

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry¹ by selected subindustries, 2004

Characteristics	All mining ¹	Oil and gas ²	Mining (except oil and gas)		
			Coal mining ³	Metal ore mining ⁴	Nonmetallic mineral mining and quarrying ⁵
Total	152	98	27	5	20
Employee status					
Wage and salary workers ⁶	145	94	27	5	18
Self-employed ⁷	7	4	—	—	—
Sex					
Men	152	98	27	5	20
Age					
20 to 24 years	13	12	—	—	—
25 to 34 years	33	23	7	—	—
35 to 44 years	37	25	3	—	6
45 to 54 years	39	23	11	—	5
55 to 64 years	23	11	6	—	5
65 and over	6	3	—	—	—
Race or ethnic origin⁸					
White	132	80	27	5	19
Black or African American	5	4	—	—	—
Hispanic or Latino	14	13	—	—	—
Event or exposure⁹					
Transportation incidents	61	45	8	—	5
Highway	36	31	—	—	3
Collision between vehicles, mobile equipment	16	14	—	—	—
Moving in opposite directions, oncoming	7	6	—	—	—
Moving in intersection	6	5	—	—	—
Vehicle struck stationary object or equipment on side of road	8	7	—	—	—
Noncollision	10	8	—	—	—
Jack-knifed or overturned--no collision	9	7	—	—	—
Nonhighway (farm, industrial premises)	10	—	6	—	—
Vehicle, mobile equipment struck stationary object ..	4	—	4	—	—
Noncollision accident	4	—	—	—	—
Worker struck by vehicle, mobile equipment	4	—	—	—	—
Worker struck by vehicle, mobile equipment in parking lot or non-road area	3	—	—	—	—
Aircraft	10	10	—	—	—
Contact with objects and equipment	56	29	14	—	9
Struck by object	25	17	3	—	4
Struck by falling object	12	7	—	—	3
Struck by flying object	4	—	—	—	—
Struck by dislodged flying object	3	—	—	—	—
Struck by swinging or slipping object	3	—	—	—	—
Caught in or compressed by equipment or objects	21	9	6	—	3
Caught in running equipment or machinery	7	3	—	—	—
Compressed or pinched by rolling, sliding, or shifting objects	7	4	—	—	—
Caught in or crushed in collapsing materials	10	3	5	—	—
Caught in or crushed in collapsing structure	4	3	—	—	—
Falls	13	8	—	—	4
Fall to lower level	13	8	—	—	4

See footnotes at end of table.

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry¹ by selected subindustries, 2004 — Continued

Characteristics	All mining ¹	Oil and gas ²	Mining (except oil and gas)		
			Coal mining ³	Metal ore mining ⁴	Nonmetallic mineral mining and quarrying ⁵
Event or exposure⁹ - continued					
Fall from building girders or other structural steel	5	4	—	—	—
Fall from nonmoving vehicle	3	—	—	—	—
Exposure to harmful substances or environments	9	5	3	—	—
Contact with electric current	5	—	3	—	—
Contact with wiring, transformers, or other electrical component	3	—	3	—	—
Fires and explosions	12	11	—	—	—
Fires--unintended or uncontrolled	8	7	—	—	—
Explosion	4	4	—	—	—
Explosion of pressure vessel or piping	4	4	—	—	—
Primary source¹⁰					
Vehicles	62	47	7	3	4
Air vehicle	10	10	—	—	—
Aircraft--powered rotary wing	10	10	—	—	—
Helicopter	10	10	—	—	—
Highway vehicle, motorized	41	30	5	—	3
Truck	37	26	5	—	3
Pickup truck	21	17	—	—	—
Semitrailer, tractor trailer, trailer truck	6	5	—	—	—
Plant and industrial powered vehicles, tractors	6	3	—	—	—
Forklift	3	—	—	—	—
Structures and surfaces	21	12	5	—	4
Floors, walkways, ground surfaces	13	8	—	—	4
Floors	3	—	—	—	—
Ground	7	4	—	—	—
Structures	6	4	—	—	—
Towers, poles	3	3	—	—	—
Machinery	25	11	7	—	5
Construction, logging, and mining machinery	13	3	6	—	—
Mining and drilling machinery	5	—	—	—	—
Material handling (cranes, conveyers, jacks)	9	6	—	—	—
Parts and materials	21	14	4	—	—
Building materials--solid elements	12	10	—	—	—
Pipes, ducts, tubing	9	9	—	—	—
Structural metal materials	3	—	—	—	—
Machine, tool, and electrical parts	5	—	3	—	—
Electric parts	3	—	3	—	—
Persons, plants, animals, and minerals	4	—	—	—	3
Nonmetallic minerals, except fuel	4	—	—	—	3
Rocks, crushed stone	3	—	—	—	—
Chemicals and chemical products	3	—	—	—	—
Other	12	9	—	—	—
Atmospheric and environmental conditions	7	5	—	—	—
Fire, flame, smoke	5	—	—	—	—
Fire, flame	4	—	—	—	—

See footnotes at end of table.

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry¹ by selected subindustries, 2004 — Continued

Characteristics	All mining ¹	Oil and gas ²	Mining (except oil and gas)		
			Coal mining ³	Metal ore mining ⁴	Nonmetallic mineral mining and quarrying ⁵
Secondary source¹¹					
Vehicles	22	17	—	—	3
Highway vehicle, motorized	20	15	—	—	3
Truck	17	12	—	—	3
Pickup truck	6	5	—	—	—
Semitrailer, tractor trailer, trailer truck	6	5	—	—	—
Structures and surfaces	27	17	5	—	3
Floors, walkways, ground surfaces	4	—	—	—	—
Other structural elements	3	—	3	—	—
Structures	18	15	—	—	—
Mines, caves, tunnels	3	—	—	—	—
Towers, poles	7	7	—	—	—
Other structures	6	5	—	—	—
Guardrails, road dividers	3	3	—	—	—
Machinery	15	6	6	—	—
Construction, logging, and mining machinery	6	—	5	—	—
Material handling (cranes, conveyers, jacks)	7	3	—	—	—
Cranes	3	—	—	—	—
Parts and materials	11	4	4	—	3
Building materials--solid elements	4	—	3	—	—
Fasteners, connectors, ropes, ties	3	—	—	—	—
Machine, tool, and electrical parts	3	—	—	—	—
Persons, plants, animals, and minerals	3	—	—	—	—
Chemicals and chemical products	7	6	—	—	—
Coal, natural gas, petroleum fuels and products	7	6	—	—	—
Tools, instruments, and equipment	4	4	—	—	—
Handtools--powered	3	3	—	—	—
Containers	4	3	—	—	—
Other	14	12	—	—	—
Atmospheric and environmental conditions	3	—	—	—	—
Steam, vapors, liquids	9	9	—	—	—
Liquids	9	9	—	—	—
Water	9	9	—	—	—
Not reported	45	27	9	—	5
Nature⁹					
Burns	7	4	—	—	—
Heat burns, scalds	6	4	—	—	—
Intracranial injuries	28	20	4	—	4
Multiple intracranial injuries	22	17	3	—	—
Multiple traumatic injuries and disorders	68	50	11	—	5
Intracranial injuries and injuries to internal organs	36	30	4	—	—
Other combinations of traumatic injuries	8	5	—	—	—
Other traumatic injuries and disorders	44	21	9	—	10
Asphyxiations/strangulations, suffocations ¹²	9	3	—	—	5
Drownings	3	—	—	—	—
Electrocutions, electric shocks	4	—	—	—	—

See footnotes at end of table.

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry¹ by selected subindustries, 2004 — Continued

Characteristics	All mining ¹	Oil and gas ²	Mining (except oil and gas)		
			Coal mining ³	Metal ore mining ⁴	Nonmetallic mineral mining and quarrying ⁵
Nature⁹ - continued					
Internal injuries to organs and blood vessels of the trunk	25	12	6	—	3
Other poisonings and toxic effects	3	—	—	—	—
Other poisonings and toxic effects, n.e.c.	3	—	—	—	—
Part of body⁹					
Head	28	20	4	—	4
Cranial region, including skull	28	20	4	—	4
Brain	28	20	4	—	4
Trunk	28	12	8	—	4
Chest, including ribs, internal organs	14	6	4	—	—
Abdomen	4	—	—	—	—
Multiple trunk locations	7	—	3	—	—
Body systems	19	10	3	—	6
Multiple body parts	73	54	11	—	6
Worker activity					
Vehicular and transportation operations	64	46	11	3	3
Driving, operating	39	26	8	—	3
Truck	29	21	3	—	3
Industrial or construction vehicle	5	—	5	—	—
Riding in, on	19	17	—	—	—
Airplane	10	10	—	—	—
Truck	5	3	—	—	—
Boarding, alighting	3	—	—	—	—
Using or operating tools, machinery	34	20	6	—	7
Operating heavy equipment	18	7	6	—	5
Mine machinery	4	—	—	—	—
Earth moving machinery	6	—	—	—	—
Operating machinery	4	3	—	—	—
Operating or reading gauges, valves, switches	4	4	—	—	—
Welding	5	4	—	—	—
Constructing, repairing, cleaning	31	15	9	—	5
Construction, assembling, dismantling	14	6	6	—	—
Installing	4	—	3	—	—
Dismantling, removing	8	4	3	—	—
Repair, maintenance	9	6	—	—	—
Inspecting or checking	3	—	—	—	—
Cleaning, washing	4	—	—	—	—
Materials handling operations	14	11	—	—	3
Loading, unloading (packing, unpacking) materials	5	4	—	—	—
Materials handling, n.e.c.	5	4	—	—	—
Physical activity¹³, n.e.c.	3	—	—	—	—
All other activities	6	4	—	—	—
Activity, n.e.c.	4	—	—	—	—
Location					
Street or highway	37	32	—	—	3

See footnotes at end of table.

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry¹ by selected subindustries, 2004 — Continued

Characteristics	All mining ¹	Oil and gas ²	Mining (except oil and gas)		
			Coal mining ³	Metal ore mining ⁴	Nonmetallic mineral mining and quarrying ⁵
Location - continued					
Interstate, freeway, or expressway	3	3	—	—	—
Other highway (State or U.S.)	19	17	—	—	—
Local road or street	10	9	—	—	—
Industrial place or premise	48	44	—	—	3
Construction site	3	—	—	—	—
Industrial place or premises, nec	37	37	—	—	—
Other specified place¹⁴	19	19	—	—	—
Sea	13	13	—	—	—
Farm	3	3	—	—	—
Farm land under cultivation, fields, meadows	3	3	—	—	—
Mine, quarry	45	—	25	5	14
Gravel, sand pit	5	—	—	—	5
Mine	29	—	20	4	4
Occupation¹⁵ (SOC)					
Management occupations	6	3	—	—	3
Other management occupations	3	—	—	—	—
Miscellaneous managers	3	—	—	—	—
Managers, all other	3	—	—	—	—
Life, physical, and social science occupations	3	—	—	—	—
Construction and extraction occupations	90	58	20	—	9
Supervisors, construction and extraction workers	16	12	—	—	4
First-line supervisors/managers of construction trades and extraction workers	16	12	—	—	4
First-line supervisors/managers of construction trades and extraction workers	16	12	—	—	4
Construction trades workers	4	—	3	—	—
Extraction workers	70	46	17	—	5
Derrick, rotary drill, and service unit operators, oil, gas, and mining	15	15	—	—	—
Derrick operators, oil and gas	6	6	—	—	—
Rotary drill operators, oil and gas	8	8	—	—	—
Earth drillers, except oil and gas	3	—	—	—	3
Earth drillers, except oil and gas	3	—	—	—	3
Mining machine operators	20	3	14	—	—
Continuous mining machine operators	4	—	4	—	—
Mining machine operators, all other	15	3	9	—	—
Roof bolters, mining	3	—	—	—	—
Roof bolters, mining	3	—	—	—	—
Roustabouts, oil and gas	7	7	—	—	—
Roustabouts, oil and gas	7	7	—	—	—
Helpers--extraction workers	3	3	—	—	—
Helpers--extraction workers	3	3	—	—	—
Miscellaneous extraction workers	17	16	—	—	—
Extraction workers, all other	17	16	—	—	—
Installation, maintenance, and repair occupations	16	9	—	—	—
Vehicle and mobile equipment mechanics, installers, and repairers	3	—	—	—	—
Other installation, maintenance, and repair occupations	11	7	—	—	—
Industrial machinery installation, repair, and maintenance workers	9	5	—	—	—

See footnotes at end of table.

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry¹ by selected subindustries, 2004 — Continued

Characteristics	All mining ¹	Oil and gas ²	Mining (except oil and gas)		
			Coal mining ³	Metal ore mining ⁴	Nonmetallic mineral mining and quarrying ⁵
Occupation¹⁵ (SOC) - continued					
Industrial machinery mechanics	5	4	—	—	—
Maintenance and repair workers, general	3	—	—	—	—
Production occupations	8	7	—	—	—
Metal workers and plastic workers	3	—	—	—	—
Welding, soldering, and brazing workers	3	—	—	—	—
Welders, cutters, solderers, and brazers	3	—	—	—	—
Other production occupations	4	4	—	—	—
Transportation and material moving occupations	25	15	5	—	5
Motor vehicle operators	10	5	—	—	4
Driver/sales workers and truck drivers	10	5	—	—	4
Truck drivers, heavy and tractor-trailer	9	4	—	—	4
Material moving workers	13	9	3	—	—
Laborers and material movers, hand	5	4	—	—	—
Laborers and freight, stock, and material movers, hand	5	4	—	—	—
Pumping station operators	4	4	—	—	—
Wellhead pumps	4	4	—	—	—

¹ Includes fatalities at all establishments categorized as Mining (Sector 21) in the North American Industry Classification System, 2002, including establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in Oil and Gas Extraction.

² Oil and gas comprises establishments in NAICS 211, NAICS 213111, and 213112.

³ Coal mining comprises establishments in NAICS 2121 and 213113.

⁴ Metal ore mining comprises establishments in NAICS 2122 and 213114.

⁵ Nonmetallic mineral mining and quarrying comprises establishments in NAICS 2123 and 213115.

⁶ May include volunteers and workers receiving other types of compensation.

⁷ 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.

⁸ Persons identified as Hispanic or Latino may be of any race. The racial categories shown exclude data for Hispanics and Latinos.

⁹ Based on the 1992 BLS Occupational Injury and Illness Classification Manual.

¹⁰ The primary source of injury identifies the object, substance, or exposure that directly produced or inflicted the injury. For most transportation incidents, the primary source identifies the vehicle in which the deceased was an occupant. For most falls, the primary source identifies the surface or object contacted.

¹¹ The secondary source of injury, if any, identifies the object, substance, or person that generated the source of injury or that contributed to the event or exposure. For vehicle collisions, the deceased's vehicle is the primary source and the other object (truck, road divider, etc.) is the secondary source. For most homicides, the "bullet" is the primary source and the "perpetrator" is the secondary source. For most falls, the secondary source identifies the equipment or surface from which the worker fell.

¹² May include some asphyxiations due to chest compressions.

¹³ Includes, but is not limited to, walking, sitting, running, and climbing ladders or stairs.

¹⁴ Primarily includes outdoor areas such as bodies of water, woods, noncultivated fields, and parking lots.

¹⁵ Based on the 2000 Standard Occupational Classification system.

NOTE: Totals for 2004 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."

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