

# News

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Bureau of Labor Statistics

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## **National Census of Fatal Occupational Injuries in 2002**

A total of 5,524 fatal work injuries were recorded in 2002, a decline of 6.6 percent from 2001, according to the Census of Fatal Occupational Injuries, conducted by the Bureau of Labor Statistics, U.S. Department of Labor. The count for 2002 was the lowest ever recorded by the fatality census, which has been conducted yearly since 1992. The fatality rate also reached a new low of 4.0 fatal work injuries per 100,000 workers in 2002.

In 2001, 5,915 fatal work injuries occurred, excluding the 2,886 work-related fatalities that resulted from the Sept. 11 terrorist attacks, which were tabulated separately. The comparisons in this release do not include the fatalities related to the terrorist attacks.

### **Profile of 2002 fatal work injuries by type of incident**

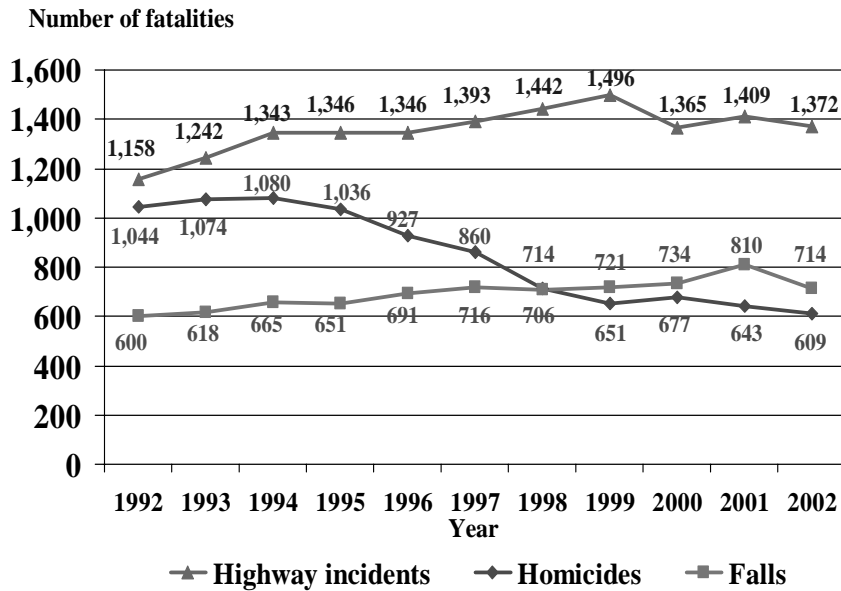
Fatal highway incidents were down 3 percent from 2001, but continued to be the most frequent type of fatal workplace event in 2002, accounting for about a quarter of all fatal work injuries. Other types of fatal transportation events also declined, including aircraft incidents (down 22 percent) and workers struck by vehicle or mobile equipment (down 7 percent). Overall, fatal work injuries from transportation incidents declined for the fourth year in a row, from 2,645 in 1998 to 2,381 in 2002.

Workplace homicides were down about 5 percent in 2002, from 643 in 2001 to 609 in 2002. The number of workplace homicides in 2002 was the lowest recorded in the fatality census and represented a 44 percent decline from the high of 1,080 workplace homicides recorded in 1994. Workplace suicides also were down in 2002.

Fatalities resulting from falls declined for the first time since 1998, from 810 in 2001 to 714 in 2002, a drop of 12 percent. Virtually all types of fatal falls declined in 2002, though falls from ladders and falls from nonmoving vehicles increased slightly.

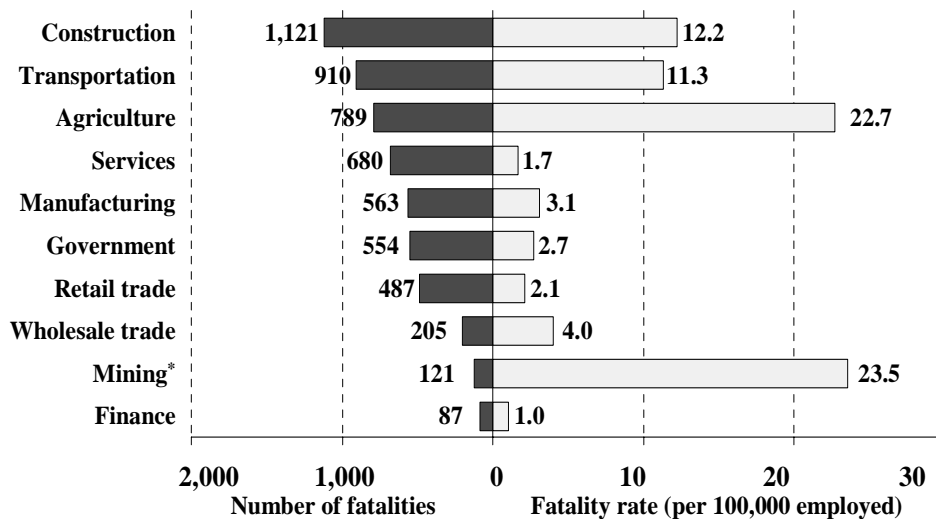
The only major fatality event recording an increase was exposure to harmful substances or environments (up 8 percent). The increase in this event category was led by a sharp increase in the number of fatalities involving contact with temperature

### Chart 1. The three most frequent work-related fatal events, 1992-2002



NOTE: Data from 2001 exclude fatalities resulting from September 11 terrorist attacks.  
 SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2002.

### Chart 2. Numbers and rates of fatal occupational injuries by industry division, 2002



\*Includes 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.  
 Rate = (Fatal work injuries/Employment) x 100,000 employed. Employment data extracted from the 2002 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.  
 SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2002.

extremes (such as heat stroke), which increased from 35 fatalities in 2001 to 60 in 2002. Electrocutions also increased slightly in 2002.

### **Profile of fatal work injuries by industry**

Construction continued to record the highest number of fatal injuries of any major industry, although the total for construction was down 9 percent from the series high recorded in 2001. Fatal work injuries in mining also were lower, due to declines in coal mining and in oil and gas extraction. Fatal work injuries in manufacturing, transportation and public utilities, retail and wholesale trade, services, and government also declined from 2001 levels.

Fatal work injuries in the agriculture, forestry, and fishing industry increased about 6 percent in 2002, due to increases in forestry and in agricultural crop production fatalities. Fatal work injuries in commercial fishing--historically one of the more hazardous industries--were down sharply, from 60 in 2001 to 31 in 2002.

Rates of fatal work injury in 2002 were highest in the mining, agriculture/forestry/fishing, construction, and transportation/public utilities industries. The mining industry recorded a rate of 23.5 fatal work injuries per 100,000 workers in 2002, the highest of any major industry, but down about 22 percent from the rate recorded in 2001. Fatal work injury rates for all other major industries also were down in 2002, except in finance, insurance, and real estate (unchanged) and in transportation and public utilities (up slightly).

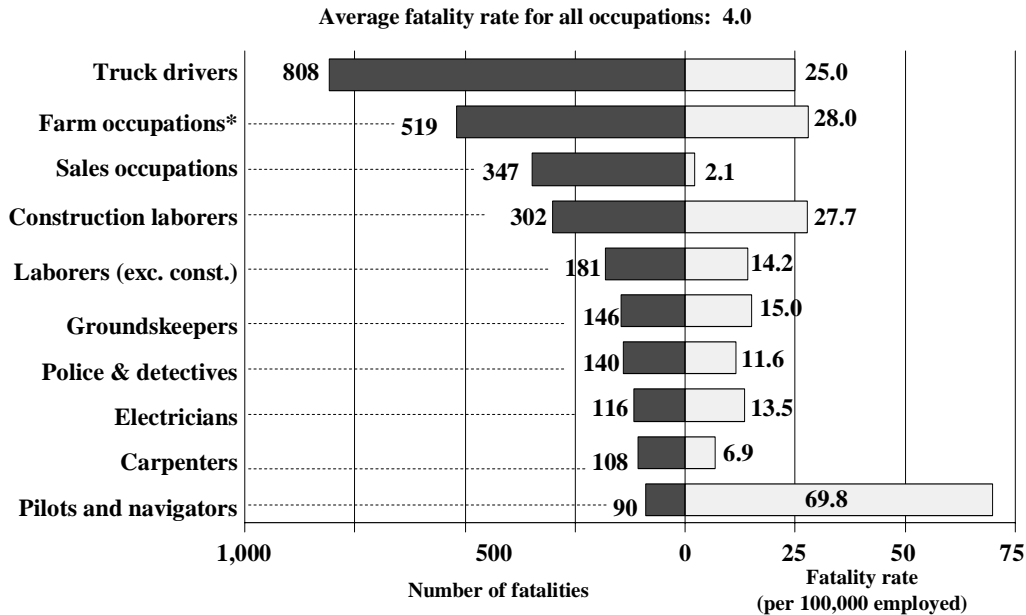
### **Profile of fatal work injuries by occupation**

Operators, fabricators, and laborers accounted for 1,895 fatal work injuries in 2002, the most of any major occupational group and about a third of the fatal work injuries reported in 2002. However, the number of fatalities for this occupational group declined for the third consecutive year and was down about 7 percent from 2001. Fatal work injuries among machine operators, assemblers, and inspectors were down sharply in 2002, and fatalities involving transportation and material moving occupations also were lower.

Fatal work injuries among construction laborers also declined in 2002, from a series high of 350 in 2001 to 302 fatalities in 2002--a decline of 14 percent. However, fatalities among laborers, except construction, were higher by about 8 percent in 2002. Overall, fatalities in handler, equipment cleaner, helper, and laborer occupations were down about 10 percent. Truck drivers--who had more fatal injuries than any other individual occupation-- recorded 808 fatal work injuries, a slight increase from the 802 fatalities recorded in 2001.

Precision production, craft, and repair workers accounted for 1,104 fatal work injuries in 2002 or about one-fifth of the overall total. While fatal work injuries in this occupational group were down about 3 percent overall in 2002, fatalities in the

### Chart 3. Numbers and rates of fatal occupational injuries for selected occupations, 2002



\*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 2002 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. SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2002.

construction trades sub-group were slightly higher. The 682 fatal work injuries in the construction trades in 2002 was the highest recorded by the fatality census for that group. Roofers, electricians, brick masons, and painters were among the construction trades recording increases in 2002. Mechanics and repairers recorded a lower number of fatal work injuries in 2002, and fatalities involving extractive occupations were down 40 percent in 2002.

Service occupations also recorded fewer fatal work injuries in 2002 than in 2001 (down 6 percent), as did managerial and professional specialty occupations (down 20 percent) and technical, sales, and administrative support occupations (down 7 percent). The number of fatal work injuries in farming, forestry, and fishing, however, increased from 804 in 2001 to 840 in 2002, a rise of about 4 percent. In that group, forestry and logging workers, groundskeepers, farm workers, and farming operators/ managers were among the occupations recording increases.

Rates of fatal injury were down for all major occupational categories in 2002. However, a few smaller occupational groups recorded higher rates in 2002, including construction trades, forestry and logging occupations, and water transportation occupations.

## **Profile of fatal work injuries by demographic characteristics**

Fatal work injuries were down in almost every demographic category-- men and women, wage and salary and self-employed workers, and virtually all age groups. Fatal work injuries among workers 19 years of age and under went from 175 in 2001 to 133 in 2002, a decline of 24 percent.

Fatal work injuries among white, non-Hispanic workers were down about 6 percent. Fatal work injuries among Hispanic workers, which had been rising each year since 1995, also were down by 6 percent in 2002. However, the 840 fatal work injuries recorded for Hispanic workers in 2002 accounted for the second highest annual total for that population. Among black workers, a total of 491 fatalities were recorded— the lowest annual count ever for that population.

## **Profile of fatal work injuries by state**

Thirty states and the District of Columbia had fewer fatal work injuries in 2002 than in 2001. Two states (New Jersey and North Dakota) had the same number of fatalities in both 2001 and 2002, and the remaining 18 states reported increases. Nine states reported series lows in 2002.

For more detailed state results, 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.

## **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 11<sup>th</sup> 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 work time and presents frequency counts and incidence rates by industry. Copies of the news release on nonfatal injuries and illnesses in 2001 are available from BLS by calling (202) 691-6179 or by accessing the website listed below. Incidence rates for 2002

by industry will be published in December 2003, and information on 2002 worker and case characteristics will be available in the spring of 2004. For additional data, access the BLS Internet site: <http://www.bls.gov/iif/>.

To request a copy of BLS Report 970 which highlights 2001 fatality results and includes a summary of the work-related fatalities that resulted from the terrorist events of September 11, 2001, e-mail your address to [CFOIstaff@bls.gov](mailto:CFOIstaff@bls.gov) or write to Bureau of Labor Statistics, 2 Massachusetts Avenue, NE, Room 3180, Washington, DC 20212.

**Table 1. Fatal occupational injuries by event or exposure, 1997-2002**

Event or exposure <sup>1</sup>	Fatalities			
	1997-2001 average	2001 <sup>2</sup>	2002	
		Number	Number	Percent
Total .....	6,036	5,915	5,524	100
<b>Transportation incidents</b> .....	2,593	2,524	2,381	43
Highway .....	1,421	1,409	1,372	25
Collision between vehicles, mobile equipment .....	697	727	635	11
Moving in same direction .....	126	142	155	3
Moving in opposite directions, oncoming.....	254	257	202	4
Moving in intersection .....	148	138	145	3
Vehicle struck stationary object or equipment .....	300	297	326	6
Noncollision .....	369	339	373	7
Jackknifed or overturned--no collision.....	300	273	312	6
Nonhighway (farm, industrial premises) .....	368	326	322	6
Overturned.....	202	158	164	3
Aircraft.....	248	247	192	3
Worker struck by a vehicle.....	382	383	356	6
Water vehicle.....	99	90	71	1
Rail vehicle.....	68	62	64	1
<b>Assaults and violent acts</b> .....	964	908	840	15
Homicides .....	709	643	609	11
Shooting .....	567	509	469	8
Stabbing.....	64	58	58	1
Other, including bombing.....	78	76	82	1
Self-inflicted injuries.....	221	230	199	4
<b>Contact with objects and equipment</b> .....	995	962	873	16
Struck by object.....	562	553	506	9
Struck by falling object.....	352	343	303	5
Struck by flying object.....	58	60	38	1
Caught in or compressed by equipment or objects .....	290	266	231	4
Caught in running equipment or machinery.....	156	144	110	2
Caught in or crushed in collapsing materials.....	126	122	116	2
<b>Falls</b> .....	737	810	714	13
Fall to lower level.....	654	700	634	11
Fall from ladder.....	111	123	126	2
Fall from roof .....	155	159	143	3
Fall from scaffold .....	91	91	87	2
Fall on same level.....	61	84	63	1
<b>Exposure to harmful substances or environments</b> .....	529	499	538	10
Contact with electric current.....	291	285	289	5
Contact with overhead powerlines .....	134	124	122	2
Contact with temperature extremes .....	41	35	60	1
Exposure to caustic, noxious, or allergenic substances ...	106	96	98	2
Inhalation of substance.....	52	49	49	1
Oxygen deficiency .....	89	83	90	2
Drowning, submersion .....	71	59	60	1
<b>Fires and explosions</b> .....	197	188	165	3
<b>Other events or exposures</b> <sup>3</sup> .....	21	24	13	-

<sup>1</sup> Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

<sup>2</sup> The BLS news release issued September 25, 2002 reported a total of 5,900 fatal work injuries for calendar year 2001. Since then, an additional 15 job-related fatalities were identified, bringing the total job-related fatality count for 2001 to 5,915. Totals for 2001 exclude fatalities from the September 11 terrorist attacks.

<sup>3</sup> 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. Dash indicates 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, 1997-2002.

**Table 2. Fatal occupational injuries and employment by industry, 2002**

Industry	SIC Code <sup>1</sup>	Fatalities				2002 Employment <sup>3</sup> (thousands)	2002 Fatalities per 100,000 employed <sup>4</sup>
		1997-2001 average	2001 (revised) <sup>2</sup>	2002			
		Number	Number	Number	Percent		
Total.....		6,036	5,915	5,524	100	137,700	4.0
<b>Private industry</b> .....		5,438	5,281	4,970	90	116,863	4.2
<b>Agriculture, forestry, and fishing</b> .....		790	741	789	14	3,417	22.7
Agricultural production – crops.....	01	337	301	338	6	899	37.0
Agricultural production – livestock.....	02	156	129	129	2	989	12.5
Agricultural services.....	07	183	191	198	4	1,437	13.8
<b>Mining</b> <sup>5</sup> .....		151	170	121	2	515	23.5
Coal mining .....	12	36	42	25	-	87	28.7
Oil and gas extraction.....	13	78	98	71	1	308	23.1
<b>Construction</b> .....		1,171	1,226	1,121	20	9,163	12.2
General building contractors.....	15	193	202	189	3	-	-
Heavy construction, except building.....	16	271	267	246	4	-	-
Special trades contractors .....	17	689	735	661	12	-	-
<b>Manufacturing</b> .....		686	598	563	10	18,072	3.1
Food and kindred products .....	20	72	57	64	1	1,640	3.9
Lumber and wood products .....	24	180	151	142	3	706	20.1
<b>Transportation and public utilities</b> .....		960	915	910	16	8,060	11.3
Local and interurban passenger transportation.....	41	91	80	60	1	683	8.8
Trucking and warehousing.....	42	569	536	584	11	2,777	21.0
Transportation by air.....	45	83	85	71	1	800	8.9
Electric, gas, and sanitary services.....	49	86	88	81	1	-	-
<b>Wholesale trade</b> .....		232	220	205	4	5,065	4.0
<b>Retail trade</b> .....		577	538	487	9	22,900	2.1
Food stores .....	54	144	132	100	2	-	-
Automotive dealers and service stations.....	55	99	83	68	1	-	-
Eating and drinking places.....	58	138	148	126	2	7,217	1.7
<b>Finance, insurance, and real estate</b> .....		92	86	87	2	8,940	1.0
<b>Services</b> .....		753	772	680	12	40,820	1.7
Business services.....	73	186	192	165	3	7,101	2.3
Automotive repair, services, and parking .....	75	125	116	114	2	1,597	7.1
<b>Government</b> <sup>6</sup> .....		599	634	554	10	20,837	2.7
Federal (including resident armed forces).....		157	162	137	2	4,493	3.0
State.....		118	112	92	2	5,711	1.6
Local .....		315	335	313	6	10,634	2.9
Police Protection.....	9221	108	212	108	2	-	-

<sup>1</sup> Standard Industrial Classification Manual, 1987 Edition.

<sup>2</sup> The BLS news release issued September 25, 2002 reported a total of 5,900 fatal work injuries for calendar year 2001. Since then, an additional 15 job-related fatalities were identified, bringing the total job-related fatality count for 2001 to 5,915. Totals for 2001 exclude fatalities from the September 11 terrorist attacks.

<sup>3</sup> Employment is an annual average of employed civilians 16 years of age and older from the Current Population Survey, 2002, adjusted to include data for resident armed forces from the Department of Defense.

<sup>4</sup> 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 16 fatally injured workers under the age of 16 years that were not included in the rate calculations to maintain consistency with the CPS employment. Relative standard errors are available upon request.

<sup>5</sup> 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.

<sup>6</sup> 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 7 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, 1997-2002.

**Table 3. Fatal occupational injuries by occupation and selected event or exposure, 2002**

Occupation <sup>1</sup>	Fatalities		Selected event or exposure <sup>2</sup> (percent of total for occupation)			
	Number	Percent	Highway <sup>3</sup>	Homicide	Struck by object	Fall to lower level
Total.....	5,524	100	25	11	9	11
<b>Managerial and professional specialty</b> .....	513	9	23	20	4	7
Executive, administrative, and managerial .....	319	6	23	27	5	8
Managers, food serving and lodging establishments.....	46	1	7	80	-	-
Professional specialty.....	194	4	22	10	3	6
<b>Technical, sales, and administrative support</b> .....	595	11	22	35	3	3
Technicians and related support occupations .....	155	3	12	5	3	2
Airplane pilots and navigators.....	90	2	-	-	-	-
Sales occupations .....	347	6	20	52	3	4
Supervisors and proprietors, sales occupations .....	162	3	12	61	4	-
Sales workers, retail and personal services .....	132	2	17	58	-	4
Cashiers .....	47	1	-	85	-	-
Administrative support occupations, including clerical..	93	2	42	24	-	-
<b>Service occupations</b> .....	483	9	23	32	3	6
Protective service occupations .....	272	5	30	35	3	-
Firefighting occupations, including supervisors .....	52	1	38	-	-	-
Police and detectives, including supervisors .....	140	3	34	41	-	-
Guards, including supervisors.....	80	1	16	46	-	-
Cleaning and building services .....	92	2	13	15	7	25
<b>Farming, forestry, and fishing</b> .....	840	15	14	2	20	7
Farm operators and managers .....	337	6	14	-	17	4
Farmers, except horticultural .....	306	6	13	-	18	4
Other agricultural and related occupations.....	366	7	13	2	13	11
Farm occupations, except managerial .....	198	4	15	4	9	4
Farm workers.....	183	3	15	2	9	4
Related agricultural occupations .....	168	3	11	-	17	20
Groundskeepers and gardeners, except farm .....	146	3	12	-	17	22
Forestry and logging occupations .....	104	2	19	-	62	-
Timber cutting and logging occupations.....	72	1	6	-	74	-
Fishers, hunters, and trappers.....	33	1	-	-	-	-
Fishers, including vessel captains and officers.....	33	1	-	-	-	-
<b>Precision production, craft, and repair</b> .....	1,104	20	13	3	9	28
Mechanics and repairers .....	274	5	18	4	15	13
Construction trades .....	682	12	11	1	5	38
Carpenters and apprentices.....	108	2	9	-	6	56
Electricians and apprentices .....	116	2	9	-	-	15
Roofers.....	87	2	9	-	-	68
Structural metal workers .....	39	1	-	-	-	69
Extractive occupations.....	58	1	14	-	14	10
<b>Operators, fabricators, and laborers</b> .....	1,895	34	39	5	9	9
Machine operators, assemblers, and inspectors .....	168	3	5	4	12	16
Transportation and material moving occupations.....	1,143	21	57	5	8	3
Motor vehicle operators .....	952	17	67	6	6	3
Truck drivers.....	808	15	69	2	7	3
Taxicab drivers and chauffeurs .....	51	1	37	59	-	-
Material moving equipment operators .....	153	3	7	-	21	7
Handlers, equipment cleaners, helpers, and laborers ..	584	11	12	5	11	19
Construction laborers.....	302	5	11	2	13	24
Laborers, except construction.....	181	3	12	4	11	14
<b>Military</b> <sup>4</sup> .....	85	1	26	-	7	-

<sup>1</sup> Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

<sup>2</sup> The figure shown is the percent of the total fatalities for that occupational group. Event or exposure categories are based on the 1992 BLS Occupational Injury and Illness Classification Structures.

<sup>3</sup> "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.

<sup>4</sup> 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 9 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, 2002.

**Table 4. Fatal occupational injuries and employment by selected worker characteristics, 2002**

Characteristics	Fatalities		Employment (in thousands) <sup>1</sup>		Most frequent events <sup>2</sup> (percent of total)
	Number	Percent	Number	Percent	
Total.....	5,524	100	137,700	100	Highway (25), falls (13)
<b>Employee status</b>					
Wage and salary workers.....	4,472	81	127,818	93	Highway (27), falls (13)
Self-employed <sup>3</sup> .....	1,052	19	9,882	7	Homicides (15), highway (15)
<b>Sex</b>					
Men.....	5,083	92	73,939	54	Highway (24), falls (13)
Women.....	441	8	63,761	46	Homicides (31), highway (30)
<b>Age<sup>4</sup></b>					
Under 16 years.....	16	-	-	-	Nonhighway (38)
16 to 17 years.....	25	-	2,333	2	Highway (24)
18 to 19 years.....	92	2	4,115	3	Highway (27)
20 to 24 years.....	435	8	13,753	10	Highway (24), falls (11)
25 to 34 years.....	1,020	18	30,711	22	Highway (24), homicides (14)
35 to 44 years.....	1,402	25	35,486	26	Highway (26), homicides (12)
45 to 54 years.....	1,250	23	31,319	23	Highway (24)
55 to 64 years.....	783	14	15,676	11	Highway (27), falls (15)
65 years and over.....	494	9	4,306	3	Highway (23), falls (18)
<b>Race or ethnic origin<sup>5</sup></b>					
White.....	3,917	71	99,256	72	Highway (26), falls (13)
Black or African American.....	491	9	14,064	10	Highway (27), homicides (23)
Hispanic or Latino.....	840	15	16,699	12	Highway (21), falls (16)
American Indian or Alaskan Native.....	40	1	-	-	Highway (30)
Asian.....	131	2	-	-	Homicides (40), highway (15)
Native Hawaiian or Pacific Islander.....	9	-	-	-	Highway (56)
Other races or not reported.....	92	2	-	-	Homicides (28), highway (23)

<sup>1</sup> Employment is an annual average of employed civilians 16 years of age and older from the Current Population Survey, 2002, adjusted to include data for resident armed forces from the Department of Defense.

<sup>2</sup> Based on the 1992 BLS Occupational Injury and Illness Classification Structures. "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.

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

<sup>4</sup> There were 7 fatalities for which age was not reported.

<sup>5</sup> 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, 2002

**Table 5. Fatal occupational injuries by state and event or exposure, 2002**

State of injury	Total fatalities <sup>1</sup>		Event or exposure <sup>2</sup> (percent of state total for 2002)					
	2001 <sup>3</sup> (revised)	2002 <sup>4</sup>	Transportation incidents <sup>5</sup>	Assaults and violent acts <sup>6</sup>	Contact with objects and equipment	Falls	Exposure to harmful substances or environments	Fires and explosions
Total.....	5,915	5,524	43	15	16	13	10	3
<b>Northeast</b>	724	708	38	19	16	15	8	4
Connecticut .....	41	39	46	18	13	-	-	-
Maine .....	23	30	83	-	-	-	-	-
Massachusetts .....	54	46	30	20	24	20	-	-
New Hampshire.....	9	19	47	-	26	-	-	-
New Jersey .....	129	129	36	22	10	16	11	5
New York (including N.Y.C.)	220	238	30	24	17	19	7	4
New York City.....	100	100	16	36	15	25	7	-
Pennsylvania.....	225	188	41	12	18	13	11	4
Rhode Island.....	17	8	-	62	-	-	-	-
Vermont .....	6	11	-	-	-	-	-	-
<b>Midwest</b>	1,371	1,315	41	15	19	12	10	3
Illinois .....	231	190	31	23	17	15	10	4
Indiana .....	152	136	40	17	22	7	12	-
Iowa .....	62	56	38	-	29	18	11	-
Kansas .....	94	89	43	10	22	11	10	-
Michigan.....	175	151	31	23	19	12	11	3
Minnesota.....	76	81	54	-	21	10	10	-
Missouri.....	145	175	47	14	13	14	8	3
Nebraska.....	57	83	52	10	20	7	7	-
North Dakota.....	25	25	64	-	-	-	-	-
Ohio .....	209	202	39	15	20	15	9	-
South Dakota .....	35	36	56	-	25	-	-	-
Wisconsin.....	110	91	40	14	22	10	11	-
<b>South</b>	2,519	2,304	43	14	14	14	11	3
Alabama.....	138	102	35	19	23	11	13	-
Arkansas.....	68	80	46	9	11	19	12	-
Delaware.....	10	11	45	-	-	-	-	-
District of Columbia .....	11	8	-	-	-	-	-	-
Florida .....	368	354	47	15	8	14	15	-
Georgia .....	237	197	42	17	11	15	12	3
Kentucky .....	105	146	48	12	14	14	10	-
Louisiana.....	117	103	48	-	12	16	15	7
Maryland.....	64	102	36	23	15	15	9	-
Mississippi.....	111	94	49	16	11	11	7	6
North Carolina .....	203	169	45	9	18	17	9	-
Oklahoma.....	115	92	54	9	12	-	10	10
South Carolina.....	91	107	36	21	22	12	8	-
Tennessee.....	136	140	49	19	17	6	7	-
Texas .....	536	417	38	15	16	17	10	5
Virginia.....	146	142	35	15	15	17	12	4
West Virginia.....	63	40	45	-	32	-	-	-
<b>West</b>	1,299	1,196	49	15	14	11	9	2
Alaska .....	64	42	71	-	14	-	-	-
Arizona.....	87	101	51	21	8	10	8	-
California.....	515	478	42	20	13	12	10	2
Colorado .....	139	123	50	22	11	12	5	-
Hawaii .....	41	24	54	-	-	-	-	-
Idaho.....	45	39	74	-	-	-	-	-
Montana.....	58	51	57	-	16	12	-	-
Nevada.....	40	45	44	16	-	18	13	-
New Mexico.....	59	63	59	8	19	-	-	-
Oregon.....	44	63	37	8	29	10	-	13
Utah .....	65	52	67	-	10	-	-	-
Washington.....	102	83	46	7	25	13	8	-
Wyoming.....	40	32	53	-	19	-	-	-

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

<sup>2</sup> Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

<sup>3</sup> The BLS news release issued September 25, 2002, reported a total of 5,900 fatal work injuries for calendar year 2001. Since then, an additional 15 job-related fatalities were identified, bringing the total job-related fatality count for 2001 to 5,915. Totals exclude fatalities resulting from the September 11 terrorist attacks.

<sup>4</sup> Includes 1 fatality that occurred within the territorial boundaries of the United States, but a State of incident could not be determined.

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

<sup>6</sup> 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, 2001-2002.

**Table 6. CFOI participating agencies and telephone numbers**

<b>State</b>	<b>Agency</b>	<b>Telephone number</b>
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 Financial Services	(850) 922-8953 ext. 113
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 ext. 281
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) 322-1851
Minnesota	Department of Labor and Industry	(651) 284-5568
Mississippi	Department of Health	(601) 576-7186
Missouri	Department of Health	(573) 751-2454
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) 353-7253
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) 353-7253
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	Department of Employment, Research and Planning	(307) 473-3819

## **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 2002 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 exposures 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 2002, there were 108 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 28 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 final data are issued. Over the last 5 years, increases in the published counts based on additional information have averaged less than 20 fatalities per year or less than 0.3 percent of the revised total. The BLS news release issued September 25, 2002, reported a total of 5,900 fatal work injuries for 2001 (excluding work-related fatalities resulting from the terrorist attacks of September 11). Since then, an additional 15 fatal work injuries were identified, bringing the total for 2001 to 5,915.

Beginning in 2004, BLS will release final updated numbers earlier than in past years. Previously, updated numbers were released along with the following year's data in the annual news release. Updated numbers will now be released on the BLS internet in the late spring, or about 3 or 4 months earlier than in past years.

### **Federal/state agency coverage**

The Census of Fatal Occupational Injuries includes data for all fatal work injuries, whether the decedent was working in a job covered by the Occupational Safety and Health Administration (OSHA) or other federal or state agencies or was 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 by each agency.

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 15 percent of the fatal work injuries in 2002.

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.)

**ACKNOWLEDGMENTS:** BLS thanks the participating states, New York City, and the District of Columbia for their efforts in collecting accurate, comprehensive, and useful data on fatal work injuries. BLS also appreciates the efforts of all federal, state, local, and private sector agencies that submitted source documents used to identify fatal work injuries. Among these agencies are the Occupational Safety and Health Administration; the National Transportation Safety Board; the U.S. Coast Guard; the Mine Safety and Health Administration; the Employment Standards Administration (Federal Employees' Compensation and Longshore and Harbor Workers' divisions); the Department of Energy; state vital statistics registrars, coroners, and medical examiners; state departments of health, labor and industries, and workers' compensation agencies; state and local police departments; and state farm bureaus.