

TABLE A-4. Fatal occupational injuries by primary and secondary source of injury for all fatal injuries and by major private industry ¹ sector, California, 2017

Primary source and secondary source ²	Total fatal injuries (number)	Goods producing				Service providing							
		Total goods producing	Natural resources and mining ³	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	133	40	69	24	204	98	--	6	67	10	12	9
Primary Source⁴													
Chemicals and chemical products	18	8	--	6	--	10	3	--	--	3	--	1	--
Chemical products--general	15	5	--	4	--	10	3	--	--	3	--	1	--
Drugs, alcohol, and medicines	14	5	--	4	--	9	3	--	--	3	--	--	--
Drugs--nonmedicinal	13	5	--	4	--	8	3	--	--	3	--	--	--
Explosives, blasting agents	1	--	--	--	--	1	--	--	--	--	--	1	--
Containers, furniture, and fixtures	5	4	--	--	--	--	--	--	--	--	--	--	--
Containers	3	--	--	--	--	--	--	--	--	--	--	--	--
Machinery	23	17	7	6	4	6	--	--	--	3	--	--	1
Agricultural and garden machinery	3	3	3	--	--	--	--	--	--	--	--	--	--
Construction, logging, and mining machinery	9	5	--	3	--	4	--	--	--	3	--	--	1
Loaders	4	--	--	--	--	3	--	--	--	--	--	--	1
Bucket, front-end, end, and pay loaders	3	--	--	--	--	--	--	--	--	--	--	--	--
Skid steer loaders, mini loaders	1	--	--	--	--	1	--	--	--	--	--	--	1
Logging and wood processing machinery--specialized	1	--	--	--	--	1	--	--	--	1	--	--	--
Chippers	1	--	--	--	--	1	--	--	--	1	--	--	--
Material and personnel handling machinery	8	6	--	3	--	--	--	--	--	--	--	--	--
Elevators, hoists, aerial lifts, personnel platforms--except truck-mounted	5	5	1	3	--	--	--	--	--	--	--	--	--
Aerial lifts, scissor lifts--except truck-mounted	4	4	--	3	--	--	--	--	--	--	--	--	--
Parts and materials	9	4	--	3	--	4	3	--	--	--	--	--	--
Building materials--solid elements	3	--	--	--	--	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	5	--	--	--	--	--	1	--	--	--	--	--	--
Electric parts	5	--	--	--	--	--	1	--	--	--	--	--	--
Generators	1	--	--	--	--	1	1	--	--	--	--	--	--
Persons, plants, animals, and minerals	93	14	6	7	--	65	23	--	4	27	5	--	3
Animals	--	--	1	--	--	--	--	--	--	--	--	--	--
Insects, arachnids, mites	--	--	1	--	--	--	--	--	--	--	--	--	--
Bees, hornets, wasps	1	1	1	--	--	--	--	--	--	--	--	--	--
Person--injured or ill worker	17	4	--	--	--	11	3	--	--	--	3	--	--
Bodily motion or position of injured, ill worker	1	--	--	--	--	--	--	--	--	--	--	--	--
Person--other than injured or ill worker	49	3	--	2	--	37	19	--	--	10	--	--	3
Relative or domestic partner of injured or ill worker	--	--	--	--	--	1	--	--	--	--	1	--	--
Spouse or domestic partner of injured or ill worker	--	--	--	--	--	1	--	--	--	--	1	--	--
Co-worker or work associate of injured or ill worker	8	1	--	1	--	5	--	--	--	--	--	--	--
Co-worker	8	1	--	1	--	5	--	--	--	--	--	--	--
Other client or customer	9	--	--	--	--	9	--	--	--	3	--	--	1
Acquaintance	1	--	--	--	--	1	1	--	--	--	--	--	--
Assailant, suspect, inmate	22	1	--	1	--	18	12	--	--	5	--	--	1
Robber	13	--	--	--	--	12	10	--	--	--	--	--	--
Suspect not yet apprehended	2	--	--	--	--	--	--	--	--	--	--	--	--
Plants, trees, vegetation--not processed	24	5	3	--	--	16	--	--	--	15	--	--	--
Trees, logs, limbs	24	5	3	--	--	16	--	--	--	15	--	--	--
Trees	19	3	--	--	--	13	--	--	--	12	--	--	--
Limbs, branches--unattached	5	--	--	--	--	3	--	--	--	3	--	--	--
Structures and surfaces	37	21	--	16	4	15	6	--	--	5	--	--	--

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		Total goods producing	Natural resources and mining ³	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
Structures other than buildings	9	7	--	5	--	--	--	--	--	--	--	--	--
Scaffolds, staging	7	6	--	5	--	--	--	--	--	--	--	--	--
Other structural elements	17	11	--	9	--	6	3	--	--	3	--	--	--
Roofs	15	9	--	7	--	6	3	--	--	3	--	--	--
Skylights	4	--	--	--	--	--	--	--	--	--	--	--	--
Floors, walkways, ground surfaces	11	3	--	--	--	7	3	--	--	--	--	--	--
Floors	5	--	--	--	--	4	--	--	--	--	--	--	--
Ground	3	--	--	--	--	--	--	--	--	--	--	--	--
Tools, instruments, and equipment	28	18	--	14	3	8	--	--	--	4	--	--	--
Handtools--powered	4	--	--	--	--	--	--	--	--	--	--	--	--
Cutting handtools--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Chainsaws--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Ladders	24	17	--	14	--	6	--	--	--	--	--	--	--
Movable--ladders	20	14	--	12	--	5	--	--	--	--	--	--	--
Extension ladders	3	3	--	--	--	--	--	--	--	--	--	--	--
Step ladders	4	--	--	--	--	--	--	--	--	--	--	--	--
Truck mounted ladders, aerial ladder trams	1	--	--	--	--	--	--	--	--	--	--	--	--
Vehicles	153	45	24	14	7	89	58	--	--	21	2	3	3
Aircraft	8	3	1	--	2	5	--	--	--	--	1	--	--
Airplanes--powered fixed wing	6	3	1	--	2	3	--	--	--	--	1	--	--
Airplane--propeller-driven or piston engine	6	3	1	--	2	3	--	--	--	--	1	--	--
Water vehicle	3	3	3	--	--	--	--	--	--	--	--	--	--
Motorboat, motorized yacht	1	1	1	--	--	--	--	--	--	--	--	--	--
Highway vehicles, motorized	124	28	10	13	5	80	53	--	--	20	1	--	3
Passenger vehicle--automobiles, buses, and passenger vans	33	4	--	--	--	20	12	--	--	5	--	--	1
Ambulance, police, and other emergency passenger vehicle	4	--	--	--	--	--	--	--	--	--	--	--	--
Automobile	22	3	--	--	--	16	8	--	--	5	--	--	1
Passenger van	3	1	1	--	--	--	--	--	--	--	--	--	--
Trucks--motorized freight hauling and utility	67	17	6	8	3	47	35	--	--	10	--	--	--
Semi, tractor-trailer, tanker truck	39	5	4	--	--	32	28	--	--	4	--	--	--
Dump truck	7	3	--	3	--	4	3	--	--	--	--	--	--
Delivery truck or van	9	4	--	--	--	5	4	--	--	--	--	--	--
Cement truck, concrete mixer truck	3	3	--	--	--	--	--	--	--	--	--	--	--
Multi-purpose highway vehicles	23	7	--	5	--	12	6	--	--	4	1	--	--
Pickup truck	18	7	--	5	--	9	5	--	--	3	1	--	--
SUV, sports utility vehicle	5	--	--	--	--	3	--	--	--	--	--	--	--
Off-road or industrial vehicles--powered	15	11	10	--	--	3	--	--	--	--	--	--	--
Off-road passenger vehicles--powered	6	4	4	--	--	--	--	--	--	--	--	--	--
ATV, all terrain vehicle	3	3	3	--	--	--	--	--	--	--	--	--	--
Golf cart, personnel transport cart	3	--	--	--	--	--	--	--	--	--	--	--	--
Industrial vehicles, material hauling and transport--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Forklift, order picker, platform truck--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Tractors, PTOs	6	6	6	--	--	--	--	--	--	--	--	--	--
Farm tractor	6	6	6	--	--	--	--	--	--	--	--	--	--
Other sources	10	--	--	--	--	6	--	--	--	3	--	--	--
Environmental and elemental conditions	3	--	--	--	--	3	--	--	--	3	--	--	--
Temperature extremes--environmental	3	--	--	--	--	3	--	--	--	3	--	--	--
Heat--environmental	3	--	--	--	--	3	--	--	--	3	--	--	--
Other steam, vapors, liquids, ice	3	--	--	--	--	--	--	--	--	--	--	--	--

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		Total goods producing	Natural resources and mining ³	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
Liquids--nonchemical	3	--	--	--	--	--	--	--	--	--	--	--	--
Water	3	--	--	--	--	--	--	--	--	--	--	--	--
Secondary Source⁵													
Containers, furniture, and fixtures	4	--	--	--	--	--	--	--	--	--	--	--	--
Machinery	8	3	--	--	--	4	--	--	--	--	--	--	--
Construction, logging, and mining machinery	4	3	--	--	--	--	--	--	--	--	--	--	--
Parts and materials	9	4	--	3	--	5	--	--	--	--	--	--	--
Building materials--solid elements	1	1	--	1	--	--	--	--	--	--	--	--	--
Pipes, ducts, tubing	1	1	--	1	--	--	--	--	--	--	--	--	--
Metal pipes, tubing	1	1	--	1	--	--	--	--	--	--	--	--	--
Fasteners, connectors, ropes, ties	5	--	--	--	--	3	--	--	--	--	--	--	--
Ropes, ties, chains	5	--	--	--	--	3	--	--	--	--	--	--	--
Rope, twine, string	3	--	--	--	--	--	--	--	--	--	--	--	--
Machine, tool, and electric parts	3	--	--	--	--	--	--	--	--	--	--	--	--
Electric parts	3	--	--	--	--	--	--	--	--	--	--	--	--
Persons, plants, animals, and minerals	16	7	5	--	--	8	--	--	--	6	1	--	--
Plants, trees, vegetation--not processed	16	7	5	--	--	8	--	--	--	6	1	--	--
Trees, logs, limbs	16	7	5	--	--	8	--	--	--	6	1	--	--
Trees	14	6	4	--	--	7	--	--	--	5	1	--	--
Structures and surfaces	89	46	3	33	10	43	18	--	--	17	1	4	--
Structures other than buildings	11	3	--	--	--	8	6	--	--	--	--	--	--
Other structures	7	--	--	--	--	5	5	--	--	--	--	--	--
Guardrails, road dividers	7	--	--	--	--	5	5	--	--	--	--	--	--
Other structural elements	7	--	--	--	--	6	--	--	--	4	1	--	--
Fences, fence panels, gates	5	--	--	--	--	5	--	--	--	3	1	--	--
Chain-link fences, panels	1	--	--	--	--	1	--	--	--	--	1	--	--
Floors, walkways, ground surfaces	63	40	3	31	6	23	7	--	--	10	--	3	--
Floors	22	15	--	11	4	7	4	--	--	--	--	--	--
Ground	29	18	2	14	--	11	--	--	--	8	--	--	--
Sidewalks, paths, outdoor walkways	4	4	--	4	--	--	--	--	--	--	--	--	--
Sidewalk, path, outdoor walkway--paved	3	3	--	3	--	--	--	--	--	--	--	--	--
Streets, roads, driveways	5	--	--	--	--	3	--	--	--	--	--	--	1
Street, road, driveway--paved	3	--	--	--	--	--	--	--	--	--	--	--	--
Street, road, driveway--unpaved	1	--	--	--	--	1	--	--	--	--	--	--	1
Geographical structures	7	2	--	--	2	5	4	--	--	--	--	--	--
Raised natural structures, hills, mountains	3	--	--	--	--	3	3	--	--	--	--	--	--
Hills	1	--	--	--	--	1	1	--	--	--	--	--	--
Water bodies--natural	--	2	--	--	2	--	--	--	--	--	--	--	--
Lakes	2	2	--	--	2	--	--	--	--	--	--	--	--
Tools, instruments, and equipment	53	4	--	--	--	40	19	--	--	11	--	--	3
Handtools--nonpowered	8	1	--	1	--	7	--	--	--	3	1	--	--
Cutting handtools--nonpowered	8	1	--	1	--	7	--	--	--	3	1	--	--
Knives, unspecified or n.e.c.	7	1	--	1	--	6	--	--	--	3	1	--	--
Protective equipment, except clothing	1	--	--	--	--	1	--	--	--	1	--	--	--
Lifelines, lanyards, safety belts, harnesses	1	--	--	--	--	1	--	--	--	1	--	--	--
Firearms, law enforcement, and other self-defense equipment	40	--	--	--	--	30	17	--	--	5	--	--	3
Firearms	40	--	--	--	--	30	17	--	--	5	--	--	3
Pistol, handgun, revolver	30	--	--	--	--	25	15	--	--	4	--	--	1

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Rifle, shotgun	2	--	--	--	--	--	--	--	--	--	--	--	--
Other tools, instruments, and equipment	--	1	1	--	--	--	--	--	--	--	--	--	--
Fishing equipment	1	1	1	--	--	--	--	--	--	--	--	--	--
Commercial fishing equipment	1	1	1	--	--	--	--	--	--	--	--	--	--
Vehicles	64	14	7	5	--	41	29	--	--	9	--	--	1
Highway vehicles, motorized	60	12	6	5	--	40	29	--	--	8	--	--	1
Passenger vehicle--automobiles, buses, and passenger vans	19	4	--	--	--	10	6	--	--	3	--	--	--
Automobile	18	3	--	--	--	10	6	--	--	3	--	--	--
Trucks--motorized freight hauling and utility	28	6	--	4	--	21	18	--	--	--	--	--	--
Semi, tractor-trailer, tanker truck	23	5	--	4	--	18	16	--	--	--	--	--	--
Fire truck, other emergency equipment truck	1	--	--	--	--	--	--	--	--	--	--	--	--
Multi-purpose highway vehicles	13	--	--	--	--	9	5	--	--	3	--	--	1
Pickup truck	6	--	--	--	--	--	--	--	--	--	--	--	--
SUV, sports utility vehicle	7	--	--	--	--	7	5	--	--	--	--	--	1
Off-road or industrial vehicles--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Industrial vehicles, material hauling and transport--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Forklift, order picker, platform truck--powered	3	--	--	--	--	--	--	--	--	--	--	--	--
Other vehicles	1	--	--	--	--	--	--	--	--	--	--	--	--
Humvee	1	--	--	--	--	--	--	--	--	--	--	--	--
Other sources	4	3	--	--	--	--	--	--	--	--	--	--	--
Environmental and elemental conditions	3	--	--	--	--	--	--	--	--	--	--	--	--

¹ 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>.

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

³ 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.

⁴ 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.

⁵ 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, November 28, 2018