

TABLE A-10. Fatal occupational injuries by primary and secondary source of injury by major private industry division, California, 1997

Primary source and secondary source	Total fatalities (number)	Private Industry <sup>1</sup> (percent)								
		Agriculture, forestry, and fishing	Mining <sup>2</sup>	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total	651	10.8	1.2	13.2	8.3	14.7	4.5	13.4	2.3	17.4
<b>Primary source<sup>3</sup></b>										
<b>Vehicles</b>	253	13.4	--	9.5	9.9	27.3	4.7	5.1	--	11.5
Air vehicle	25	--	--	--	--	--	--	--	--	16.0
Aircraft, unspecified	8	--	--	--	--	--	--	--	--	--
Aircraft--powered fixed wing	6	--	--	--	--	--	--	--	--	50.0
Aircraft--powered fixed wing, unspecified	5	--	--	--	--	--	--	--	--	60.0
Aircraft--powered rotary wing	10	--	--	--	--	--	--	--	--	--
Helicopter	10	--	--	--	--	--	--	--	--	--
Highway vehicle, motorized	192	8.9	--	9.4	11.5	31.3	5.7	5.7	--	12.0
Highway vehicle, unspecified	31	--	--	9.7	--	16.1	9.7	--	--	16.1
Automobile	47	8.5	--	6.4	17.0	12.8	--	14.9	--	23.4
Motorcycle, moped	5	--	--	--	--	--	--	--	--	--
Truck	100	11.0	--	12.0	8.0	47.0	8.0	--	--	5.0
Truck, unspecified	23	17.4	--	13.0	--	47.8	--	--	--	--
Pickup truck	11	--	--	--	--	27.3	--	--	--	--
Semitrailer, tractor trailer, trailer truck	42	9.5	--	--	--	64.3	11.9	--	--	--
Truck, n.e.c.	21	14.3	--	28.6	--	23.8	--	--	--	--
Van--passenger or light delivery	7	--	--	--	57.1	--	--	--	--	--
Plant and industrial powered vehicles, tractors	23	56.5	--	--	--	--	--	--	--	--
Forklift	7	--	--	--	--	--	--	--	--	--
Forklift, unspecified	6	--	--	--	--	--	--	--	--	--
Tractor	15	80.0	--	--	--	--	--	--	--	--
Water vehicle	9	33.3	--	--	--	--	--	--	--	--
Tugboat, commercial fishing boat	5	60.0	--	--	--	--	--	--	--	--
<b>Structures and surfaces</b>	82	12.2	--	34.1	4.9	3.7	--	7.3	3.7	19.5
Floors, walkways, ground surfaces	74	12.2	--	35.1	5.4	4.1	--	6.8	4.1	21.6
Floors, walkways, ground surfaces, unspecified	6	--	--	50.0	--	--	--	--	--	--
Floors	18	--	--	38.9	--	--	--	--	16.7	27.8
Floor, unspecified	5	--	--	--	--	--	--	--	--	--
Floor of building	9	--	--	44.4	--	--	--	--	--	--
Floor, n.e.c.	3	--	--	--	--	--	--	--	--	--
Ground	42	19.0	--	31.0	7.1	--	--	7.1	--	14.3
Parking lots	3	--	--	--	--	--	--	--	--	--
Other structural elements	7	--	--	--	--	--	--	--	--	--
<b>Machinery</b>	36	13.9	--	19.4	16.7	--	22.2	--	--	11.1
Agricultural and garden machinery	4	100.0	--	--	--	--	--	--	--	--
Construction, logging, and mining machinery	10	--	--	40.0	--	--	--	--	--	--
Excavating machinery	3	--	--	--	--	--	--	--	--	--
Heating, cooling, and cleaning machinery and appliances	3	--	--	--	--	--	--	--	--	--
Material handling machinery	10	--	--	30.0	30.0	--	--	--	--	30.0
Cranes	3	--	--	--	--	--	--	--	--	--
Special process machinery	4	--	--	--	--	--	100.0	--	--	--
Packaging, bottling, wrapping machinery	4	--	--	--	--	--	100.0	--	--	--
Packaging, wrapping, bundling machinery	4	--	--	--	--	--	100.0	--	--	--
<b>Parts and materials</b>	39	10.3	--	25.6	10.3	--	--	7.7	--	25.6
Building materials--solid elements	5	--	--	--	--	--	--	--	--	--

See footnotes at end of table.

TABLE A-10. Fatal occupational injuries by primary and secondary source of injury by major private industry division, California, 1997 - continued

Primary source and secondary source	Total fatalities (number)	Private Industry <sup>1</sup> (percent)								
		Agriculture, forestry, and fishing	Mining <sup>2</sup>	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Fasteners, connectors, ropes, ties	11	--	--	--	--	--	--	--	--	36.4
Ropes, ties	11	--	--	--	--	--	--	--	--	36.4
Ropes, ties, unspecified	5	--	--	--	--	--	--	--	--	--
Wire--nonelectrical	3	--	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	18	16.7	--	16.7	22.2	--	--	--	--	22.2
Electric parts	13	--	--	--	--	--	--	--	--	30.8
Electric parts, unspecified	3	--	--	--	--	--	--	--	--	--
Electrical wiring	4	--	--	--	--	--	--	--	--	75.0
Power lines, transformers, convertors	3	--	--	--	--	--	--	--	--	--
Machine and appliance parts	4	--	--	--	--	--	--	--	--	--
Drums, pulleys, sheaves	3	--	--	--	--	--	--	--	--	--
Vehicle and mobile equipment parts	3	--	--	--	--	--	--	--	--	--
<b>Persons, plants, animals, and minerals</b>	25	12.0	12.0	12.0	12.0	12.0	--	--	--	24.0
Animals and animal products	5	--	--	--	--	--	--	--	--	--
Insects, arachnids (spiders, ticks, scorpions, etc.)	4	--	--	--	--	--	--	--	--	--
Nonmetallic minerals, except fuel	4	--	--	--	--	--	--	--	--	--
Dirt, earth	4	--	--	--	--	--	--	--	--	--
Person--other than injured or ill worker	3	--	--	--	--	--	--	--	--	--
Plants, trees, vegetation--not processed	12	--	--	--	25.0	--	--	--	--	25.0
Trees, logs	12	--	--	--	25.0	--	--	--	--	25.0
<b>Chemicals and chemical products</b>	23	--	--	17.4	13.0	13.0	--	13.0	--	21.7
Chemical products--general	13	--	--	--	--	--	--	--	--	23.1
Drugs, alcohol, medicines	12	--	--	--	--	--	--	--	--	25.0
Drugs--nonmedicinal	6	--	--	--	--	--	--	--	--	--
Medicines	3	--	--	--	--	--	--	--	--	--
Other chemicals	6	--	--	--	--	--	--	--	--	--
Oxygen and oxygen compounds, n.e.c.	5	--	--	--	--	--	--	--	--	--
Carbon monoxide	5	--	--	--	--	--	--	--	--	--
<b>Tools, instruments, and equipment</b>	17	--	--	29.4	--	--	--	23.5	--	35.3
Handtools--nonpowered	12	--	--	--	--	--	--	33.3	--	33.3
Cutting handtools--nonpowered	10	--	--	--	--	--	--	40.0	--	40.0
Cutting handtools--nonpowered, unspecified	3	--	--	--	--	--	--	--	--	--
Knives	7	--	--	--	--	--	--	--	--	57.1
Containers	8	--	--	--	--	--	--	--	--	--
Containers--nonpressurized	3	--	--	--	--	--	--	--	--	--
Containers--variable restraint	3	--	--	--	--	--	--	--	--	--
<b>Other sources</b>	167	7.8	--	2.4	4.2	7.8	2.4	32.3	5.4	21.0
Ammunition	133	3.8	--	--	3.8	6.0	2.3	37.6	6.8	22.6
Bullets	131	3.8	--	--	3.8	6.1	--	38.2	6.9	22.1
Atmospheric and environmental conditions	13	23.1	--	--	--	23.1	--	--	--	--
Fire, flame, smoke	11	--	--	--	--	27.3	--	--	--	--
Fire, flame	10	--	--	--	--	30.0	--	--	--	--
Steam, vapors, liquids, n.e.c.	12	41.7	--	--	--	--	--	--	--	--
Liquids	12	41.7	--	--	--	--	--	--	--	--
Water	12	41.7	--	--	--	--	--	--	--	--
Nonclassifiable	7	--	--	--	--	--	--	--	--	42.9
<b>Secondary source<sup>4</sup></b>										
<b>Vehicles</b>	54	13.0	--	11.1	16.7	25.9	--	9.3	--	5.6

See footnotes at end of table.

TABLE A-10. Fatal occupational injuries by primary and secondary source of injury by major private industry division, California, 1997 - continued

Primary source and secondary source	Total fatalities (number)	Private Industry <sup>1</sup> (percent)								
		Agriculture, forestry, and fishing	Mining <sup>2</sup>	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Highway vehicle, motorized	45	8.9	--	11.1	17.8	24.4	--	8.9	--	6.7
Highway vehicle, unspecified	5	--	--	--	--	--	--	--	--	--
Automobile	9	--	--	--	--	--	--	33.3	--	--
Truck	30	10.0	--	13.3	16.7	30.0	--	--	--	--
Truck, unspecified	4	--	--	--	--	--	--	--	--	--
Pickup truck	4	--	--	--	--	--	--	--	--	--
Semitrailer, tractor trailer, trailer truck	13	--	--	--	23.1	46.2	--	--	--	--
Truck, n.e.c.	5	--	--	--	--	--	--	--	--	--
Plant and industrial powered vehicles, tractors	6	50.0	--	--	--	--	--	--	--	--
Forklift	4	--	--	--	--	--	--	--	--	--
Forklift, unspecified	3	--	--	--	--	--	--	--	--	--
<b>Structures and surfaces</b>	66	4.5	--	42.4	--	15.2	--	7.6	--	10.6
Floors, walkways, ground surfaces	8	--	--	--	--	--	--	--	--	--
Other structural elements	25	--	--	60.0	--	--	--	--	--	--
Roof	17	--	--	70.6	--	--	--	--	--	--
Walls	3	--	--	--	--	--	--	--	--	--
Structures	33	--	--	33.3	--	21.2	--	9.1	--	9.1
Pools	4	--	--	--	--	--	--	--	--	--
Scaffolds, staging	9	--	--	66.7	--	--	--	--	--	--
Scaffolds--staging, unspecified	8	--	--	75.0	--	--	--	--	--	--
Towers, poles	4	--	--	--	--	--	--	--	--	--
Other structures	12	--	--	--	--	33.3	--	--	--	--
Guardrails, road dividers	10	--	--	--	--	30.0	--	--	--	--
<b>Machinery</b>	13	--	--	38.5	--	--	--	--	--	23.1
Material handling machinery	7	--	--	--	--	--	--	--	--	--
Cranes	3	--	--	--	--	--	--	--	--	--
<b>Parts and materials</b>	19	21.1	--	26.3	--	26.3	--	--	--	21.1
Building materials--solid elements	3	--	--	--	--	--	--	--	--	--
Fasteners, connectors, ropes, ties	3	--	--	--	--	--	--	--	--	--
Ropes, ties	3	--	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	11	--	--	36.4	--	27.3	--	--	--	27.3
Electric parts	11	--	--	36.4	--	27.3	--	--	--	27.3
Power lines, transformers, convertors	8	--	--	37.5	--	37.5	--	--	--	--
<b>Persons, plants, animals, and minerals</b>	129	7.8	--	3.9	3.9	7.0	2.3	38.0	7.0	20.2
Person--other than injured or ill worker	115	2.6	--	--	4.3	7.0	--	41.7	7.8	22.6
Person--other than injured or ill worker, unspecified	17	--	--	--	--	--	--	17.6	--	47.1
Co-worker, former co-worker of injured or ill worker	14	--	--	--	28.6	--	--	--	--	21.4
Robber	15	--	--	--	--	--	--	73.3	--	--
Person--other than injured or ill worker, n.e.c.	69	--	--	--	--	5.8	--	47.8	10.1	18.8
Plants, trees, vegetation--not processed	12	58.3	--	--	--	--	--	--	--	--
Trees, logs	12	58.3	--	--	--	--	--	--	--	--
<b>Chemicals and chemical products</b>	4	--	--	--	--	--	--	--	--	--
Coal, natural gas, petroleum fuels and products, n.e.c.	4	--	--	--	--	--	--	--	--	--
Petroleum fuels, distillates, products, n.e.c.	3	--	--	--	--	--	--	--	--	--
<b>Tools, instruments, and equipment</b>	20	15.0	--	15.0	--	--	--	--	--	30.0
Ladders	14	--	--	21.4	--	--	--	--	--	28.6
Ladders, unspecified	7	--	--	--	--	--	--	--	--	--
Ladders--movable	7	--	--	--	--	--	--	--	--	42.9
Movable ladders, unspecified	4	--	--	--	--	--	--	--	--	--
Other tools, instruments, and equipment	3	--	--	--	--	--	--	--	--	--

See footnotes at end of table.

TABLE A-10. Fatal occupational injuries by primary and secondary source of injury by major private industry division, California, 1997 - continued

Primary source and secondary source	Total fatalities (number)	Private Industry <sup>1</sup> (percent)								
		Agriculture, forestry, and fishing	Mining <sup>2</sup>	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Firearms	3	--	--	--	--	--	--	--	--	--
<b>Containers</b>	3	--	--	--	--	--	--	--	--	--
Containers--nonpressurized	3	--	--	--	--	--	--	--	--	--
<b>Other sources</b>	15	26.7	--	--	--	20.0	--	--	--	--
Atmospheric and environmental conditions	5	--	--	--	--	--	--	--	--	--
Fire, flame, smoke	3	--	--	--	--	--	--	--	--	--
Fire, flame	3	--	--	--	--	--	--	--	--	--
Steam, vapors, liquids, n.e.c.	10	40.0	--	--	--	--	--	--	--	--
Liquids	10	40.0	--	--	--	--	--	--	--	--
Water	10	40.0	--	--	--	--	--	--	--	--

<sup>1</sup> Classified according to the *Standard Industrial Classification Manual, 1987*

<sup>2</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>3</sup> The primary source 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.

<sup>4</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.

NOTE: 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."

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal agencies, *Census of Fatal Occupational Injuries*