

TABLE A-4. Fatal occupational injuries by primary and secondary source of injury for all fatal injuries and by major private industry<sup>1</sup> sector, California, 2016

Primary source and secondary source <sup>2</sup>	Total fatal injuries (number)	Goods producing				Service providing							
		Total goods producing	Natural resources and mining <sup>3</sup>	Construction	Manufacturing	Total service providing	Trade, transportation and utilities	Information	Financial activities	Professional and business services	Educational and health services	Leisure and hospitality	Other services
Total	376	112	38	55	19	225	116	4	10	37	12	26	20
<b>Primary Source<sup>4</sup></b>													
<b>Chemicals and chemical products</b>	9	4	--	3	--	5	--	--	--	--	--	--	--
Chemical products--general	8	3	--	3	--	5	--	--	--	--	--	--	--
Drugs, alcohol, and medicines	8	3	--	3	--	5	--	--	--	--	--	--	--
Drugs--nonmedicinal	5	--	--	--	--	3	--	--	--	--	--	--	--
<b>Containers, furniture, and fixtures</b>	6	5	--	--	4	--	--	--	--	--	--	--	--
Containers	4	3	--	--	--	--	--	--	--	--	--	--	--
<b>Machinery</b>	15	10	--	7	--	5	--	--	--	--	--	--	--
Agricultural and garden machinery	3	--	--	--	--	--	--	--	--	--	--	--	--
Material and personnel handling machinery	10	7	--	5	--	3	--	--	--	--	--	--	--
Cranes	4	4	--	3	--	--	--	--	--	--	--	--	--
Elevators, hoists, aerial lifts, personnel platforms--except truck-mounted	6	3	--	--	--	3	--	--	--	--	--	--	--
Aerial lifts--except truck-mounted	5	--	--	--	--	3	--	--	--	--	--	--	--
<b>Parts and materials</b>	14	8	--	5	--	5	--	--	--	3	--	--	--
Building materials--solid elements	7	4	--	3	1	3	--	--	--	--	--	--	--
Structural metal materials	4	3	--	--	1	--	--	--	--	--	--	--	--
Beams--unattached metal	1	1	--	1	--	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	4	3	--	--	--	--	--	--	--	--	--	--	--
Electric parts	4	3	--	--	--	--	--	--	--	--	--	--	--
Vehicle and mobile equipment parts	3	--	--	--	--	--	--	--	--	--	--	--	--
<b>Persons, plants, animals, and minerals</b>	94	17	11	4	--	64	27	--	4	7	6	12	8
Nonmetallic minerals, except fuel	--	--	--	--	--	--	--	--	--	--	--	--	--
Boulders	1	--	--	--	--	--	--	--	--	--	--	--	--
Person--injured or ill worker	28	4	--	--	--	22	9	--	3	1	3	4	4
Person--other than injured or ill worker	49	4	--	--	--	35	18	--	1	5	6	4	4
Relative or domestic partner of injured or ill worker	3	1	--	1	--	--	--	--	--	--	--	--	--
Immediate family member other than spouse	1	1	--	1	--	--	--	--	--	--	--	--	--
Co-worker or work associate of injured or ill worker	3	--	--	--	--	--	1	--	--	--	--	--	--
Co-worker	3	--	--	--	--	--	1	--	--	--	--	--	--
Acquaintance	--	--	--	--	--	--	1	--	--	--	--	--	--
Assailant, suspect, inmate	23	--	--	--	--	16	9	--	1	1	--	2	3
Robber	15	--	--	--	--	14	9	--	1	--	--	1	3
Suspect not yet apprehended	6	--	--	--	--	--	--	--	--	--	--	--	--
Plants, trees, vegetation--not processed	13	9	9	--	--	4	--	--	--	3	--	--	--
Trees, logs, limbs	13	9	9	--	--	4	--	--	--	3	--	--	--
Trees	8	4	4	--	--	4	--	--	--	3	--	--	--
Logs	3	3	3	--	--	--	--	--	--	--	--	--	--
<b>Structures and surfaces</b>	41	21	--	16	3	17	--	--	--	5	--	5	3
Buildings--office, plant, residential	6	--	--	--	--	6	--	--	--	--	--	5	--
Industrial buildings	6	--	--	--	--	6	--	--	--	--	--	5	--
Warehouse	6	--	--	--	--	6	--	--	--	--	--	5	--
Structures other than buildings	6	3	--	--	--	3	--	--	--	--	--	--	--
Scaffolds, staging	3	--	--	--	--	--	--	--	--	--	--	--	--
Towers, poles	1	1	--	1	--	--	--	--	--	--	--	--	--
Utility and telephone poles	1	1	--	1	--	--	--	--	--	--	--	--	--
Other structural elements	18	12	--	10	--	6	--	--	--	3	--	--	--
Roofs	13	8	--	7	--	5	--	--	--	--	--	--	--

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		Total goods producing	Natural resources and mining <sup>3</sup>	Construction	Manufacturing	Total service providing	Trade, transportation and utilities	Information	Financial activities	Professional and business services	Educational and health services	Leisure and hospitality	Other services
Skylights	3	--	--	--	--	--	--	--	--	--	--	--	--
Roof edges	4	4	--	4	--	--	--	--	--	--	--	--	--
Floors, walkways, ground surfaces	8	3	--	--	--	--	--	--	--	--	--	--	--
Floors	4	--	--	--	--	--	--	--	--	--	--	--	--
<b>Tools, instruments, and equipment</b>	21	11	3	7	--	9	3	--	3	--	--	--	--
Ladders	18	9	3	5	--	8	3	--	--	--	--	--	--
Movable--ladders	4	3	--	--	--	--	--	--	--	--	--	--	--
<b>Vehicles</b>	168	34	18	12	4	115	78	--	3	16	6	6	6
Aircraft	11	1	1	--	--	6	--	--	--	--	5	--	--
Airplanes--powered fixed wing	10	1	1	--	--	5	--	--	--	--	--	--	--
Airplane--jet or turbine engine	5	--	--	--	--	--	--	--	--	--	--	--	--
Airplane--propeller-driven or piston engine	4	1	1	--	--	--	--	--	--	--	--	--	--
Aircraft--nonpowered	1	--	--	--	--	1	--	--	--	--	1	--	--
Parachute	1	--	--	--	--	1	--	--	--	--	1	--	--
Water vehicle	3	--	--	--	--	--	--	--	--	--	--	--	--
Highway vehicles, motorized	135	19	7	10	--	102	74	--	--	14	--	6	5
Passenger vehicle--automobiles, buses, and passenger vans	34	--	--	--	--	25	14	--	--	3	--	3	4
Ambulance, police, and other emergency passenger vehicle	1	--	--	--	--	--	--	--	--	--	--	--	--
Taxi	4	--	--	--	--	4	4	--	--	--	--	--	--
Automobile	21	--	--	--	--	16	8	--	--	--	--	--	4
Bus	1	--	--	--	--	1	1	--	--	--	--	--	--
Passenger van	5	--	--	--	--	--	--	--	--	--	--	--	--
Motorcycle, moped, dirt bike	2	--	--	--	--	2	--	--	--	--	--	2	--
Trucks--motorized freight hauling and utility	73	8	3	3	--	62	53	--	--	5	--	--	--
Semi, tractor-trailer, tanker truck	52	4	--	--	--	48	46	--	--	--	--	--	--
Dump truck	4	--	--	--	--	--	--	--	--	--	--	--	--
Delivery truck or van	6	--	--	--	--	5	--	--	--	--	--	--	--
Cement truck, concrete mixer truck	1	--	--	--	--	1	1	--	--	--	--	--	--
Multi-purpose highway vehicles	28	10	--	6	--	15	7	--	--	6	--	--	--
Pickup truck	23	8	--	4	--	14	6	--	--	6	--	--	--
SUV, sports utility vehicle	4	--	--	--	--	--	--	--	--	--	--	--	--
Off-road or industrial vehicles--powered	18	12	8	--	--	5	--	--	--	--	--	--	--
Off-road passenger vehicles--powered	5	3	3	--	--	--	--	--	--	--	--	--	--
ATV, all terrain vehicle	3	3	3	--	--	--	--	--	--	--	--	--	--
Industrial vehicles, material hauling and transport--powered	8	4	--	--	--	4	--	--	--	--	--	--	--
Forklift, order picker, platform truck--powered	8	4	--	--	--	4	--	--	--	--	--	--	--
Tractors, PTOs	5	5	4	--	--	--	--	--	--	--	--	--	--
Farm tractor	3	3	3	--	--	--	--	--	--	--	--	--	--
<b>Other sources</b>	8	--	--	--	--	4	--	--	--	--	--	--	--
Other steam, vapors, liquids, ice	3	--	--	--	--	--	--	--	--	--	--	--	--
Liquids--nonchemical	3	--	--	--	--	--	--	--	--	--	--	--	--
Water	3	--	--	--	--	--	--	--	--	--	--	--	--
<b>Secondary Source<sup>5</sup></b>													
<b>Containers, furniture, and fixtures</b>	11	5	--	--	--	6	4	--	--	--	--	--	--
Containers	9	4	--	--	--	5	4	--	--	--	--	--	--
Containers--nonpressurized	3	--	--	--	--	--	--	--	--	--	--	--	--
<b>Machinery</b>	5	3	--	--	--	--	--	--	--	--	--	--	--
Construction, logging, and mining machinery	--	--	--	--	--	--	--	--	--	--	--	--	--

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Primary source and secondary source <sup>2</sup>	Total fatal injuries (number)	Goods producing				Service providing								
		Total goods producing	Natural resources and mining <sup>3</sup>	Construction	Manufacturing	Total service providing	Trade, transportation and utilities	Information	Financial activities	Professional and business services	Educational and health services	Leisure and hospitality	Other services	
Logging and wood processing machinery--specialized	1	1	1	--	--	--	--	--	--	--	--	--	--	--
Forwarding and yarding machinery, except feller-forwarders	1	1	1	--	--	--	--	--	--	--	--	--	--	--
<b>Parts and materials</b>	18	5	--	3	--	13	6	--	--	--	--	--	--	--
Fasteners, connectors, ropes, ties	6	--	--	--	--	6	3	--	--	--	--	--	--	--
Ropes, ties, chains	6	--	--	--	--	6	3	--	--	--	--	--	--	--
Rope, twine, string	4	--	--	--	--	4	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	7	3	--	--	--	4	--	--	--	--	--	--	--	--
Electric parts	7	3	--	--	--	4	--	--	--	--	--	--	--	--
Power cords, electrical cords, extension cords	3	--	--	--	--	--	--	--	--	--	--	--	--	--
Vehicle and mobile equipment parts	3	--	--	--	--	--	--	--	--	--	--	--	--	--
Trailers	3	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Persons, plants, animals, and minerals</b>	16	5	4	1	--	9	6	--	--	3	--	--	--	--
Person--other than injured or ill worker	1	1	--	1	--	--	--	--	--	--	--	--	--	--
Co-worker or work associate of injured or ill worker	1	1	--	1	--	--	--	--	--	--	--	--	--	--
Co-worker	1	1	--	1	--	--	--	--	--	--	--	--	--	--
Plants, trees, vegetation--not processed	13	3	3	--	--	8	5	--	--	3	--	--	--	--
Trees, logs, limbs	13	3	3	--	--	8	5	--	--	3	--	--	--	--
Trees	12	3	3	--	--	7	5	--	--	--	--	--	--	--
<b>Structures and surfaces</b>	32	5	--	--	--	19	12	--	--	--	--	--	--	--
Buildings--office, plant, residential	3	--	--	--	--	--	--	--	--	--	--	--	--	--
Structures other than buildings	14	--	--	--	--	10	9	--	--	--	--	--	--	--
Pools	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Towers, poles	6	--	--	--	--	3	--	--	--	--	--	--	--	--
Other structures	7	--	--	--	--	7	7	--	--	--	--	--	--	--
Guardrails, road dividers	6	--	--	--	--	6	6	--	--	--	--	--	--	--
Other structural elements	5	--	--	--	--	3	3	--	--	--	--	--	--	--
Ceilings, walls	3	--	--	--	--	--	--	--	--	--	--	--	--	--
Floors, walkways, ground surfaces	9	--	--	--	--	--	--	--	--	--	--	--	--	--
Ground	8	--	--	--	--	--	--	--	--	--	--	--	--	--
Geographical structures	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Raised natural structures, hills, mountains	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Hills	1	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Tools, instruments, and equipment</b>	57	6	--	3	--	40	15	--	--	5	5	7	6	6
Handtools--nonpowered	7	3	--	--	--	4	--	--	--	--	--	--	--	--
Cutting handtools--nonpowered	7	3	--	--	--	4	--	--	--	--	--	--	--	--
Box cutters and razor knives	1	--	--	--	--	1	1	--	--	--	--	--	--	--
Knives, unspecified or n.e.c.	6	3	--	--	--	3	--	--	--	--	--	--	--	--
Firearms, law enforcement, and other self-defense equipment	46	--	--	--	--	33	13	--	--	4	4	4	4	6
Firearms	46	--	--	--	--	33	13	--	--	4	4	4	4	6
Pistol, handgun, revolver	30	--	--	--	--	21	7	--	--	3	3	4	--	--
Rifle, shotgun	5	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Vehicles</b>	64	17	8	4	5	42	27	--	--	8	--	--	--	--
Aircraft	1	1	1	--	--	--	--	--	--	--	--	--	--	--
Airplanes--powered fixed wing	1	1	1	--	--	--	--	--	--	--	--	--	--	--
Airplane--propeller-driven or piston engine	1	1	1	--	--	--	--	--	--	--	--	--	--	--
Highway vehicles, motorized	56	10	3	3	4	41	27	--	--	7	--	--	--	--
Passenger vehicle--automobiles, buses, and passenger vans	18	3	--	--	--	14	10	--	--	--	--	--	--	--
Automobile	15	3	--	--	--	12	8	--	--	--	--	--	--	--
Passenger van	2	--	--	--	--	1	1	--	--	--	--	--	--	--
Trucks--motorized freight hauling and utility	27	6	--	--	4	17	12	--	--	--	--	--	--	--
Semi, tractor-trailer, tanker truck	23	4	--	--	--	15	10	--	--	--	--	--	--	--

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		Total goods producing	Natural resources and mining <sup>3</sup>	Construction	Manufacturing	Total service providing	Trade, transportation and utilities	Information	Financial activities	Professional and business services	Educational and health services	Leisure and hospitality	Other services
Delivery truck or van	3	--	--	--	--	--	--	--	--	--	--	--	--
Multi-purpose highway vehicles	11	--	--	--	--	10	5	--	--	3	--	--	--
Pickup truck	6	--	--	--	--	6	3	--	--	--	--	--	--
SUV, sports utility vehicle	5	--	--	--	--	4	--	--	--	--	--	--	--
Off-road or industrial vehicles--powered	3	3	--	--	1	--	--	--	--	--	--	--	--
Industrial vehicles, material hauling and transport--powered	--	--	--	--	1	--	--	--	--	--	--	--	--
Forklift, order picker, platform truck--powered	--	--	--	--	1	--	--	--	--	--	--	--	--
<b>Other sources</b>	10	4	3	--	--	5	5	--	--	--	--	--	--
Environmental and elemental conditions	8	4	3	--	--	--	--	--	--	--	--	--	--
Flooding and other water sources	1	1	1	--	--	--	--	--	--	--	--	--	--
Waves, surges, rough seas	1	1	1	--	--	--	--	--	--	--	--	--	--
Weather and atmospheric conditions	5	--	--	--	--	--	--	--	--	--	--	--	--
Ice, sleet, snow	1	--	--	--	--	--	--	--	--	--	--	--	--
Other steam, vapors, liquids, ice	1	--	--	--	--	1	1	--	--	--	--	--	--
Liquids--nonchemical	1	--	--	--	--	1	1	--	--	--	--	--	--

<sup>1</sup> CFOI has used several versions of the North American Industry Classification System (NAICS) since 2003 to define industry. For more information on the version of NAICS used in this year, see our definitions page at <http://www.bls.gov/iif/oshcdef.htm>.

<sup>2</sup> Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward.

<sup>3</sup> Includes fatal injuries at all establishments categorized as Mining (Sector 21) in the North American Industry Classification System, including establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in Oil and Gas Extraction.

<sup>4</sup> The primary source of a fatal occupational injury is the object, substance, person, bodily motion, or exposure which most directly led to, produced, or inflicted the injury or illness.

<sup>5</sup> The secondary source of a fatal occupational injury is the object, substance, person, or exposure, other than the source, if any, which most actively generated the source or contributed to the injury or illness.

Note: Data for all years 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." CFOI fatal injury counts exclude illness-related deaths unless precipitated by an injury event.

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, December 15, 2017