

TABLE A-10. Fatal occupational injuries by primary and secondary source of injury by major private industry division, California, 1999

Primary source and secondary source	Total fatalities (number)	Private Industry ¹ (percent)								
		Agriculture, forestry, and fishing	Mining ²	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total	602	15.4	--	15.6	10.3	15.3	3.0	9.3	1.8	15.4
Primary source³										
Vehicles	283	19.8	--	11.7	4.9	23.3	4.2	5.3	--	15.9
Air vehicle	23	--	--	--	--	26.1	--	--	--	13.0
Aircraft--powered fixed wing	8	--	--	--	--	--	--	--	--	37.5
Propeller-driven aircraft	5	--	--	--	--	--	--	--	--	--
Aircraft--powered rotary wing	13	--	--	--	--	30.8	--	--	--	--
Helicopter	13	--	--	--	--	30.8	--	--	--	--
Highway vehicle, motorized	216	18.1	--	13.4	3.7	23.6	4.6	6.5	--	17.1
Highway vehicle, unspecified	6	--	--	--	--	--	--	--	--	--
Automobile	52	7.7	--	5.8	--	9.6	5.8	11.5	--	26.9
Truck	126	15.1	--	19.0	4.8	33.3	5.6	4.8	--	11.1
Truck, unspecified	8	--	--	--	--	--	37.5	--	--	--
Delivery truck	5	--	--	--	--	--	--	60.0	--	--
Dump truck	6	--	--	66.7	--	--	--	--	--	--
Pickup truck	42	26.2	--	26.2	--	11.9	7.1	--	--	19.0
Semitrailer, tractor trailer, trailer truck	45	15.6	--	8.9	8.9	60.0	--	--	--	--
Truck, n.e.c.	20	--	--	20.0	--	35.0	--	--	--	--
Van--passenger or light delivery	27	51.9	--	--	--	--	--	--	--	18.5
Offroad vehicle, nonindustrial	5	--	--	--	--	--	--	--	--	60.0
Golf cart, powered	3	--	--	--	--	--	--	--	--	--
Plant and industrial powered vehicles, tractors	19	52.6	--	15.8	--	15.8	--	--	--	--
Forklift	7	--	--	--	--	--	--	--	--	--
Forklift, unspecified	7	--	--	--	--	--	--	--	--	--
Tractor	11	72.7	--	--	--	--	--	--	--	--
Water vehicle	12	41.7	--	--	--	--	--	--	--	--
Motorboat, yachts	5	--	--	--	--	--	--	--	--	--
Tugboat, commercial fishing boat	4	--	--	--	--	--	--	--	--	--
Structures and surfaces	81	7.4	--	40.7	12.3	3.7	--	6.2	--	14.8
Floors, walkways, ground surfaces	70	7.1	--	35.7	12.9	4.3	--	7.1	--	15.7
Floors, walkways, ground surfaces, unspecified	9	--	--	55.6	--	--	--	--	--	--
Floors	20	--	--	30.0	20.0	--	--	15.0	--	20.0
Floor, unspecified	3	--	--	--	--	--	--	--	--	--
Floor of building	17	--	--	29.4	17.6	--	--	17.6	--	23.5
Ground	25	16.0	--	40.0	12.0	--	--	--	--	--
Sidewalks, paths, outdoor walkways	6	--	--	--	--	--	--	--	--	--
Surfaces below ground level, n.e.c.	4	--	--	--	--	--	--	--	--	--
Parking lots	4	--	--	--	--	--	--	--	--	--
Other structural elements	4	--	--	--	--	--	--	--	--	--
Structures	4	--	--	100.0	--	--	--	--	--	--
Machinery	31	35.5	--	22.6	12.9	9.7	--	--	--	9.7
Machinery, unspecified	3	--	--	--	--	--	--	--	--	--
Agricultural and garden machinery	9	66.7	--	--	--	--	--	--	--	--
Harvesting and threshing machinery	3	--	--	--	--	--	--	--	--	--
Construction, logging, and mining machinery	11	36.4	--	54.5	--	--	--	--	--	--
Excavating machinery	3	--	--	100.0	--	--	--	--	--	--
Other construction, logging, and mining machinery	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, 1999 - continued

Primary source and secondary source	Total fatalities (number)	Private Industry ¹ (percent)								
		Agriculture, forestry, and fishing	Mining ²	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Material handling machinery	6	--	--	--	--	--	--	--	--	--
Cranes	4	--	--	--	--	--	--	--	--	--
Cranes--mobile, truck, rail mounted	4	--	--	--	--	--	--	--	--	--
Parts and materials	31	--	--	22.6	22.6	19.4	--	--	--	--
Building materials--solid elements	10	--	--	--	40.0	--	--	--	--	--
Pipes, ducts, tubing	3	--	--	--	--	--	--	--	--	--
Structural metal materials	3	--	--	--	--	--	--	--	--	--
Wood, lumber	3	--	--	--	--	--	--	--	--	--
Fasteners, connectors, ropes, ties	7	--	--	--	--	--	--	--	--	--
Ropes, ties	7	--	--	--	--	--	--	--	--	--
Ropes, ties, unspecified	4	--	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	10	--	--	50.0	--	--	--	--	--	--
Electric parts	9	--	--	55.6	--	--	--	--	--	--
Electrical wiring	4	--	--	100.0	--	--	--	--	--	--
Vehicle and mobile equipment parts	3	--	--	--	--	100.0	--	--	--	--
Persons, plants, animals, and minerals	17	29.4	--	--	17.6	--	--	--	--	--
Animals and animal products	6	66.7	--	--	--	--	--	--	--	--
Mammals, except humans	4	75.0	--	--	--	--	--	--	--	--
Nonmetallic minerals, except fuel	4	--	--	--	--	--	--	--	--	--
Person--other than injured or ill worker	4	--	--	--	--	--	--	--	--	--
Chemicals and chemical products	12	--	--	--	--	--	--	--	--	--
Chemical products--general	8	--	--	--	--	--	--	--	--	--
Drugs, alcohol, medicines	5	--	--	--	--	--	--	--	--	--
Drugs--nonmedicinal	3	--	--	--	--	--	--	--	--	--
Tools, instruments, and equipment	15	--	--	20.0	20.0	--	--	33.3	--	--
Handtools--nonpowered	7	--	--	--	--	--	--	57.1	--	--
Cutting handtools--nonpowered	5	--	--	--	--	--	--	60.0	--	--
Knives	4	--	--	--	--	--	--	75.0	--	--
Containers	9	--	--	--	44.4	--	--	--	--	--
Containers--nonpressurized	6	--	--	--	--	--	--	--	--	--
Boxes, crates, cartons	3	--	--	--	--	--	--	--	--	--
Tanks, bins, vats	3	--	--	--	--	--	--	--	--	--
Containers--variable restraint	3	--	--	--	--	--	--	--	--	--
Other sources	121	9.1	--	5.8	12.4	7.4	--	21.5	5.8	20.7
Ammunition	81	4.9	--	--	7.4	11.1	--	25.9	8.6	25.9
Bullets	80	5.0	--	--	6.3	11.3	--	26.3	8.8	26.3
Atmospheric and environmental conditions	20	--	--	25.0	25.0	--	--	--	--	15.0
Fire, flame, smoke	15	--	--	33.3	--	--	--	--	--	20.0
Fire, flame	14	--	--	35.7	--	--	--	--	--	21.4
Temperature extremes--environmental	4	--	--	--	--	--	--	--	--	--
Heat--environmental	4	--	--	--	--	--	--	--	--	--
Steam, vapors, liquids, n.e.c.	8	50.0	--	--	37.5	--	--	--	--	--
Liquids	8	50.0	--	--	37.5	--	--	--	--	--
Water	7	42.9	--	--	42.9	--	--	--	--	--
Nonclassifiable	9	--	--	--	--	--	--	33.3	--	--
Secondary source⁴										
Vehicles	106	25.5	--	9.4	6.6	19.8	5.7	6.6	--	14.2
Highway vehicle, motorized	91	27.5	--	9.9	3.3	18.7	5.5	6.6	--	15.4

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, 1999 - continued

Primary source and secondary source	Total fatalities (number)	Private Industry ¹ (percent)								
		Agriculture, forestry, and fishing	Mining ²	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Highway vehicle, unspecified	3	--	--	--	--	--	--	--	--	--
Automobile	11	--	--	--	--	27.3	--	--	--	27.3
Truck	72	31.9	--	9.7	4.2	18.1	6.9	8.3	--	11.1
Truck, unspecified	5	--	--	--	--	--	--	--	--	--
Dump truck	3	100.0	--	--	--	--	--	--	--	--
Pickup truck	16	--	--	--	--	--	--	25.0	--	18.8
Semitrailer, tractor trailer, trailer truck	42	40.5	--	11.9	--	19.0	9.5	--	--	--
Truck, n.e.c.	5	--	--	--	--	60.0	--	--	--	--
Van--passenger or light delivery	3	--	--	--	--	--	--	--	--	--
Plant and industrial powered vehicles, tractors	9	--	--	--	44.4	33.3	--	--	--	--
Forklift	8	--	--	--	50.0	37.5	--	--	--	--
Forklift, unspecified	7	--	--	--	57.1	--	--	--	--	--
Structures and surfaces	98	6.1	--	29.6	6.1	16.3	3.1	4.1	--	17.3
Floors, walkways, ground surfaces	29	--	--	13.8	17.2	10.3	--	--	--	24.1
Floors	4	--	--	--	--	--	--	--	--	--
Floor of building	4	--	--	--	--	--	--	--	--	--
Ground	13	--	--	--	--	--	--	--	--	30.8
Stairs, steps	3	--	--	--	--	--	--	--	--	--
Surfaces below ground level, n.e.c.	4	--	--	--	--	--	--	--	--	--
Surfaces below ground level, n.e.c.	3	--	--	--	--	--	--	--	--	--
Other structural elements	27	--	--	59.3	--	--	--	--	--	22.2
Roof	15	--	--	66.7	--	--	--	--	--	20.0
Skylights	4	--	--	--	--	--	--	--	--	--
Walls	3	--	--	--	--	--	--	--	--	--
Structures	42	11.9	--	21.4	--	31.0	--	7.1	--	9.5
Buildings--office, plant, residential	4	--	--	--	--	--	--	--	--	--
Scaffolds, staging	4	--	--	--	--	--	--	--	--	--
Scaffolds--staging, unspecified	4	--	--	--	--	--	--	--	--	--
Towers, poles	8	--	--	50.0	--	--	--	--	--	--
Other structures	23	13.0	--	13.0	--	39.1	--	13.0	--	--
Guardrails, road dividers	11	--	--	--	--	63.6	--	--	--	--
Structures, n.e.c.	11	--	--	27.3	--	--	--	--	--	--
Machinery	14	--	--	--	28.6	28.6	--	--	--	--
Material handling machinery	12	--	--	--	--	33.3	--	--	--	--
Cranes	3	--	--	--	--	--	--	--	--	--
Cranes, unspecified	3	--	--	--	--	--	--	--	--	--
Jacks	6	--	--	--	--	--	--	--	--	--
Jacks, unspecified	3	--	--	--	--	--	--	--	--	--
Jacks--hydraulic	3	--	--	--	--	--	--	--	--	--
Parts and materials	11	--	--	45.5	27.3	--	--	--	--	--
Machine, tool, and electric parts	9	--	--	44.4	--	--	--	--	--	--
Electric parts	9	--	--	44.4	--	--	--	--	--	--
Power lines, transformers, convertors	7	--	--	57.1	--	--	--	--	--	--
Persons, plants, animals, and minerals	91	7.7	--	3.3	5.5	11.0	--	27.5	4.4	25.3
Person--other than injured or ill worker	73	5.5	--	--	5.5	9.6	--	34.2	5.5	27.4
Person--other than injured or ill worker, unspecified	25	--	--	--	--	16.0	--	24.0	12.0	20.0
Co-worker, former co-worker of injured or ill worker	6	--	--	--	--	--	--	50.0	--	--
Robber	20	--	--	--	--	15.0	--	65.0	--	15.0
Person--other than injured or ill worker, n.e.c.	20	--	--	--	--	--	--	15.0	--	55.0
Plants, trees, vegetation--not processed	15	20.0	--	--	--	--	--	--	--	--

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		Agriculture, forestry, and fishing	Mining ²	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Trees, logs	14	--	--	--	--	--	--	--	--	--
Chemicals and chemical products	13	--	--	23.1	46.2	--	--	--	--	--
Chemical products--general	5	--	--	60.0	--	--	--	--	--	--
Solvents, degreasers, n.e.c.	4	--	--	75.0	--	--	--	--	--	--
Naphtha solvents	4	--	--	75.0	--	--	--	--	--	--
Other chemicals	3	--	--	--	--	--	--	--	--	--
Oxygen and oxygen compounds, n.e.c.	3	--	--	--	--	--	--	--	--	--
Tools, instruments, and equipment	28	--	--	10.7	14.3	--	--	21.4	10.7	--
Ladders	8	--	--	37.5	--	--	--	--	--	--
Ladders, unspecified	5	--	--	--	--	--	--	--	--	--
Ladders--movable	3	--	--	--	--	--	--	--	--	--
Other tools, instruments, and equipment	20	--	--	--	--	--	--	20.0	15.0	--
Firearms	20	--	--	--	--	--	--	20.0	15.0	--
Firearm, unspecified	4	--	--	--	--	--	--	--	--	--
Pistol, handgun, revolver	12	--	--	--	--	--	--	25.0	--	--
Shotgun	3	--	--	--	--	--	--	--	--	--
Containers	6	--	--	--	50.0	--	--	--	--	--
Containers--nonpressurized	5	--	--	--	--	--	--	--	--	--
Tanks, bins, vats	5	--	--	--	--	--	--	--	--	--
Other sources	25	20.0	--	--	12.0	12.0	--	--	--	--
Apparel and textiles	3	--	--	--	--	--	--	--	--	--
Clothing and shoes	3	--	--	--	--	--	--	--	--	--
Atmospheric and environmental conditions	4	--	--	--	--	--	--	--	--	--
Weather and atmospheric conditions	3	--	--	--	--	--	--	--	--	--
Steam, vapors, liquids, n.e.c.	18	--	--	--	--	16.7	--	--	--	--
Liquids	18	--	--	--	--	16.7	--	--	--	--
Water	18	--	--	--	--	16.7	--	--	--	--

¹ Classified according to the *Standard Industrial Classification Manual, 1987*

² 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.

³ 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.

⁴ 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