

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry<sup>1</sup> by selected subindustries, 2004

Characteristics	All mining <sup>1</sup>	Oil and gas <sup>2</sup>	Mining (except oil and gas)		
			Coal mining <sup>3</sup>	Metal ore mining <sup>4</sup>	Nonmetallic mineral mining and quarrying <sup>5</sup>
Total .....	152	98	27	5	20
<b>Employee status</b>					
Wage and salary workers <sup>6</sup> .....	145	94	27	5	18
Self-employed <sup>7</sup> .....	7	4	—	—	—
<b>Sex</b>					
Men .....	152	98	27	5	20
<b>Age</b>					
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	—	—	—
<b>Race or ethnic origin<sup>8</sup></b>					
White .....	132	80	27	5	19
Black or African American .....	5	4	—	—	—
Hispanic or Latino .....	14	13	—	—	—
<b>Event or exposure<sup>9</sup></b>					
<b>Transportation incidents</b> .....	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	—	—	—
<b>Contact with objects and equipment</b> .....	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	—	—	—
<b>Falls</b> .....	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 industry<sup>1</sup> by selected subindustries, 2004 — Continued

Characteristics	All mining <sup>1</sup>	Oil and gas <sup>2</sup>	Mining (except oil and gas)		
			Coal mining <sup>3</sup>	Metal ore mining <sup>4</sup>	Nonmetallic mineral mining and quarrying <sup>5</sup>
<b>Event or exposure<sup>9</sup> - continued</b>					
Fall from building girders or other structural steel .....	5	4	—	—	—
Fall from nonmoving vehicle .....	3	—	—	—	—
<b>Exposure to harmful substances or environments .....</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>—</b>	<b>—</b>
Contact with electric current .....	5	—	3	—	—
Contact with wiring, transformers, or other electrical component .....	3	—	3	—	—
<b>Fires and explosions .....</b>	<b>12</b>	<b>11</b>	<b>—</b>	<b>—</b>	<b>—</b>
Fires--unintended or uncontrolled .....	8	7	—	—	—
Explosion .....	4	4	—	—	—
Explosion of pressure vessel or piping .....	4	4	—	—	—
<b>Primary source<sup>10</sup></b>					
<b>Vehicles .....</b>	<b>62</b>	<b>47</b>	<b>7</b>	<b>3</b>	<b>4</b>
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	—	—	—	—
<b>Structures and surfaces .....</b>	<b>21</b>	<b>12</b>	<b>5</b>	<b>—</b>	<b>4</b>
Floors, walkways, ground surfaces .....	13	8	—	—	4
Floors .....	3	—	—	—	—
Ground .....	7	4	—	—	—
Structures .....	6	4	—	—	—
Towers, poles .....	3	3	—	—	—
<b>Machinery .....</b>	<b>25</b>	<b>11</b>	<b>7</b>	<b>—</b>	<b>5</b>
Construction, logging, and mining machinery .....	13	3	6	—	—
Mining and drilling machinery .....	5	—	—	—	—
Material handling (cranes, conveyers, jacks) .....	9	6	—	—	—
<b>Parts and materials .....</b>	<b>21</b>	<b>14</b>	<b>4</b>	<b>—</b>	<b>—</b>
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	—	—
<b>Persons, plants, animals, and minerals .....</b>	<b>4</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>
Nonmetallic minerals, except fuel .....	4	—	—	—	3
Rocks, crushed stone .....	3	—	—	—	—
<b>Chemicals and chemical products .....</b>	<b>3</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Other .....</b>	<b>12</b>	<b>9</b>	<b>—</b>	<b>—</b>	<b>—</b>
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 industry<sup>1</sup> by selected subindustries, 2004 — Continued

Characteristics	All mining <sup>1</sup>	Oil and gas <sup>2</sup>	Mining (except oil and gas)		
			Coal mining <sup>3</sup>	Metal ore mining <sup>4</sup>	Nonmetallic mineral mining and quarrying <sup>5</sup>
<b>Secondary source<sup>11</sup></b>					
<b>Vehicles</b> .....	22	17	—	—	3
Highway vehicle, motorized .....	20	15	—	—	3
Truck .....	17	12	—	—	3
Pickup truck .....	6	5	—	—	—
Semitrailer, tractor trailer, trailer truck .....	6	5	—	—	—
<b>Structures and surfaces</b> .....	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	—	—	—
<b>Machinery</b> .....	15	6	6	—	—
Construction, logging, and mining machinery .....	6	—	5	—	—
Material handling (cranes, conveyers, jacks) .....	7	3	—	—	—
Cranes .....	3	—	—	—	—
<b>Parts and materials</b> .....	11	4	4	—	3
Building materials--solid elements .....	4	—	3	—	—
Fasteners, connectors, ropes, ties .....	3	—	—	—	—
Machine, tool, and electrical parts .....	3	—	—	—	—
<b>Persons, plants, animals, and minerals</b> .....	3	—	—	—	—
<b>Chemicals and chemical products</b> .....	7	6	—	—	—
Coal, natural gas, petroleum fuels and products .....	7	6	—	—	—
<b>Tools, instruments, and equipment</b> .....	4	4	—	—	—
Handtools--powered .....	3	3	—	—	—
<b>Containers</b> .....	4	3	—	—	—
<b>Other</b> .....	14	12	—	—	—
Atmospheric and environmental conditions .....	3	—	—	—	—
Steam, vapors, liquids .....	9	9	—	—	—
Liquids .....	9	9	—	—	—
Water .....	9	9	—	—	—
<b>Not reported</b> .....	45	27	9	—	5
<b>Nature<sup>9</sup></b>					
<b>Burns</b> .....	7	4	—	—	—
Heat burns, scalds .....	6	4	—	—	—
<b>Intracranial injuries</b> .....	28	20	4	—	4
Multiple intracranial injuries .....	22	17	3	—	—
<b>Multiple traumatic injuries and disorders</b> .....	68	50	11	—	5
Intracranial injuries and injuries to internal organs .....	36	30	4	—	—
Other combinations of traumatic injuries .....	8	5	—	—	—
<b>Other traumatic injuries and disorders</b> .....	44	21	9	—	10
Asphyxiations/strangulations, suffocations <sup>12</sup> .....	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 industry<sup>1</sup> by selected subindustries, 2004 — Continued

Characteristics	All mining <sup>1</sup>	Oil and gas <sup>2</sup>	Mining (except oil and gas)		
			Coal mining <sup>3</sup>	Metal ore mining <sup>4</sup>	Nonmetallic mineral mining and quarrying <sup>5</sup>
<b>Nature<sup>9</sup> - continued</b>					
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	—	—	—	—
<b>Part of body<sup>9</sup></b>					
<b>Head</b> .....	28	20	4	—	4
Cranial region, including skull .....	28	20	4	—	4
Brain .....	28	20	4	—	4
<b>Trunk</b> .....	28	12	8	—	4
Chest, including ribs, internal organs .....	14	6	4	—	—
Abdomen .....	4	—	—	—	—
Multiple trunk locations .....	7	—	3	—	—
<b>Body systems</b> .....	19	10	3	—	6
<b>Multiple body parts</b> .....	73	54	11	—	6
<b>Worker activity</b>					
<b>Vehicular and transportation operations</b> .....	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	—	—	—	—
<b>Using or operating tools, machinery</b> .....	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	—	—	—
<b>Constructing, repairing, cleaning</b> .....	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	—	—	—	—
<b>Materials handling operations</b> .....	14	11	—	—	3
Loading, unloading (packing, unpacking) materials .....	5	4	—	—	—
Materials handling, n.e.c. ....	5	4	—	—	—
<b>Physical activity<sup>13</sup>, n.e.c.</b> .....	3	—	—	—	—
<b>All other activities</b> .....	6	4	—	—	—
Activity, n.e.c. ....	4	—	—	—	—
<b>Location</b>					
<b>Street or highway</b> .....	37	32	—	—	3

See footnotes at end of table.

TABLE F-4. Fatal occupational injuries to all workers in the private mining industry<sup>1</sup> by selected subindustries, 2004 — Continued

Characteristics	All mining <sup>1</sup>	Oil and gas <sup>2</sup>	Mining (except oil and gas)		
			Coal mining <sup>3</sup>	Metal ore mining <sup>4</sup>	Nonmetallic mineral mining and quarrying <sup>5</sup>
<b>Location - continued</b>					
Interstate, freeway, or expressway .....	3	3	—	—	—
Other highway (State or U.S.) .....	19	17	—	—	—
Local road or street .....	10	9	—	—	—
<b>Industrial place or premise</b> .....	48	44	—	—	3
Construction site .....	3	—	—	—	—
Industrial place or premises, nec .....	37	37	—	—	—
<b>Other specified place<sup>14</sup></b> .....	19	19	—	—	—
Sea .....	13	13	—	—	—
<b>Farm</b> .....	3	3	—	—	—
Farm land under cultivation, fields, meadows .....	3	3	—	—	—
<b>Mine, quarry</b> .....	45	—	25	5	14
Gravel, sand pit .....	5	—	—	—	5
Mine .....	29	—	20	4	4
<b>Occupation<sup>15</sup> (SOC)</b>					
<b>Management occupations</b> .....	6	3	—	—	3
Other management occupations .....	3	—	—	—	—
Miscellaneous managers .....	3	—	—	—	—
Managers, all other .....	3	—	—	—	—
<b>Life, physical, and social science occupations</b> .....	3	—	—	—	—
<b>Construction and extraction occupations</b> .....	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	—	—	—
<b>Installation, maintenance, and repair occupations</b> .....	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 industry<sup>1</sup> by selected subindustries, 2004 — Continued

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<b>Occupation<sup>15</sup> (SOC) - continued</b>					
Industrial machinery mechanics .....	5	4	—	—	—
Maintenance and repair workers, general .....	3	—	—	—	—
<b>Production occupations</b> .....	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	—	—	—
<b>Transportation and material moving occupations</b> .....	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	—	—	—

<sup>1</sup> 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.

<sup>2</sup> Oil and gas comprises establishments in NAICS 211, NAICS 213111, and 213112.

<sup>3</sup> Coal mining comprises establishments in NAICS 2121 and 213113.

<sup>4</sup> Metal ore mining comprises establishments in NAICS 2122 and 213114.

<sup>5</sup> Nonmetallic mineral mining and quarrying comprises establishments in NAICS 2123 and 213115.

<sup>6</sup> May include volunteers and workers receiving other types of compensation.

<sup>7</sup> 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.

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

<sup>9</sup> Based on the 1992 BLS Occupational Injury and Illness Classification Manual.

<sup>10</sup> 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.

<sup>11</sup> 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.

<sup>12</sup> May include some asphyxiations due to chest compressions.

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

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

<sup>15</sup> 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