

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004

Source	Fatalities	Occupation ¹ (Percent)				
		Man- agement, business and financial occupations	Profes- sional and related occupa- tions	Service occupa- tions	Sales and related occupa- tions	Office and administra- tive support occupa- tions
Total	5,764	11.5	5.2	11.6	6.2	1.6
Primary source²						
Vehicles	2,583	12.0	6.6	8.7	4.3	1.9
Air Vehicle	232	6.9	17.7	2.6	3.0	—
Aircraft--powered fixed wing	159	10.1	15.7	1.9	4.4	—
Jet	39	15.4	12.8	—	—	—
Propeller-driven aircraft	103	9.7	15.5	—	6.8	—
Aircraft--powered rotary wing	65	—	20.0	4.6	—	—
Highway vehicle, motorized	1,842	6.2	6.3	10.4	5.1	2.3
Automobile	374	11.2	13.1	22.2	12.3	4.8
Bus	22	—	—	—	—	—
Truck	1,239	4.0	3.1	7.2	2.7	1.2
Delivery truck	54	—	—	—	—	9.3
Dump truck	117	6.0	3.4	4.3	—	—
Pickup truck	256	9.4	5.5	16.8	6.2	2.0
Semitrailer, tractor trailer, trailer truck	569	1.1	.5	1.8	.7	—
Van--passenger or light delivery	124	8.1	13.7	4.8	5.6	6.5
Offroad vehicle, nonindustrial	46	34.8	10.9	17.4	—	—
Golf cart, powered	4	—	—	75.0	—	—
Plant and industrial powered vehicles, tractors	312	51.6	—	3.8	1.6	1.0
Forklift	92	5.4	—	—	4.3	3.3
Tractor	201	76.1	—	4.0	—	—
Rail vehicle	44	—	—	6.8	—	—
Water vehicle	95	—	6.3	—	—	—
Barge	13	—	—	—	—	—
Motorboat	12	—	25.0	—	—	—
Ships--other than sail powered	31	—	—	—	—	—
Tugboat, commercial fishing boat	32	—	—	—	—	—
Structures and surfaces	880	8.9	3.2	9.5	3.1	1.2
Floors, walkways, ground surfaces	786	8.5	3.3	10.2	3.3	1.1
Floors	263	6.8	5.3	5.7	6.8	2.7
Ground	327	9.2	2.4	15.6	—	—
Sidewalks, paths, outdoor walkways	36	11.1	—	—	8.3	—
Street, road	24	—	—	12.5	—	—
Surfaces below ground level, n.e.c.	16	—	—	—	—	—
Ditches, channels, trenches, excavations	16	—	—	—	—	—
Parking lots	28	—	—	—	—	—
Other structural elements	36	11.1	—	—	—	—
Roof	7	—	—	—	—	—
Walls	13	—	—	—	—	—
Structures	53	13.2	—	—	—	—
Buildings--office, plant, residential	17	35.3	—	—	—	—
Mines, caves, tunnels	6	—	—	—	—	—
Scaffolds, staging	7	—	—	—	—	—
Towers, poles	14	—	—	—	—	—
Machinery	475	13.7	1.5	8.4	1.1	—
Agricultural and garden machinery	63	34.9	—	33.3	—	—
Harvesting and threshing machinery	14	42.9	—	—	—	—
Harvesters, reapers	3	—	—	—	—	—
Mowing machinery	36	27.8	—	55.6	—	—
Lawn mowers--riding	20	20.0	—	75.0	—	—
Mowers, tractor	12	25.0	—	41.7	—	—
Plowing, planting, and fertilizing machinery	5	—	—	—	—	—
Construction, logging, and mining machinery ..	202	13.9	1.5	6.9	—	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Occupation ¹ (Percent)					
	Farming, fishing, and forestry occupations	Construction and extraction occupations	Installation, maintenance, and repair occupations	Production occupations	Transportation and material moving occupations	Military specific occupations
Total	4.9	19.7	6.7	5.0	26.2	1.2
Primary source²						
Vehicles	5.1	8.4	4.3	2.1	44.4	2.0
Air Vehicle	—	3.9	1.3	—	50.0	13.4
Aircraft--powered fixed wing	—	—	—	—	54.7	8.8
Jet	—	—	—	—	41.0	28.2
Propeller-driven aircraft	—	—	—	—	59.2	—
Aircraft--powered rotary wing	—	9.2	—	—	38.5	24.6
Highway vehicle, motorized	3.0	9.9	4.8	1.5	49.3	1.0
Automobile	—	7.8	6.1	.8	20.1	.8
Bus	—	—	—	—	72.7	—
Truck	2.5	11.1	4.1	1.3	61.9	1.0
Delivery truck	—	—	—	—	74.1	—
Dump truck	—	19.7	4.3	—	59.8	—
Pickup truck	4.7	27.3	7.0	1.2	18.8	1.2
Semitrailer, tractor trailer, trailer truck	2.3	1.4	.7	.9	90.0	—
Van--passenger or light delivery	16.1	8.1	4.8	3.2	29.0	—
Offroad vehicle, nonindustrial	13.0	10.9	—	—	6.5	—
Golf cart, powered	—	—	—	—	—	—
Plant and industrial powered vehicles, tractors	11.5	5.4	3.8	4.8	16.0	—
Forklift	4.3	9.8	10.9	13.0	47.8	—
Tractor	15.9	2.0	—	—	—	—
Rail vehicle	—	—	9.1	9.1	54.5	—
Water vehicle	33.7	3.2	4.2	5.3	43.2	—
Barge	—	—	—	—	76.9	—
Motorboat	—	—	—	—	—	—
Ships--other than sail powered	—	—	—	—	90.3	—
Tugboat, commercial fishing boat	84.4	—	—	—	—	—
Structures and surfaces	1.1	51.7	8.3	3.5	9.0	.5
Floors, walkways, ground surfaces	1.1	50.9	8.4	3.8	9.0	—
Floors	—	48.3	7.2	7.2	9.5	—
Ground	1.8	54.4	7.0	2.1	5.8	—
Sidewalks, paths, outdoor walkways	—	52.8	16.7	—	—	—
Street, road	—	58.3	—	—	12.5	—
Surfaces below ground level, n.e.c.	—	87.5	—	—	—	—
Ditches, channels, trenches, excavations	—	87.5	—	—	—	—
Parking lots	—	35.7	—	—	35.7	—
Other structural elements	—	69.4	—	—	—	—
Roof	—	71.4	—	—	—	—
Walls	—	100.0	—	—	—	—
Structures	—	50.9	11.3	—	11.3	—
Buildings--office, plant, residential	—	29.4	—	—	—	—
Mines, caves, tunnels	—	100.0	—	—	—	—
Scaffolds, staging	—	71.4	—	—	—	—
Towers, poles	—	42.9	—	—	—	—
Machinery	5.9	28.2	11.8	14.9	13.9	—
Agricultural and garden machinery	17.5	—	4.8	—	6.3	—
Harvesting and threshing machinery	35.7	—	—	—	—	—
Harvesters, reapers	—	—	—	—	—	—
Mowing machinery	11.1	—	—	—	—	—
Lawn mowers--riding	—	—	—	—	—	—
Mowers, tractor	25.0	—	—	—	—	—
Plowing, planting, and fertilizing machinery	—	—	—	—	—	—
Construction, logging, and mining machinery ..	6.4	43.1	8.4	5.4	13.4	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Fatalities	Occupation ¹ (Percent)				
		Man- agement, business and financial occupa- tions	Profes- sional and related occupa- tions	Service occupa- tions	Sales and related occupa- tions	Office and administra- tive support occupa- tions
Primary source² - continued						
Excavating machinery	57	19.3	-	-	-	-
Backhoes	32	18.8	-	-	-	-
Bulldozers	13	-	-	-	-	-
Loaders	57	24.6	-	10.5	-	-
Bucket loaders	9	-	-	-	-	-
Front end loaders	35	17.1	-	14.3	-	-
Logging and wood processing machinery--specialized	26	-	-	23.1	-	-
Skidder--cable and grapple	5	-	-	-	-	-
Mining and drilling machinery	11	-	-	-	-	-
Drilling machines, drilling augers	7	-	-	-	-	-
Road grading and surfacing mahinery	40	-	-	-	-	-
Graders, levellers, planers, scrapers	20	-	-	-	-	-
Steam rollers, road pavers	14	-	-	-	-	-
Heating, cooling, and cleaning machinery and appliances	15	-	-	-	-	-
Cooling and humidifying machinery and appliances	9	-	-	-	-	-
Material handling (cranes, conveyers, jacks) ...	122	8.2	-	-	-	-
Conveyers--powered	32	15.6	-	-	-	-
Cranes	39	-	-	-	-	-
Cranes--mobile, truck, and rail mounted ..	16	-	-	-	-	-
Overhead hoists	5	-	-	-	-	-
Elevators	34	-	-	-	-	-
Bucket or basket hoist--truck mounted	10	-	-	-	-	-
Metal, woodworking, and special material machinery	31	-	-	-	-	-
Extruding, injecting, forming, molding machinery	14	-	-	-	-	-
Special process machinery	28	10.7	-	-	-	-
Miscellaneous machinery	12	-	-	-	-	-
Street sweeping and cleaning machinery	3	-	-	-	-	-
Parts and materials	397	7.6	2.8	5.3	3.8	-
Building materials--solid elements	127	4.7	2.4	-	3.1	-
Bricks, blocks, structural stone	22	-	-	-	-	-
Pipes, ducts, tubing	42	-	-	-	-	-
Structural metal materials	48	-	-	-	-	-
Bars, rods, reinforcing bar (rebar)	5	-	-	-	-	-
Wood, lumber	10	-	-	-	-	-
Other building materials--solid elements	4	-	-	-	-	-
Fasteners, connectors, ropes, ties	56	7.1	7.1	7.1	16.1	-
Ropes, ties	47	8.5	8.5	8.5	19.1	-
Rope, twine, string	18	-	-	-	33.3	-
Machine, tool, and electrical parts	147	7.5	2.7	9.5	-	-
Electric parts	129	8.5	3.1	10.9	-	-
Electrical wiring	55	12.7	-	7.3	-	-
Power lines, transformers, converters	50	-	-	18.0	-	-
Switchboards, switches, fuses	5	-	-	-	-	-
Metal materials--nonstructural	6	-	-	-	-	-
Vehicle and mobile equipment parts	48	18.8	-	-	-	-
Tires, inner tubes, wheels	21	14.3	-	-	-	-
Wheels, tire rims	11	27.3	-	-	-	-
Trailers	13	38.5	-	-	-	-
Persons, plants, animals, and minerals	295	19.7	5.1	20.3	3.1	-
Animals and animal products	52	42.3	7.7	23.1	-	-
Insects, arachnids	9	-	-	44.4	-	-

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Occupation ¹ (Percent)					
	Farming, fishing, and forestry occupations	Construction and extraction occupations	Installation, maintenance, and repair occupations	Production occupations	Transportation and material moving occupations	Military specific occupations
Primary source² - continued						
Excavating machinery	—	49.1	—	—	17.5	—
Backhoes	—	43.8	—	—	21.9	—
Bulldozers	—	69.2	—	—	—	—
Loaders	—	24.6	10.5	—	21.1	—
Bucket loaders	—	—	—	—	—	—
Front end loaders	—	31.4	8.6	—	20.0	—
Logging and wood processing machinery--specialized	38.5	—	15.4	23.1	—	—
Skidder--cable and grapple	80.0	—	—	—	—	—
Mining and drilling machinery	—	90.9	—	—	—	—
Drilling machines, drilling augers	—	85.7	—	—	—	—
Road grading and surfacing machinery	—	72.5	10.0	—	7.5	—
Graders, levellers, planers, scrapers	—	60.0	20.0	—	—	—
Steam rollers, road pavers	—	78.6	—	—	—	—
Heating, cooling, and cleaning machinery and appliances	—	—	53.3	—	—	—
Cooling and humidifying machinery and appliances	—	—	77.8	—	—	—
Material handling (cranes, conveyers, jacks) ...	2.5	32.8	12.3	17.2	22.1	—
Conveyers--powered	—	—	18.8	31.2	28.1	—
Cranes	—	33.3	12.8	10.3	33.3	—
Cranes--mobile, truck, and rail mounted ..	—	37.5	—	—	31.2	—
Overhead hoists	—	60.0	—	—	—	—
Elevators	—	55.9	11.8	11.8	8.8	—
Bucket or basket hoist--truck mounted	—	60.0	—	—	—	—
Metal, woodworking, and special material machinery	—	9.7	22.6	54.8	—	—
Extruding, injecting, forming, molding machinery	—	—	21.4	50.0	—	—
Special process machinery	—	—	14.3	57.1	10.7	—
Miscellaneous machinery	—	—	—	33.3	—	—
Street sweeping and cleaning machinery	—	—	—	—	—	—
Parts and materials	1.5	37.3	17.9	10.3	12.8	—
Building materials--solid elements	—	44.9	5.5	12.6	25.2	—
Bricks, blocks, structural stone	—	68.2	—	—	18.2	—
Pipes, ducts, tubing	—	35.7	11.9	11.9	28.6	—
Structural metal materials	—	39.6	—	14.6	29.2	—
Bars, rods, reinforcing bar (rebar)	—	60.0	—	—	—	—
Wood, lumber	—	50.0	—	30.0	—	—
Other building materials--solid elements	—	—	—	—	—	—
Fasteners, connectors, ropes, ties	—	17.9	17.9	8.9	10.7	—
Ropes, ties	—	10.6	17.0	8.5	10.6	—
Rope, twine, string	—	—	16.7	—	16.7	—
Machine, tool, and electrical parts	—	44.2	21.8	9.5	3.4	—
Electric parts	—	45.0	23.3	3.9	3.9	—
Electrical wiring	—	52.7	18.2	5.5	—	—
Power lines, transformers, converters	—	38.0	28.0	—	8.0	—
Switchboards, switches, fuses	—	80.0	—	—	—	—
Metal materials--nonstructural	—	—	—	50.0	50.0	—
Vehicle and mobile equipment parts	—	12.5	43.8	—	10.4	—
Tires, inner tubes, wheels	—	—	66.7	—	—	—
Wheels, tire rims	—	—	54.5	—	—	—
Trailers	—	23.1	—	—	—	—
Persons, plants, animals, and minerals	26.1	14.9	2.0	1.7	6.4	—
Animals and animal products	19.2	—	—	—	—	—
Insects, arachnids	—	—	—	—	—	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Fatalities	Occupation ¹ (Percent)				
		Man- agement, business and financial occupa- tions	Profes- sional and related occupa- tions	Service occupa- tions	Sales and related occupa- tions	Office and administra- tive support occupa- tions
Primary source² - continued						
Mammals, except humans	39	51.3	10.3	17.9	-	-
Cattle	17	70.6	-	-	-	-
Horses	19	36.8	-	26.3	-	-
Food products--fresh or processed	22	27.3	-	-	-	-
Nonmetallic minerals, except fuel	39	7.7	-	-	-	-
Dirt, earth	25	12.0	-	-	-	-
Rocks, crushed stone	4	-	-	-	-	-
Person--other than injured or ill worker	38	26.3	18.4	18.4	13.2	-
Co-worker, former co-worker of injured worker	7	-	-	-	-	-
Robber	9	-	-	-	33.3	-
Plants, trees, vegetation--not processed	134	11.2	-	28.4	-	-
Trees, logs	132	9.8	-	28.8	-	-
Chemicals and chemical products	129	9.3	11.6	17.1	4.7	-
Halogens and halogen compounds	5	-	-	-	-	-
Chemical products--general	63	6.3	15.9	20.6	6.3	-
Drugs, alcohol, medicines	58	6.9	17.2	19.0	6.9	-
Coal, natural gas, petroleum fuels and products	7	-	-	-	-	-
Petroleum fuels, distillates, products, n.e.c.	4	-	-	-	-	-
Other chemicals	42	16.7	7.1	14.3	-	-
Oxygen and oxygen compounds, n.e.c.	29	17.2	-	20.7	-	-
Carbon monoxide	26	19.2	-	23.1	-	-
Sewer gas, mine gas, methane	3	-	-	-	-	-
Tools, instruments, and equipment	140	12.1	10.0	19.3	15.7	-
Handtools--nonpowered	88	17.0	12.5	21.6	22.7	-
Cutting handtools	72	18.1	12.5	23.6	27.8	-
Knives	62	21.0	14.5	19.4	27.4	-
Turning handtools, screwdrivers, wrenches	5	-	-	-	-	-
Handtools--powered	18	-	-	22.2	-	-
Cutting handtools	10	-	-	40.0	-	-
Ladders	17	-	-	-	-	-
Ladders--movable	12	-	-	-	-	-
Extension ladders	8	-	-	-	-	-
Containers	80	13.8	-	-	-	3.8
Containers--nonpressurized	39	15.4	-	-	-	-
Bags, sacks, totes	3	-	-	-	-	-
Boxes, crates, cartons	8	-	-	-	-	-
Tanks, bins, vats	16	18.8	-	-	-	-
Containers--pressurized	17	-	-	-	-	-
Variable restraint	19	21.1	-	-	-	-
Bundles, bales	11	36.4	-	-	-	-
Reels, rolls	8	-	-	-	-	-
Other	785	10.6	4.5	24.3	20.0	2.5
Furniture and fixtures	16	-	-	25.0	-	-
Other fixtures	8	-	-	-	-	-
Ammunition	537	12.1	4.5	27.0	27.2	3.4
Bullets	521	11.9	4.4	26.9	27.1	3.5
Atmospheric and environmental conditions	132	7.6	4.5	14.4	2.3	-
Fire, flame, smoke	90	11.1	-	18.9	3.3	-
Fire, flame	71	8.5	-	12.7	-	-
Smoke, fire gases	15	-	-	46.7	-	-
Temperature extreme	19	-	15.8	-	-	-

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Occupation ¹ (Percent)					
	Farming, fishing, and forestry occupations	Construction and extraction occupations	Installation, maintenance, and repair occupations	Production occupations	Transportation and material moving occupations	Military specific occupations
Primary source² - continued						
Mammals, except humans	20.5	-	-	-	-	-
Cattle	-	-	-	-	-	-
Horses	26.3	-	-	-	-	-
Food products--fresh or processed	13.6	-	-	-	36.4	-
Nonmetallic minerals, except fuel	-	74.4	-	-	-	-
Dirt, earth	-	88.0	-	-	-	-
Rocks, crushed stone	-	-	-	-	-	-
Person--other than injured or ill worker	-	7.9	-	-	7.9	-
Co-worker, former co-worker of injured worker	-	-	-	-	-	-
Robber	-	-	-	-	-	-
Plants, trees, vegetation--not processed	45.5	8.2	-	-	3.7	-
Trees, logs	46.2	8.3	-	-	3.8	-
Chemicals and chemical products	3.1	19.4	7.8	9.3	14.0	-
Halogens and halogen compounds	-	-	60.0	-	-	-
Chemical products--general	-	20.6	-	7.9	11.1	-
Drugs, alcohol, medicines	-	20.7	-	5.2	12.1	-
Coal, natural gas, petroleum fuels and products	-	-	42.9	-	42.9	-
Petroleum fuels, distillates, products, n.e.c.	-	-	-	-	75.0	-
Other chemicals	-	23.8	-	14.3	11.9	-
Oxygen and oxygen compounds, n.e.c.	-	17.2	-	13.8	10.3	-
Carbon monoxide	-	19.2	-	15.4	-	-
Sewer gas, mine gas, methane	-	-	-	-	-	-
Tools, instruments, and equipment	6.4	18.6	5.0	2.1	10.7	-
Handtools--nonpowered	4.5	8.0	4.5	-	8.0	-
Cutting handtools	4.2	-	-	-	8.3	-
Knives	4.8	-	-	-	8.1	-
Turning handtools, screwdrivers, wrenches	-	-	-	-	-	-
Handtools--powered	-	38.9	-	-	-	-
Cutting handtools	-	40.0	-	-	-	-
Ladders	17.6	58.8	-	-	-	-
Ladders--movable	-	66.7	-	-	-	-
Extension ladders	-	75.0	-	-	-	-
Containers	6.2	11.2	10.0	16.2	32.5	-
Containers--nonpressurized	-	15.4	10.3	7.7	33.3	-
Bags, sacks, totes	-	-	-	-	-	-
Boxes, crates, cartons	-	-	-	-	-	-
Tanks, bins, vats	-	-	-	-	43.8	-
Containers--pressurized	-	17.6	23.5	17.6	17.6	-
Variable restraint	-	-	-	31.6	42.1	-
Bundles, bales	-	-	-	-	36.4	-
Reels, rolls	-	-	-	50.0	50.0	-
Other	1.9	10.1	5.2	7.3	11.5	1.4
Furniture and fixtures	-	37.5	-	-	-	-
Other fixtures	-	75.0	-	-	-	-
Ammunition	-	3.4	3.9	4.8	12.5	.9
Bullets	-	3.5	4.0	5.0	12.7	1.0
Atmospheric and environmental conditions	3.0	29.5	10.6	15.2	10.6	-
Fire, flame, smoke	-	24.4	11.1	17.8	10.0	-
Fire, flame	-	26.8	11.3	22.5	11.3	-
Smoke, fire gases	-	20.0	-	-	-	-
Temperature extreme	-	36.8	-	-	15.8	-

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Fatalities	Occupation ¹ (Percent)				
		Man- agement, business and financial occupa- tions	Profes- sional and related occupa- tions	Service occupa- tions	Sales and related occupa- tions	Office and administra- tive support occupa- tions
Primary source² - continued						
Steam, vapors, liquids	65	7.7	6.2	29.2	4.6	—
Scrap, waste, debris	8	—	—	—	—	—
Secondary source³						
Vehicles	1,001	9.4	6.6	9.1	5.1	2.8
Air Vehicle	11	—	—	—	—	—
Aircraft--powered fixed wing	8	—	—	—	—	—
Jet	4	—	—	—	—	—
Highway vehicle, motorized	854	9.8	7.3	9.8	5.3	3.2
Automobile	172	10.5	7.6	18.0	7.0	4.1
Bus	9	—	—	—	—	—
Truck	610	9.3	6.7	7.5	4.8	2.5
Delivery truck	8	—	—	—	—	—
Dump truck	44	9.1	—	—	—	—
Pickup truck	134	11.2	9.7	10.4	6.0	—
Semitrailer, tractor trailer, trailer truck	304	8.6	5.6	4.9	4.9	2.0
Van--passenger or light delivery	24	16.7	—	16.7	—	16.7
Plant and industrial powered vehicles, tractors	76	9.2	—	5.3	—	—
Forklift	57	—	—	5.3	—	—
Tractor	17	41.2	—	—	—	—
Rail vehicle	44	—	—	—	11.4	—
Water vehicle	8	—	—	—	—	—
Ships--other than sail powered	6	—	—	—	—	—
Structures and surfaces	922	8.2	5.5	7.9	1.6	.8
Floors, walkways, ground surfaces	281	11.0	12.1	8.5	1.1	1.1
Floors	35	—	—	—	—	—
Ground	122	9.8	21.3	5.7	—	—
Street, road	19	—	—	21.1	—	—
Surfaces below ground level, n.e.c.	40	22.5	—	—	—	—
Ditches, channels, trenches, excavations	36	25.0	—	—	—	—
Parking lots	4	—	—	—	—	—
Other structural elements	246	10.2	3.3	4.1	1.2	—
Doors	4	—	—	—	—	—
Fences, fence panels	12	—	—	—	—	—
Roof	134	10.4	3.0	3.7	—	—
Walls	33	9.1	—	9.1	—	—
Structures	388	5.2	2.3	10.1	2.1	—
Bridges, dams, locks	31	12.9	—	—	—	—
Buildings--office, plant, residential ..	29	—	—	41.4	—	—
Mines, caves, tunnels	19	—	—	—	—	—
Scaffolds, staging	86	3.5	—	—	—	—
Towers, poles	81	3.7	—	12.3	—	—
Other structures	132	6.8	4.5	4.5	3.8	—
Guardrails, road dividers	100	5.0	5.0	5.0	4.0	—
Machinery	282	11.3	1.4	6.7	—	—
Agricultural and garden machinery	19	78.9	—	—	—	—
Mowing machinery	5	60.0	—	—	—	—
Construction, logging, and mining machinery ..	49	12.2	—	6.1	—	—
Excavating machinery	21	—	—	—	—	—
Backhoes	9	—	—	—	—	—
Bulldozers	6	—	—	—	—	—
Loaders	15	20.0	—	—	—	—
Front end loaders	5	—	—	—	—	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Occupation ¹ (Percent)					
	Farming, fishing, and forestry occupations	Construction and extraction occupations	Installation, maintenance, and repair occupations	Production occupations	Transportation and material moving occupations	Military specific occupations
Primary source² - continued						
Steam, vapors, liquids	12.3	15.4	6.2	6.2	7.7	4.6
Scrap, waste, debris	—	—	—	—	—	—
Secondary source³						
Vehicles	4.0	9.9	4.4	2.9	44.9	.8
Air Vehicle	—	—	—	—	—	—
Aircraft--powered fixed wing	—	—	—	—	—	—
Jet	—	—	—	—	—	—
Highway vehicle, motorized	3.5	8.8	3.9	2.1	45.6	.6
Automobile	4.1	3.5	4.1	2.3	37.8	—
Bus	—	—	—	—	44.4	—
Truck	3.6	10.2	3.8	2.3	48.7	.5
Delivery truck	—	—	—	—	37.5	—
Dump truck	—	27.3	—	—	54.5	—
Pickup truck	6.7	14.9	3.0	4.5	30.6	—
Semitrailer, tractor trailer, trailer truck	3.0	6.6	3.6	2.0	58.6	—
Van--passenger or light delivery	—	—	—	—	25.0	—
Plant and industrial powered vehicles, tractors	6.6	23.7	11.8	13.2	28.9	—
Forklift	—	26.3	14.0	17.5	36.8	—
Tractor	29.4	17.6	—	—	—	—
Rail vehicle	—	9.1	—	—	65.9	—
Water vehicle	—	—	—	—	—	—
Ships--other than sail powered	—	—	—	—	—	—
Structures and surfaces	2.1	34.4	4.6	2.4	29.7	2.8
Floors, walkways, ground surfaces	3.9	17.4	3.2	2.8	32.4	6.4
Floors	—	65.7	14.3	—	—	—
Ground	3.3	4.9	—	—	40.2	11.5
Street, road	—	26.3	—	—	42.1	—
Surfaces below ground level, n.e.c.	—	17.5	—	—	27.5	—
Ditches, channels, trenches, excavations	—	16.7	—	—	27.8	—
Parking lots	—	—	—	—	—	—
Other structural elements	—	63.8	5.3	2.4	8.1	—
Doors	—	—	—	—	—	—
Fences, fence panels	—	—	—	—	41.7	—
Roof	—	75.4	6.0	—	—	—
Walls	—	36.4	—	—	30.3	—
Structures	1.5	27.8	5.2	1.8	41.5	2.1
Bridges, dams, locks	—	16.1	—	—	71.0	—
Buildings--office, plant, residential	—	17.2	—	—	20.7	—
Mines, caves, tunnels	—	57.9	—	—	—	—
Scaffolds, staging	—	81.4	—	4.7	—	—
Towers, poles	—	8.6	18.5	—	40.7	8.6
Other structures	—	6.8	—	—	72.0	—
Guardrails, road dividers	—	5.0	—	—	76.0	—
Machinery	2.8	27.0	20.9	13.1	15.2	—
Agricultural and garden machinery	—	—	—	—	—	—
Mowing machinery	—	—	—	—	—	—
Construction, logging, and mining machinery ..	8.2	49.0	—	6.1	14.3	—
Excavating machinery	—	61.9	—	—	14.3	—
Backhoes	—	77.8	—	—	—	—
Bulldozers	—	—	—	—	—	—
Loaders	—	33.3	—	—	26.7	—
Front end loaders	—	—	—	—	—	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Fatalities	Occupation ¹ (Percent)				
		Management, business and financial occupations	Professional and related occupations	Service occupations	Sales and related occupations	Office and administrative support occupations
Secondary source³ - continued						
Logging and wood processing machinery--specialized	5	—	—	—	—	—
Heating, cooling, and cleaning machinery and appliances	21	—	—	19.0	—	—
Heating and cooking machinery and appliances	13	—	—	30.8	—	—
Material handling (cranes, conveyers, jacks) ...	162	4.9	—	6.2	—	—
Conveyers--powered	6	—	—	—	—	—
Cranes	47	—	—	—	—	—
Cranes--mobile, truck, and rail mounted ..	8	—	—	—	—	—
Cranes--overhead	9	—	—	—	—	—
Overhead hoists	5	—	—	—	—	—
Elevators	51	—	—	19.6	—	—
Bucket or basket hoist--truck mounted	23	—	—	39.1	—	—
Manlifts	20	—	—	—	—	—
Jacks	50	10.0	—	—	—	—
Metal, woodworking, and special material machinery	18	—	—	—	—	—
Special process machinery	6	—	—	—	—	—
Miscellaneous machinery	7	—	—	—	—	—
Parts and materials	275	8.0	3.3	8.4	1.8	—
Building materials--solid elements	63	6.3	—	—	—	—
Bricks, blocks, structural stone	8	—	—	—	—	—
Pipes, ducts, tubing	16	—	—	—	—	—
Structural metal materials	24	—	—	—	—	—
Wood, lumber	13	—	—	—	—	—
Fasteners, connectors, ropes, ties	34	14.7	—	11.8	—	—
Ropes, ties	25	20.0	—	12.0	—	—
Machine, tool, and electrical parts	144	5.6	4.2	11.1	—	—
Electric parts	136	5.1	4.4	11.8	—	—
Electrical wiring	16	—	—	25.0	—	—
Power lines, transformers, converters	108	4.6	4.6	11.1	—	—
Vehicle and mobile equipment parts	27	18.5	—	—	—	—
Tires, inner tubes, wheels	6	—	—	—	—	—
Trailers	17	23.5	—	—	—	—
Persons, plants, animals, and minerals	775	11.5	5.5	25.4	22.6	2.5
Animals and animal products	26	34.6	11.5	—	—	—
Mammals, except humans	25	32.0	12.0	—	—	—
Cattle	10	70.0	—	—	—	—
Horses	7	—	42.9	—	—	—
Nonmetallic minerals, except fuel	17	29.4	—	—	—	—
Dirt, earth	12	25.0	—	—	—	—
Rocks, crushed stone	3	—	—	—	—	—
Person--other than injured or ill worker	530	9.6	5.3	27.7	30.9	3.2
Co-worker, former co-worker of injured worker	56	19.6	7.1	17.9	5.4	—
Relative of injured worker	17	17.6	—	41.2	—	—
Robber	232	9.5	1.3	18.5	47.8	3.9
Plants, trees, vegetation--not processed	201	11.9	6.0	22.9	4.5	—
Trees, logs	199	11.1	6.0	23.1	4.5	—
Chemicals and chemical products	98	8.2	—	5.1	4.1	—
Chemical products--general	14	21.4	—	21.4	—	—
Coal, natural gas, petroleum fuels and products	35	—	—	—	—	—
Petroleum fuels, distillates, products, n.e.c.	24	—	—	—	—	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Occupation ¹ (Percent)					
	Farming, fishing, and forestry occupations	Construction and extraction occupations	Installation, maintenance, and repair occupations	Production occupations	Transportation and material moving occupations	Military specific occupations
Secondary source³ - continued						
Logging and wood processing machinery--specialized	—	—	—	—	—	—
Heating, cooling, and cleaning machinery and appliances	—	—	14.3	19.0	14.3	—
Heating and cooking machinery and appliances	—	—	—	30.8	—	—
Material handling (cranes, conveyers, jacks) ...	—	29.0	29.6	9.9	16.0	—
Conveyers--powered	—	—	—	50.0	—	—
Cranes	—	36.2	6.4	19.1	29.8	—
Cranes--mobile, truck, and rail mounted ..	—	50.0	—	—	37.5	—
Cranes--overhead	—	33.3	—	44.4	—	—
Overhead hoists	—	—	—	—	—	—
Elevators	—	41.2	21.6	5.9	9.8	—
Bucket or basket hoist--truck mounted	—	26.1	30.4	—	—	—
Manlifts	—	50.0	20.0	15.0	—	—
Jacks	—	8.0	64.0	—	12.0	—
Metal, woodworking, and special material machinery	—	16.7	16.7	50.0	—	—
Special process machinery	—	—	—	50.0	—	—
Miscellaneous machinery	—	—	—	—	57.1	—
Parts and materials	5.1	35.3	10.9	6.2	20.7	—
Building materials--solid elements	—	46.0	4.8	9.5	27.0	—
Bricks, blocks, structural stone	—	50.0	—	—	—	—
Pipes, ducts, tubing	—	31.2	—	18.8	25.0	—
Structural metal materials	—	54.2	—	—	25.0	—
Wood, lumber	—	53.8	—	—	30.8	—
Fasteners, connectors, ropes, ties	11.8	26.5	14.7	—	8.8	—
Ropes, ties	12.0	20.0	12.0	—	12.0	—
Machine, tool, and electrical parts	4.9	37.5	13.2	3.5	18.8	—
Electric parts	5.1	36.8	12.5	3.7	19.1	—
Electrical wiring	—	37.5	25.0	—	—	—
Power lines, transformers, converters	3.7	36.1	11.1	3.7	23.1	—
Vehicle and mobile equipment parts	—	—	—	14.8	33.3	—
Tires, inner tubes, wheels	—	—	—	—	—	—
Trailers	—	—	—	17.6	29.4	—
Persons, plants, animals, and minerals	3.7	3.9	3.1	2.6	18.8	—
Animals and animal products	11.5	—	—	—	23.1	—
Mammals, except humans	12.0	—	—	—	24.0	—
Cattle	—	—	—	—	30.0	—
Horses	—	—	—	—	—	—
Nonmetallic minerals, except fuel	—	17.6	—	—	35.3	—
Dirt, earth	—	—	—	—	50.0	—
Rocks, crushed stone	—	—	—	—	—	—
Person--other than injured or ill worker8	2.8	3.4	3.0	13.2	—
Co-worker, former co-worker of injured worker	5.4	10.7	5.4	17.9	7.1	—
Relative of injured worker	—	—	—	—	—	—
Robber	—	—	1.7	—	15.9	—
Plants, trees, vegetation--not processed	10.4	6.0	2.5	1.5	31.8	—
Trees, logs	10.6	6.0	2.5	1.5	32.2	—
Chemicals and chemical products	5.1	15.3	12.2	18.4	30.6	—
Chemical products--general	—	28.6	—	—	—	—
Coal, natural gas, petroleum fuels and products	—	22.9	25.7	8.6	14.3	—
Petroleum fuels, distillates, products, n.e.c.	—	20.8	25.0	—	20.8	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Fatalities	Occupation ¹ (Percent)				
		Management, business and financial occupations	Professional and related occupations	Service occupations	Sales and related occupations	Office and administrative support occupations
Secondary source³ - continued						
Gasoline, diesel fuel, jet fuel	14	—	—	—	—	—
Other chemicals	19	—	—	—	—	—
Oxygen and oxygen compounds, n.e.c.	4	—	—	—	—	—
Tools, instruments, and equipment	245	10.2	4.1	13.1	5.3	—
Handtools--nonpowered	5	—	—	—	—	—
Handtools--powered	33	—	—	15.2	—	—
Cutting handtools	14	—	—	35.7	—	—
Welding and heating handtools	9	—	—	—	—	—
Other handtools--powered	4	—	—	—	—	—
Ladders	137	5.8	—	10.2	3.6	—
Ladders--fixed	9	—	—	—	—	—
Ladders--movable	87	6.9	—	9.2	—	—
Extension ladders	28	—	—	14.3	—	—
Step ladders	22	—	—	—	—	—
Containers	100	21.0	4.0	—	4.0	—
Containers--nonpressurized	58	20.7	5.2	—	5.2	—
Tanks, bins, vats	39	25.6	—	—	—	—
Containers--pressurized	19	15.8	—	—	—	—
Pressure lines, except hoses	9	—	—	—	—	—
Variable restraint	13	46.2	—	—	—	—
Bundles, bales	11	54.5	—	—	—	—
Other	227	11.5	4.4	7.5	4.4	—
Furniture and fixtures	31	—	—	—	9.7	—
Furniture	10	—	—	—	30.0	—
Atmospheric and environmental conditions	73	17.8	—	8.2	6.8	—
Fire, flame, smoke	10	—	—	—	—	—
Fire, flame	9	—	—	—	—	—
Steam, vapors, liquids	86	5.8	10.5	11.6	—	—
Scrap, waste, debris	5	—	—	—	—	—

See footnotes at end of table.

TABLE A-8. Fatal occupational injuries by primary and secondary source and major occupational group, 2004 — Continued

Source	Occupation ¹ (Percent)					
	Farming, fishing, and forestry occupations	Construction and extraction occupations	Installation, maintenance, and repair occupations	Production occupations	Transportation and material moving occupations	Military specific occupations
Secondary source³ - continued						
Gasoline, diesel fuel, jet fuel	—	35.7	—	—	—	—
Other chemicals	—	—	—	42.1	—	—
Oxygen and oxygen compounds, n.e.c.	—	—	—	—	—	—
Tools, instruments, and equipment	4.5	40.8	10.2	4.9	4.5	1.6
Handtools--nonpowered	—	—	—	—	—	—
Handtools--powered	18.2	39.4	9.1	12.1	—	—
Cutting handtools	35.7	21.4	—	—	—	—
Welding and heating handtools	—	33.3	—	—	—	—
Other handtools--powered	—	75.0	—	—	—	—
Ladders	2.2	57.7	11.7	2.2	3.6	—
Ladders--fixed	—	—	33.3	—	—	—
Ladders--movable	—	62.1	10.3	—	3.4	—
Extension ladders	—	64.3	—	—	—	—
Step ladders	—	54.5	13.6	—	—	—
Containers	8.0	11.0	11.0	12.0	27.0	—
Containers--nonpressurized	6.9	8.6	12.1	13.8	25.9	—
Tanks, bins, vats	7.7	12.8	10.3	12.8	25.6	—
Containers--pressurized	—	26.3	15.8	15.8	21.1	—
Pressure lines, except hoses	—	55.6	—	—	—	—
Variable restraint	—	—	—	—	23.1	—
Bundles, bales	—	—	—	—	—	—
Other	9.7	19.4	5.7	7.0	25.6	—
Furniture and fixtures	—	25.8	12.9	9.7	16.1	—
Furniture	—	—	—	—	—	—
Atmospheric and environmental conditions	8.2	21.9	—	—	27.4	—
Fire, flame, smoke	—	—	—	—	40.0	—
Fire, flame	—	—	—	—	44.4	—
Steam, vapors, liquids	14.0	16.3	3.5	5.8	29.1	—
Scrap, waste, debris	—	—	—	—	—	—

¹ Based on the 2000 Standard Occupational Classification System

² The primary source of injury identifies the object, substance, or exposure that directly produced or inflicted the injury. For transportation incidents, the source identifies the vehicle in which the deceased was an occupant.

³ The secondary source of injury, if any, identifies the object, substance, or person that generated the primary 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.

NOTE: Totals for 2004 are revised and final. Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate no data reported or data that do not meet publication criteria. n.e.c. means "not elsewhere classified". There were 7 fatalities for which there was insufficient information to determine a specific occupation classification.

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.