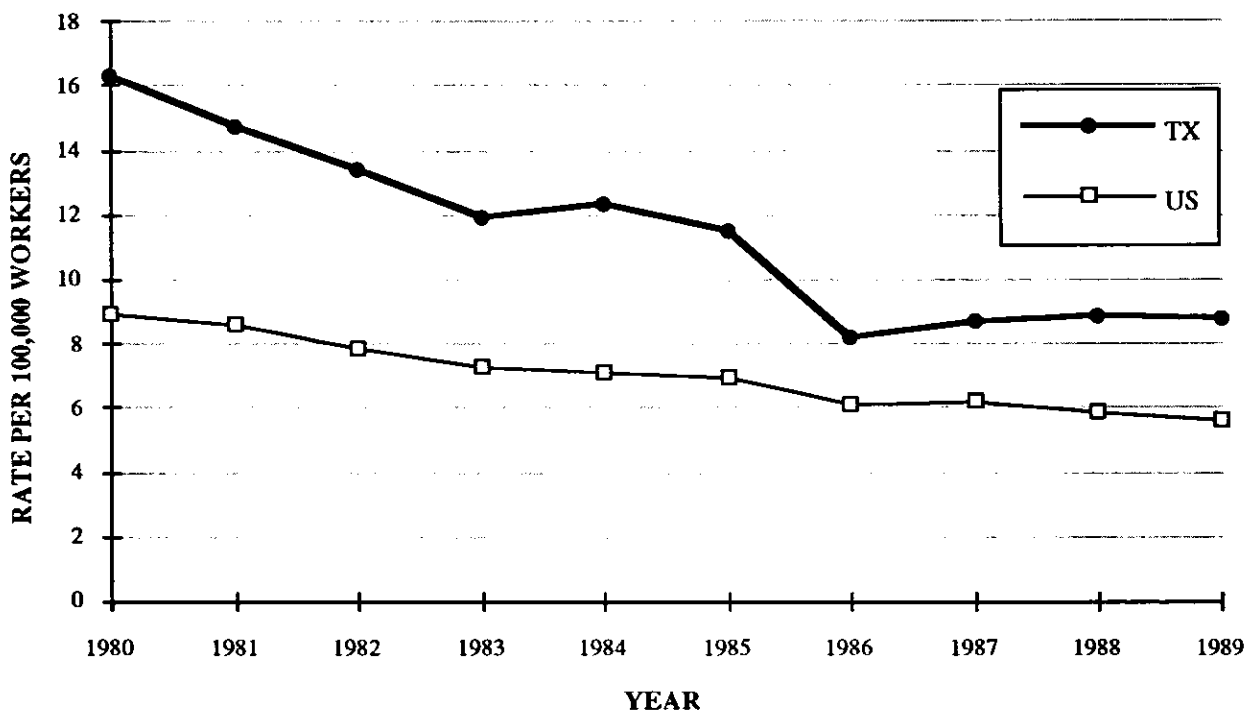


Figure TX-5. Rate of Traumatic Occupational Fatalities by Year, US and Texas, 1980-1989.

State of Utah

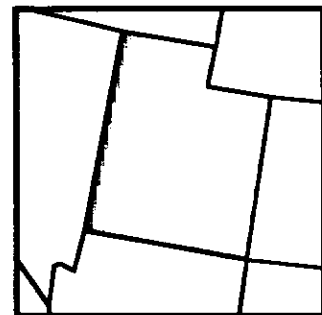
Average Annual Fatal Injuries: **66**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **12.3**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (132)**

Rate: **Mining (79.5)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (145)**

Rate: **Transportation/Material Movers (44.0)**

The State of Utah had 655 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 647 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 12.3 for Utah compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 345.8 per 100,000 workers for Utah compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Utah and had a fatality rate of 16.0

Table UT-1. Traumatic Occupational Fatalities by Race/Ethnicity, Utah, 1980-1989.

Race/Ethnicity	Number	Percent
White	617	94.2
Hispanic	26	4.0
Native American	6	0.9
Black	4	0.6
Other	2	0.3

per 100,000 workers compared to 1.0 for females. The fatality distribution by **race/ethnicity** for the State of Utah shows that Whites accounted for 94% of the total fatalities and Hispanics for 4% as shown in **Table UT-1**. As shown in **Figure UT-1**, workers aged 30 to 34 years old accounted for the largest number of fatalities (18%). Of all Utah occupational fatality victims, 78% were Utah residents (**Table UT-2**).

Figure UT-2 presents the distribution of fatalities by external cause of death for the State of Utah and for the U.S. The three leading causes of death among employees in Utah were motor vehicle incidents (34%), air transportation (10%), and machine-related incidents (10%).

In Utah, the **industry divisions** in which the largest number of fatalities occurred were transportation/communication/public utilities (20%), mining (15%), and construction (14%). The mining industry had the highest fatality rate at 79.5 per 100,000 workers, followed by transportation/communication/public utilities (39.4), and construction (33.3) (**Figure UT-3**). **Table UT-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

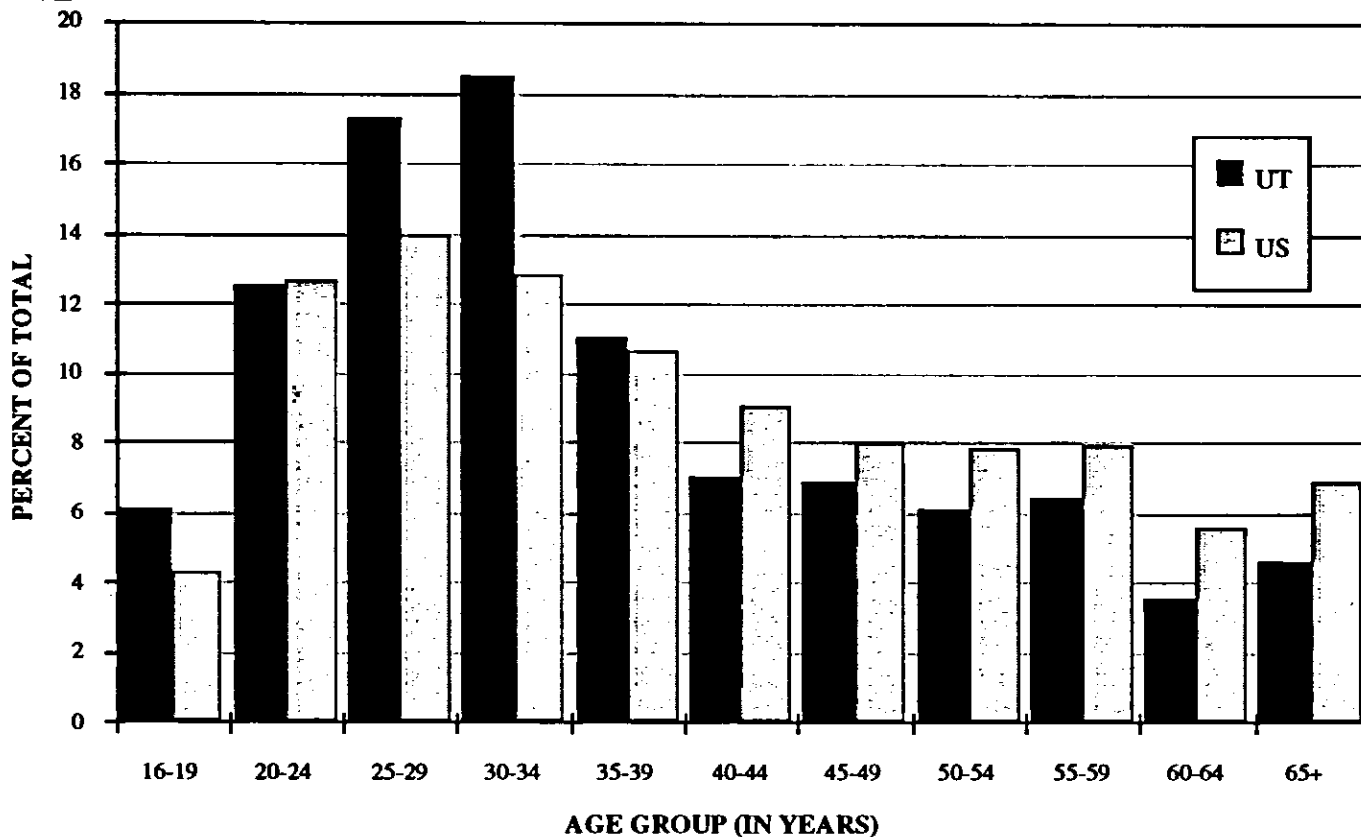


Figure UT-1. Traumatic Occupational Fatalities by Age Group, US and Utah, 1980-1989.

Table UT-2. Traumatic Occupational Fatalities by State of Residence, Utah, 1980-1989.

State	Number	Percent
Utah	508	77.6
Colorado	22	3.4
Idaho	20	3.1
Wyoming	19	2.9
Texas	13	2.0
California	9	1.4
Georgia	9	1.4
Montana	5	0.8
New Mexico	5	0.8
Alabama	4	0.6
Nevada	4	0.6
Washington	4	0.6
Other	33	5.0

The occupation divisions in Utah with the largest number of fatalities were precision production/craft/repair and transportation/material movers, each accounting for 22%. The occupations with the highest rates were transportation/material movers (44.0 deaths per 100,000 workers), farmers/foresters/fishers (22.9), and laborers (15.8) (Figure UT-4). Table UT-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Utah decreased 68%, from 13.8 in 1980 to a low of 4.4 in 1989. A high of 22.5 deaths per 100,000 workers was reported in 1984 (Figure UT-5).

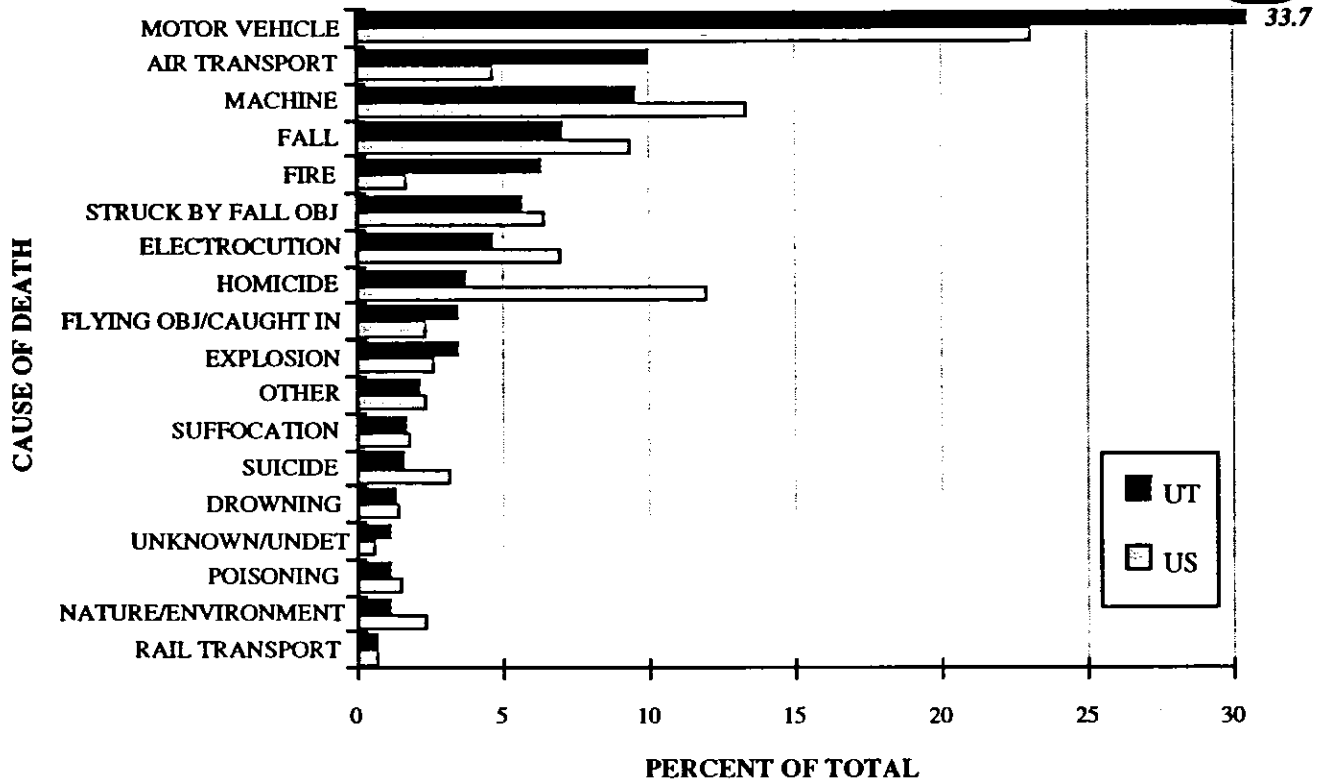


Figure UT-2. Traumatic Occupational Fatalities by Cause of Death, US and Utah, 1980-1989.

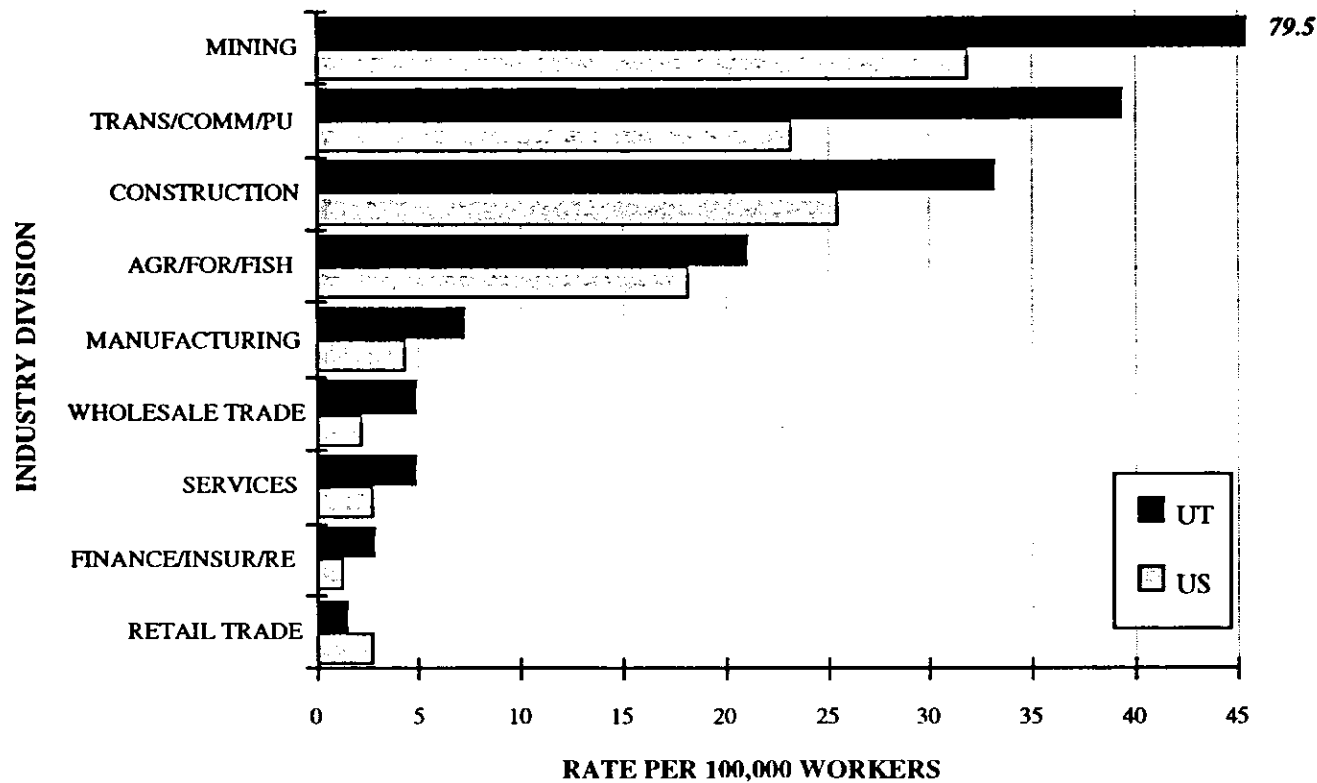


Figure UT-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Utah, 1980-1989.

Table UT-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Utah, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	9	10	13	9	36	5	8	--	5	--	98	79.5
TRANS/COMM/PU	15	22	10	14	19	7	10	15	14	6	132	39.4
CONSTRUCTION	9	16	8	11	15	9	6	9	4	4	91	33.3
AGR/FOR/FISH	--	6	6	4	8	3	10	4	5	--	48	21.3
MANUFACTURING	6	9	7	9	8	8	4	11	--	--	66	7.3
WHOLESALE TRADE	--	--	--	4	3	--	--	3	--	--	17	5.0
SERVICES	5	7	10	5	8	8	3	4	8	6	64	4.9
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	9	2.9
RETAIL TRADE	--	6	--	--	--	--	--	3	--	--	17	1.6
PUBLIC ADMIN	5	4	4	5	5	--	3	7	5	3	42	N/A
NOT CLASSIFIED	14	6	8	5	6	5	8	3	4	4	63	N/A
STATE	67	90	68	66	112	49	55	62	50	28	647	12.3

NOTE: Dashes denote categories with fewer than three cases.

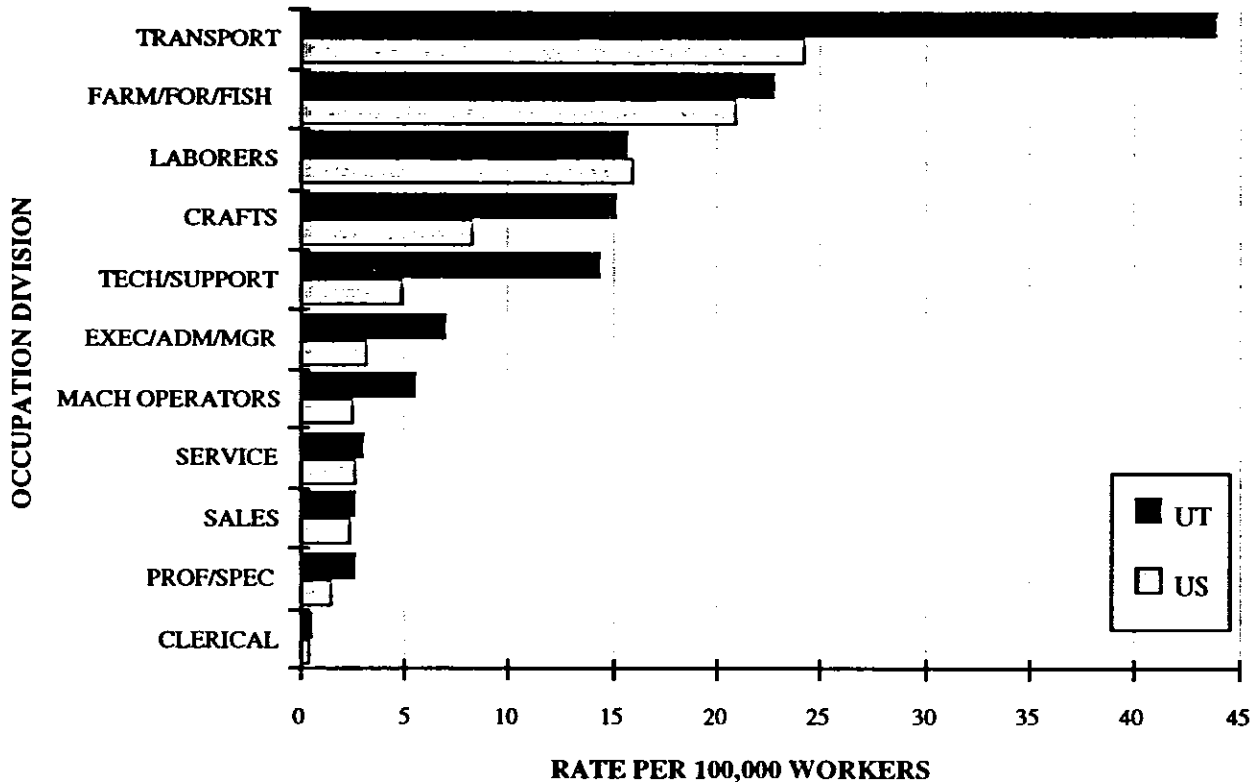


Figure UT-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Utah, 1983-1989.

Table UT-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Utah.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	142	44.0
FARM/FOR/FISH	52	22.9
LABORERS	54	15.8
CRAFTS	145	15.3
TECH/SUPPORT	28	14.4
EXEC/ADM/MGR	52	7.1
MACH OPERATORS	23	5.7
SERVICE	31	3.2
SALES	22	2.8
PROF/SPEC	30	2.7
CLERICAL	8	0.6
NOT CLASSIFIED	60	N/A

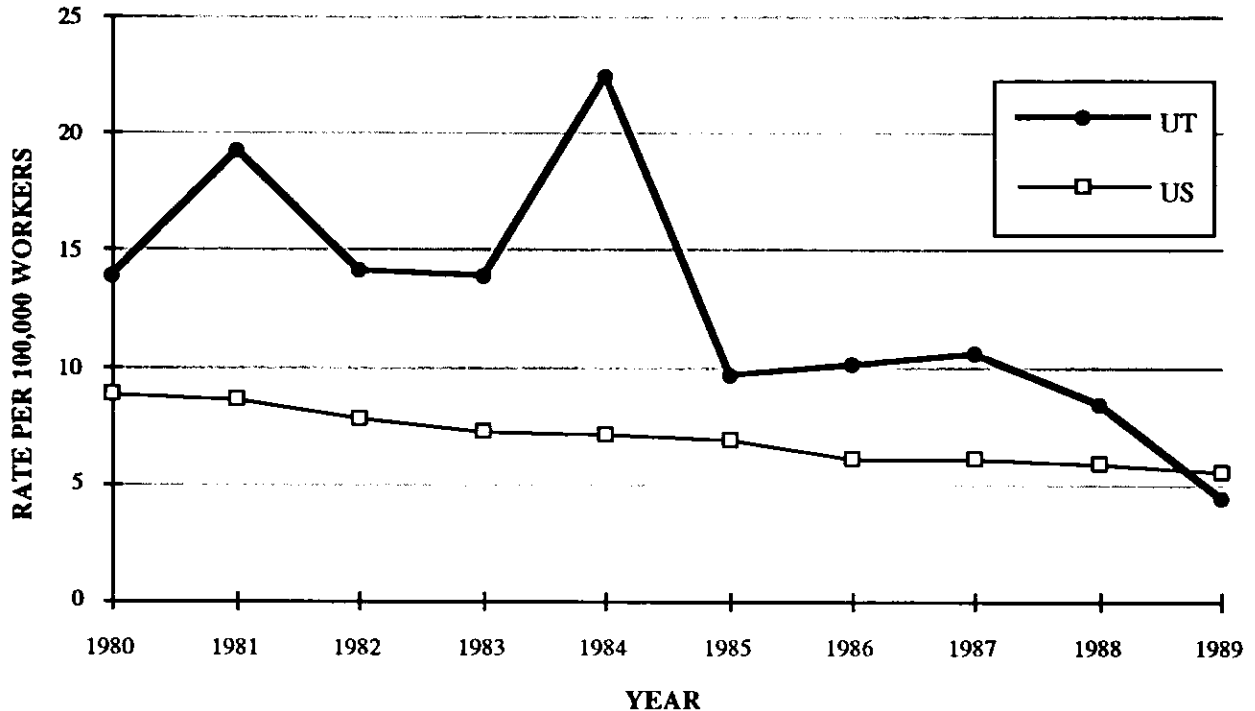


Figure UT-5. Rate of Traumatic Occupational Fatalities by Year, US and Utah, 1980-1989.

State of Vermont

Average Annual Fatal Injuries: **14**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **6.7**

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Construction (30)**
Manufacturing (30)
Rate: **Mining (77.6)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (29)**
Rate: **Transportation/Material Movers (31.7)**

The State of Vermont had 137 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 135 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 6.7 for Vermont compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 175.8 per 100,000 workers for Vermont compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Vermont and had a fatality rate of 8.8 per 100,000 workers compared to 0.5 for females. The fatality distribution by **race/ethnicity** for the State of Vermont shows that Whites accounted for 99% of the total fatalities as shown in **Table VT-1**.

Table VT-1. Traumatic Occupational Fatalities by Race/Ethnicity, Vermont, 1980-1989.

Race/Ethnicity	Number	Percent
White	135	98.5
Other	2	1.5

As shown in **Figure VT-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (19%). Of all Vermont occupational fatality victims, 83% were Vermont residents (**Table VT-2**).

Figure VT-2 presents the distribution of fatalities by external cause of death for the State of Vermont and for the U.S. The three leading causes of death among employees in Vermont were motor vehicle incidents (23%), machine-related incidents (20%), and being struck by falling objects (19%).

In Vermont, the **industry divisions** in which the largest number of fatalities occurred were construction (22%), manufacturing (22%), and transportation/communication/public utilities (15%). The mining industry had the highest fatality rate at 77.6 per 100,000 workers, followed by construction (26.8), and transportation/communication/public utilities (23.4) (**Figure VT-3**). **Table VT-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The **occupation divisions** in Vermont with the largest number of fatalities were farmers/foresters/fishers (21%), transportation/material movers (20%), and precision production/craft/repair (19%). The

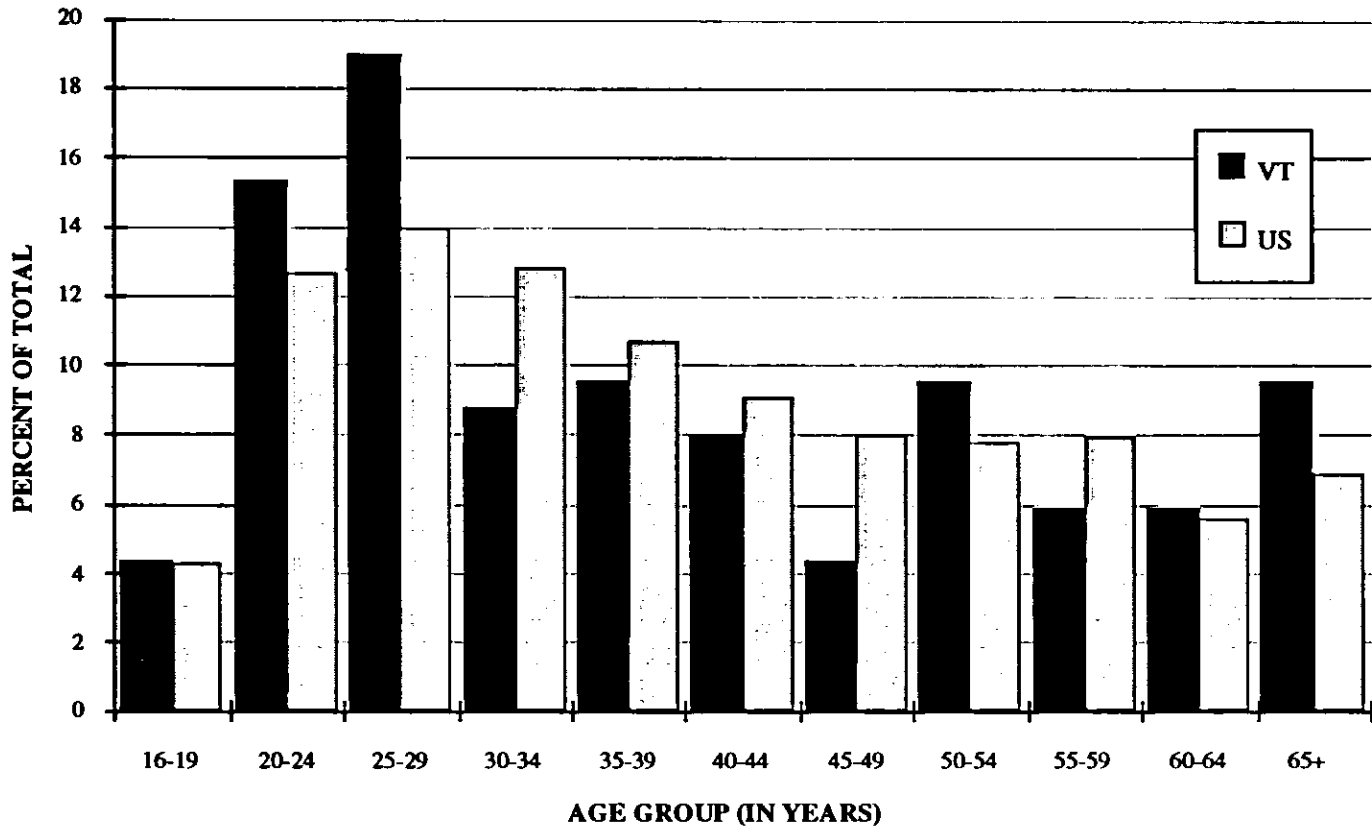


Figure VT-1. Traumatic Occupational Fatalities by Age Group, US and Vermont, 1980-1989.

Table VT-2. Traumatic Occupational Fatalities by State of Residence, Vermont, 1980-1989.

State	Number	Percent
Vermont	113	82.5
New York	9	6.6
New Hampshire	4	2.9
Other	11	8.0

occupations with the highest rates were transportation/material movers (31.7 deaths per 100,000 workers), farmers/foresters/fishers (23.3), and laborers (19.7) (Figure VT-4). Table VT-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Vermont decreased 9%, from 6.5 in 1980 to 5.9 in 1989. A high of 9.8 and a low of 5.0 deaths per 100,000 workers were reported in 1985 and 1987, respectively (Figure VT-5).

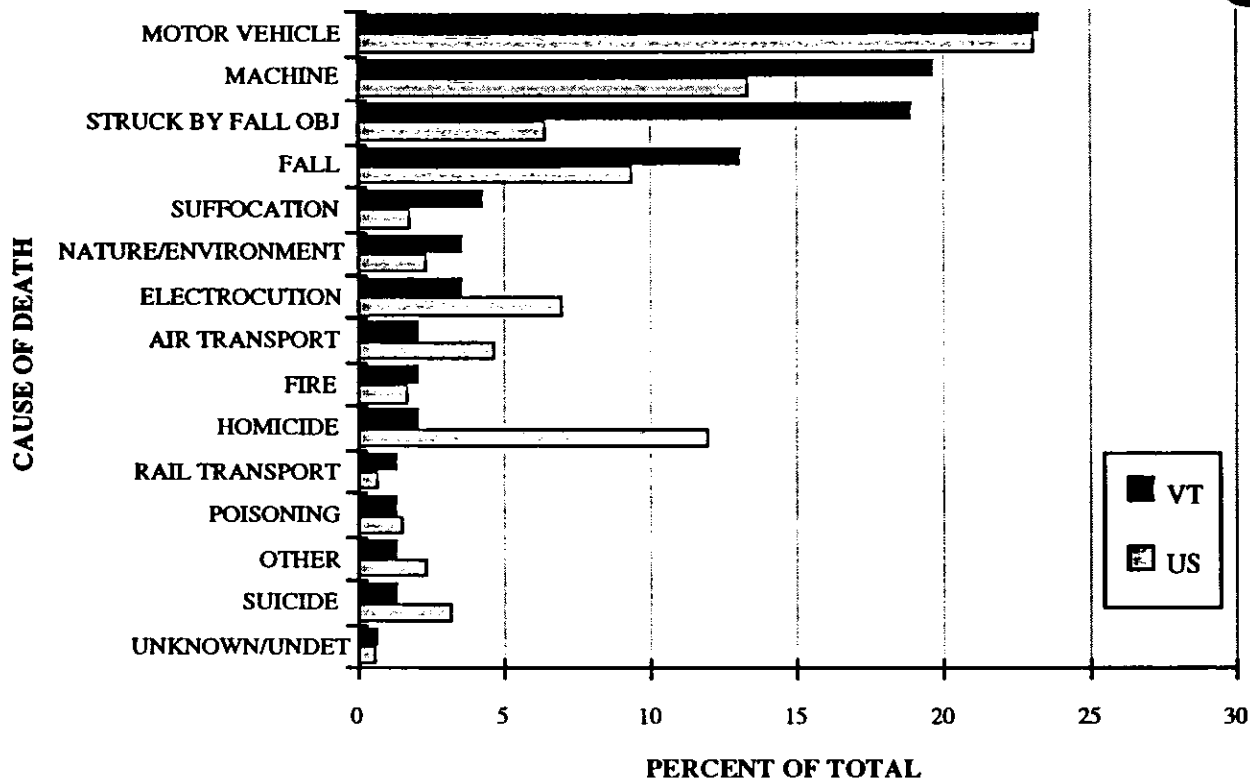


Figure VT-2. Traumatic Occupational Fatalities by Cause of Death, US and Vermont, 1980-1989.

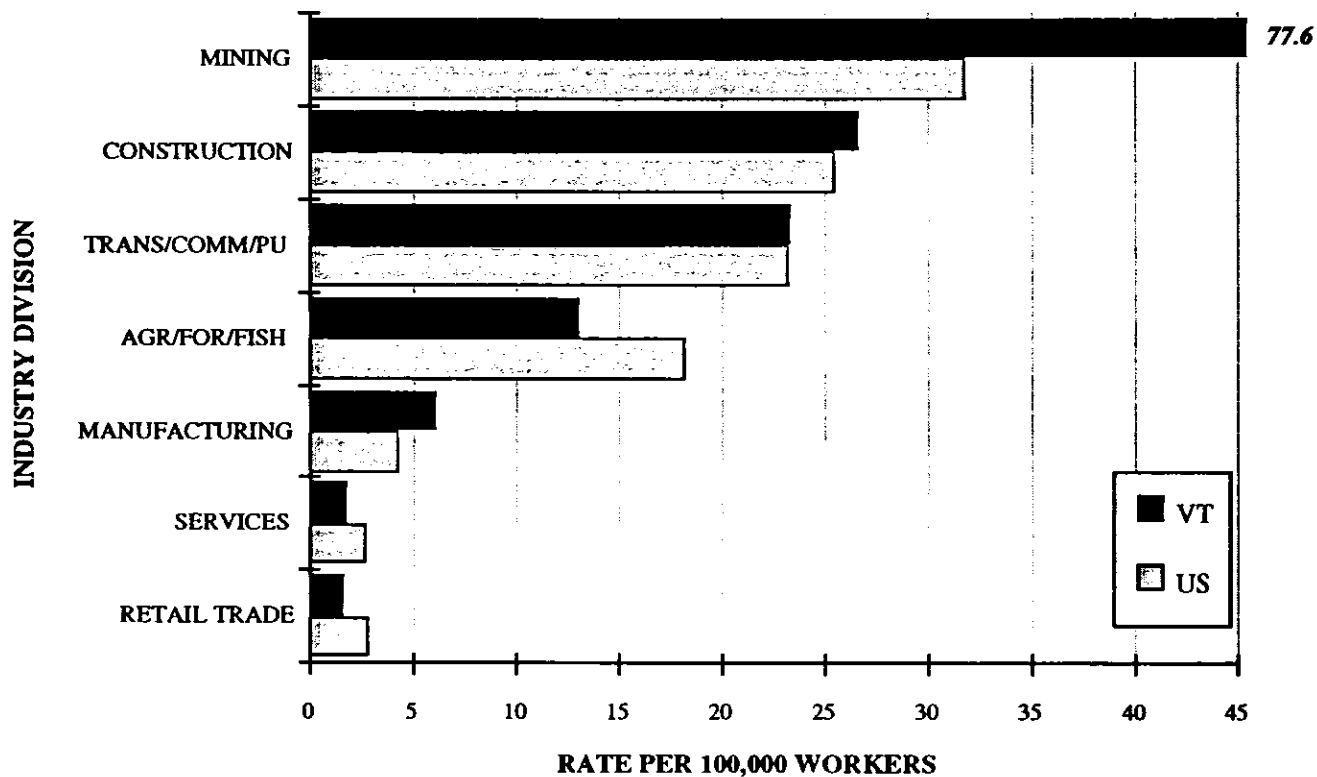


Figure VT-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Vermont, 1980-1989.

Table VT-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Vermont, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	--	--	--	--	--	--	6	77.6
CONSTRUCTION	3	--	--	5	--	3	3	3	--	8	30	26.8
TRANS/COMM/PU	--	--	--	--	3	4	--	--	4	--	20	23.4
AGR/FOR/FISH	--	--	--	--	--	5	--	--	--	--	18	13.2
MANUFACTURING	--	--	7	--	4	3	3	--	3	3	30	6.3
SERVICES	--	--	--	--	--	--	--	--	--	--	10	1.9
RETAIL TRADE	--	--	--	--	--	--	--	--	--	--	7	1.7
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	--	N/A
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	--	N/A
PUBLIC ADMIN	--	--	--	--	--	--	--	--	--	--	4	N/A
NOT CLASSIFIED	--	4	--	--	--	--	--	--	--	--	9	N/A
STATE	11	14	12	12	13	20	13	12	14	14	135	6.7

NOTE: Dashes denote categories with fewer than three cases.

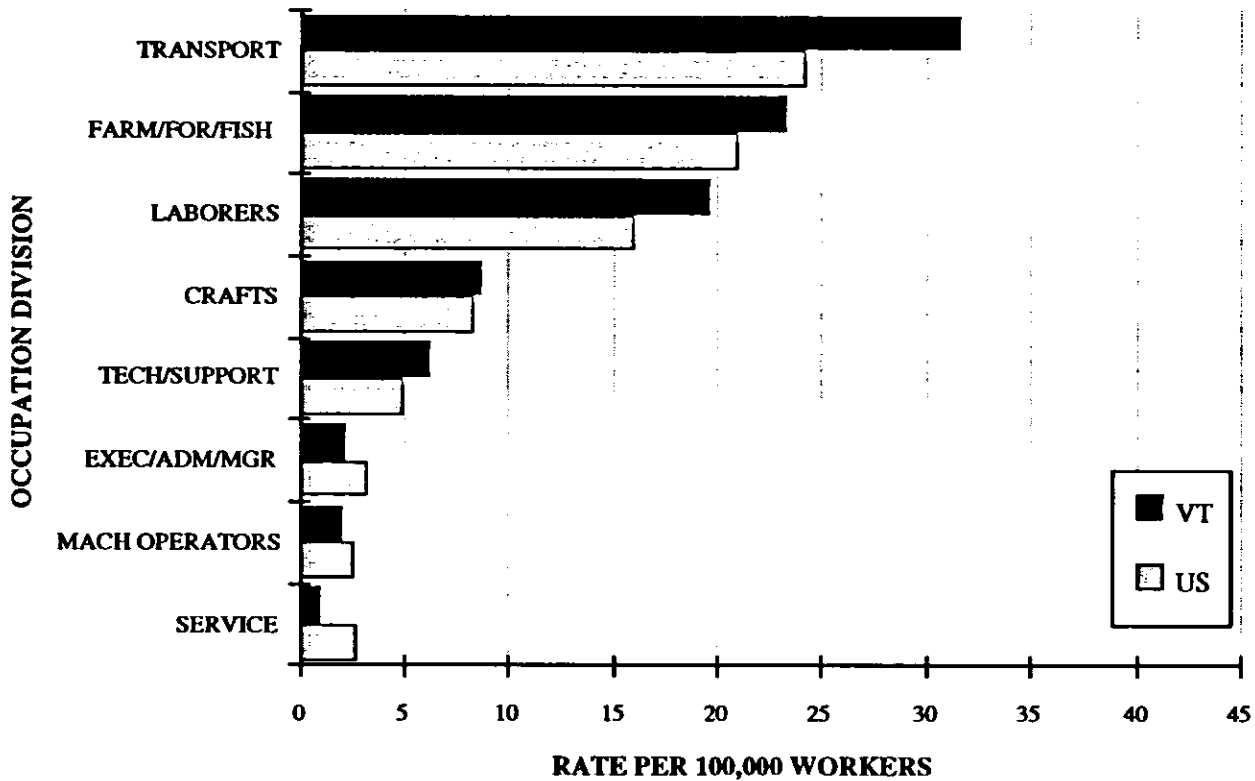


Figure VT-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Vermont, 1983-1989.

Table VT-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Vermont.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	27	31.7
FARM/FOR/FISH	29	23.3
LABORERS	19	19.7
CRAFTS	25	8.8
TECH/SUPPORT	4	6.4
EXEC/ADM/MGR	8	2.3
MACH OPERATORS	4	2.1
SERVICE	6	1.1
SALES	3	N/A
CLERICAL	--	N/A
PROF/SPEC	--	N/A
NOT CLASSIFIED	7	N/A

NOTE: Dashes denote categories with fewer than three cases.

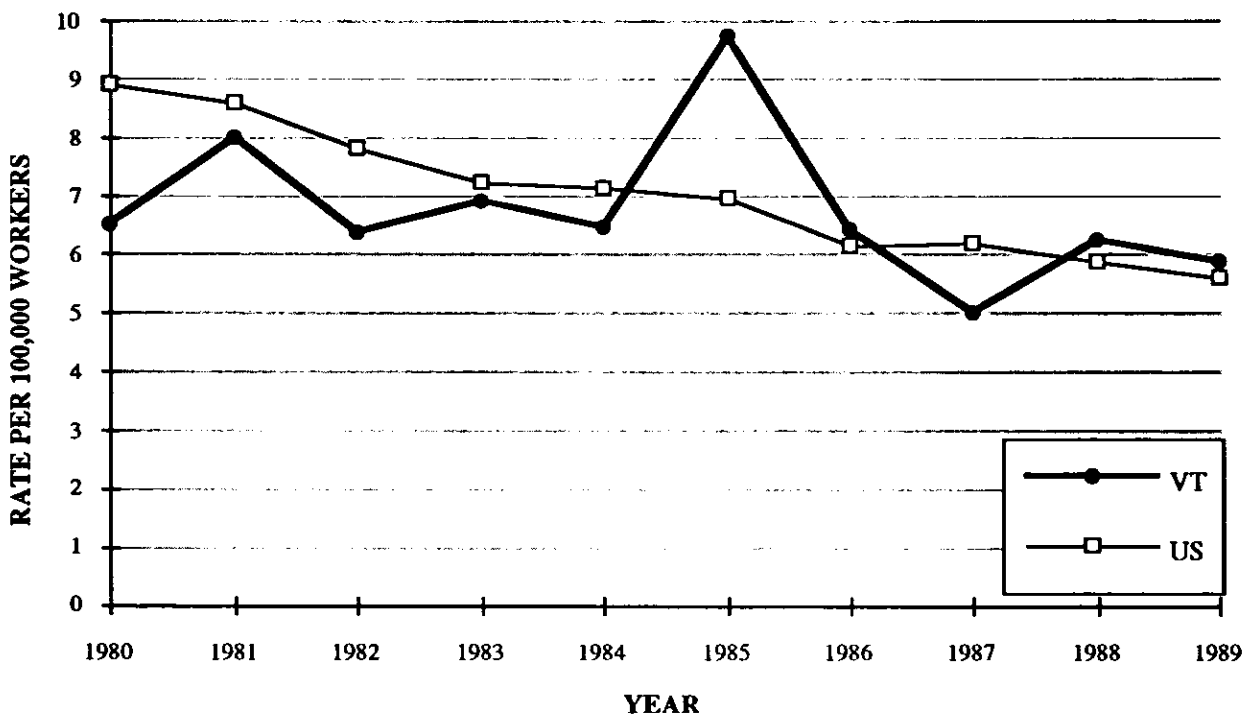


Figure VT-5. Rate of Traumatic Occupational Fatalities by Year, US and Vermont, 1980-1989.

State of Virginia

Average Annual Fatal Injuries: **199**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **9.4**

Industries with the Highest Number and Rate of Fatal Injuries:

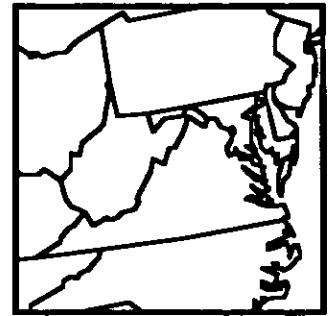
Number: **Construction (352)**

Rate: **Mining (56.7)**

Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (415)**

Rate: **Transportation/Material Movers (29.0)**



The State of Virginia had 1,993 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,942 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 9.4 for Virginia compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 227.9 per 100,000 workers for Virginia compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Virginia and had a fatality rate of

Table VA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Virginia, 1980-1989.

Race/Ethnicity	Number	Percent
White	1559	78.2
Black	395	19.8
Asian	18	0.9
Hispanic	9	0.5
Native American	3	0.2
Other	9	0.5

12.3 per 100,000 workers compared to 1.0 for females. The fatality distribution by **race/ethnicity** for the State of Virginia shows that Whites accounted for 78% of the total fatalities and Blacks for 20% as shown in **Table VA-1**. As shown in **Figure VA-1**, workers aged 20 to 24 and 25 to 29 years old each accounted for 13% of the fatalities. Of all Virginia occupational fatality victims, 82% were Virginia residents (**Table VA-2**).

Figure VA-2 presents the distribution of fatalities by external cause of death for the State of Virginia and for the U.S. The three leading causes of death among employees in Virginia were motor vehicle incidents (24%), machine-related incidents (15%), and homicides (10%).

In Virginia, the **industry divisions** in which the largest number of fatalities occurred were construction (18%), transportation/communication/public utilities (16%), and manufacturing (15%). The mining industry had the highest fatality rate at 56.7 per 100,000 workers, followed by transportation/communication/public utilities (27.6), and construction (26.3) (**Figure VA-3**). **Table VA-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

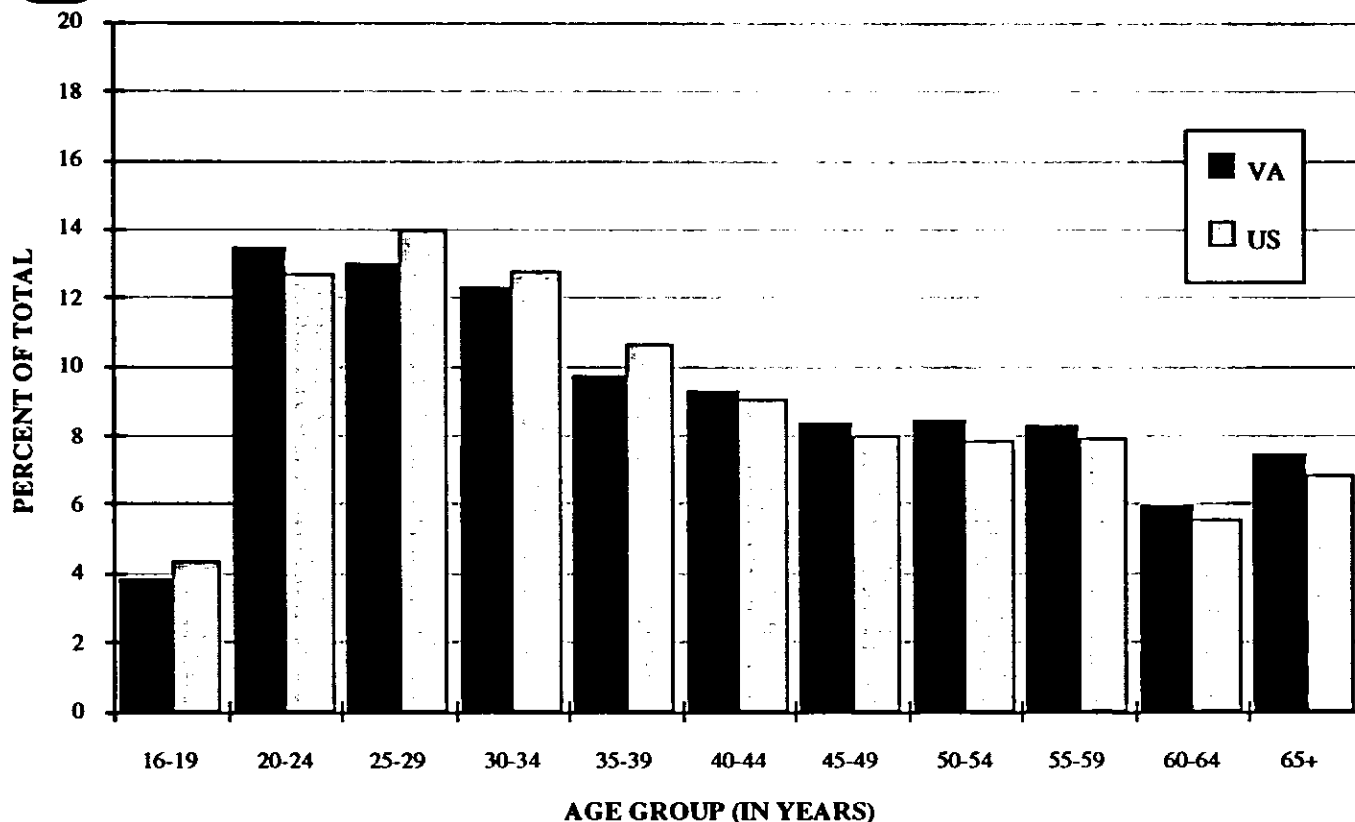


Figure VA-1. Traumatic Occupational Fatalities by Age Group, US and Virginia, 1980-1989.

Table VA-2. Traumatic Occupational Fatalities by State of Residence, Virginia, 1980-1989.

State	Number	Percent
Virginia	1628	81.7
North Carolina	81	4.1
Maryland	44	2.2
West Virginia	32	1.6
Tennessee	21	1.1
Pennsylvania	16	0.8
South Carolina	16	0.8
Washington, D.C.	12	0.6
Kentucky	11	0.6
Georgia	10	0.5
Alabama	9	0.5
Texas	9	0.5
Other	104	5.2

The occupation divisions in Virginia with the largest number of fatalities were precision production/craft/repair (21%), transportation/material movers (19%), and laborers (14%). The occupations with the highest rates were transportation/material movers (29.0 deaths per 100,000 workers), farmers/foresters/fishers (27.7), and laborers (21.2) (Figure VA-4). Table VA-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Virginia decreased 62%, from a high of 14.3 in 1980 to a low of 5.5 in 1989 (Figure VA-5).

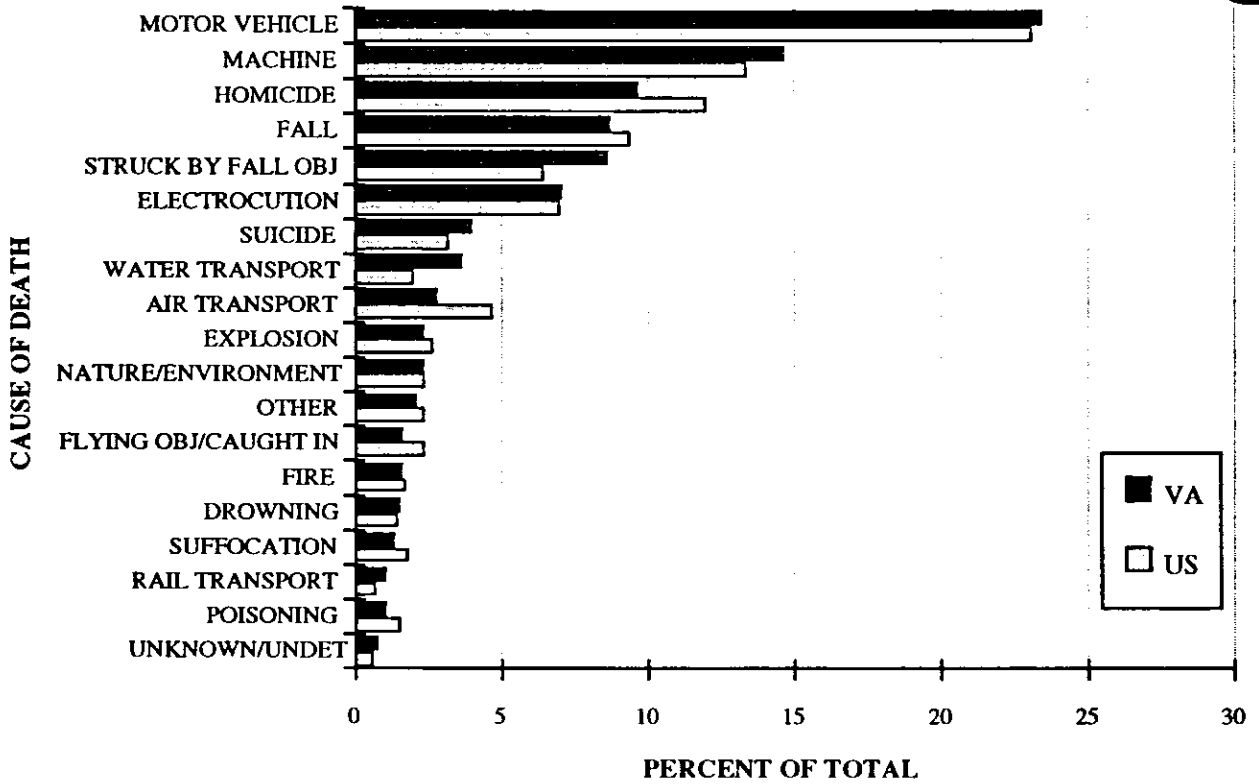


Figure VA-2. Traumatic Occupational Fatalities by Cause of Death, US and Virginia, 1980-1989.

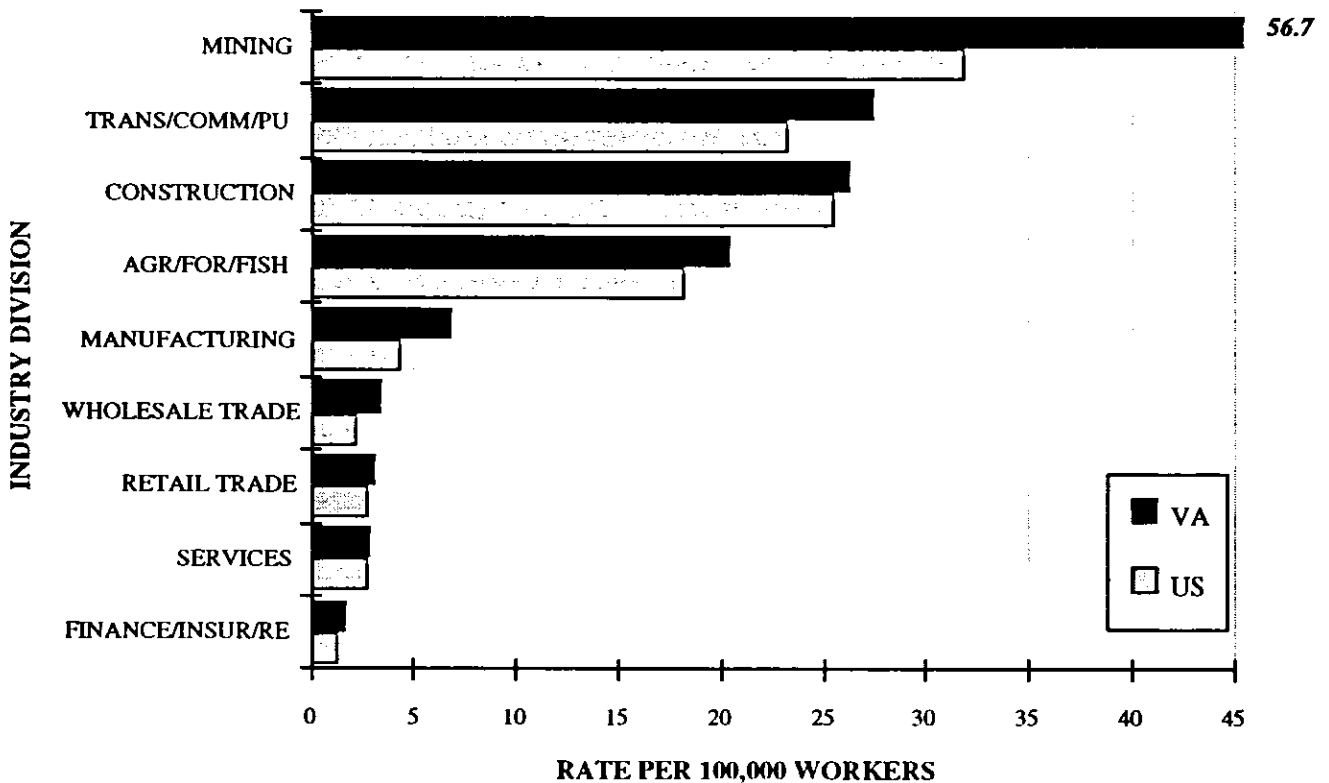


Figure VA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Virginia, 1980-1989.

Table VA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Virginia, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	14	15	17	14	15	10	12	5	9	9	120	56.7
TRANS/COMM/PU	44	33	31	31	34	36	32	33	27	13	314	27.6
CONSTRUCTION	42	35	25	32	36	36	33	45	43	25	352	26.3
AGR/FOR/FISH	27	23	12	20	17	22	27	15	25	14	202	20.6
MANUFACTURING	31	30	22	27	31	38	39	23	17	28	286	6.9
WHOLESALE TRADE	--	4	7	4	3	--	4	--	5	5	38	3.5
RETAIL TRADE	17	14	11	33	9	11	6	9	12	8	130	3.2
SERVICES	15	9	9	21	17	13	16	16	19	12	147	2.9
FINANCE/INSUR/RE	4	3	--	3	3	--	--	--	--	4	21	1.7
PUBLIC ADMIN	14	12	13	19	24	14	13	8	10	7	134	N/A
NOT CLASSIFIED	37	19	19	23	19	19	17	16	14	15	198	N/A
STATE	247	197	167	227	208	201	200	174	181	140	1942	9.4

NOTE: Dashes denote categories with fewer than three cases.

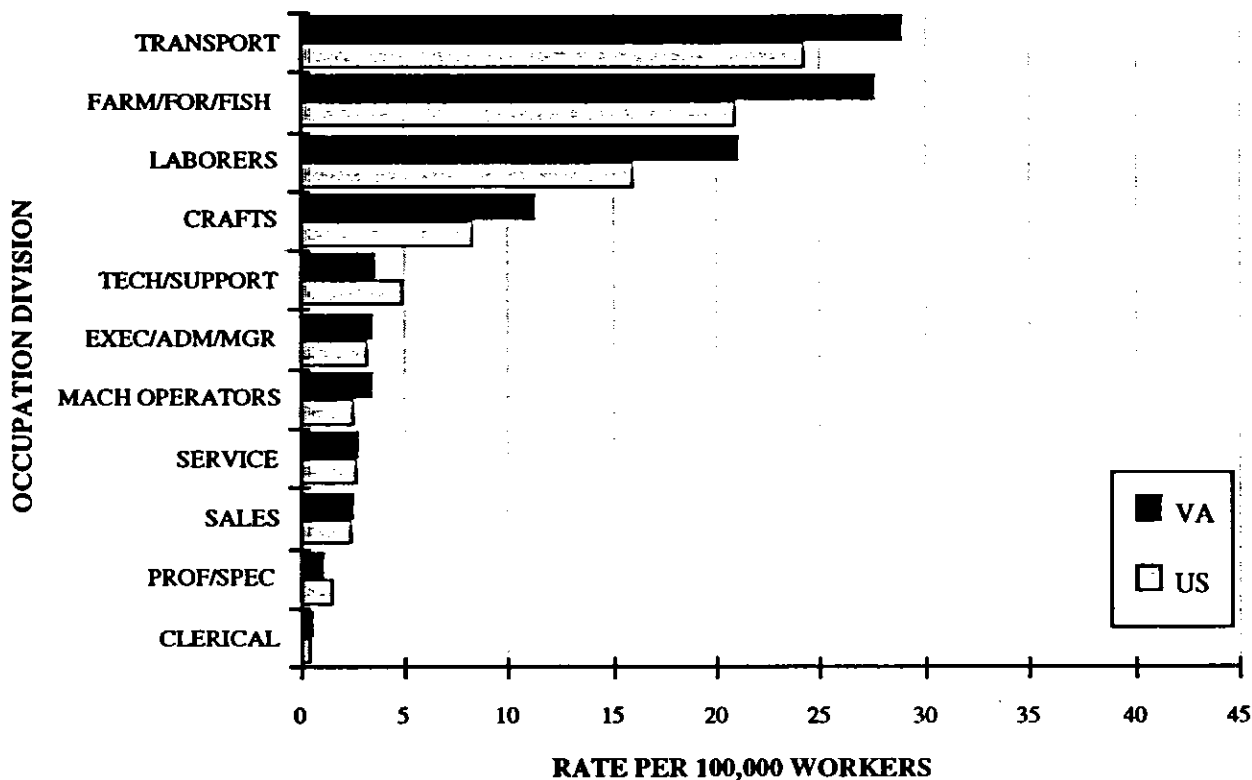


Figure VA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Virginia, 1983-1989.

Table VA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Virginia.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	371	29.0
FARM/FOR/FISH	215	27.7
LABORERS	262	21.2
CRAFTS	415	11.4
TECH/SUPPORT	34	3.7
EXEC/ADM/MGR	127	3.6
MACH OPERATORS	62	3.6
SERVICE	92	2.9
SALES	93	2.7
PROF/SPEC	53	1.3
CLERICAL	27	0.7
NOT CLASSIFIED	191	N/A

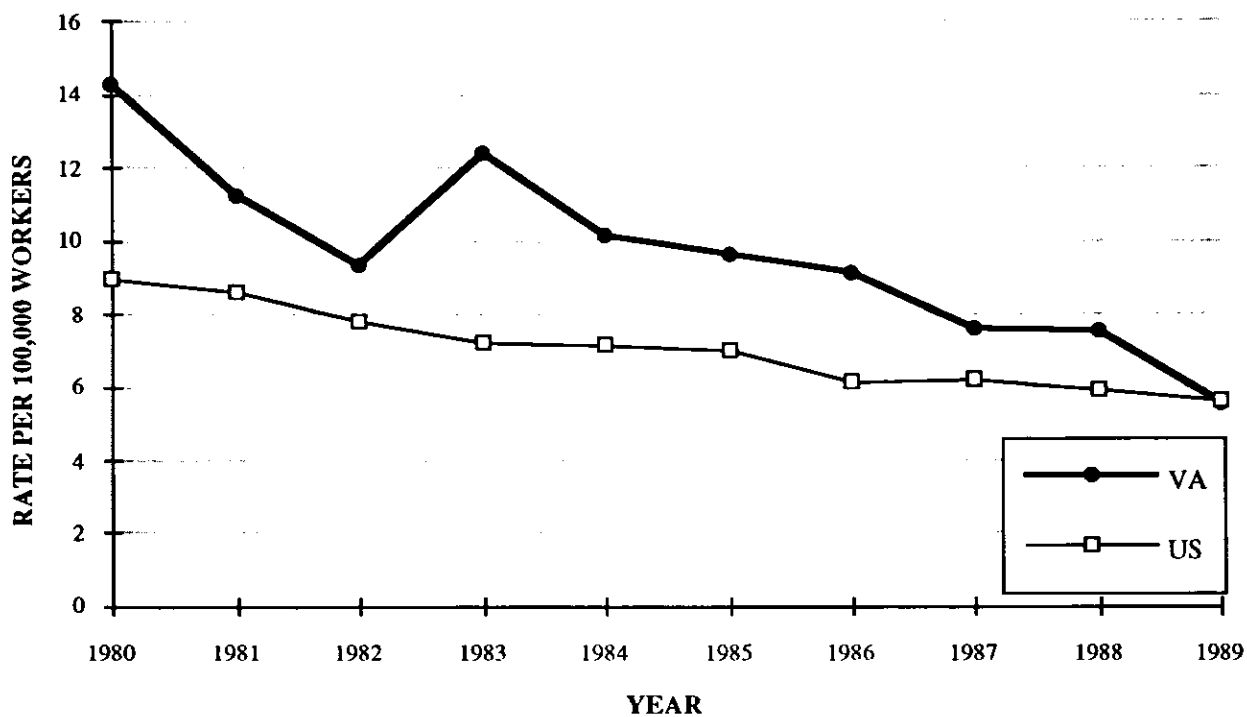


Figure VA-5. Rate of Traumatic Occupational Fatalities by Year, US and Virginia, 1980-1989.



State of Washington

Average Annual Fatal Injuries: **124**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **7.5**

Industries with the Highest Number and Rate of Fatal Injuries:

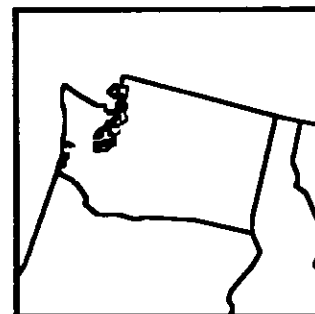
Number: **Manufacturing (284)**

Rate: **Mining (42.8)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (265)**

Rate: **Farmers/Foresters/Fishers (27.5)**



The State of Washington had 1,240 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,212 of these deaths. The **average annual rate** of fatalities per 100,000 workers was 7.5 for Washington compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 190.4 per 100,000 workers for Washington compared to 175.6 for the United States.

Males accounted for 94% of the civilian occupational fatalities in Washington and had a fatality rate

Table WA-1. Traumatic Occupational Fatalities by Race/Ethnicity, Washington, 1980-1989.

Race/Ethnicity	Number	Percent
White	1139	91.9
Hispanic	33	2.7
Black	27	2.2
Native American	20	1.6
Asian	18	1.5
Other	3	0.2

of 10.4 per 100,000 workers compared to 0.9 for females. The fatality distribution by **race/ethnicity** for the State of Washington shows that Whites accounted for 92% of the total fatalities and Hispanics for 3% as shown in **Table WA-1**. As shown in **Figure WA-1**, workers aged 25 to 29 years old accounted for the largest number of fatalities (15%). Of all Washington occupational fatality victims, 88% were Washington residents (**Table WA-2**).

Figure WA-2 presents the distribution of fatalities by external cause of death for the State of Washington and for the U.S. The three leading causes of death among employees in Washington were motor vehicle incidents (20%), machine-related incidents (14%), and being struck by falling objects (12%).

In Washington, the **industry divisions** in which the largest number of fatalities occurred were manufacturing (23%), construction (17%), and transportation/communication/public utilities (15%). The mining industry had the highest fatality rate at 42.8 per 100,000 workers, followed by construction (24.4), and transportation/communication/public utilities (21.6) (**Figure WA-3**). **Table WA-3** provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

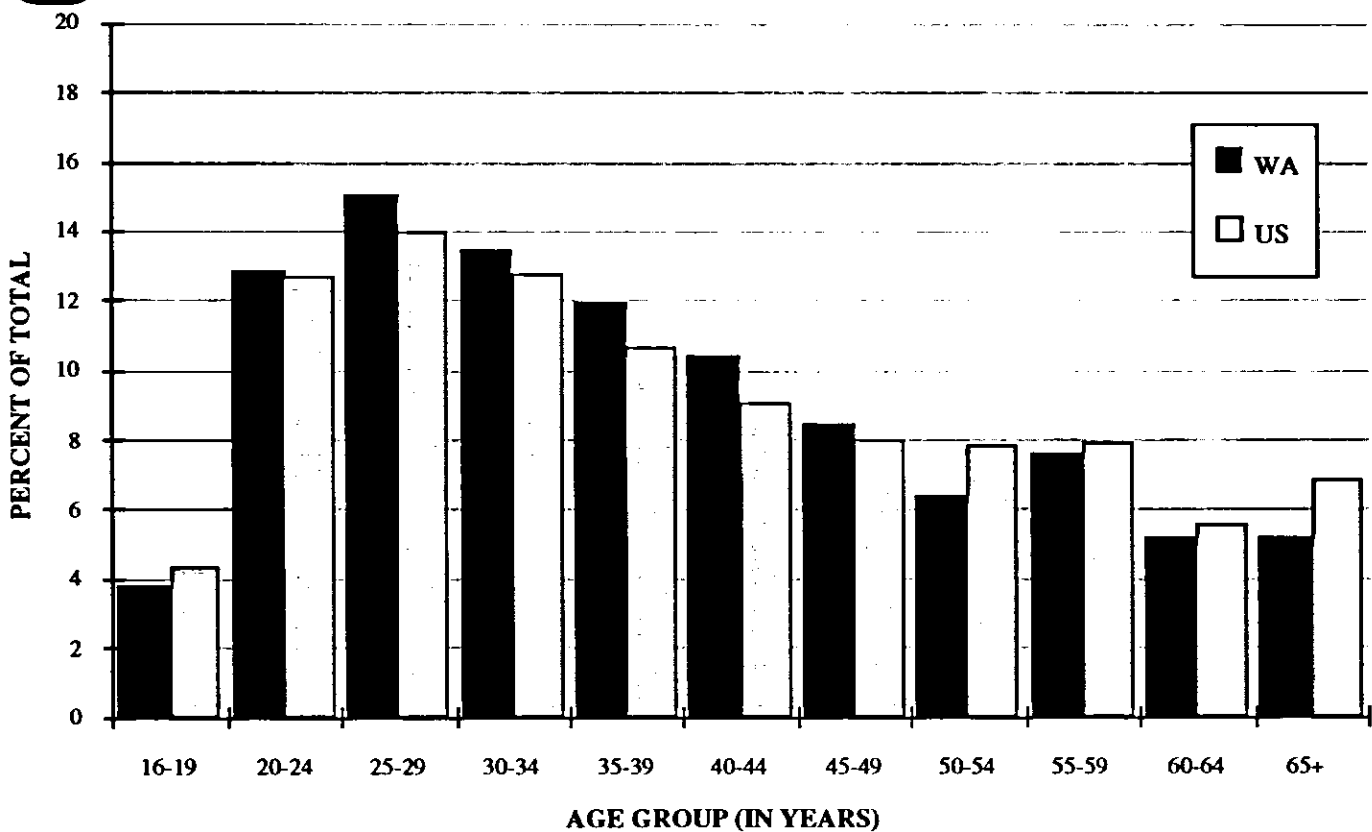


Figure WA-1. Traumatic Occupational Fatalities by Age Group, US and Washington, 1980-1989.

Table WA-2. Traumatic Occupational Fatalities by State of Residence, Washington, 1980-1989.

State	Number	Percent
Washington	1087	87.7
Oregon	51	4.1
Idaho	30	2.4
California	18	1.5
Montana	7	0.6
Alaska	4	0.3
Texas	4	0.3
Arizona	3	0.2
Other	36	2.9

The occupation divisions in Washington with the largest number of fatalities were farmers/foresters/fishers (22%), precision production/craft/repair (17%), and transportation/material movers (17%). The occupations with the highest rates were farmers/foresters/fishers (27.5 deaths per 100,000 workers), transportation/material movers (23.2), and laborers (12.1) (Figure WA-4). Table WA-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Washington decreased 39%, from 9.9 in 1980 to 6.0 in 1989. A high of 10.9 and a low of 5.2 deaths per 100,000 workers were reported in 1981 and 1988, respectively (Figure WA-5).

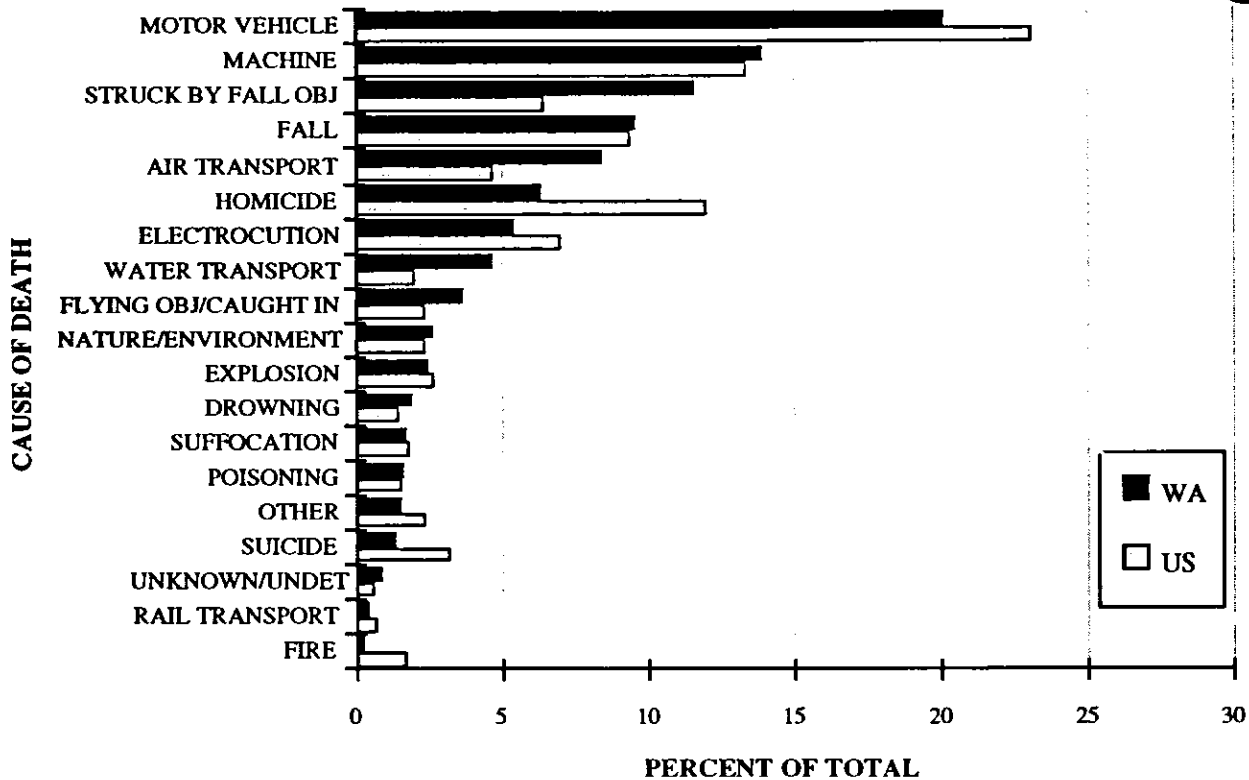


Figure WA-2. Traumatic Occupational Fatalities by Cause of Death, US and Washington, 1980-1989.

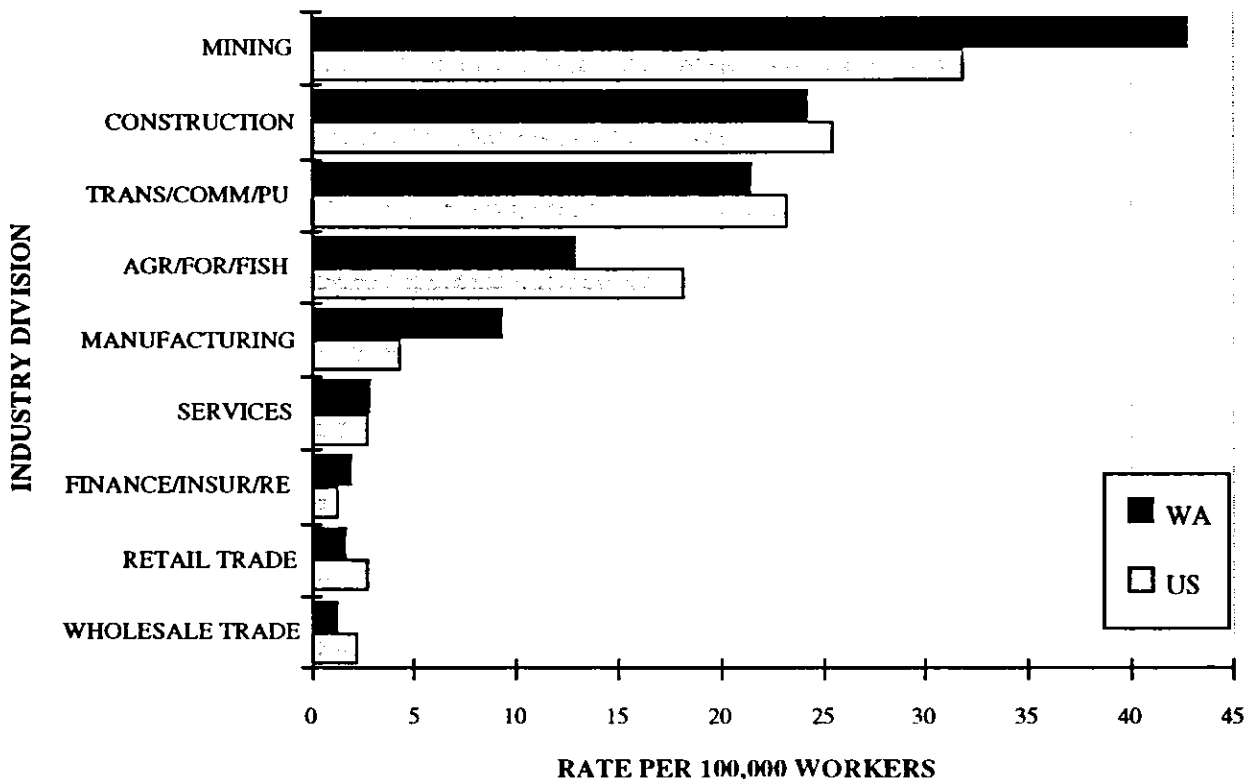


Figure WA-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Washington, 1980-1989.

Table WA-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Washington, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	3	--	--	--	--	--	--	--	--	--	13	42.8
CONSTRUCTION	28	26	21	15	28	15	13	15	19	21	201	24.4
TRANS/COMM/PU	18	28	27	13	21	19	13	13	12	23	187	21.6
AGR/FOR/FISH	17	28	18	19	14	15	15	13	15	13	167	13.0
MANUFACTURING	30	28	29	29	29	28	27	38	21	25	284	9.4
SERVICES	15	13	11	11	7	10	6	12	8	14	107	2.9
FINANCE/INSUR/RE	--	4	--	--	--	3	--	--	3	3	21	2.1
RETAIL TRADE	11	9	6	6	5	3	3	4	4	3	54	1.8
WHOLESALE TRADE	--	4	--	--	--	--	--	--	--	--	14	1.4
PUBLIC ADMIN	13	5	12	16	9	12	5	16	6	7	101	N/A
NOT CLASSIFIED	9	8	7	4	5	8	4	9	5	4	63	N/A
STATE	148	155	132	118	121	115	88	125	94	116	1212	7.5

NOTE: Dashes denote categories with fewer than three cases.

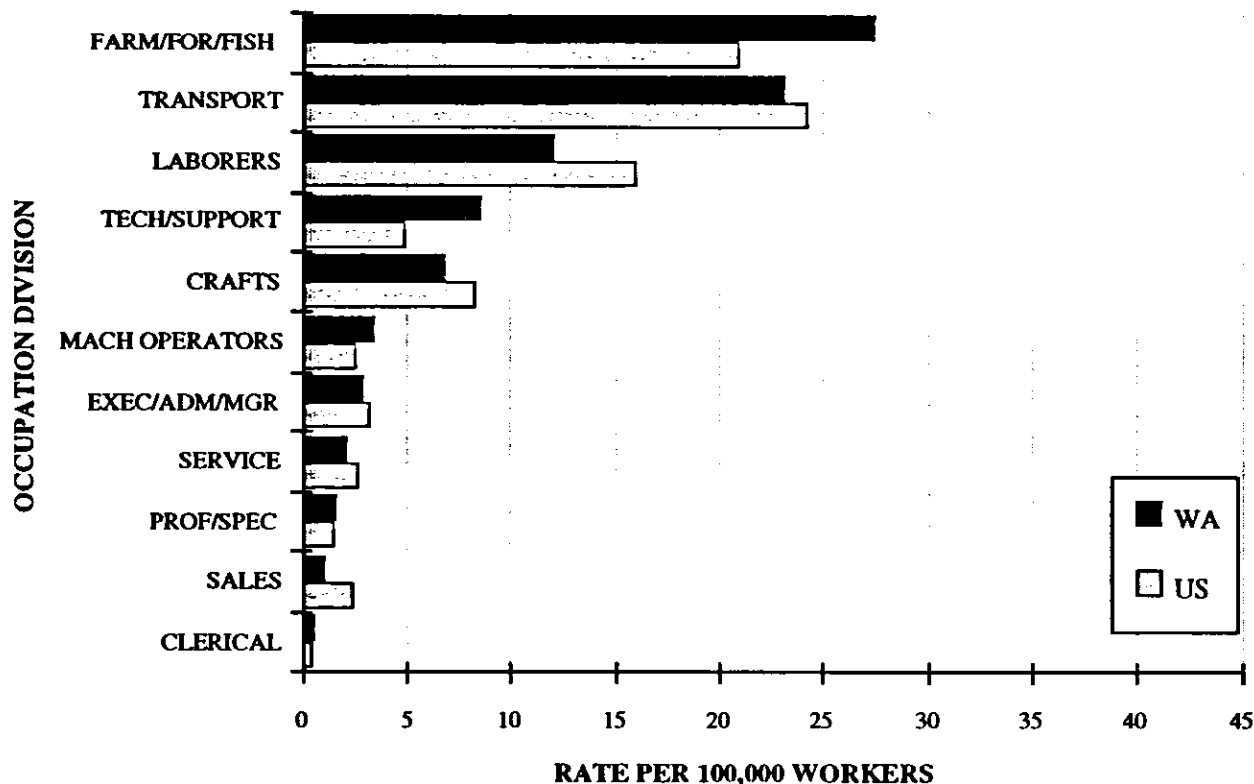


Figure WA-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Washington, 1983-1989.

Table WA-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Washington.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	265	27.5
TRANSPORT	203	23.2
LABORERS	109	12.1
TECH/SUPPORT	50	8.6
CRAFTS	206	7.0
MACH OPERATORS	36	3.6
EXEC/ADM/MGR	86	3.1
SERVICE	61	2.2
PROF/SPEC	58	1.7
SALES	36	1.2
CLERICAL	22	0.7
NOT CLASSIFIED	80	N/A

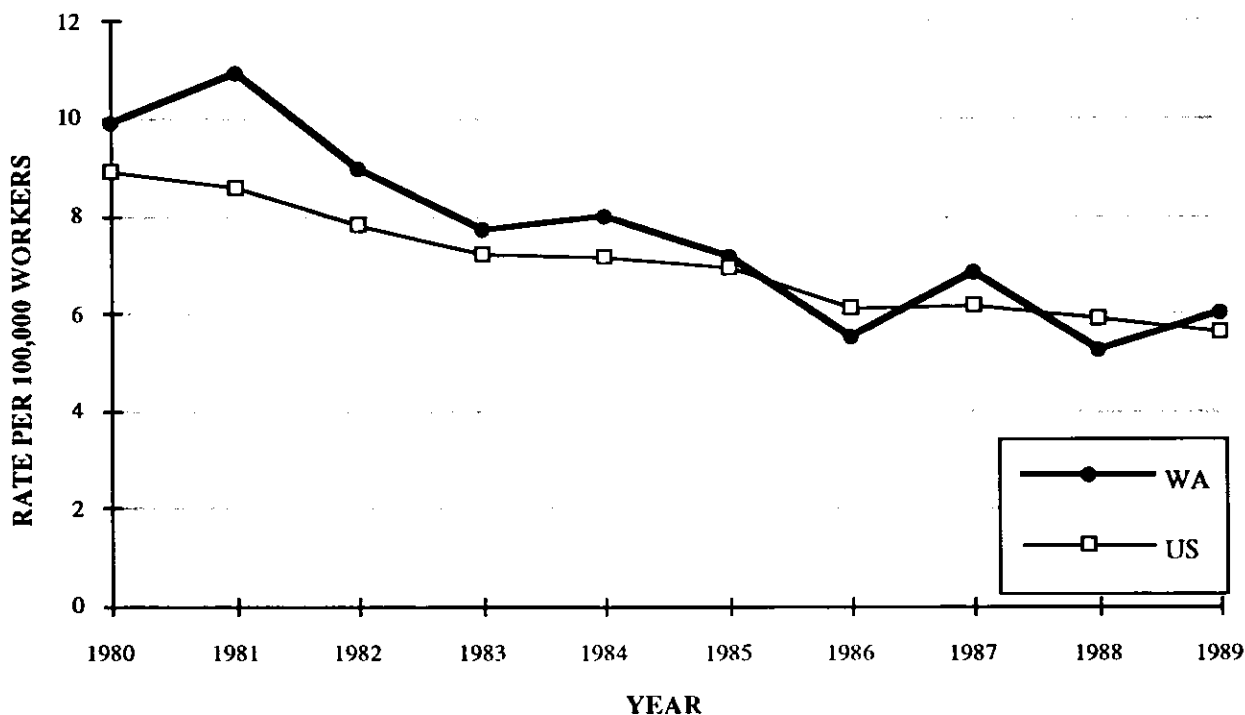


Figure WA-5. Rate of Traumatic Occupational Fatalities by Year, US and Washington, 1980-1989.

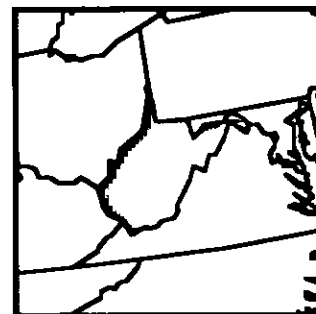
State of West Virginia

Average Annual Fatal Injuries: 77

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): 15.7

Industries with the Highest Number and Rate of Fatal Injuries:

Number: **Mining (203)**
Rate: **Transportation/Communication/
Public Utilities (59.7)**



Occupations with the Highest Number and Rate of Fatal Injuries:

Number: **Precision Production/Craft/Repair (237)**
Rate: **Transportation/Material Movers (35.4)**

The State of West Virginia had 773 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 770 of these deaths. The average annual rate of fatalities per 100,000 workers was 15.7 for West Virginia compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 409.5 per 100,000 workers for West Virginia compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in West Virginia and had a fatality rate of 18.8 per 100,000 workers compared to 1.0 for females. The fatality distribution by race/ethnicity for the State of West Virginia shows that Whites accounted for 96.5% of the total fatalities and Blacks for 3.5% as shown in Table WV-1. As shown in

Table WV-1. Traumatic Occupational Fatalities by Race/Ethnicity, West Virginia, 1980-1989.

Race/Ethnicity	Number	Percent
White	746	96.5
Black	27	3.5

Figure WV-1, workers aged 25 to 29 years old accounted for the largest number of fatalities (17%). Of all West Virginia occupational fatality victims, 74% were West Virginia residents (Table WV-2).

Figure WV-2 presents the distribution of fatalities by external cause of death for the State of West Virginia and for the U.S. The three leading causes of death among employees in West Virginia were motor vehicle incidents (26%), being struck by falling objects (16%), and machine-related incidents (14%).

In West Virginia, the industry divisions in which the largest number of fatalities occurred were mining (26%), transportation/communication/public utilities (22%), and construction (14%). The transportation/communication/public utilities industry had the highest fatality rate at 59.7 per 100,000 workers, followed by construction (53.2), and mining (40.6) (Figure WV-3). Table WV-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

The occupation divisions in West Virginia with the largest number of fatalities were precision production/craft/repair (31%), transportation/material movers (22%), and laborers (13%). The occupations

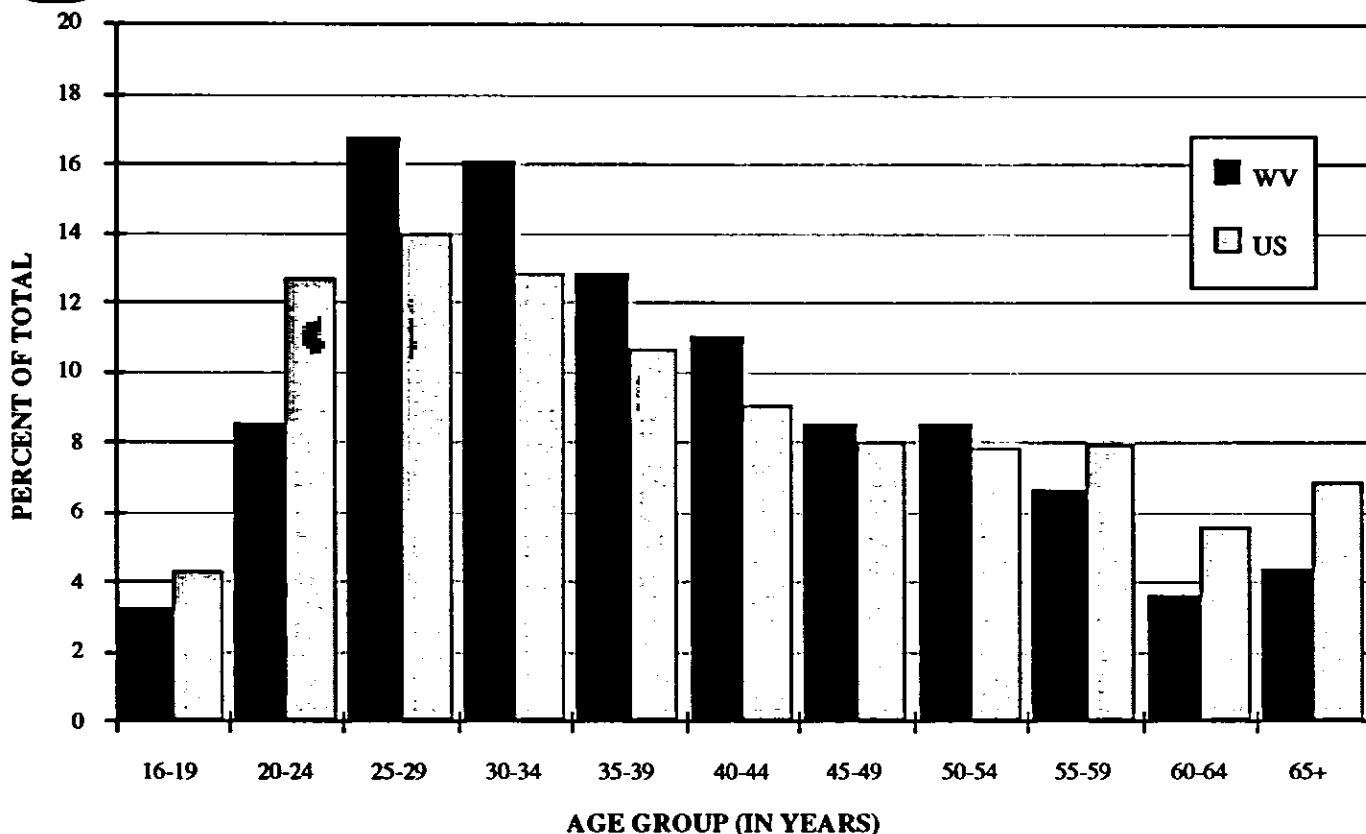


Figure WV-1. Traumatic Occupational Fatalities by Age Group, US and West Virginia, 1980-1989.

Table WV-2. Traumatic Occupational Fatalities by State of Residence, West Virginia, 1980-1989.

State	Number	Percent
West Virginia	573	74.1
Ohio	71	9.2
Pennsylvania	36	4.7
Kentucky	25	3.2
Virginia	14	1.8
Maryland	11	1.4
North Carolina	7	0.9
Texas	5	0.6
Georgia	4	0.5
Florida	3	0.4
New York	3	0.4
Other	21	2.7

with the highest rates were transportation/material movers (35.4 deaths per 100,000 workers), farmers/foresters/fishers (29.8), and laborers (22.1) (Figure WV-4). Table WV-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in West Virginia decreased 34%, from 17.7 in 1980 to a low of 11.6 in 1989. A high of 18.8 deaths per 100,000 workers was reported in 1981 (Figure WV-5).

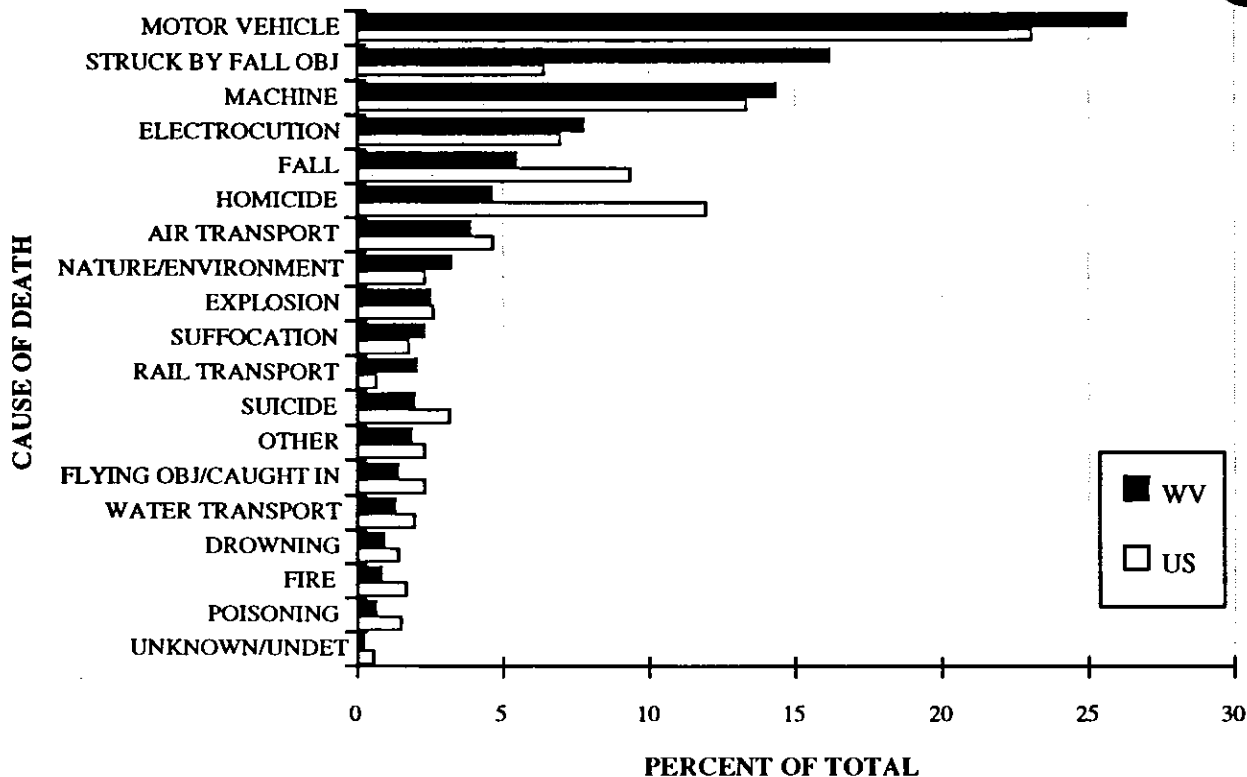


Figure WV-2. Traumatic Occupational Fatalities by Cause of Death, US and West Virginia, 1980-1989.

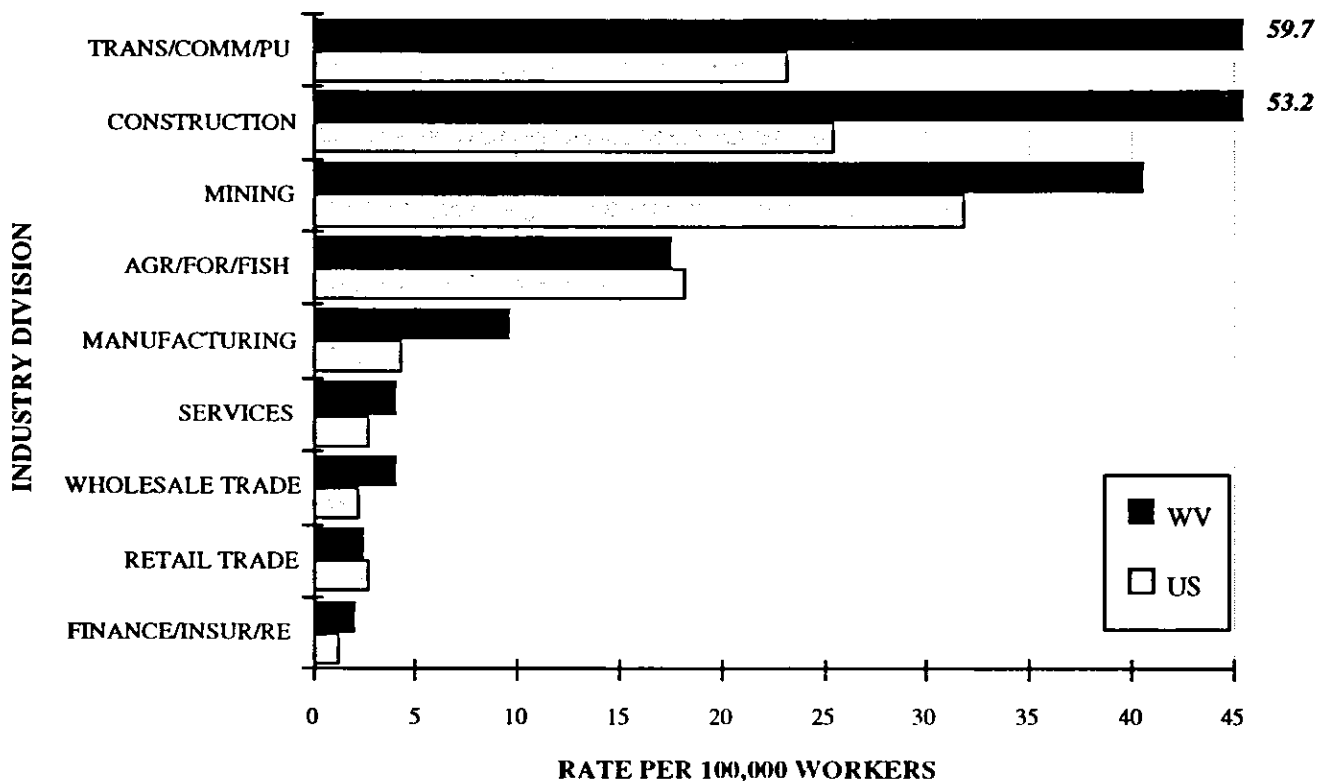


Figure WV-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and West Virginia, 1980-1989.

Table WV-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, West Virginia, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	20	19	13	20	12	18	16	16	17	18	169	59.7
CONSTRUCTION	12	12	12	12	11	7	11	14	10	8	109	53.2
MINING	36	31	26	18	18	18	18	14	13	11	203	40.6
AGR/FOR/FISH	--	10	7	--	--	5	4	3	--	--	37	17.6
MANUFACTURING	10	8	7	8	12	10	11	10	9	6	91	9.7
SERVICES	--	6	6	5	5	3	--	4	6	5	44	4.2
WHOLESALE TRADE	--	--	--	--	--	--	--	--	--	--	11	4.1
RETAIL TRADE	--	--	4	--	--	3	--	5	5	3	27	2.6
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	5	2.2
PUBLIC ADMIN	--	9	--	--	3	4	--	--	--	3	26	N/A
NOT CLASSIFIED	6	4	6	3	6	4	6	5	5	3	48	N/A
STATE	90	103	83	73	74	73	70	71	73	60	770	15.7

NOTE: Dashes denote categories with fewer than three cases.

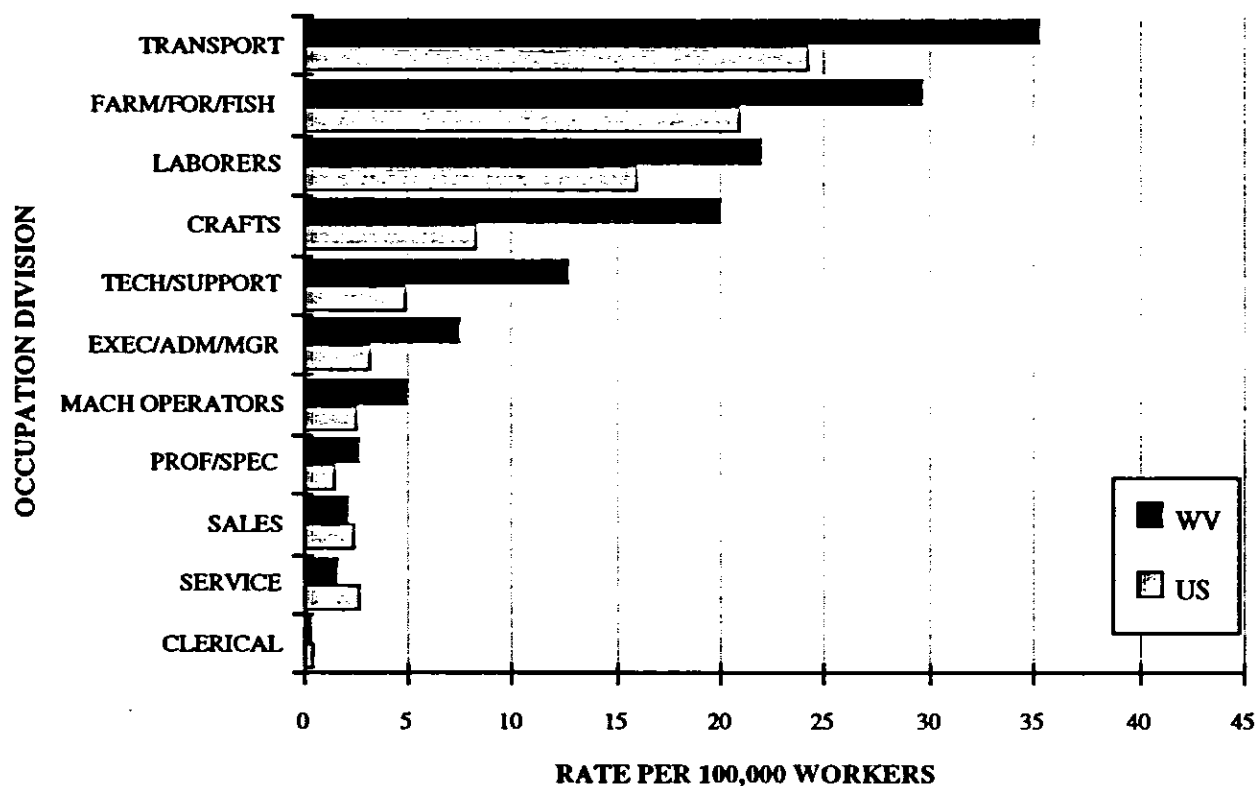


Figure WV-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and West Virginia, 1983-1989.

Table WV-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, West Virginia.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	170	35.4
FARM/FOR/FISH	58	29.8
LABORERS	97	22.1
CRAFTS	237	20.1
TECH/SUPPORT	22	12.9
EXEC/ADM/MGR	39	7.6
MACH OPERATORS	20	5.1
PROF/SPEC	26	2.8
SALES	18	2.2
SERVICE	22	1.7
CLERICAL	7	0.5
NOT CLASSIFIED	54	N/A

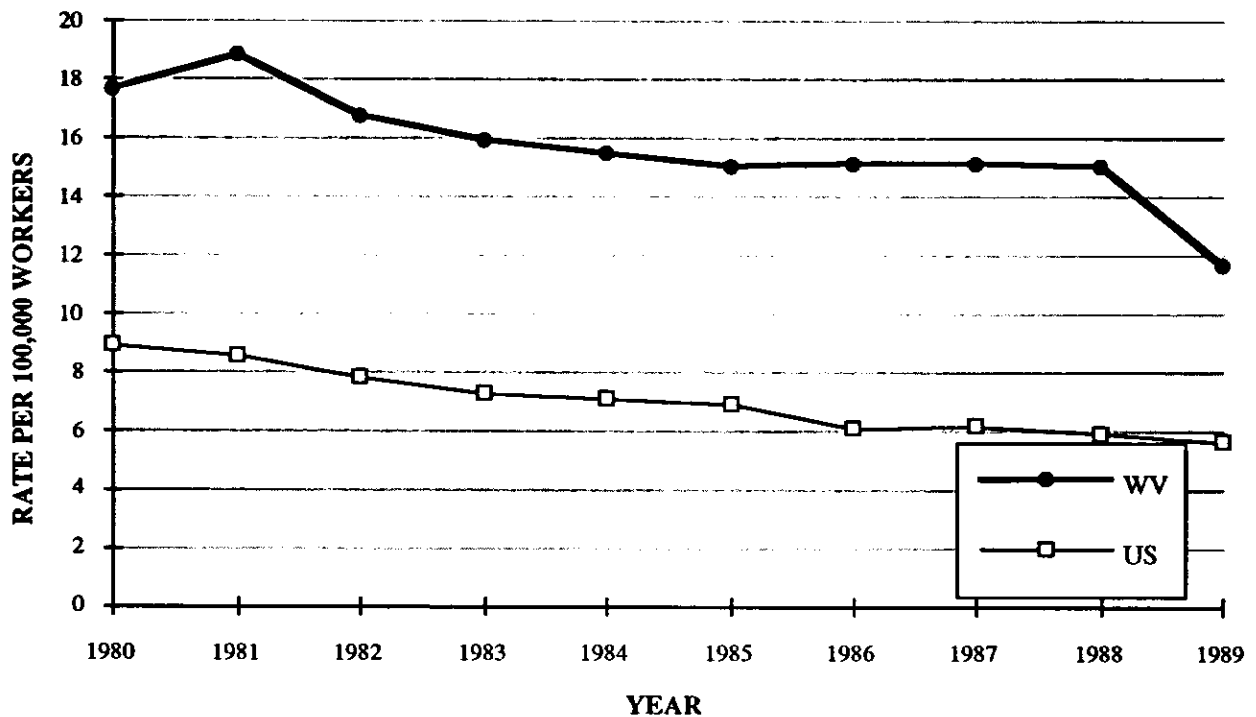


Figure WV-5. Rate of Traumatic Occupational Fatalities by Year, US and West Virginia, 1980-1989.

State of Wisconsin

Average Annual Fatal Injuries: **116**

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): **6.2**

Industries with the Highest Number and Rate of Fatal Injuries:

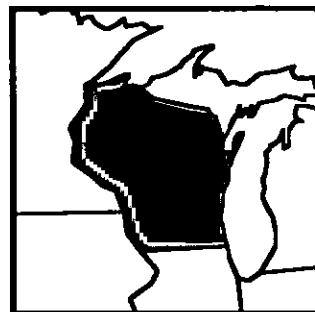
Number: **Agriculture/Forestry/Fishing (258)**

Rate: **Mining (61.0)**

Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Farmers/Foresters/Fishers (289)**

Rate: **Farmers/Foresters/Fishers (25.9)**



The State of Wisconsin had 1,159 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 1,156 of these deaths. The average annual rate of fatalities per 100,000 workers was 6.2 for Wisconsin compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 138.5 per 100,000 workers for Wisconsin compared to 175.6 for the United States.

Males accounted for 93% of the civilian occupational fatalities in Wisconsin and had a fatality rate of 8.5 per 100,000 workers compared to 0.8 for females.

Table WI-1. Traumatic Occupational Fatalities by Race/Ethnicity, Wisconsin, 1980-1989.

Race/Ethnicity	Number	Percent
White	1109	95.7
Black	32	2.8
Hispanic	10	0.9
Asian	3	0.3
Other	5	0.4

The fatality distribution by race/ethnicity for the State of Wisconsin shows that Whites accounted for 96% of the total fatalities and Blacks for 3% as shown in Table WI-1. As shown in Figure WI-1, workers aged 65 years and older accounted for the largest number of fatalities (13%). Of all Wisconsin occupational fatality victims, 91% were Wisconsin residents (Table WI-2).

Figure WI-2 presents the distribution of fatalities by external cause of death for the State of Wisconsin and for the U.S. The three leading causes of death among employees in Wisconsin were motor vehicle incidents (22%), machine-related incidents (21%), and falls (10%).

In Wisconsin, the industry divisions in which the largest number of fatalities occurred were agriculture/forestry/fishing (22%), manufacturing (20%), and transportation/communication/public utilities (14%). The mining industry had the highest fatality rate at 61.0 per 100,000 workers, followed by construction (23.2), and transportation/communication/public utilities (19.0) (Figure WI-3). Table WI-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

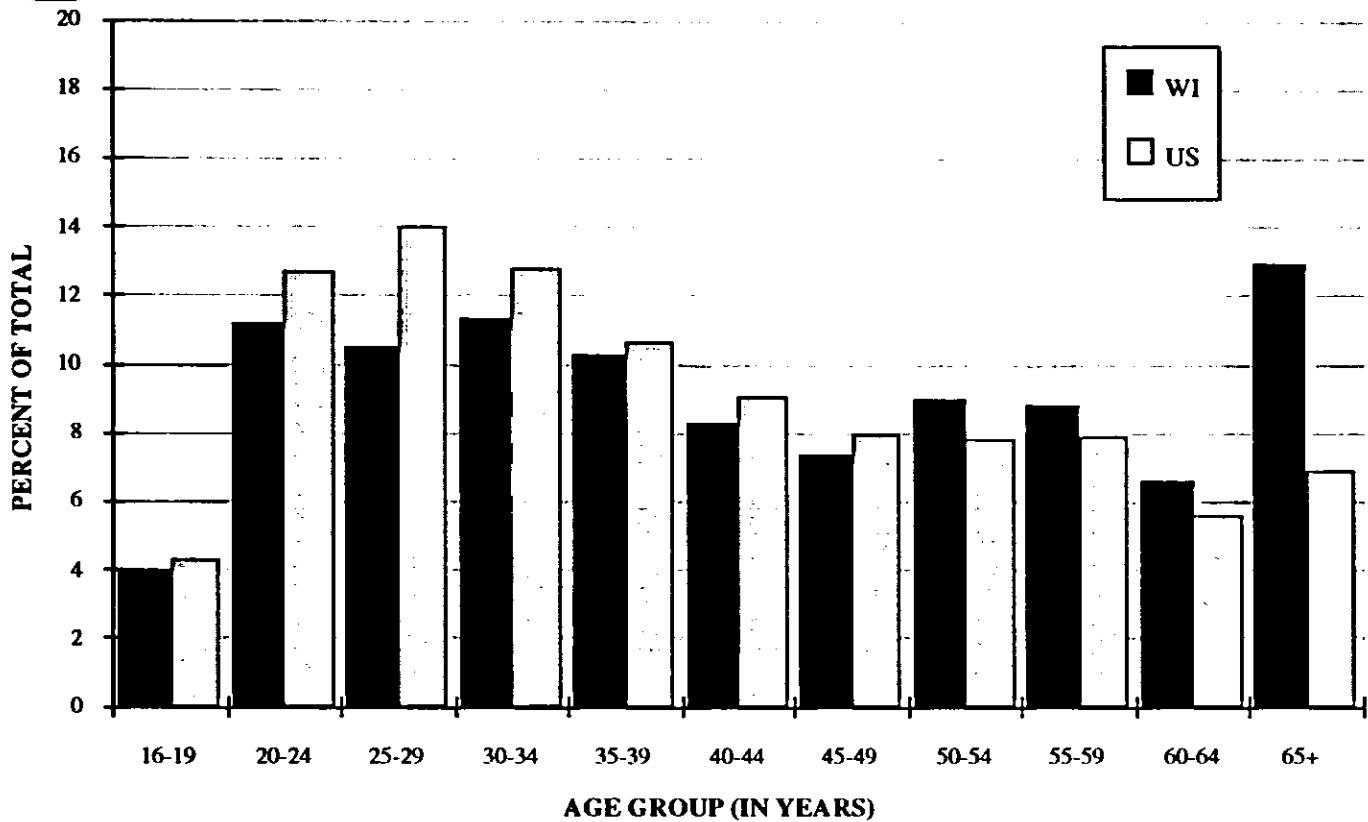


Figure WI-1. Traumatic Occupational Fatalities by Age Group, US and Wisconsin, 1980-1989.

Table WI-2. Traumatic Occupational Fatalities by State of Residence, Wisconsin, 1980-1989.

State	Number	Percent
Wisconsin	1058	91.3
Illinois	23	2.0
Minnesota	21	1.8
Michigan	15	1.3
Connecticut	8	0.7
Iowa	5	0.4
Texas	5	0.4
Georgia	3	0.3
Ohio	3	0.3
South Dakota	3	0.3
Other	15	1.3

The occupation divisions in Wisconsin with the largest number of fatalities were farmers/foresters/fishers (25%), transportation/material movers (15%), and precision production/craft/repair (14%). The occupations with the highest rates were farmers/foresters/fishers (25.9 deaths per 100,000 workers), transportation/material movers (17.7), and laborers (12.3) (Figure WI-4). Table WI-4 provides numbers and rates of work-related deaths for each occupation division.

From 1980 to 1989, the fatality rates in Wisconsin decreased 33%, from a high of 7.6 in 1980 to a low of 5.1 in 1989 (Figure WI-5).

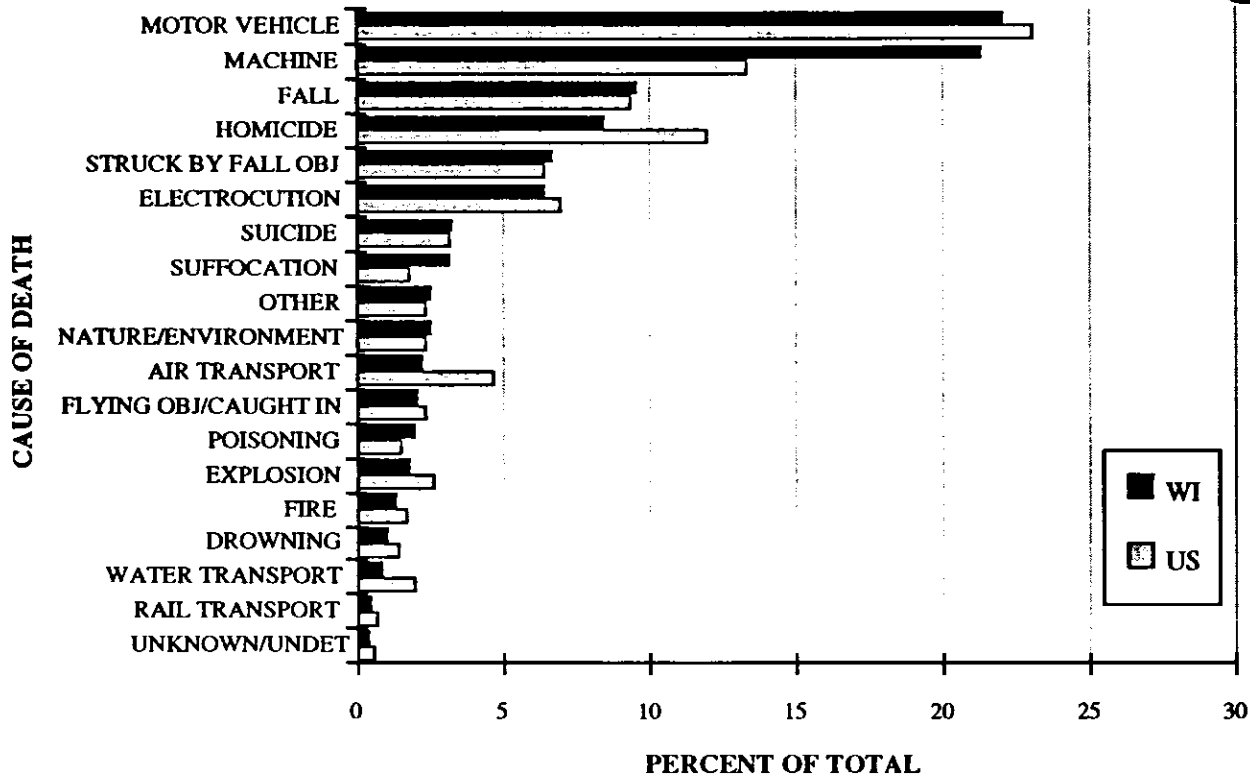


Figure WI-2. Traumatic Occupational Fatalities by Cause of Death, US and Wisconsin, 1980-1989.

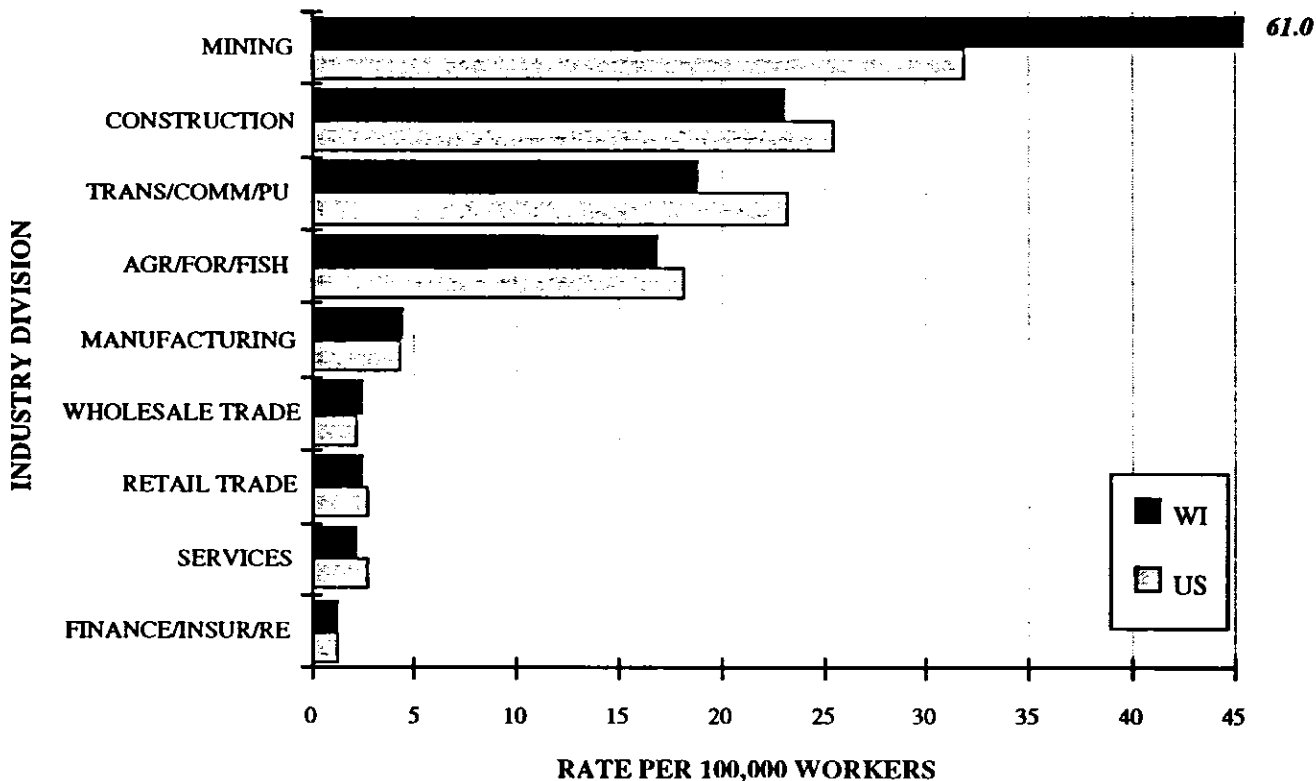


Figure WI-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Wisconsin, 1980-1989.

Table WI-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Wisconsin, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
MINING	--	--	--	--	--	--	--	--	--	--	10	61.0
CONSTRUCTION	18	20	14	15	10	16	16	11	20	9	149	23.2
TRANS/COMM/PU	22	19	12	11	15	18	12	17	20	14	160	19.0
AGR/FOR/FISH	26	24	28	26	24	19	30	26	25	30	258	16.9
MANUFACTURING	28	18	19	17	25	29	18	28	28	24	234	4.6
WHOLESALE TRADE	--	--	3	--	--	4	3	3	4	--	26	2.6
RETAIL TRADE	11	10	11	9	6	10	5	8	8	10	88	2.5
SERVICES	8	8	7	10	5	9	6	14	16	11	94	2.3
FINANCE/INSUR/RE	--	--	3	--	--	3	--	--	--	--	14	1.3
PUBLIC ADMIN	6	10	4	--	4	6	3	6	6	4	49	N/A
NOT CLASSIFIED	13	5	11	6	11	7	5	10	--	5	74	N/A
STATE	137	119	113	98	103	123	100	123	130	110	1156	6.2

NOTE: Dashes denote categories with fewer than three cases.

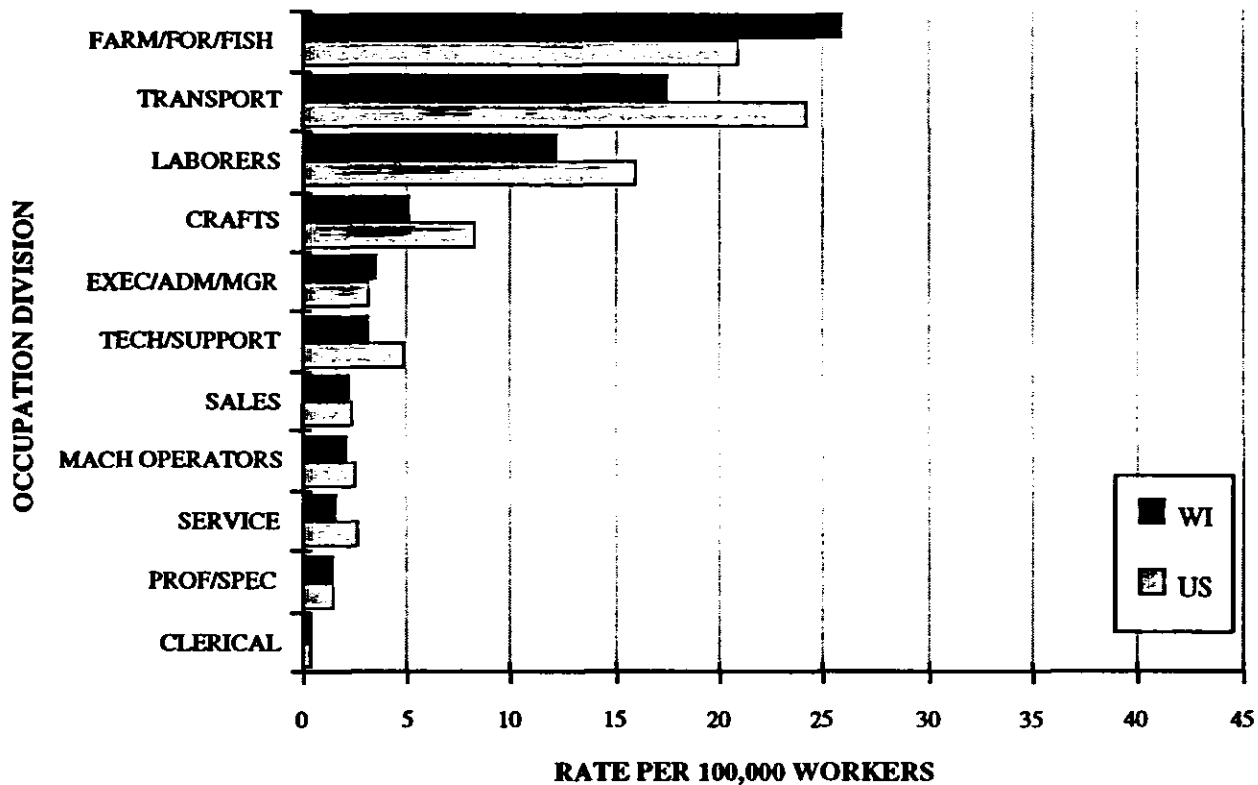


Figure WI-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Wisconsin, 1983-1989.

Table WI-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Wisconsin.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
FARM/FOR/FISH	289	25.9
TRANSPORT	175	17.7
LABORERS	126	12.3
CRAFTS	161	5.3
EXEC/ADM/MGR	81	3.7
TECH/SUPPORT	16	3.3
SALES	68	2.3
MACH OPERATORS	52	2.2
SERVICE	64	1.7
PROF/SPEC	44	1.6
CLERICAL	17	0.6
NOT CLASSIFIED	63	N/A

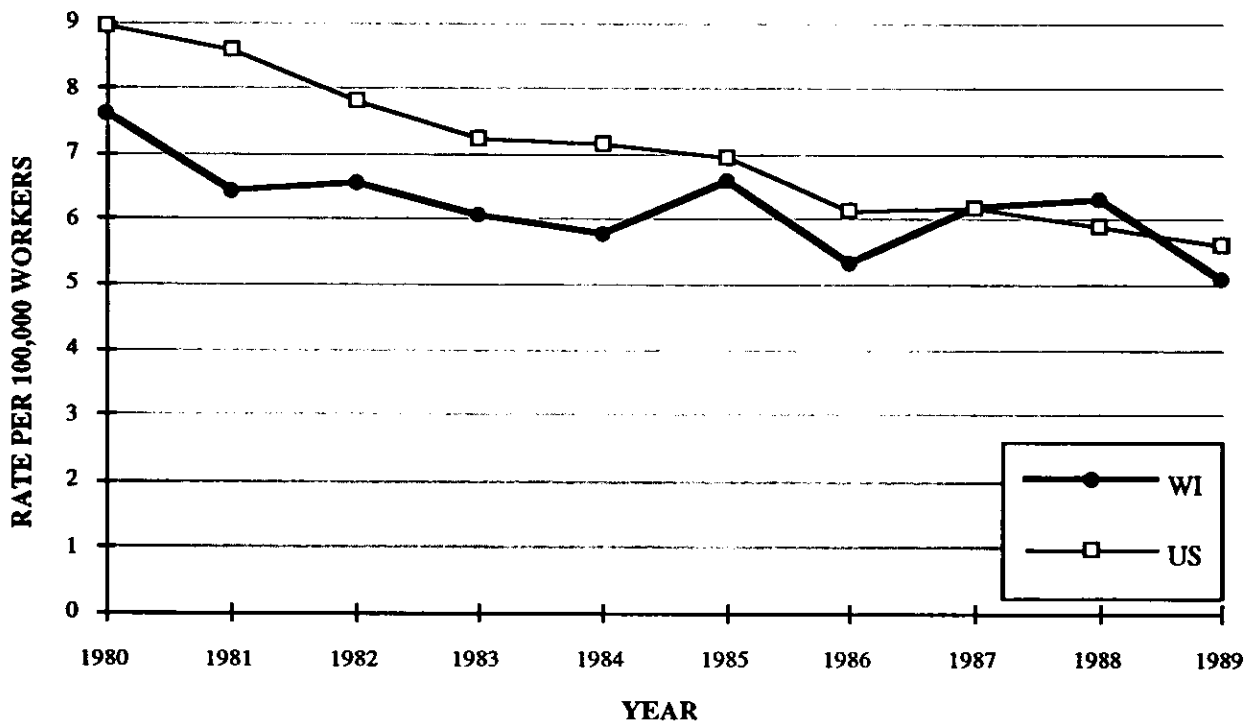


Figure WI-5. Rate of Traumatic Occupational Fatalities by Year, US and Wisconsin, 1980-1989.

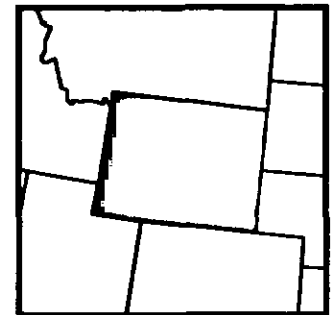
State of Wyoming

Average Annual Fatal Injuries: 46

Average Annual Fatal Injury Rate
(deaths per 100,000 workers): 29.0

Industry with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Communication/
Public Utilities (120)**
Rate: **Transportation/Communication/
Public Utilities (109.9)**



Occupation with the Highest Number and Rate of Fatal Injuries:

Number: **Transportation/Material Movers (130)**
Rate: **Transportation/Material Movers (66.4)**

The State of Wyoming had 455 traumatic occupational fatalities from 1980 through 1989. Civilian workers accounted for 454 of these deaths. The average annual rate of fatalities per 100,000 workers was 29.0 for Wyoming compared to 7.0 for the United States. The average annual rate for years of potential life lost (YPLL) was 809.5 per 100,000 workers for Wyoming compared to 175.6 for the United States.

Males accounted for 96% of the civilian occupational fatalities in Wyoming and had a fatality rate of

32.9 per 100,000 workers compared to 1.8 for females. The fatality distribution by race/ethnicity for the State of Wyoming shows that Whites accounted for 93% of the total fatalities and Hispanics for 5% as shown in Table WY-1. As shown in Figure WY-1, workers aged 25 to 29 years old accounted for the largest number of fatalities (18%). Of all Wyoming occupational fatality victims, 70% were Wyoming residents (Table WY-2).

Figure WY-2 presents the distribution of fatalities by external cause of death for the State of Wyoming and for the U.S. The three leading causes of death among employees in Wyoming were motor vehicle incidents (41%), machine-related incidents (13%), and air transportation (7%).

Table WY-1. Traumatic Occupational Fatalities by Race/Ethnicity, Wyoming, 1980-1989.

Race/Ethnicity	Number	Percent
White	425	93.4
Hispanic	22	4.8
Native American	3	0.7
Other	5	1.1

In Wyoming, the industry divisions in which the largest number of fatalities occurred were transportation/communication/public utilities (26%), construction (18%), and mining (17%). The transportation/communication/public utilities industry had the highest fatality rate at 109.9 per 100,000 workers, followed by construction (74.3), and mining (30.4) (Figure WY-3). Table WY-3 provides the number of deaths in each industry division by year of occurrence, and the total number and rate of fatalities for each industry division for the 10-year period.

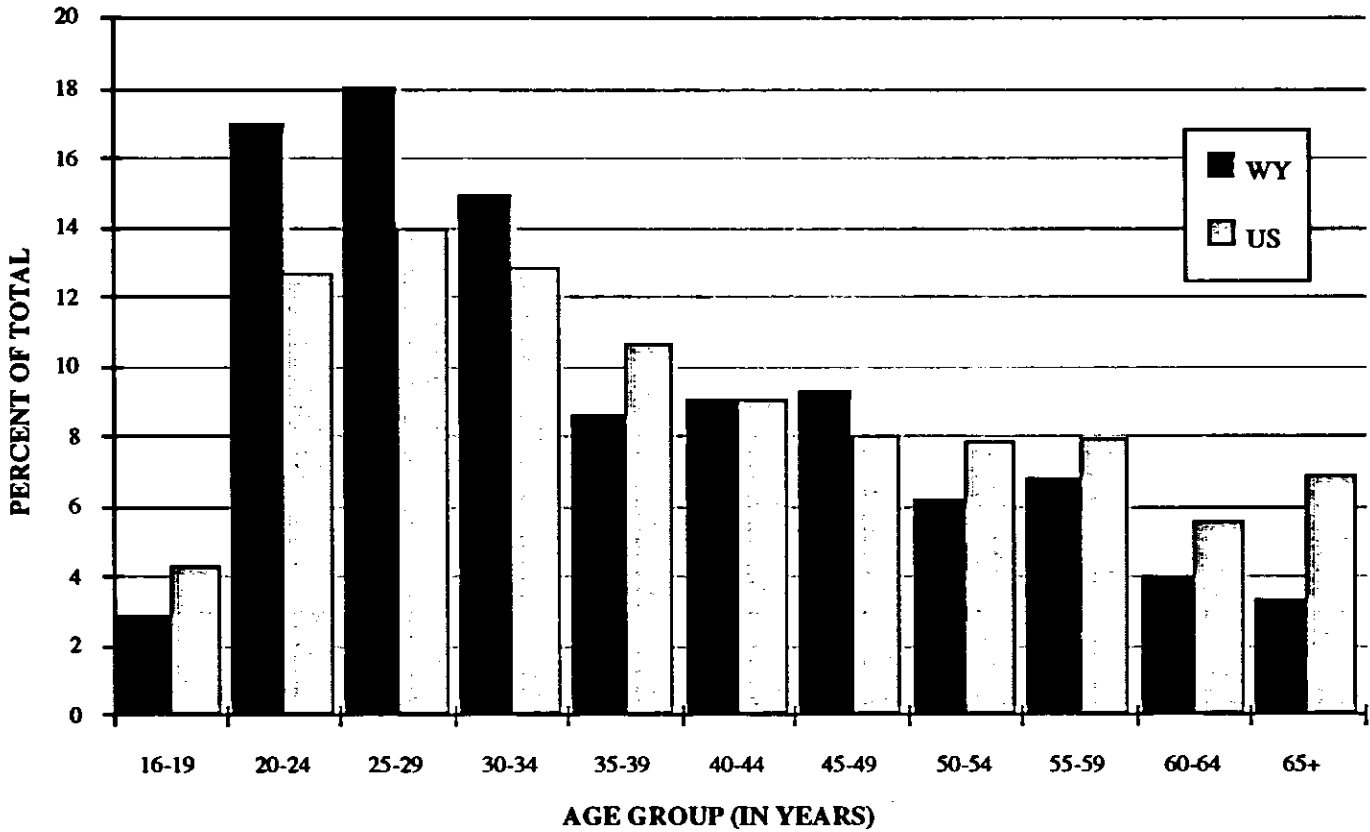


Figure WY-1. Traumatic Occupational Fatalities by Age Group, US and Wyoming, 1980-1989.

Table WY-2. Traumatic Occupational Fatalities by State of Residence, Wyoming, 1980-1989.

State	Number	Percent
Wyoming	316	69.5
Utah	26	5.7
Colorado	22	4.8
South Dakota	14	3.1
Idaho	11	2.4
California	7	1.5
Montana	6	1.3
Texas	6	1.3
Nebraska	5	1.1
Kansas	4	0.9
Other	38	8.4

The occupation divisions in Wyoming with the largest number of fatalities were transportation/material movers (29%), precision production/craft/repair (18%), and laborers (11%). The occupations with the highest rates were transportation/material movers (66.4 deaths per 100,000 workers), technicians/related support (38.5), and laborers (35.8) (Figure WY-4). Table WY-4 provides numbers and rates of work-related deaths for each occupation division.

During the decade, the fatality rates in Wyoming decreased 33%, from 37.3 in 1980 to 24.9 in 1989. A high of 47.1 and a low of 18.3 deaths per 100,000 workers were reported in 1981 and 1986, respectively (Figure WY-5).

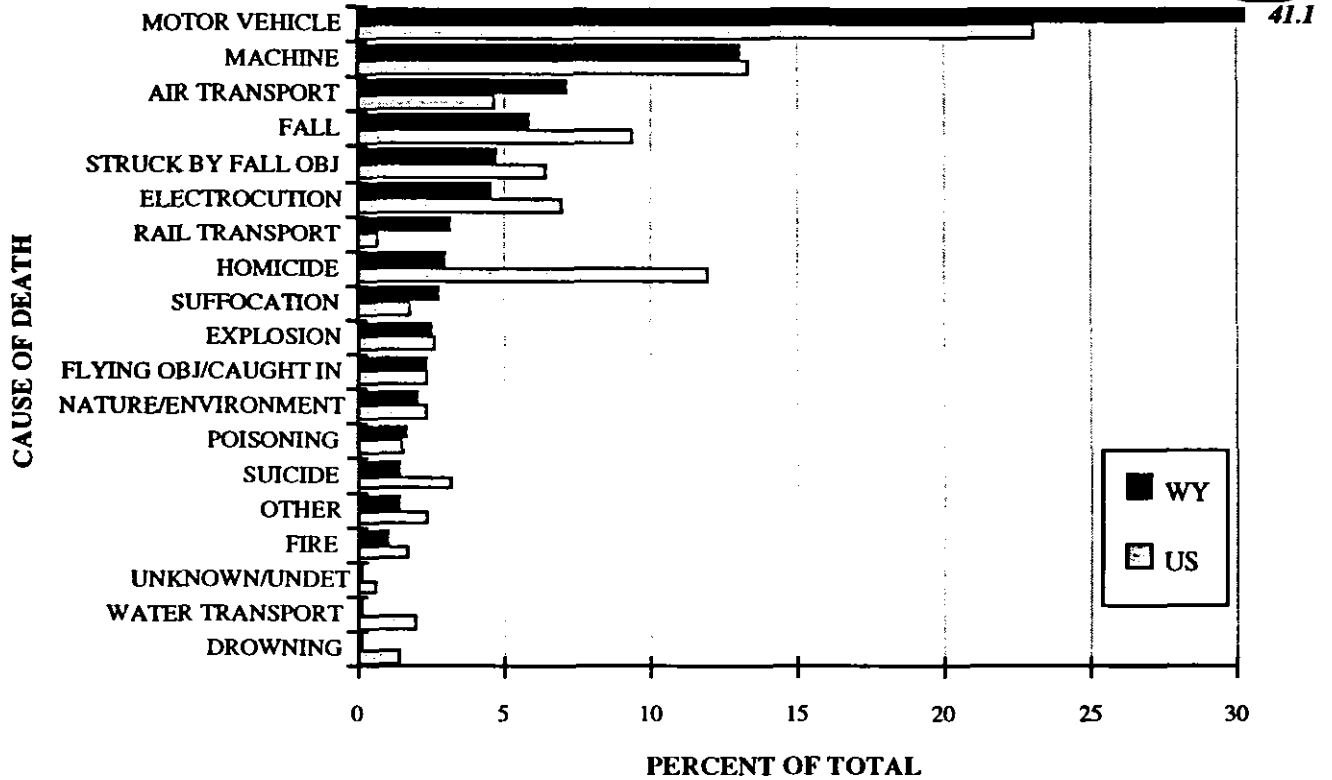


Figure WY-2. Traumatic Occupational Fatalities by Cause of Death, US and Wyoming, 1980-1989.

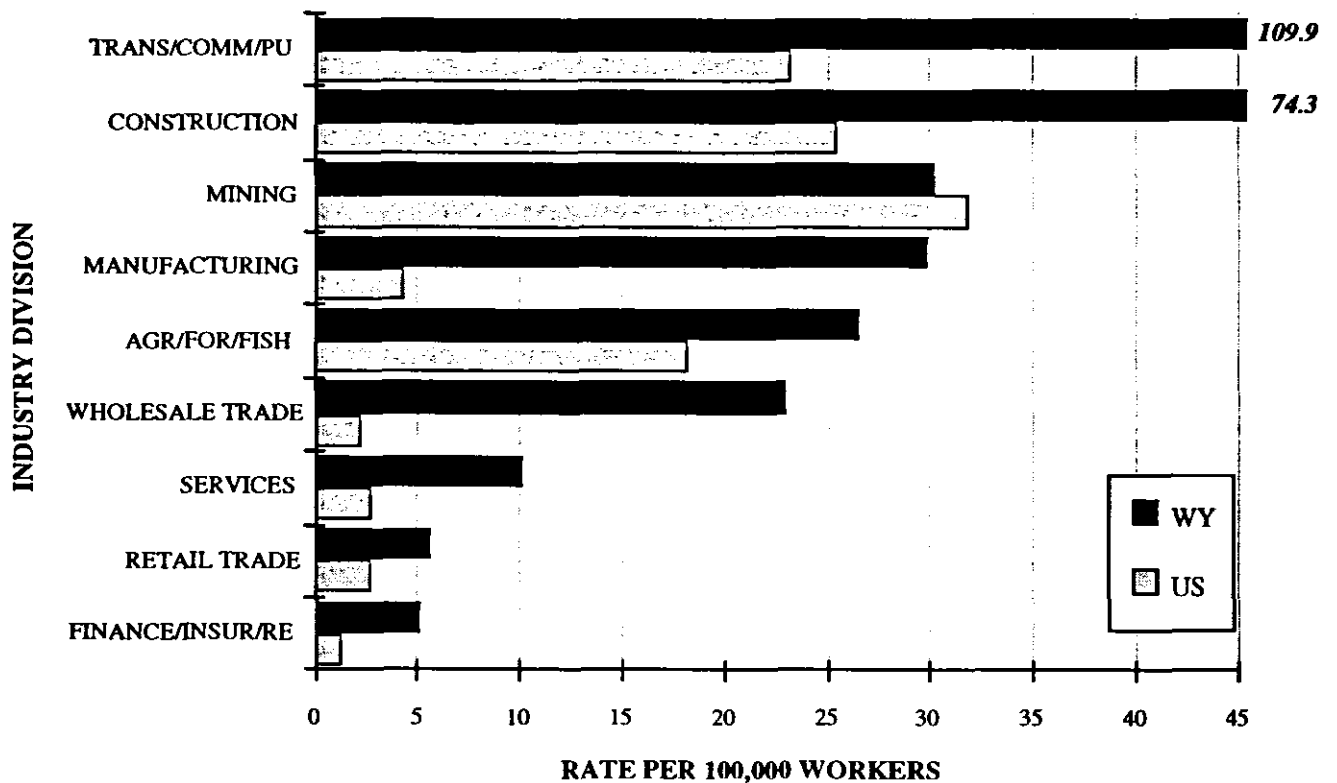


Figure WY-3. Average Annual Rate of Traumatic Occupational Fatalities by Industry Division, US and Wyoming, 1980-1989.

Table WY-3. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Industry Division and Year, Wyoming, 1980-1989.

Industry Division	Annual Number										Total Number	Average Annual Rate
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
TRANS/COMM/PU	13	22	14	10	11	12	10	7	13	8	120	109.9
CONSTRUCTION	8	11	10	12	5	9	6	6	9	5	81	74.3
MINING	17	21	10	3	6	5	--	3	3	6	76	30.4
MANUFACTURING	--	3	--	3	5	3	--	--	--	4	26	30.0
AGR/FOR/FISH	5	3	5	7	--	--	--	6	3	4	39	26.6
WHOLESALE TRADE	3	5	4	--	--	--	--	--	--	--	18	23.1
SERVICES	3	6	--	3	--	3	--	--	4	5	31	10.2
RETAIL TRADE	5	--	--	4	--	--	--	--	--	3	20	5.8
FINANCE/INSUR/RE	--	--	--	--	--	--	--	--	--	--	4	5.2
PUBLIC ADMIN	--	--	--	--	--	3	--	--	--	--	11	N/A
NOT CLASSIFIED	6	5	--	--	--	4	3	--	--	--	28	N/A
STATE	62	81	50	49	35	42	28	29	41	37	454	29.0

NOTE: Dashes denote categories with fewer than three cases.

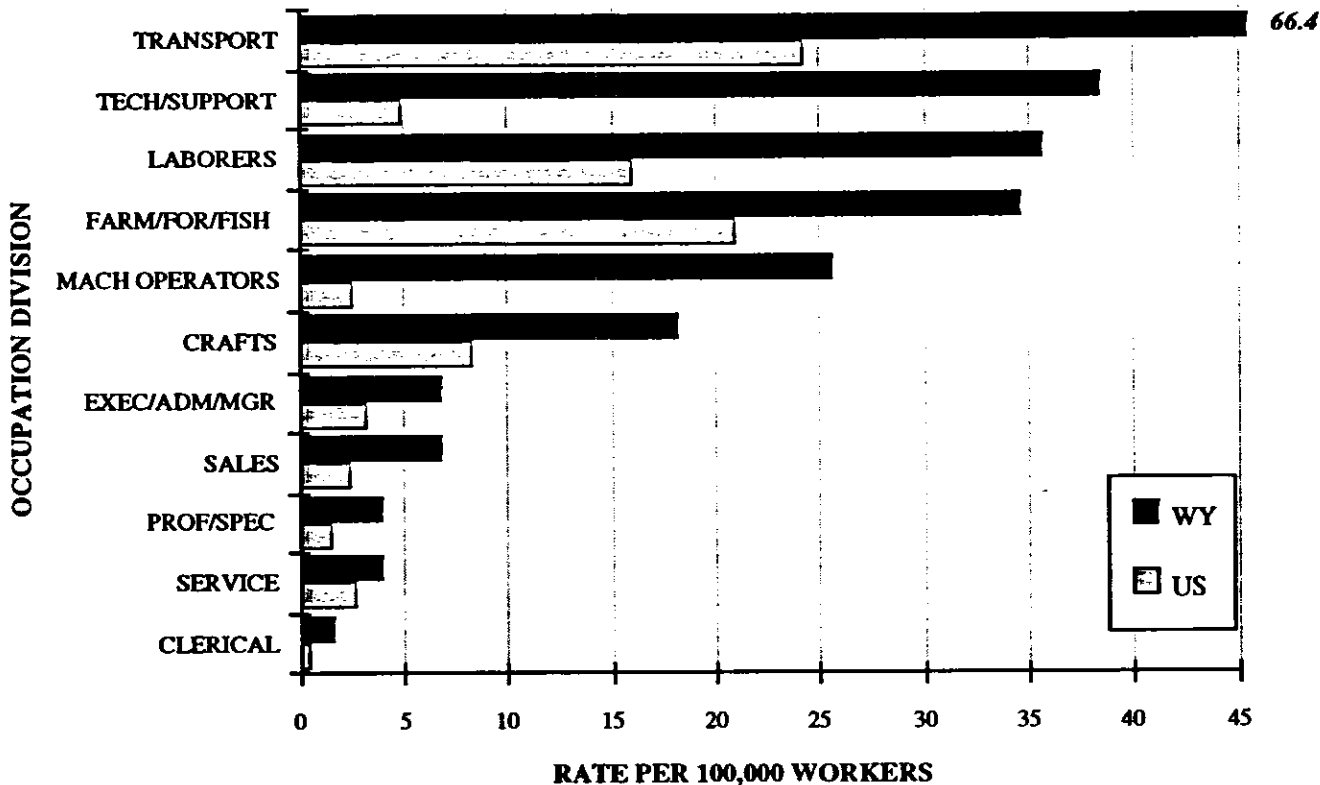


Figure WY-4. Average Annual Rate of Traumatic Occupational Fatalities by Occupation Division, US and Wyoming, 1983-1989.

Table WY-4. Distribution and Average Annual Rate (per 100,000 workers) of Traumatic Occupational Fatalities by Occupation Division, Wyoming.

Occupation Division	Total Number (1980-1989)	Average Annual Rate (1983-1989)
TRANSPORT	130	66.4
TECH/SUPPORT	29	38.5
LABORERS	50	35.8
FARM/FOR/FISH	47	34.8
MACH OPERATORS	20	25.8
CRAFTS	81	18.3
EXEC/ADM/MGR	23	6.9
SALES	20	6.9
PROF/SPEC	12	4.1
SERVICE	14	4.0
CLERICAL	7	1.8
NOT CLASSIFIED	21	N/A

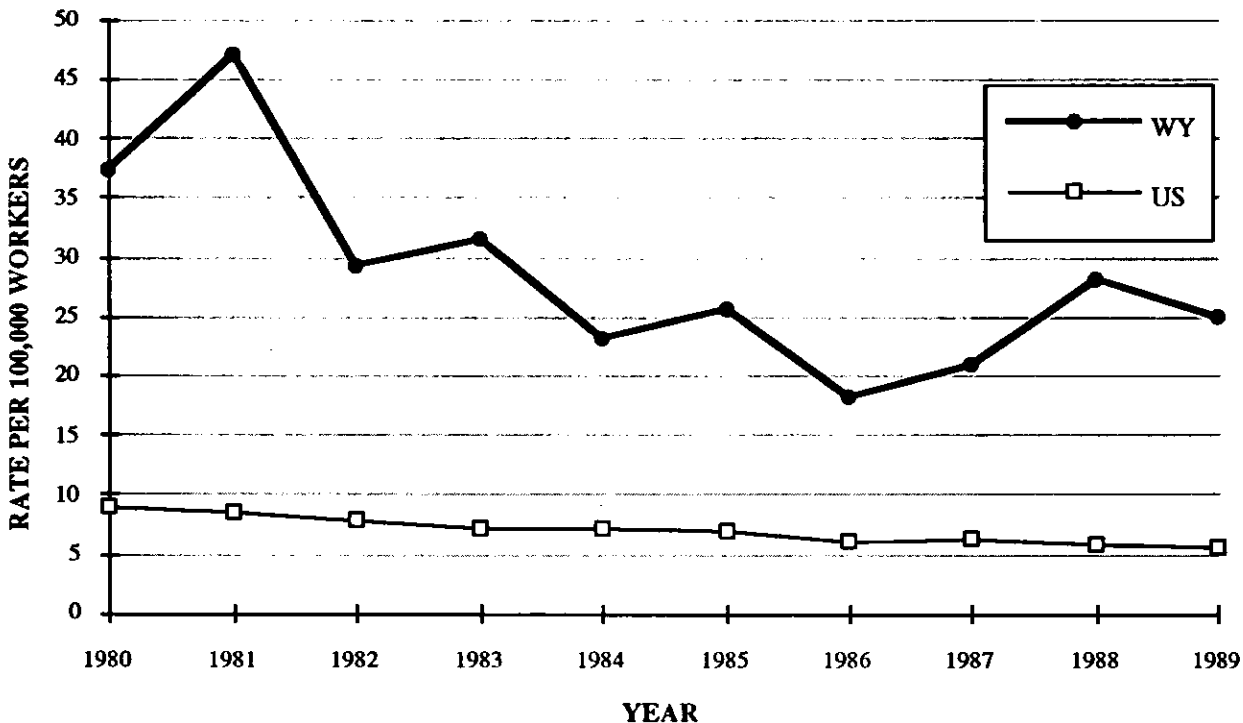


Figure WY-5. Rate of Traumatic Occupational Fatalities by Year, US and Wyoming, 1980-1989.

APPENDIX I

Operational Guidelines for Determination of Injury at Work

Operational Guidelines For Determination Of Injury At Work

1. Complete the injury at work item if any other than natural cause of death is mentioned in Part I or Part II of the medical certification, including homicides, suicides, and accidents, including motor vehicle deaths.
2. The injury at work item **must** be completed for decedents ages 14 or over and may be completed for those less than 14 years of age if warranted. Consider possibility of work injury regardless of whether injury occurred in the course of work in "usual" or other occupation and/or industry. If decedent's "usual" occupation is housewife, student, or retired consider possible injury during other employment. If occupation is transportation-related, suspect injury at work and evaluate per criteria.
3. Consider available information with regard to location and activity at time of injury. If location is farm, suspect work-related and evaluate per criteria.

CRITERIA	INJURY AT WORK	
	Yes	No
<i>On Employer Premises</i>		
• Engaged in work activity, apprentice, vocational training	✓	
• On break, in hallways, rest room, cafeteria, storage area	✓	
• In employer parking lots while working, arriving, or leaving	✓	
• Engaged in recreational activities on employer controlled facilities (games, etc.) for personal enjoyment		✓
• As a visitor for non-work purposes, not on official business		✓
<i>Off Employer Premises</i>		
• Working for pay or compensation, including at home	✓	
• Working as a volunteer EMS, firefighter, or law enforcement officer	✓	
• Working in a family business, including family farm. Activity should be clearly related to a profit-oriented business.	✓	
• Traveling on business, including to and from customer/business contacts	✓	
• Engaged in work activity where vehicle is considered the work environment (e.g., taxi driver, truck driver, etc.)	✓	
• Homemaker working at homemaking activities		✓
• Working for self—non profit, i.e., mowing lawn, repairing own roof, hobby, or recreation activities		✓
• Student engaged in school activities		✓
• Operating vehicle (personal or commercial) for non-work purposes		✓
• Commuting to or from work site		✓

These guidelines were developed jointly by: The Association for Vital Records and Health Statistics (AVRHS), the National Institute for Occupational Safety and Health (NIOSH), the National Center for Health Statistics, (NCHS), and the National Center for Environmental Health and Injury Control (NCEHIC).

1

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For questions contact your State Vital Statistics Office

APPENDIX II

**Abbreviations for Standard Industrial Classification (SIC) Industry Divisions and
Bureau of the Census (BOC) Occupation Groups**

**Abbreviations for Standard Industrial Classification (SIC) Industry Divisions and
Bureau of the Census (BOC) Occupation Groups**

Industry Abbreviation	Description (SIC)
Ag/For/Fish	Agriculture/Forestry/Fishing
Mining	Mining
Construction	Construction
Manufacturing	Manufacturing
Trans/Comm/PU	Transportation/Communication/Public Utilities
Wholesale Trade	Wholesale Trade
Retail Trade	Retail Trade
Finance/Insur/RE	Finance/Insurance/Real Estate
Services	Services
Public Admin	Public Administration

Occupation Abbreviation	Description (BOC)
Exec/Adm/Mgr	Executives/Administrators/Managers
Prof/Spec	Professional Specialties
Tech/Support	Technicians/Related Support
Sales	Sales
Clerical	Clerical
Service	Service
Farm/For/Fish	Farmers/Foresters/Fishers
Crafts	Precision Production/Craft/Repair
Mach Operators	Machine Operators
Transport	Transportation/Material Movers
Laborers	Laborers

APPENDIX III
ICD-9 E-Code Rubrics for Cause of Death Categories

ICD-9* E-Code Rubrics for Cause of Death Categories

Category	ICD-9 Rubric
Rail Transport	E800-E807
Motor Vehicle	E810-E829, E846-E849
Water Transport	E830-E838
Air Transport	E840-E845
Poisoning	E850-E858, E860-E869
Fall	E880-E888
Fire	E890-E899
Nature/Environment	E900-E909, E928
Drowning	E910
Suffocation	E911-E913
Struck By Falling Object	E916
Flying Object/Caught In Machine	E917, E918 E919
Explosion	E921, E923
Electrocution	E925
Suicide	E950-E959
Homicide	E960-E969
Other	E870-E879, E914, E915, E920, E922, E924, E926, E927, E929, E930-E949, E970-E978, E990-E999
Unknown/Undetermined	E980-E989, Blank

*International Classification of Diseases, Ninth Revision.

FATAL INJURIES TO WORKERS IN THE UNITED STATES, 1980-1989

**Appendix IV - NEW
NIOSH Publication No. 93-108S
September 1994**

The following appendix should be added to the subject report as it identifies the industries within the 10 major industrial divisions from the Standard Industrial Classification Manual.¹²

Agriculture, forestry, and fishing: crop and livestock production, animal specialties, agricultural services, forestry, fishing, hunting, and trapping.

Mining*: metal and coal mining, oil and gas extraction, and mining and quarrying of nonmetallic minerals.

Construction: building construction, heavy construction, and special trade.

Manufacturing: timber harvesting; products of food, tobacco, textile mills, fabrics, lumber and wood, paper, chemicals, rubber, plastics, leather, stone, clay, glass, concrete, and primary and fabricated metals; apparel; furniture and fixtures; printing and publishing; petroleum refining; industrial and commercial machinery; computer, electronic and transportation equipment; and measuring, analyzing, and controlling instruments.

Transportation, communications, and public utilities: railroad, air, and water transportation; local, suburban, and highway passenger transportation; motor freight; US postal service; pipelines; transportation services; communications; and electric, gas, and sanitary services.

Wholesale trade: of durable and nondurable goods.

Retail trade: of building materials, hardware, garden supply, mobile homes, automobiles, general merchandise, food, apparel, accessory, furnishings, and equipment stores; gasoline service stations; and eating and drinking places.

Finance, insurance, and real estate: depository and credit institutions; security and commodity brokers, dealers, exchanges, services; insurance carriers, agents, brokers, and service; real estate; and investment offices.

Services: personal business, automotive repair, parking, and miscellaneous repair services; motion pictures, amusement, and recreation services; health, legal, educational, and social services; museums, art galleries, botanical gardens, and zoos; membership organizations; engineering, accounting, research, and management services; and private household services.

Public administration: executive, legislative, and general government, except finance; justice, public order, and safety; public finance, taxation, and monetary policy; administration of human resource, environmental quality, housing, and economic programs; and national security and international affairs.

*Fatality data specific to coal, metal, and non-metal mining and quarrying can be obtained from the Mine Safety and Health Administration (MSHA).

National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention, Public Health Service, Department of Health and Human Services.