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NATIONAL CENSUS OF FATAL OCCUPATIONAL INJURIES IN 2022

There were 5,486 fatal work injuries recorded in the United States in 2022, a 5.7-percent increase from 5,190 in 2021, the U.S. Bureau of Labor Statistics reported today. (See chart 1 and table 1.) The fatal work injury rate was 3.7 fatalities per 100,000 full-time equivalent (FTE) workers, up from 3.6 per 100,000 FTE in 2021. (See chart 2.) These data are from the Census of Fatal Occupational Injuries (CFOI).

Chart 1. Number of fatal work injuries, 2013-22

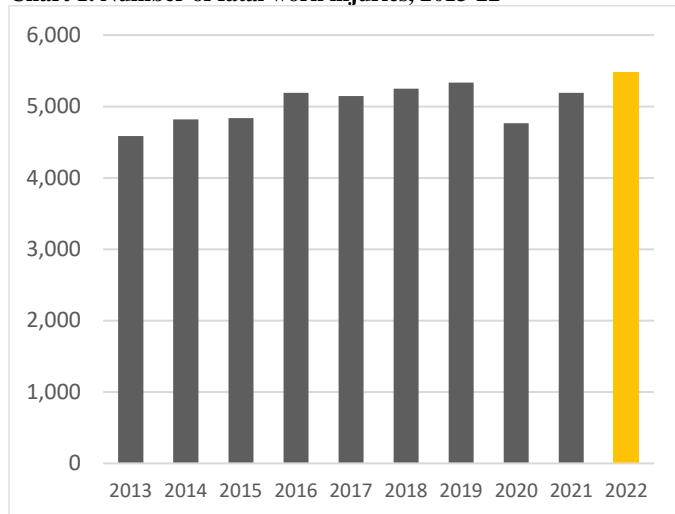
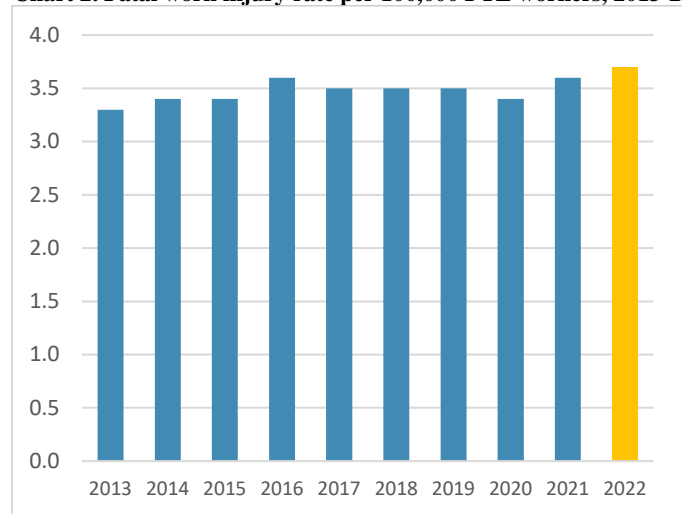


Chart 2. Fatal work injury rate per 100,000 FTE workers, 2013-22



Key findings

- A worker died every 96 minutes from a work-related injury in 2022 compared to 101 minutes in 2021.
- Fatalities due to violence and other injuries by persons or animals increased 11.6 percent to 849 in 2022, compared to 761 in 2021. Homicides accounted for 61.7 percent of these fatalities, with 524 deaths, an 8.9-percent increase from 2021.
- Unintentional overdoses increased 13.1 percent to a series high of 525 fatalities in 2022, up from 464 in 2021, continuing a trend of annual increases since 2012.
- Workers in transportation and material moving occupations experienced 1,620 fatal work injuries in 2022 and represented the occupational group with the most fatalities. The next highest was construction and extraction workers with 1,056 fatalities, an 11.0-percent increase from 2021.
- Transportation incidents remained the most frequent type of fatal event accounting for 37.7 percent of all occupational fatalities. There were 2,066 fatal injuries from transportation incidents in 2022, a 4.2-percent increase from 1,982 in 2021.

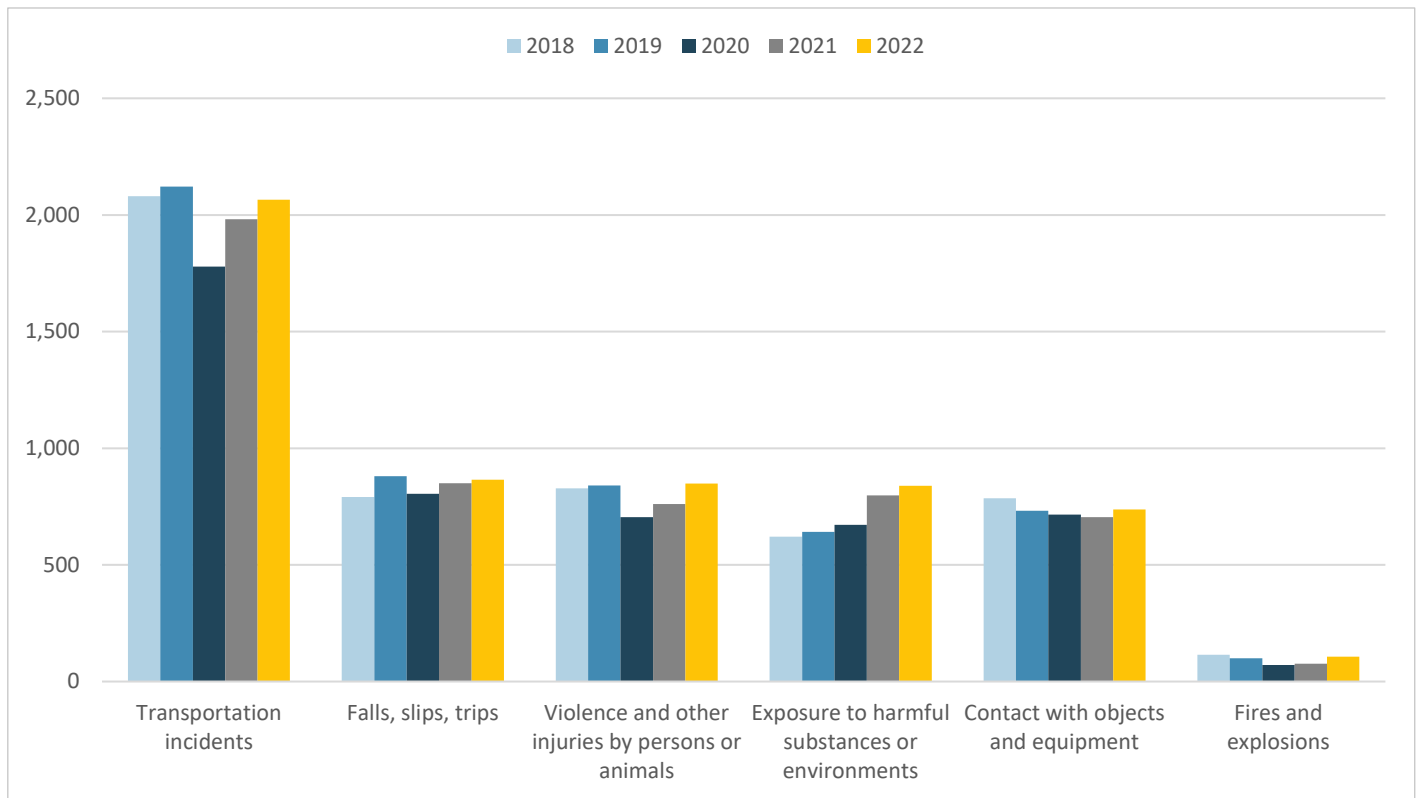
Worker characteristics

- The fatal injury rate for Black or African American workers and for Hispanic or Latino workers increased from 2021 to 2022 with rates up from 4.0 to 4.2 and 4.5 to 4.6 per 100,000 FTE workers, respectively. The rates for these groups were both higher than the all-worker rate of 3.7.
- Transportation incidents were the highest cause of fatalities within both groups, with 278 for Black or African American workers and 439 for Hispanic or Latino workers.
- The second highest cause of fatalities to Black or African American workers was injuries due to violence and other injuries by persons or animals (199), while for Hispanic or Latino workers it was falls, slips, or trips (286).
- Foreign-born Hispanic or Latino workers accounted for 63.5 percent (792) of total Hispanic or Latino worker fatalities (1,248). Fatalities in the construction industry accounted for 316 of the 792 foreign-born Hispanic or Latino worker deaths in 2022.
- Black or African American fatalities accounted for 13.4 percent (734) of all fatalities in 2022 but represented 33.4 percent (175) of fatalities from homicides.
- Similarly, women made up 8.1 percent (445) of all workplace fatalities but accounted for 15.3 percent (80) of homicides in 2022.
- Workers in the 55 to 64 age group continued to have the highest number of fatalities in 2022 with 1,175 (21.4 percent of total fatalities), up from 1,140 in 2021. Transportation incidents were the highest cause of fatalities for this age group (455), followed by falls, slips, and trips (251).

Fatal event or exposure

- Despite consecutive increases in 2021 and 2022, transportation incidents were still down 2.6 percent from pre-pandemic levels in 2019 when there were 2,122 fatalities. (See chart 3.)
- Roadway incidents involving motorized land vehicles increased 9.3 percent between 2021 and 2022, leading to a series high of 1,369 fatalities. Pedestrian vehicular incidents were down 3.6 percent in 2022 with 325 fatalities, which is the lowest number of fatalities since 2018.
- Suicides increased 13.1 percent to 267 fatalities in 2022. This followed consecutive decreases in both 2020 and 2021.
- Exposure to harmful substances or environments increased 5.1 percent in 2022 and led to 839 worker fatalities. This increase was largely due to the increase in unintentional overdoses which accounted for over 60 percent of fatalities in this category.
- Fatalities due to exposure to temperature extremes increased 18.6 percent in 2022, rising to 51 from 43 in 2021. Fatalities specifically due to environmental heat were 43 in 2022, up from 36 in 2021.
- Almost a quarter (24.6 percent) of fatalities due to homicides occurred while a worker was tending a retail establishment or waiting on customers.
- Fatalities due to contact with objects and equipment increased 4.7 percent from 705 fatalities in 2021 to 738 in 2022. This is the highest count for this event category since 2018. Machinery was the source of 199 fatalities within this category.
- Work-related fatalities due to falls, slips, and trips increased 1.8 percent in 2022, resulting in 865 fatalities, up from 850 in 2021. Most fatalities in this category (80.9 percent) were due to falls to lower levels, which had 700 fatalities in 2022. This was a 2.9-percent increase from 680 fatalities in 2021.

Chart 3. Fatal work injuries by major event or exposure, 2018-22

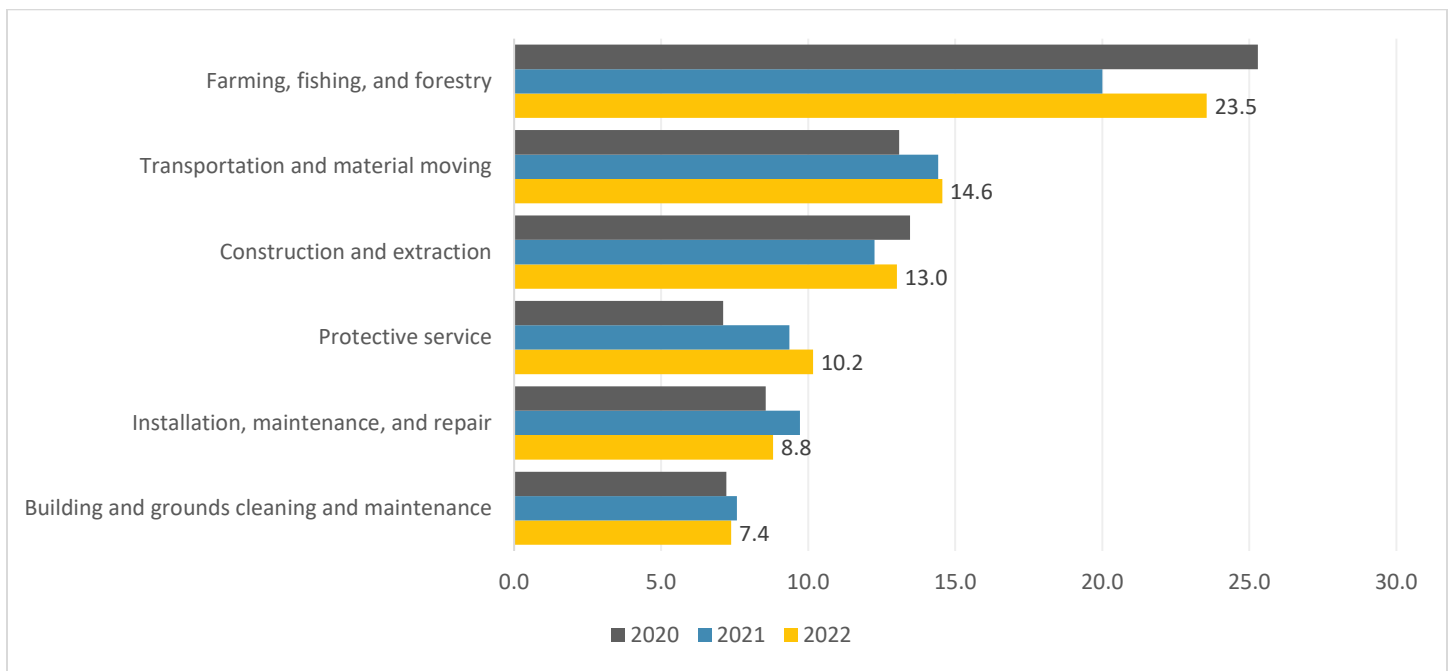


Occupation

- With a rate of 14.6 fatalities per 100,000 FTE workers, transportation and material moving occupations had the most fatalities in 2022 (1,620), up from 1,523 in 2021. The increase was due to fatalities to driver/sales workers and truck drivers increasing by 8.0 percent, from 1,032 fatalities in 2021 to 1,115 in 2022.
- Workers in construction and extraction occupations had the second most fatalities (1,056) in 2022 compared to other occupation groups. Falls, slips, or trips were the events precipitating 423 of these fatalities. The fatality rate for this occupation group increased from 12.3 deaths per 100,000 FTE workers in 2021 to 13.0 in 2022.
- Fatalities among protective service occupations increased 10.9 percent in 2022, rising to 335 from 302 in 2021. The rate for this occupational group increased to 10.2 fatalities per 100,000 FTE workers in 2022, up from 9.4 in 2021. Homicides (121) and suicides (17) accounted for 41.2 percent of these fatalities.
- The number and rate of fatalities for installation, maintenance, and repair occupations decreased in 2022. The total fatalities decreased to 431 in 2022 from 475 in 2021 and the rate decreased to 8.8 fatalities per 100,000 FTE workers from 9.7 in 2021. Work fatalities among building and grounds cleaning and maintenance workers also decreased in 2022 to 352 from 356 in 2021. The 2022 rate was 7.4 and in 2021 it was 7.6.
- Farming, fishing, and forestry occupations had the highest fatality rate (23.5 fatalities per 100,000 FTE workers) of all occupational groups in 2022, up from 20.0 in 2021.

Fatal injury counts and rates by occupation, industry, and worker demographics are available at www.bls.gov/iif/fatal-injuries-tables.htm.

Chart 4. Fatal work injury rates per 100,000 full-time equivalent workers by selected occupational groups, 2020-22



TECHNICAL NOTES

Background

The Census of Fatal Occupational Injuries (CFOI), part of the Bureau of Labor Statistics (BLS) Occupational Safety and Health Statistics (OSHS) program, is a count of all fatalities resulting from workplace injuries occurring in the U.S. during the calendar year. The CFOI uses a variety of state, federal, and independent data sources to identify, verify, and describe fatal work injuries. This ensures counts are as complete and accurate as possible. For the 2022 data, over 27,200 unique source documents were reviewed as part of the data collection process. For technical information and definitions for the CFOI, see the BLS Handbook of Methods on the BLS website at www.bls.gov/opub/hom/cfoi/home.htm and the CFOI definitions at www.bls.gov/iif/definitions/occupational-safety-and-health-definitions.htm. Fatal injury rates are subject to sampling error as they are calculated using employment data from the Current Population Survey, a sample of households, and the BLS Local Area Unemployment Statistics. For more information on sampling error, see www.bls.gov/iif/additional-resources/reliability-of-estimates.htm.

The Survey of Occupational Injuries and Illnesses (SOII), another component of the OSHS program, presents frequency counts and incidence rates by industry, detailed case circumstances, and worker characteristics for nonfatal workplace injuries and illnesses for cases that result in days away from work and days of job transfer or restriction. For these data, access the BLS website: www.bls.gov/iif.

Identification and verification of work-related fatalities

In 2022, work relationship could not be independently verified by multiple source documents for 32 fatal work injuries. 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 are included.

Federal/State agency coverage

The CFOI includes data for all fatal work injuries, some of which may be outside the scope of other agencies or regulatory coverage. Comparisons between CFOI counts and those released by other agencies should account for the different coverage requirements and definitions used by each agency. For more information on the scope of CFOI, see www.bls.gov/iif/overview/cfoi-scope.htm and www.bls.gov/opub/hom/cfoi/concepts.htm.

Latency Cases

Latent fatal occupational injury cases occur when the date of injury differs from the date of death. In some cases, the death occurs in a different year than the occupational injury and are known as cross-year latent cases. In 2022, there were 186 cases where this occurred, and 157 of these latent cases occurred more than 30 days prior to the start of 2022. For more information on latent cases, see www.bls.gov/opub/btn/volume-10/latency-in-fatal-occupational-injuries.htm.

CFOI Methodology

Starting with the reference year 2019, CFOI modernized its disclosure methodology further strengthening its protection of confidential data. Individually identifiable data collected by the CFOI are used exclusively for statistical purposes and are protected under the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA). These data are collected under a pledge of confidentiality and therefore require BLS to prevent disclosure of identifying information of decedents. For more information see www.bls.gov/iif/questions-and-answers.htm.

Coronavirus (COVID-19) Pandemic and the Census of Fatal Occupational Injuries

CFOI reports fatal workplace injuries only. These may include fatal workplace injuries complicated by an illness such as COVID-19. Fatal workplace illnesses not precipitated by an injury are not in scope for CFOI. CFOI does not report any illness related information, including COVID-19. Additional information is available at www.bls.gov/covid19/effects-of-covid-19-on-workplace-injuries-and-illnesses-compensation-and-occupational-requirements.htm.

Acknowledgements

BLS thanks the participating states, New York City, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam for their efforts in collecting accurate, comprehensive, and useful data on fatal work injuries. Although data for Puerto Rico, the U.S. Virgin Islands, and Guam are not included in the national totals, results for these jurisdictions are available. Participating agencies may be contacted to request more detailed state results. Contact information is available at www.bls.gov/iif/state-data.htm.

BLS also appreciates the efforts of all federal, state, local, and private sector entities that provided 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 Office of Workers' Compensation Programs (Federal Employees' Compensation and Longshore and Harbor Workers' Compensation divisions); the Federal Railroad Administration; the National Highway Traffic Safety Administration; state vital statistics registrars, coroners, and medical examiners; state departments of health, labor, and industrial relations and workers' compensation agencies; state and local police departments; and state farm bureaus.

If you are deaf, hard of hearing, or have a speech disability, please dial 7-1-1 to access telecommunications relay services.

Table 1: Fatal occupational injuries by selected demographic characteristics, 2018-22

Characteristic	2018	2019	2020	2021	2022
Total ¹	5,250	5,333	4,764	5,190	5,486
Employee status					
Wage and salary workers ²	4,178	4,240	3,864	4,284	4,601
Self-employed ³	1,072	1,093	900	906	885
Gender					
Women	413	437	387	448	445
Men	4,837	4,896	4,377	4,741	5,041
Age					
Under 16 years	13	17	14	7	6
16 to 17 years	9	17	12	17	13
18 to 19 years	56	50	66	85	77
20 to 24 years	282	325	260	289	323
25 to 34 years	946	866	833	882	962
35 to 44 years	966	967	898	977	1,058
45 to 54 years	1,114	1,082	954	1,087	1,111
55 to 64 years	1,104	1,212	1,051	1,140	1,175
65 years and over	759	793	676	702	761
Race or ethnic origin⁴					
White (non-Hispanic)	3,405	3,297	2,898	3,103	3,167
Black or African-American (non-Hispanic)	615	634	541	653	734
Hispanic or Latino	961	1,088	1,072	1,130	1,248
American Indian or Alaskan Native (non-Hispanic)	42	30	32	41	35
Asian (non-Hispanic)	153	181	150	178	169
Native Hawaiian or Pacific Islander (non-Hispanic)	10	14	8	18	9
Multiple races (non-Hispanic)	14	22	14	11	16
Other races or not reported (non-Hispanic)	50	67	49	56	108

¹ The Census of Fatal Occupational Injuries (CFOI) has published data on fatal occupational injuries for the United States since 1992. During this time, the classification systems and definitions of many data elements have changed. See the CFOI Definitions page (www.bls.gov/iif/definitions/census-of-fatal-occupational-injuries-definitions.htm) for a more detailed description of each data element.

² May include volunteers and workers receiving other types of compensation. Cases where employment status is unknown are included in the counts of wage and salary workers.

³ Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

⁴ Persons identified as Hispanic or Latino may be of any race. The race categories shown exclude data for Hispanics and Latinos. Cases where ethnicity is unknown are included in counts of non-Hispanic workers.

Note: Data for all years are revised and final. Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. N.e.c. means "not elsewhere classified." CFOI fatal injury counts exclude illness-related deaths unless precipitated by an injury event.

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

Table 2: Fatal occupational injuries for selected events or exposures, 2018-22

Characteristic	2018	2019	2020	2021	2022
Total ¹	5,250	5,333	4,764	5,190	5,486
Event or exposure²					
Violence and other injuries by persons or animals	828	841	705	761	849
Intentional injury by person	757	761	651	718	791
Homicides	453	454	392	481	524
Shooting by other person—intentional	351	363	304	387	435
Stabbing, cutting, slashing, piercing	44	42	50	45	44
Suicides	304	307	259	236	267
Transportation incidents	2,080	2,122	1,778	1,982	2,066
Aircraft incidents	133	152	80	100	101
Rail vehicle incidents	48	47	32	33	43
Pedestrian vehicular incident	325	341	330	337	325
Pedestrian struck by vehicle in work zone	58	56	57	49	30
Water vehicle incident	58	63	74	39	31
Roadway incident involving motorized land vehicle	1,276	1,270	1,038	1,253	1,369
Roadway collision with other vehicle	677	729	537	649	763
Roadway collision moving in same direction	183	194	142	184	207
Roadway collision moving in opposite directions, oncoming	243	258	198	218	252
Roadway collision moving perpendicularly	141	153	106	129	164
Roadway collision with object other than vehicle	373	325	302	319	352
Vehicle struck object or animal on side of roadway	345	301	275	283	314
Roadway noncollision incident	222	212	196	279	249
Jack-knifed or overturned, roadway	170	164	155	207	181
Nonroadway incident involving motorized land vehicle	225	236	206	201	185
Nonroadway noncollision incident	164	193	167	153	128
Jack-knifed or overturned, nonroadway	105	128	101	100	77
Fire or explosion	115	99	71	76	107
Fall, slip, trip	791	880	805	850	865
Fall on same level	154	146	136	145	144
Fall to lower level	615	711	645	680	700
Fall from collapsing structure or equipment	50	37	36	51	33
Fall through surface or existing opening	83	95	63	77	90
Exposure to harmful substances or environments	621	642	672	798	839
Exposure to electricity	160	166	126	152	145
Exposure to temperature extremes	60	53	62	43	51
Exposure to other harmful substances	355	379	448	551	586
Inhalation of harmful substance	42	59	50	72	49
Contact with objects and equipment	786	732	716	705	738
Struck by object or equipment	566	518	468	473	484
Struck by powered vehicle nontransport	215	205	174	169	181
Struck by falling object or equipment	278	241	217	227	238
Struck by discharged or flying object	32	26	37	24	19
Caught in or compressed by equipment or objects	137	120	142	143	142
Caught in running equipment or machinery	106	93	89	93	102
Struck, caught, or crushed in collapsing structure, equipment, or material	73	83	93	79	95

¹ The Census of Fatal Occupational Injuries (CFOI) has published data on fatal occupational injuries for the United States since 1992. During this time, the classification systems and definitions of many data elements have changed. See the CFOI Definitions page (www.bls.gov/iif/definitions/census-of-fatal-occupational-injuries-definitions.htm) for a more detailed description of each data element.

² Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward.

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

Table 3: Fatal occupational injuries for selected occupations, 2018-22

Characteristic	2018	2019	2020	2021	2022
Total ¹	5,250	5,333	4,764	5,190	5,486
Occupation (SOC)²					
Management occupations	387	380	361	323	342
Business and financial operations occupations	38	29	23	27	32
Computer and mathematical occupations	12	15	8	6	12
Architecture and engineering occupations	30	43	31	29	41
Life, physical, and social science occupations	18	15	17	10	20
Community and social services occupations	23	31	26	40	19
Legal occupations	15	11	5	11	11
Educational instruction and library occupations	27	24	13	16	28
Arts, design, entertainment, sports, and media occupations	71	40	36	45	49
Healthcare practitioners and technical occupations	65	56	51	57	65
Healthcare support occupations	32	38	44	32	38
Protective service occupations	270	231	229	302	335
Fire fighting and prevention workers	33	24	-	-	-
Law enforcement workers	127	97	115	-	-
Food preparation and serving related occupations	100	99	82	101	123
Building and grounds cleaning and maintenance occupations	350	333	307	356	352
Building cleaning and pest control workers	66	63	61	80	74
Grounds maintenance workers	225	229	202	225	222
Personal care and service occupations	63	61	58	64	61
Sales and related occupations	241	240	200	200	212
Supervisors, sales workers	102	99	73	70	67
Retail sales workers	99	96	95	83	112
Office and administrative support occupations	69	92	69	91	82
Farming, fishing, and forestry occupations	262	291	264	218	223
Agricultural workers	158	183	148	133	146
Fishing and hunting workers	31	44	42	23	16
Forest, conservation, and logging workers	57	49	42	46	55
Construction and extraction occupations	1,003	1,066	976	951	1,056
Supervisors of construction and extraction workers	144	136	88	117	113
Construction trades workers	731	809	771	726	811
Extraction workers	64	50	59	54	70
Installation, maintenance, and repair occupations	420	438	393	475	431
Vehicle and mobile equipment mechanics, installers, and repairers	152	155	135	152	140
Production occupations	225	245	224	242	268
Transportation and material moving occupations	1,443	1,481	1,282	1,523	1,620
Air transportation workers	71	85	50	68	74
Motor vehicle operators	1,044	1,091	933	1,103	1,198
Material moving workers	255	238	218	284	281
Military occupations³	82	65	-	-	-

¹ The Census of Fatal Occupational Injuries (CFOI) has published data on fatal occupational injuries for the United States since 1992. During this time, the classification systems and definitions of many data elements have changed. See the CFOI Definitions page (www.bls.gov/iif/definitions/census-of-fatal-occupational-injuries-definitions.htm) for a more detailed description of each data element.

² CFOI has used several versions of the Standard Occupation Classification (SOC) system since 2003 to define occupation. For complete information on the version of SOC used in these years, see our definitions page at <https://www.bls.gov/iif/definitions/census-of-fatal-occupational-injuries-definitions.htm>. Cases where occupation is unknown are included in the total.

³ Includes fatal injuries to persons identified as resident armed forces regardless of individual occupation listed.

Note: Data for all years are revised and final. Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. N.e.c. means "not elsewhere classified." CFOI fatal injury counts exclude illness-related deaths unless precipitated by an injury event.

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

Table 4: Fatal work injury rates¹ per 100,000 full-time equivalent workers by selected occupations, 2020-22

Characteristic	2020	2021	2022
All workers ²	3.4	3.6	3.7
Occupation (SOC)³			
Farming, fishing, and forestry	25.3	20.0	23.5
Transportation and material moving	13.1	14.4	14.6
Construction and extraction	13.5	12.3	13.0
Protective Service	7.1	9.4	10.2
Installation, maintenance, and repair	8.6	9.7	8.8
Building and grounds cleaning and maintenance	7.2	7.6	7.4

¹ Fatal injury rates are per 100,000 full-time equivalent (FTE) workers. Fatal injury rates exclude workers under the age of 16 years, volunteers, and resident military. Complete national rates can be found at www.bls.gov/iif/fatal-injuries-tables.htm#rates. Complete state rates can be found at www.bls.gov/iif/state-data.htm. National and state rates are calculated using different methodology and cannot be directly compared. See www.bls.gov/opub/hom/cfoi/calculation.htm#comparisons-of-national-and-state-rates for more information on how rates are calculated and caveats for comparison. N/A means a rate was not published for this group.

² The Census of Fatal Occupational Injuries (CFOI) has published data on fatal occupational injuries for the United States since 1992. During this time, the classification systems and definitions of many data elements have changed. See the CFOI Definitions page (www.bls.gov/iif/definitions/census-of-fatal-occupational-injuries-definitions.htm) for a more detailed description of each data element.

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