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National Census of Fatal Occupational Injuries in 2001

A total of 8,786 fatal work injuries were reported in 2001, including fatalities related to the September 11th terrorist attacks, according to the Census of Fatal Occupational Injuries, Bureau of Labor Statistics, U.S. Department of Labor. A total of 2,886 work-related fatalities resulted from the events of September 11th. Excluding these fatalities, the overall workplace fatality count was 5,900 for 2001.

Profile of fatal work injuries resulting from the September 11th attacks

Most of the more than 3,000 people killed were at work (as defined by the fatality census) in the World Trade Center or the Pentagon, were on business travel or were crew aboard the commercial airliners that crashed in Pennsylvania, New York City, and Virginia, or were involved in rescue duties. The events of that day killed 2,886 workers from a wide range of backgrounds - janitors to managers, native and foreign-born workers, and the young and the old. (See tables A. and B.)

Industry

Seventy-eight percent of the 2,198 non-rescue workers killed in the World Trade Center were working in the finance, insurance, and real estate industry. All of the 412 fatally injured rescue workers were killed at the World Trade Center; 99 percent worked for state and local government. Of the 125 workers killed at the Pentagon, 91 percent were civilian or military federal government employees. Of the 151 workers who were killed on the planes that crashed in Pennsylvania, Virginia, and New York City, 39 percent were employed in the services industry.

Occupation

Of the rescue workers fatally injured, 335 were firefighters and 61 were police or detectives. Fifty percent of the other workers fatally injured in the World Trade Center were employed as managerial or professional specialty workers. Forty-three percent of the workers fatally injured at the Pentagon were working in military occupations and slightly less than half, 47 percent, were working in civilian managerial and professional specialty occupations.

Twenty five of the workers killed on the passenger airliners were flight attendants, 8 were pilots. The majority of the workers killed on the airliners, 69 percent, were in managerial and professional specialty occupations.

Worker characteristics

Of the fatally injured workers in the World Trade Center, 66 percent were between the ages of 25 and 44, 9 percent were black, 10 percent were Hispanic, and 26 percent were women. Of those working in the Pentagon office building, 54 percent were between the ages of 25 and 44, 33 percent were black, 4 percent were Hispanic, and 37 percent were women. Of the workers involved in the rescue efforts, 70 percent were between the ages of 25 and 44. Ninety-nine percent were male. Of the workers on the passenger airliners 62 percent were men, 7 percent were black, and 5 percent were Hispanic.

Overall, two-thirds of the workers fatally injured on September 11th were over 34 years old and 23 percent were women. Almost 20 percent of the workers were foreign-born.

Profiles of 2001 fatal work injuries excluding fatalities resulting from the September 11th attacks

Excluding the fatalities on September 11th, the overall workplace fatality count of 5,900 for 2001 was down slightly, less than 1 percent from 2000. Total employment also declined slightly in 2001. As a result, the occupational fatality rate was the same in 2001 as in 2000, 4.3 fatalities per 100,000 employed.

The construction industry, with fatalities at their highest level since the fatality census was first conducted in 1992, continued to report the largest number of fatal work injuries of any industry. From 2000 to 2001, decreases in fatalities from transportation incidents and job-related homicides were offset by increases in fatalities from falls and from electrocutions.

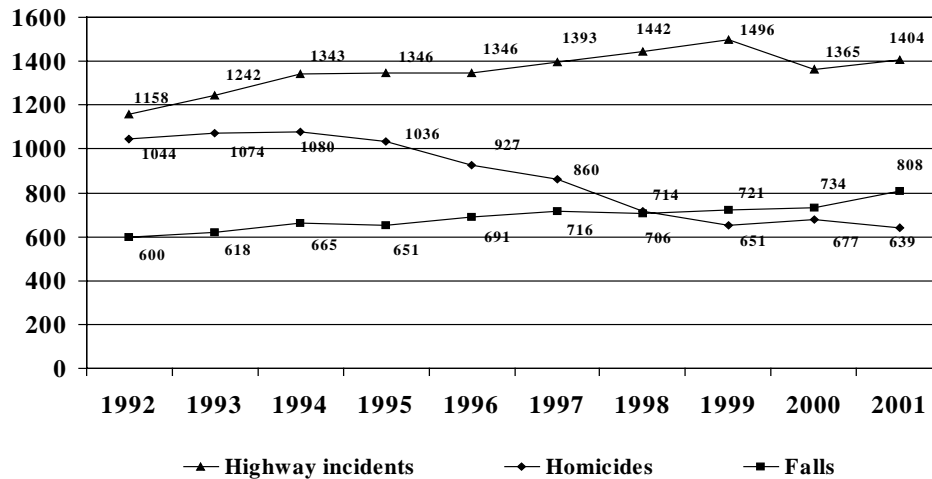
Profile of 2001 fatal work injuries (excluding September 11th) by type of incident

Fatalities resulting from transportation incidents decreased for the third year in a row, from 2,573 in 2000 to 2,517 in 2001. Highway incidents, however, increased about 3 percent from 2000 and continued to be the leading cause of on-the-job fatalities. Fatal work injuries resulting from workers being struck by vehicles or mobile equipment also increased slightly in 2001. In contrast, the number of workers killed in non-highway incidents, aircraft incidents, and railway incidents decreased. Non-highway fatal incidents, which include tractor and forklift overturns, were at their lowest levels since the census began in 1992.

Work-related homicides, at 639 (excluding fatalities resulting from September 11th), fell to their lowest levels since the census began; the record high was 1,080 in 1994. Homicides among technical, sales, and administrative support workers decreased 14 percent to 203 fatalities. However, homicides increased sharply among workers in service occupations, which include police and detectives, food preparation workers, barbers, and hairdressers. The number of workplace suicides and fatal assaults by animals increased slightly.

Chart 1: The three most frequent work-related fatal events, 1992-2001

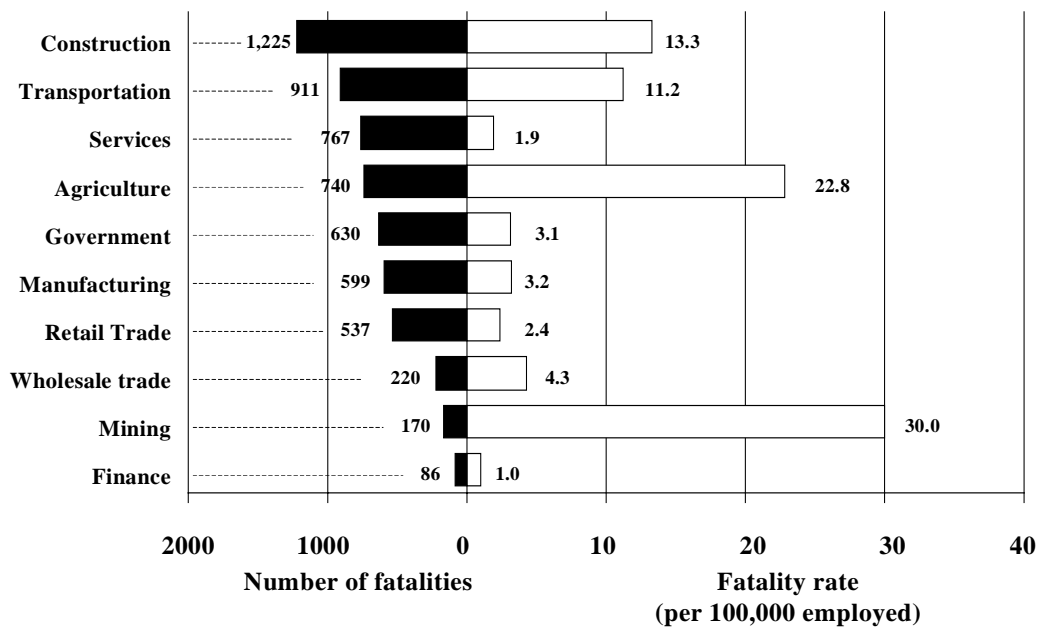
Number of fatalities



SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2001

Chart 2: Numbers and rates of fatal occupational injuries by industry division, 2001

Average fatality rate for all industries: 4.3



SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2001

Rate = (Fatal work injuries/Employment) x 100,000 workers. Employment data extracted from the 2001 Current Population Survey (CPS).

Fatalities resulting from falls increased to 808 in 2001, a 10 percent rise over 2000 levels. This was the highest total since the fatality census began in 1992. Falls to lower levels increased by 39 to 698 in 2001. Falls on the same level increased by 28 to a ten-year high of 84 in 2001.

Fatal falls in the construction industry increased 13 percent from 2000 levels and accounted for over half of all fatal falls. Worker deaths resulting from electrocutions and from fires and explosions increased to levels of the late 1990's after falling to a near 10-year low in 2000.

Profile of fatal work injuries by industry

While fatalities in the construction industry increased 6 percent in 2001 to a record high, fatalities in manufacturing decreased 10 percent from 2000 to their lowest recorded level since the census began in 1992. Other industries showing decreases in work-related fatalities were transportation and public utilities, wholesale trade, and retail trade. The decrease in retail trade fatalities was largely a result of the decline in workplace homicides. Fatalities to workers in services remained relatively unchanged, while fatalities in agriculture, forestry and fishing; finance, insurance, and real estate; and mining increased. Fatalities in government (excluding September 11th) increased 10 percent from 2000.

Occupational fatality rates in 2001 were highest in the mining; agriculture; forestry and fishing; construction; and transportation industries. The fatality rate for the mining industry, which includes oil and gas extraction, remained at 30.0 fatal work injuries per 100,000 workers for the second year in a row, the highest fatality rate. The agriculture, forestry and fishing industry had the second highest rate, at 22.8 fatalities per 100,000 employed. The private sector construction industry reported 13.3 fatalities per 100,000 employed, and the rate was 11.2 fatalities per 100,000 employed in the transportation industry.

Profile of fatal work injuries by occupation

Operators, fabricators, and laborers again recorded the largest number of fatal work injuries of any occupational group, accounting for more than one out of every three fatalities in 2001. However, the number of fatalities in this occupational group dropped 4 percent for the second year in a row. Most of this decrease resulted from fewer fatalities among motor vehicle operators, particularly truck drivers. There also were fewer fatalities among material moving equipment operators, machine operators, and workers in railroad transportation and water transportation. Fatalities among handlers, equipment cleaners, helpers, and laborers increased, mainly due to an increase in fatalities to construction laborers; fatalities to non-construction laborers decreased.

Service occupations showed an increase of 18 percent in fatalities, the highest percentage increase among the major occupation categories. Within this occupation group, police and detectives, including supervisors, had the highest number of fatalities. Fatalities in personal service occupations increased from 37 in 2000 to 59 in 2001. Precision production, craft, and repair occupations showed a small increase in the number of fatalities (3 percent). However, within this occupation group, fatalities in the extractive occupations (drillers and mining machine operators) increased from a low of 47 in 1999 to match its 10 year high of 97 fatalities in 1993.

While fatalities to truck drivers declined by 6 percent, they continued to incur more workplace fatalities than any other individual occupation. Truck drivers reported a rate of 25.3 workplace fatalities per 100,000 employed. Farm occupations had the second highest number of fatalities with 499 and rate of 27.9 fatalities, which increased from the previous year. Other occupations that typically have large numbers of worker fatalities but showed decreasing fatalities in 2001 included timber cutters; groundskeepers and gardeners; and aircraft pilots.

Fatalities to workers in military occupations increased over 25 percent from 87 in 2000 to 110 in 2001 (excluding September 11th). Almost half of these fatalities resulted from aircraft crashes. The occupational fatality rate for military occupations increased in 2001 to 9.3 fatalities per 100,000 employed.

Profile of fatal work injuries by demographic characteristics

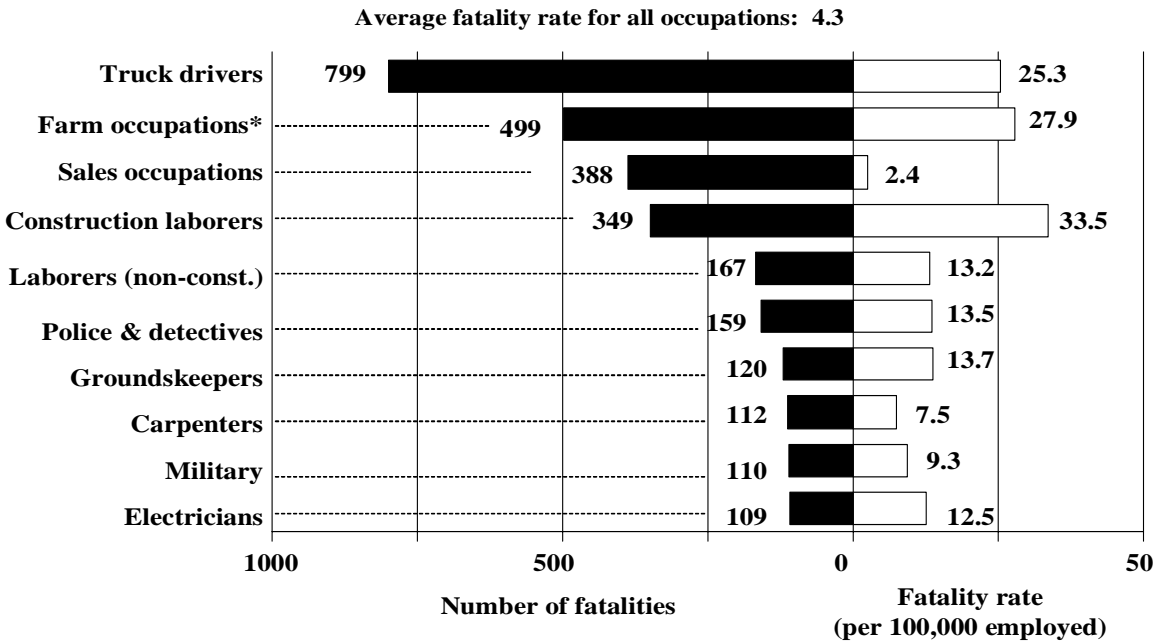
Fatal injuries to Hispanic or Latino workers were up 9 percent, from 815 in 2000 to 891 in 2001 (excluding September 11th). This resulted from a rise in Hispanic worker fatalities in the services and agriculture industries, rather than in construction as in prior years. Fatalities to white (non-Hispanic) workers fell for the sixth year in a row; fatalities among black (non-Hispanic) workers fell for the second year in a row. Fatal work injuries to men were down slightly, although fatalities to women increased by 5 percent over 2000. The number of occupational fatalities to workers aged 17 years and younger decreased to 53 in 2001 from 73 in 2000. In 2001 fatalities to the self-employed were down by 5 percent to their lowest level recorded since 1992.

On average, about 16 workers were fatally injured each day during 2001. The total number of multiple fatality incidents (incidents that resulted in two or more worker deaths) decreased from 214 in 2000 to 197 in 2001. However, the total number of job-related deaths in multiple fatality incidents increased from 531 in 2000 to 563 in 2001 (excluding September 11th).

Profile of fatal work injuries by state and region

Twenty-six states and the District of Columbia reported fewer fatal work injuries in 2001 than in 2000. The number of work injuries also declined in 2 of the 4 census regions in 2001. For state results beyond those presented here, please contact the individual state agency responsible for the collection of CFOI data in that state. A list of those agencies, with telephone numbers, is provided in table 6.

Chart 3: Numbers and rates of fatal occupational injuries for selected occupations, 2001



*Farm occupations include the following: Non-horticultural farmers, Non-horticultural farm managers, Farm workers, and Farm worker supervisors.

Rate = (Fatal work injuries/Employment) x 100,000 workers. Employment data extracted from the 2001 Current Population Survey (CPS). The fatality rates were calculated using employment as the denominator; employment-based rates measure the risk for those employed during a given period of time, regardless of exposure hours.

Background of the program

The Census of Fatal Occupational Injuries, part of the BLS occupational safety and health statistics program, provides the most complete count of fatal work injuries available. The program uses diverse state and federal data sources to identify, verify, and profile fatal work injuries. Information about each workplace fatality (occupation and other worker characteristics, equipment being used, and circumstances of the event) is obtained by cross-referencing source documents, such as death certificates, workers' compensation records, and reports to federal and state agencies. This method assures counts are as complete and accurate as possible.

This is the tenth year that the fatality census has been conducted in all 50 states and the District of Columbia. The BLS fatality census is a federal/state cooperative venture in which costs are shared equally. Additional state-specific data are available from the participating agencies, listed in table 6.

Another BLS program, the Survey of Occupational Injuries and Illnesses, profiles worker and case characteristics of nonfatal workplace injuries and illnesses that result in lost worktime and presents frequency counts and incidence rates by industry. Copies of the news release on nonfatal injuries and illnesses in 2000 are available from BLS by calling (202) 691-6179 or by accessing the website listed below. Incidence rates for 2001 by industry will be published in December 2002, and information on 2001 worker and case characteristics will be available in April 2003. For additional data, access the BLS Internet site: <https://www.bls.gov/iif/>.

To request a copy of BLS Report 961 which includes several articles and highlights 2000 fatality data, e-mail your address to CFOIstaff@bls.gov or write to Bureau of Labor Statistics, 2 Massachusetts Avenue, NE, Room 3180, Washington, DC 20212.

Table A. Fatal occupational injuries from events on September 11, 2001, by industry and occupation

Characteristics	Total		Office building		Passenger airliner		Rescue efforts	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	2,886	100	2,323	100	151	100	412	100
Industry								
Private industry	2,264	78	2,119	91	141	93	-	-
Construction	58	2	57	2	-	-	-	-
General building contractors.....	12	(1)	11	(1)	-	-	-	-
Heavy construction, except building.....	13	(1)	13	1	-	-	-	-
Special trade contractors.....	32	1	32	1	-	-	-	-
Transportation and public utilities	78	3	35	2	42	28	-	-
Transportation by air.....	37	1	-	-	36	24	-	-
Wholesale trade	27	1	18	1	9	6	-	-
Retail trade	118	4	108	5	10	7	-	-
Eating and drinking places.....	103	4	103	4	-	-	-	-
Finance, insurance, and real estate	1,715	59	1,708	74	7	5	-	-
Depository institutions.....	192	7	192	8	-	-	-	-
Security and commodity brokers.....	973	34	971	42	-	-	-	-
Insurance carriers.....	202	7	202	9	-	-	-	-
Insurance agents, brokers, and service.....	330	11	329	14	-	-	-	-
Real estate.....	13	(1)	12	1	-	-	-	-
Holding and other investment offices.....	5	(1)	-	-	3	2	-	-
Services	230	8	168	7	59	39	3	1
Business services.....	141	5	120	5	21	14	-	-
Government ²	622	22	204	9	10	7	408	99
Federal government (including resident armed forces).....	124	4	116	5	7	5	-	-
National security.....	118	4	114	5	4	3	-	-
State government	49	2	43	2	3	2	3	1
Local government	449	16	45	2	-	-	404	98
Police protection.....	25	1	-	-	-	-	23	6
Fire protection.....	344	12	-	-	-	-	343	83
Administration of economic programs.....	79	3	41	2	-	-	38	9
Occupation								
Managerial and professional specialty	1,271	44	1,157	50	104	69	10	2
Executive, administrative, and managerial.....	1,072	37	993	43	70	46	9	2
Professional specialty.....	199	7	164	7	34	23	-	-
Technical, sales, and administrative support	930	32	905	39	19	13	6	1
Technicians and related support occupations.....	92	3	78	3	8	5	6	1
Health technologists and technicians.....	8	(1)	-	-	-	-	6	1
Airplane pilots and navigators.....	8	(1)	-	-	8	5	-	-
Sales occupations.....	565	20	557	24	8	5	-	-
Service occupations	549	19	128	6	25	17	396	96
Protective service occupations.....	433	15	37	2	-	-	396	96
Firefighting, including supervisors.....	336	12	-	-	-	-	335	81
Police and detectives, including supervisors.....	64	2	3	(1)	-	-	61	15
Guards, including supervisors.....	33	1	33	1	-	-	-	-
Food preparation and service occupations.....	64	2	64	3	-	-	-	-
Cleaning and building service.....	25	1	25	1	-	-	-	-
Personal service occupations.....	27	1	-	-	25	17	-	-
Transportation attendants.....	25	1	-	-	25	17	-	-
Precision production, craft, and repair	61	2	60	3	-	-	-	-
Mechanics and repairers.....	20	1	20	1	-	-	-	-
Construction trades.....	39	1	38	2	-	-	-	-
Operators, fabricators, and laborers	14	(1)	12	1	-	-	-	-
Military occupations	54	2	54	2	-	-	-	-

¹ Less than 0.5 percent.

² Includes fatalities to workers employed by governmental organizations regardless of industry

NOTE: These totals include work-related fatalities only. They may differ from totals published by other organizations primarily due to the differences in how work relationship, industry and occupation are categorized. Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate no data reported or data that do not meet publication criteria.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with state, New York City, and federal agencies, Census of Fatal Occupational Injuries.

Table B. Fatal occupational injuries from events on September 11, 2001, by selected demographic characteristics

Characteristics	Total		Office building		Passenger airliner		Rescue efforts	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	2,886	100	2,323	100	151	100	412	100
State								
New York (New York City only).....	2,699	94	2,198	95	89	59	412	100
Virginia.....	165	6	125	5	40	26	-	-
Pennsylvania.....	22	1	-	-	22	15	-	-
Sex								
Men.....	2,212	77	1,710	74	93	62	409	99
Women.....	674	23	613	26	58	38	3	1
Age								
20 to 24 years.....	112	4	104	4	4	3	4	1
25 to 34 years.....	822	28	682	29	32	21	108	26
35 to 44 years.....	1,068	37	831	36	56	37	181	44
45 to 54 years.....	608	21	465	20	43	28	100	24
55 to 64 years.....	237	8	211	9	13	9	13	3
65 and over.....	30	1	25	1	3	2	-	-
Race or ethnic origin¹								
White.....	2,122	74	1,653	71	117	77	352	85
Black or African American.....	261	9	232	10	10	7	19	5
Hispanic or Latino ²	259	9	231	10	8	5	20	5
Asian.....	149	5	142	6	6	4	-	-
Native Hawaii or Pacific Islander.....	29	1	29	1	-	-	-	-
Other races or not reported.....	63	2	33	1	10	7	20	5

¹ The categories "White" and "Black or African American" do not include "Hispanic or Latino" persons.

² Persons identified as Hispanic may be of any race.

NOTE: These totals include work-related fatalities only. They may differ from totals published by other organizations primarily due to the differences in how work relationship, industry and occupation are categorized. Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate no data reported or data that do not meet publication criteria.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with state, New York City and federal agencies, Census of Fatal Occupational Injuries.

Table 1. Fatal occupational injuries by event or exposure, 1996-2001

Event or exposure ¹	Fatalities			
	1996-2000 average	2000 ²	2001	
		Number	Number	Percent
Total, including fatalities from September 11th	N/A	N/A	8,786	--
Total, excluding fatalities from September 11th	6,094	5,920	5,900	100
Transportation incidents	2,608	2,573	2,517	43
Highway	1,408	1,365	1,404	24
Collision between vehicles, mobile equipment	685	696	723	12
Moving in same direction	117	136	142	2
Moving in opposite directions, oncoming.....	247	243	256	4
Moving in intersection	151	154	137	2
Vehicle struck stationary object or equipment	289	279	295	5
Noncollision	372	356	339	6
Jackknifed or overturned--no collision.....	298	304	273	5
Nonhighway (farm, industrial premises).....	378	399	324	5
Overturned	212	213	157	3
Aircraft.....	263	280	247	4
Worker struck by a vehicle.....	376	370	383	6
Water vehicle.....	105	84	90	2
Rail vehicle.....	71	71	62	1
Assaults and violent acts	1,015	930	902	15
Homicides	766	677	639	11
Shooting	617	533	505	9
Stabbing.....	68	66	58	1
Other, including bombing.....	80	78	76	1
Self-inflicted injuries.....	216	221	228	4
Contact with objects and equipment	1,005	1,006	962	16
Struck by object.....	567	571	553	9
Struck by falling object.....	364	357	343	6
Struck by flying object.....	57	61	60	1
Caught in or compressed by equipment or objects	293	294	266	5
Caught in running equipment or machinery.....	157	157	144	2
Caught in or crushed in collapsing materials.....	128	123	122	2
Falls	714	734	808	14
Fall to lower level.....	636	659	698	12
Fall from ladder.....	106	110	122	2
Fall from roof	153	150	159	3
Fall from scaffold	90	85	91	2
Fall on same level.....	55	56	84	1
Exposure to harmful substances or environments	535	481	499	8
Contact with electric current	290	256	285	5
Contact with overhead powerlines	132	128	124	2
Contact with temperature extremes	40	29	35	1
Exposure to caustic, noxious, or allergenic substances ...	112	100	96	2
Inhalation of substance.....	57	48	49	1
Oxygen deficiency	92	94	83	1
Drowning, submersion.....	73	75	59	1
Fires and explosions	196	177	188	3
Other events or exposures ³	20	19	24	-

¹ Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

² The BLS news release issued Aug. 14, 2001, reported a total of 5,915 fatal work injuries for calendar year 2000. Since then, an additional 5 job-related fatalities were identified, bringing the total job-related fatality count for 2000 to 5,920.

³ Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate less than 0.5 percent.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, in cooperation with state, New York City, District of Columbia, and federal agencies, Census of Fatal Occupational Injuries, 1996-2001.

Table 2. Fatal occupational injuries and employment by industry, 2001

Industry	SIC Code ¹	Fatalities				Employment ³ (in thousands)	Fatalities per 100,000 employed ⁴	Relative standard error ⁵
		1996- 2000 average	2000 (revised) ²	2001				
		Number	Number	Number	Percent			
Total, including fatalities from September 11th		N/A	N/A	8,786	--	136,252	6.4	.1
Total, excluding fatalities from September 11th		6,094	5,920	5,900	100	136,252	4.3	.1
Private industry		5,501	5,347	5,270	89	115,934	4.5	.2
Agriculture, forestry, and fishing		803	720	740	13	3,208	22.8	1.4
Agricultural production – crops	01	345	277	301	5	888	33.3	2.7
Agricultural production – livestock	02	162	132	128	2	966	13.0	2.6
Agricultural services	07	179	213	191	3	1,277	15.0	2.3
Mining ⁶		147	156	170	3	566	30.0	3.4
Coal mining	12	35	40	42	1	88	47.7	8.7
Oil and gas extraction	13	75	83	98	2	353	27.8	4.4
Construction		1,135	1,155	1,225	21	9,125	13.3	.8
General building contractors	15	190	175	201	3	-	-	-
Heavy construction, except building	16	267	284	267	5	-	-	-
Special trades contractors	17	663	673	735	12	-	-	-
Manufacturing		711	668	599	10	18,897	3.2	.6
Food and kindred products	20	75	68	57	1	1,632	3.5	2.0
Lumber and wood products	24	190	186	151	3	691	21.9	3.1
Transportation and public utilities		971	957	911	15	8,131	11.2	.9
Local and interurban passenger transportation	41	91	84	80	1	622	12.9	3.3
Trucking and warehousing	42	566	566	533	9	2,691	19.8	1.6
Transportation by air	45	89	97	85	1	884	9.6	2.7
Electric, gas, and sanitary services	49	86	84	88	1	982	-	-
Wholesale trade		242	230	220	4	5,086	4.3	1.1
Retail trade		606	594	537	9	22,478	2.4	.5
Food stores	54	154	145	132	2	2,862	-	-
Automotive dealers and service stations	55	102	95	83	1	-	-	-
Eating and drinking places	58	142	138	147	2	6,870	2.1	1.0
Finance, insurance, and real estate		98	79	86	1	8,616	1.0	.9
Services		754	769	767	13	39,904	1.9	.4
Business services	73	181	199	191	3	9,698	2.0	.8
Automotive repair, services, and parking	75	122	132	115	2	-	-	-
Government ⁷		593	573	630	11	20,318	3.1	.5
Federal (including resident armed forces)		161	149	161	3	4,436	3.6	1.2
State		122	109	112	2	5,678	2.0	1.1
Local		306	311	332	6	10,205	3.3	.8
Police protection	9221	99	112	121	2	-	-	-

¹ Standard Industrial Classification Manual, 1987 Edition.

² The BLS news release issued Aug. 14, 2001, reported a total of 5,915 fatal work injuries for calendar year 2000. Since then, an additional 5 job-related fatalities were identified, bringing the total job-related fatality count for 2000 to 5,920.

³ Employment is an annual average of employed civilians 16 years of age and older from the Current Population Survey, 2001, adjusted to include data for resident armed forces from the Department of Defense.

⁴ The employment figures, except for military, are annual average estimates of employed civilians, 16 years of age and older, from the Current Population Survey (CPS), 2001. The resident military figure, obtained from the Department of Defense, was added to the CPS employment total.

⁵ The rate represents the number of fatal occupational injuries per 100,000 employed workers and was calculated as follows: (N/W) x 100,000, where N = the number of fatal work injuries, and W = the number of employed workers. There were 20 fatally injured workers under the age of 16 years that were not included in the rate calculations to maintain consistency with the CPS employment.

⁶ Includes fatalities at all establishments categorized as Mining (Division B) in the Standard Industrial Classification Manual, 1987 Edition, including establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in Oil and Gas Extraction.

⁷ Includes fatalities to workers employed by government organizations regardless of industry.

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. There were 15 fatalities for which there was insufficient information to determine a specific industry classification, although a distinction between private sector and government was made for each. Dashes indicate less than 0.5 percent or data that are not available or that do not meet publication criteria.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, in cooperation with state, New York City, District of Columbia, and federal agencies, Census of Fatal Occupational Injuries, 1996-2001.

Table 3. Fatal occupational injuries by occupation and selected event or exposure, 2001

Occupation ¹	Fatalities		Selected event or exposure ² (percent of total for occupation)			
	Number	Percent	Highway ³	Homicide	Struck by object	Fall to lower level
Total, including fatalities from September 11th	8,786	--	--	--	--	--
Total, excluding fatalities from September 11th	5,900	100	24	11	9	12
Managerial and professional specialty	637	11	23	19	5	8
Executive, administrative, and managerial.....	378	6	20	24	5	10
Managers, food serving and lodging establishments	63	1	-	67	-	-
Professional specialty.....	259	4	27	11	5	7
Technical, sales, and administrative support	641	11	25	32	3	4
Technicians and related support occupations	154	3	20	3	-	3
Airplane pilots and navigators.....	87	1	-	-	-	-
Sales occupations	388	7	23	47	2	3
Supervisors and proprietors, sales occupations.....	191	3	18	53	3	3
Sales workers, retail and personal services	148	3	17	51	-	4
Cashiers.....	55	1	-	82	-	-
Administrative support occupations, including clerical..	99	2	39	16	8	7
Service occupations	511	9	19	33	3	6
Protective service occupations	287	5	24	35	4	3
Firefighting occupations, including supervisors.....	50	1	22	-	-	-
Police and detectives, including supervisors.....	159	3	34	39	-	-
Guards, including supervisors	78	1	-	49	9	-
Cleaning and building services	78	1	12	13	-	24
Farming, forestry, and fishing	805	14	13	1	18	7
Farm operators and managers	321	5	12	-	17	4
Farmers, except horticultural	305	5	11	-	16	4
Managers, farms, except horticultural	11	0	-	-	-	-
Other agricultural and related occupations	327	6	19	-	9	13
Farm occupations, except managerial	185	3	23	-	6	5
Farm workers, including supervisors.....	170	3	22	-	6	6
Related agricultural occupations.....	142	2	15	-	13	22
Groundskeepers and gardeners, except farm	120	2	12	-	15	23
Forestry and logging occupations	95	2	-	-	63	6
Timber cutting and logging occupations.....	82	1	-	-	67	6
Fishers, hunters, and trappers.....	62	1	-	-	-	-
Fishers, including vessel captains and officers	62	1	-	-	-	-
Precision production, craft, and repair	1,140	19	11	3	11	29
Mechanics and repairers	287	5	15	4	20	11
Construction trades	666	11	8	2	5	42
Carpenters and apprentices	112	2	6	-	4	62
Electricians and apprentices.....	109	2	8	-	-	16
Roofers	78	1	-	-	-	72
Structural metal workers.....	45	1	-	-	-	87
Extractive occupations.....	97	2	12	-	21	-
Operators, fabricators, and laborers	2,043	35	37	5	10	10
Machine operators, assemblers, and inspectors.....	208	4	5	2	15	12
Transportation and material moving occupations.....	1,185	20	55	6	8	3
Motor vehicle operators	966	16	65	7	5	3
Truck drivers.....	799	14	68	2	6	3
Taxicab drivers and chauffeurs.....	62	1	40	55	-	-
Material moving equipment operators.....	183	3	11	-	20	8
Handlers, equipment cleaners, helpers, and laborers..	650	11	14	3	14	20
Construction laborers	349	6	13	-	13	26
Laborers, except construction.....	167	3	14	4	14	14
Military ⁴	110	1	15	-	6	-

¹ Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

² The figure shown is the percent of the total fatalities for that occupational group.

³ "Highway" includes deaths to vehicle occupants resulting from traffic incidents that occur on the public roadway, shoulder, or surrounding area. It excludes incidents occurring entirely off the roadway, such as in parking lots and on farms; incidents involving trains; and deaths to pedestrians or other nonpassengers.

⁴ Resident armed forces.

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. There were 13 fatalities for which there was insufficient information to determine an occupation classification. Dashes indicate less than 0.5 percent or data that are not available or that do not meet publication criteria.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, in cooperation with state, New York City, District of Columbia, and federal agencies, Census of Fatal Occupational Injuries, 2001.

Table 4. Fatal occupational injuries and employment by selected worker characteristics, 2001

Characteristics	Fatalities		Employment (in thousands) ¹		Most frequent events ² (percent of total)
	Number	Percent	Number	Percent	
Total, including fatalities from Sept. 11th...	8,786	--	--	--	
Total, excluding fatalities from Sept. 11th...	5,900	100	136,252	100	Highway (24), falls (14)
Employee status					
Wage and salary workers.....	4,770	81	126,298	93	Highway (26), falls (14)
Self-employed ³	1,130	19	9,954	7	Homicides (15), highway (14)
Sex					
Men	5,429	92	73,087	54	Highway (23), falls (14)
Women	471	8	63,164	46	Highway (29), homicides (27)
Age⁴					
Under 16 years	20	-	-	-	Nonhighway (25)
16 to 17 years	33	1	2,576	2	Highway (30)
18 to 19 years	122	2	4,432	3	Highway (25), homicides (11)
20 to 24 years	440	7	13,682	10	Highway (24), falls (15)
25 to 34 years	1,140	19	30,091	22	Highway (27), falls (12)
35 to 44 years	1,474	25	36,474	27	Highway (23), homicides (12)
45 to 54 years	1,363	23	30,627	22	Highway (23), falls (14)
55 to 64 years	773	13	14,135	10	Highway (24), falls (14)
65 years and over	529	9	4,175	3	Falls (20), highway (20)
Race or ethnic origin⁵					
White	4,168	71	99,963	73	Highway (25), falls (14)
Black or African American.....	563	10	14,815	11	Highway (28), homicides (20)
Hispanic or Latino	891	15	14,815	11	Highway (19), falls (18)
American Indian or Alaskan Native	48	1	-	-	Highway (23), aircraft (21)
Asian	172	3	-	-	Homicides (41), falls (13)
Native Hawaiian or Pacific Islander.....	9	-	-	-	-
Multiple races.....	6	-	-	-	-
Other races or not reported.....	43	1	-	-	Homicides (30), highway (19)

¹ Employment is an annual average of employed civilians 16 years of age and older, plus resident armed forces, from the Current Population Survey, 2001, adjusted to include data for resident armed forces from the Department of Defense.

² "Highway" includes deaths to vehicle occupants resulting from traffic incidents that occur on the public roadway, shoulder, or surrounding area. It excludes incidents occurring entirely off the roadway, such as in parking lots and on farms. "Nonhighway" includes transport-related deaths of vehicle occupants that occur or originate entirely off the roadway. Incidents involving trains and deaths to pedestrians or other nonpassengers are excluded from both categories.

³ Includes paid and unpaid family workers and may include owners of incorporated businesses or members of partnerships.

⁴ There were 6 fatalities for which age was not reported.

⁵ The categories "White" and "Black or African American" do not include "Hispanic or Latino" persons. Persons identified as Hispanic or Latino may be of any race.

NOTE: Totals may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate less than 0.5 percent or data that are not available or that do not meet publication criteria.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, in cooperation with state, New York City, District of Columbia, and federal agencies, Census of Fatal Occupational Injuries, 2001

Table 5. Fatal occupational injuries by state and event or exposure, 2001

State of injury	Total fatalities ¹		Event or exposure ² (percent of state total for 2001)					
	2000 ³ (revised)	2001 ⁴	Transportation incidents ⁵	Assaults and violent acts ⁶	Contact with objects and equipment	Falls	Exposure to harmful substances or environments	Fires and explosions
Total, including fatalities from Sept. 11th	N/A	8,786	--	--	--	--	--	--
Total, excluding fatalities from Sept. 11th	5,920	5,900	43	15	16	14	8	3
Northeast	733	722	39	19	15	16	7	5
Connecticut	55	40	48	15	-	22	-	-
Maine	26	23	43	-	-	22	-	-
Massachusetts	70	53	21	25	21	21	-	-
New Hampshire.....	13	9	-	-	-	-	-	-
New Jersey	115	129	33	19	14	17	9	7
New York (including N.Y.C.)	233	220	40	20	15	17	4	5
New York City	111	100	39	27	12	13	-	5
Pennsylvania.....	199	225	42	17	17	12	8	4
Rhode Island.....	7	17	35	-	-	-	-	-
Vermont	15	6	-	-	-	-	-	-
Midwest	1,335	1,368	42	14	18	13	8	4
Illinois	206	231	32	19	16	17	12	4
Indiana	159	152	43	16	18	9	8	7
Iowa	71	62	48	-	26	13	8	-
Kansas.....	85	93	53	6	15	14	9	-
Michigan	156	175	37	21	18	13	6	4
Minnesota	68	76	37	-	29	21	9	-
Missouri	148	143	41	12	21	14	10	-
Nebraska.....	59	57	58	-	19	9	-	-
North Dakota.....	34	25	64	-	-	-	-	-
Ohio	207	209	40	21	11	12	9	7
South Dakota	35	35	51	-	23	-	-	-
Wisconsin.....	107	110	52	7	19	14	5	-
South	2,600	2,513	43	15	16	13	10	3
Alabama.....	103	138	47	9	16	9	9	9
Arkansas.....	106	68	53	-	19	10	7	-
Delaware.....	13	10	50	-	-	-	-	-
District of Columbia	13	11	-	55	-	-	-	-
Florida.....	329	368	41	18	9	17	13	-
Georgia	195	235	41	20	13	16	8	-
Kentucky	132	105	39	10	28	11	7	5
Louisiana.....	143	117	49	8	21	11	10	-
Maryland.....	84	64	38	28	11	11	11	-
Mississippi.....	125	111	48	11	14	11	14	-
North Carolina.....	234	203	46	15	16	13	9	-
Oklahoma.....	82	115	38	11	22	13	11	-
South Carolina	115	89	42	11	11	21	9	6
Tennessee	160	136	47	9	19	12	8	4
Texas	572	534	39	18	16	13	10	4
Virginia.....	148	146	47	7	21	11	8	6
West Virginia.....	46	63	52	-	21	14	-	-
West	1,248	1,294	45	16	16	14	7	2
Alaska	53	64	75	8	8	-	-	-
Arizona.....	118	87	43	24	13	10	9	-
California.....	553	510	41	19	12	18	9	-
Colorado	117	139	40	19	19	14	6	-
Hawaii	20	41	44	20	24	-	-	-
Idaho.....	35	45	47	11	29	-	-	-
Montana	42	58	47	22	17	-	-	-
Nevada	51	40	52	18	12	-	-	-
New Mexico	35	59	47	14	22	10	-	-
Oregon.....	52	44	45	-	23	18	-	-
Utah	61	65	45	12	22	9	8	-
Washington.....	75	102	43	9	18	18	6	7
Wyoming.....	36	40	55	-	22	-	12	-

¹ Includes other events and exposures such as bodily reaction, in addition to those shown separately.

² Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

³ The BLS news release issued Aug. 14, 2001 reported a total of 5,915 fatal work injuries for calendar year 2000. Since then, an additional 5 job-related fatalities were identified, bringing the total job-related fatality count for 2000 to 5,920.

⁴ Includes 3 fatalities that occurred within the territorial boundaries of the United States, but a State of incident could not be determined.

⁵ Includes highway, nonhighway, air, water, and rail fatalities and fatalities to workers struck by vehicles.

⁶ Includes homicides, self-inflicted injuries, and animal attacks.

NOTE: Percentages may not add to 100 because of rounding. Dashes indicate less than 0.5 percent or data that are not available or that do not meet publication criteria.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, in cooperation with state, New York City, District of Columbia, and federal agencies, Census of Fatal Occupational Injuries, 2000-2001.

Table 6. CFOI participating agencies and telephone numbers

State	Agency	Telephone number
Alabama	Department of Labor	(334) 242-3460
Alaska	Department of Labor and Workforce Development	(907) 465-4539
Arizona	Industrial Commission of Arizona	(602) 542-3739
Arkansas	Department of Labor	(501) 682-4542
California	Department of Industrial Relations	(415) 703-4776
Colorado	Department of Public Health	(303) 692-2173
Connecticut	Labor Department	(860) 566-4380
Delaware	Department of Labor	(302) 761-8223
District of Columbia	Center for Health Statistics	(202) 442-5920
Florida	Department of Insurance	(850) 922-8953
Georgia	Department of Labor	(404) 679-0687
Hawaii	Department of Labor and Industrial Relations	(808) 586-9001
Idaho	Industrial Commission	(208) 334-6090
Illinois	Department of Public Health	(217) 782-5750
Indiana	Department of Labor	(317) 232-2668
Iowa	Division of Labor Services	(515) 281-5151
Kansas	Department of Health and Environment	(785) 296-1058
Kentucky	Labor Cabinet	(502) 564-3070
Louisiana	Department of Labor	(225) 342-3126
Maine	Bureau of Labor Standards	(207) 624-6440
Maryland	Division of Labor and Industry	(410) 767-2356
Massachusetts	Department of Public Health	(617) 624-5627
Michigan	Department of Consumer and Industry Services	(517) 322-5258
Minnesota	Department of Labor and Industry	(651) 284-5568
Mississippi	Department of Health	(601) 576-7186
Missouri	Department of Health	(573) 751-6155
Montana	Department of Labor and Industry	(406) 444-3297
Nebraska	Workers' Compensation Court	(402) 471-3547
Nevada	Division of Industrial Relations	(775) 684-7081
New Hampshire	Department of Public Health	(603) 271-4647
New Jersey	Department of Health and Senior Services	(609) 984-1863
New Mexico	Occupational Health and Safety Bureau	(505) 827-4230
New York State	Department of Health	(518) 402-7900
New York City	Department of Health	(212) 788-4585
North Carolina	Department of Labor	(919) 733-0337
North Dakota	U.S. Department of Labor	(312) 353-7200
Ohio	Department of Health	(614) 466-4183
Oklahoma	Department of Labor	(405) 528-1500
Oregon	Department of Consumer and Business Services	(503) 947-7051
Pennsylvania	Department of Health	(717) 783-2548
Rhode Island	Department of Health	(401) 222-2812
South Carolina	Department of Labor, Licensing, and Regulation	(803) 734-4298
South Dakota	U.S. Department of Labor	(312) 353-7200
Tennessee	Department of Labor and Workforce Development	(615) 741-1749
Texas	Workers' Compensation Commission	(512) 804 4637
Utah	Labor Commission	(801) 530-6823
Vermont	Department of Labor and Industry	(802) 828-5076
Virginia	Department of Labor and Industry	(804) 786-6427
Washington	Department of Labor and Industries	(360) 902-5512
West Virginia	Department of Labor	(304) 558-7890
Wisconsin	Department of Workforce Development	(608) 266-7850
Wyoming	U.S. Department of Labor	(816) 426-2483

TECHNICAL NOTES

Definitions

For a fatality to be included in the census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job. These criteria are generally broader than those used by federal and state agencies administering specific laws and regulations. (Fatalities that occur during a person's commute to or from work are excluded from the census counts.)

Data presented in this release include deaths occurring in 2001 that resulted from traumatic occupational injuries. An injury is defined as any intentional or unintentional wound or damage to the body resulting from acute exposure to energy, such as heat, electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event, incident, or series of events within a single workday or shift. Included are open wounds, intracranial and internal injuries, heatstroke, hypothermia, asphyxiation, acute poisonings resulting from short-term exposures limited to the worker's shift, suicides and homicides, and work injuries listed as underlying or contributory causes of death.

Information on work-related fatal illnesses is not reported in the BLS census and is excluded from the attached tables because the latency period of many occupational illnesses and the difficulty of linking illnesses to work make identification of a universe problematic.

Measurement techniques and limitations

Data for the Census of Fatal Occupational Injuries are compiled from various federal, state, and local administrative sources--including death certificates, workers' compensation reports and claims, reports to various regulatory agencies, medical examiner reports, and police reports--as well as news and other non-governmental reports. Diverse sources are used because studies have shown that no single source captures all job-related fatalities. Source documents are matched so that each fatality is counted only once. To ensure that a fatality occurred while the decedent was at work, information is verified from two or more independent source documents or from a source document and a follow-up questionnaire. Approximately 30 data elements are collected, coded, and tabulated, including information about the worker, the fatal incident, and the machinery or equipment involved.

Identification and verification of work-related fatalities.

In 2001, there were 148 cases included for which work relationship could not be independently verified; however, the information on the initiating source document for these cases was sufficient to determine that the incident was likely to be job related. Data for these fatalities, which primarily affected self-employed workers, are included in the Census of Fatal Occupational Injuries counts. An additional 16 fatalities submitted by states were not included because the initiating source document had insufficient information to determine work relationship and could not be verified by either an independent source document or a follow-up questionnaire.

States may identify additional fatal work injuries after data collection closeout for a

reference year. In addition, other fatalities excluded from the published count because of insufficient information to determine work relationship may subsequently be verified as work related. States have up to one year to update their initial published state counts. This procedure ensures that fatality data are disseminated as quickly as possible and that no legitimate case is excluded from the counts. Thus, each year's report should be considered preliminary until the next year's data are issued. Increases in the published counts based on additional information have averaged less than 100 fatalities per year or less than 1.5 percent of the total. The BLS news release issued August 14, 2001, reported a total of 5,915 fatal work injuries for 2000. Since then, an additional 5 fatal work injuries were identified, bringing the total for 2000 to 5,920.

Federal/state

The Census of Fatal Occupational Injuries includes data for all fatal work injuries, whether they are covered by the Occupational Safety and Health Administration (OSHA) or other federal or state agencies or are outside the scope of regulatory coverage. Thus, any comparison between the BLS fatality census counts and those released by other agencies should take into account the different coverage requirements and definitions being used.

Several federal and state agencies have jurisdiction over workplace safety and health. OSHA and affiliated agencies in states with approved safety programs cover the largest portion of the nation's workers. However, injuries and illnesses occurring in certain industries or activities, such as coal, metal, and nonmetal mining and highway, water, rail, and air transportation, are excluded from OSHA coverage because they are covered by other federal agencies, such as the Mine Safety and Health Administration and various agencies within the Department of Transportation. Fatalities occurring in activities regulated by federal agencies other than OSHA accounted for about 16 percent of the fatal work injuries in 2001.

Fatalities occurring among several other groups of workers are generally not covered by any federal or state agencies. These groups include self-employed and unpaid family workers, which accounted for about 19 percent of the fatalities; laborers on small farms, accounting for about 1 percent of the fatalities; and state and local government employees in states without OSHA-approved safety programs, which accounted for about 4 percent. (Approximately one-half of the states have approved OSHA safety programs, which cover state and local government employees.)

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