

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017

Characteristics	2011	2012	2013	2014	2015	2016	2017
Total	154	205	203	234	221	266	272
State of incident							
Alabama	-	-	6	-	-	-	-
Arizona	6	-	5	-	-	-	-
Arkansas	-	-	-	-	-	-	5
California	8	15	6	10	14	14	16
Colorado	-	7	-	-	-	-	-
District of Columbia	-	-	-	-	-	-	5
Florida	5	11	25	21	24	31	18
Georgia	6	-	5	-	-	-	-
Illinois	-	-	-	5	-	-	-
Indiana	-	5	-	7	5	-	6
Iowa	-	-	-	6	-	-	-
Kansas	5	-	-	-	-	-	-
Louisiana	-	-	-	-	-	6	-
Maryland	-	9	7	8	-	10	9
Massachusetts	5	5	-	6	7	13	10
Michigan	-	6	7	8	8	10	8
Minnesota	5	-	-	-	-	-	-
Mississippi	-	-	-	-	5	-	-
Missouri	-	-	9	-	-	-	-
New Jersey	-	8	-	6	8	5	5
New York (including N.Y.C.)	7	13	7	8	14	21	23
New York City	-	5	-	-	6	-	8
North Carolina	-	-	5	9	8	8	12
Ohio	6	11	-	9	5	-	7
Pennsylvania	13	9	8	21	8	13	12
South Carolina	-	-	9	7	8	-	7
Tennessee	5	-	8	11	-	13	15
Texas	21	18	29	27	33	46	33
Virginia	-	14	7	8	7	7	14
Washington	-	5	-	8	-	-	-
Wisconsin	-	-	5	-	-	-	-

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Employee status							
Wage and salary workers ²	98	137	132	140	143	189	183
Self-employed ³	56	68	71	94	78	77	89
Sex							
Men	152	204	201	234	220	266	270
Age							
20 to 24 years	8	15	15	8	11	14	9
25 to 34 years	27	32	37	37	48	40	47
35 to 44 years	37	46	40	54	36	58	49
45 to 54 years	45	57	48	52	61	68	67
55 to 64 years	24	36	49	52	42	62	53
65 and over	11	15	13	29	21	21	44
Race or ethnic origin⁴							
White (non-Hispanic)	101	113	126	156	117	160	154
Black or African American (non-Hispanic)	5	16	10	10	18	16	9
Hispanic or Latino	43	69	65	62	82	87	91
Asian (non-Hispanic)	—	—	—	—	—	—	11
Event or exposure⁵							
Violence and other injuries by persons or animals	8	8	12	21	9	21	22
Intentional injury by person	6	8	8	17	8	16	19
Homicides	—	—	—	9	—	9	7
Shooting by other person—intentional	—	—	—	7	—	—	5
Suicide, self-inflicted injury	—	—	—	8	—	7	12
Shooting—intentional self-harm	—	—	—	—	—	—	7
Hanging, strangulation, asphyxiation—intentional self-harm	—	—	—	6	—	—	—
Transportation incidents	26	20	38	36	35	41	39
Pedestrian vehicular incident	6	—	9	—	6	8	7

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Event or exposure⁵							
Pedestrian struck by vehicle in nonroadway area	—	—	—	—	—	5	—
Roadway incidents involving motorized land vehicle	16	14	25	24	27	25	29
Roadway collision with other vehicle	10	9	10	12	11	13	12
Roadway collision—moving in opposite directions, oncoming	—	—	5	—	5	6	5
Roadway collision—moving perpendicularly	—	6	—	6	5	—	—
Roadway collision with object other than vehicle	—	—	6	6	8	6	10
Vehicle struck object or animal on side of roadway	—	—	6	5	8	6	8
Roadway noncollision incident	—	—	9	6	8	6	7
Jack-knifed or overturned, roadway	—	—	8	—	6	5	5
Nonroadway incidents involving motorized land vehicles	—	—	—	6	—	6	—
Nonroadway noncollision incident	—	—	—	—	—	5	—
Falls, slips, trips	70	111	97	114	112	125	134
Falls on same level	—	5	—	—	—	6	—
Falls to lower level	69	106	91	110	110	117	129
Fall from collapsing structure or equipment	8	6	7	6	8	7	8
Fall through surface or existing opening	6	14	5	10	9	11	14
Fall through surface or existing opening 6 to 10 feet	—	—	—	5	—	—	—
Fall through surface or existing opening 11 to 15 feet	—	—	—	—	—	5	5
Fall through surface or existing opening more than 30 feet ...	—	6	—	—	—	—	—
Other fall to lower level	53	86	79	94	91	98	105
Other fall to lower level, unspecified	—	14	14	15	16	15	9
Other fall to lower level less than 6 feet	—	6	—	8	—	—	5
Other fall to lower level 6 to 10 feet	6	11	10	14	15	12	17
Other fall to lower level 11 to 15 feet	14	16	17	17	15	28	32
Other fall to lower level 16 to 20 feet	9	8	17	20	17	11	15
Other fall to lower level 21 to 25 feet	—	14	15	10	11	14	13
Other fall to lower level 26 to 30 feet	7	8	—	7	—	9	—
Other fall to lower level more than 30 feet	8	9	—	—	10	7	10
Exposure to harmful substances or environments	33	35	26	35	33	47	46
Exposure to electricity	22	22	18	19	18	27	14
Direct exposure to electricity	10	7	9	9	10	16	8
Indirect exposure to electricity	10	14	8	10	7	11	6
Exposure to temperature extremes	—	—	—	—	7	—	5
Exposure to environmental heat	—	—	—	—	7	—	5
Exposure to other harmful substances	7	10	5	13	8	20	27
Nonmedical use of drugs or alcohol—unintentional overdose ...	—	—	5	9	6	15	21
Inhalation of harmful substance	—	8	—	—	—	5	6

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Event or exposure⁵							
Contact with objects and equipment	14	30	28	27	30	28	27
Struck by object or equipment	9	16	16	12	18	15	15
Struck by powered vehicle—nontransport	—	—	9	—	—	—	5
Struck by falling object or equipment—other than powered vehicle	—	7	6	7	14	8	7
Struck by discharged or flying object	—	5	—	—	—	—	—
Struck, caught, or crushed in collapsing structure, equipment, or material	—	11	12	13	10	12	9
Excavation or trenching cave-in	—	5	5	—	—	5	—
Struck, caught, or crushed in other collapsing structure or equipment	—	6	7	5	5	7	6
Primary source⁶							
Chemicals and chemical products	7	9	5	13	10	21	28
Other chemicals	—	7	—	—	—	—	6
Oxygen and oxygen compounds	—	5	—	—	—	—	5
Carbon monoxide	—	5	—	—	—	—	5
Chemical products—general	—	—	5	9	7	15	21
Drugs, alcohol, and medicines	—	—	5	9	6	15	21
Drugs—nonmedicinal	—	—	—	—	—	8	12
Multiple drugs, alcohol, and medicines	—	—	—	—	—	—	7
Machinery	9	9	12	12	5	17	8
Construction, logging, and mining machinery	6	5	9	6	—	9	5
Excavating machinery	—	—	6	—	—	—	—
Parts and materials	16	19	13	11	14	14	11
Building materials—solid elements	—	8	5	—	—	6	—
Machine, tool, and electrical parts	12	8	8	6	9	5	8
Electric parts	11	6	8	6	8	5	7
Electrical wiring—building	6	—	5	—	5	—	—
Persons, plants, animals, and minerals	8	9	14	23	13	22	24
Person—injured or ill worker	—	—	6	8	—	7	13
Person—other than injured or ill worker	—	—	5	9	—	10	8
Assailant, suspect, inmate	—	—	—	5	—	6	—

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Primary source⁶							
Structures and surfaces	48	95	84	78	77	93	112
Confined spaces	—	6	5	5	—	—	—
Ditches, channels, trenches, excavations	—	6	5	—	—	—	—
Buildings—office, plant, residential	—	8	8	—	—	—	6
Residential buildings, except institutional	—	8	7	—	—	—	6
House, townhouse, rowhouse	—	5	—	—	—	—	—
Structures other than buildings	14	20	17	21	24	19	28
Scaffolds, staging	14	19	17	17	17	17	22
Scaffolds—improvised staging	—	6	—	—	—	5	5
Scaffolds—self-supporting staging	9	6	—	8	7	—	6
Other structures	—	—	—	—	5	—	5
Other structural elements	28	53	45	44	38	50	52
Roofs	25	39	38	38	32	40	39
Roof surfaces other than roof edge	—	—	—	—	—	5	—
Roof edges	17	26	19	27	24	28	21
Trusses, girders, beams—structurally attached	—	—	—	—	—	—	6
Roof trusses, joists	—	—	—	—	—	—	6
Ceilings, walls	—	6	—	—	—	—	—
Walls	—	6	—	—	—	—	—
Floors, walkways, ground surfaces	—	7	8	6	5	16	22
Stairs, steps, escalators	—	—	—	—	—	—	5
Floors	—	5	—	—	—	10	14
Tools, instruments, and equipment	27	32	32	46	44	48	39
Ladders	24	31	29	44	38	45	39
Ladders—movable	21	27	19	31	28	33	34
Extension ladders	11	11	10	15	11	10	23
Step ladders	—	—	—	7	—	5	—
Vehicles	30	25	39	40	38	42	41
Highway vehicles, motorized	26	20	38	35	34	35	41
Passenger vehicles—automobiles, buses, and passenger vans ...	9	6	13	—	6	5	5
Automobile	5	—	—	—	—	—	—
Passenger van	—	—	9	—	—	—	—
Trucks—motorized freight hauling and utility	9	8	11	11	10	14	23
Dump truck	—	—	—	—	—	—	9
Delivery truck or van	—	—	—	—	—	7	6
Multi-purpose highway vehicles	8	6	14	20	18	16	13

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Primary source⁶							
Pickup truck	8	6	13	18	16	13	10
Off-road and industrial vehicles—powered	—	5	—	—	—	6	—
Industrial vehicles, material hauling and transport—powered	—	—	—	—	—	5	—
Forklift, order picker, platform truck—powered	—	—	—	—	—	5	—
Other sources	6	6	—	9	17	7	6
Environmental and elemental conditions	—	—	—	7	12	5	5
Temperature extremes—environmental	—	—	—	—	7	—	5
Heat—environmental	—	—	—	—	7	—	5
Secondary source⁷							
Machinery	—	14	—	—	6	—	8
Material and personnel handling machinery	—	6	—	—	—	—	—
Parts and materials	17	19	17	23	19	25	17
Building materials—solid elements	—	—	—	—	6	6	5
Fasteners, connectors, ropes, ties	—	—	—	5	—	—	—
Ropes, ties, chains	—	—	—	5	—	—	—
Machine, tool, and electrical parts	13	16	10	14	12	16	8
Electric parts	13	16	10	14	12	16	8
Power lines, transformers, convertors	7	13	7	9	5	10	6
Persons, plants, animals, and minerals	—	—	6	6	7	5	11
Plants, trees, vegetation—not processed	—	—	5	6	6	—	7
Trees, logs, limbs	—	—	5	6	6	—	7
Trees	—	—	5	6	6	—	7
Structures and surfaces	10	12	8	9	8	11	128
Confined spaces	—	6	—	—	—	—	—
Structures other than buildings	—	—	—	—	—	—	8
Other structures	—	—	—	—	—	—	7
Other structural elements	—	—	—	—	—	—	5
Floors, walkways, ground surfaces	—	—	—	—	—	—	114
Floors	—	—	—	—	—	—	26
Ground	—	—	—	—	—	—	58
Sidewalks, paths, outdoor walkways	—	—	—	—	—	—	16
Streets, roads, driveways	—	—	—	—	—	—	5

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Secondary source⁷							
Tools, instruments, and equipment	6	11	9	15	8	14	16
Firearms, law enforcement, and other self-defense equipment	—	6	5	8	5	—	13
Firearms	—	6	5	8	5	—	13
Pistol, handgun, revolver	—	—	—	—	—	—	9
Vehicles	13	13	16	15	13	19	17
Highway vehicles, motorized	12	11	15	14	11	17	16
Trucks—motorized freight hauling and utility	10	6	6	10	6	8	7
Semi, tractor-trailer, tanker truck	7	—	—	7	6	5	6
Multi-purpose highway vehicles	—	—	6	—	—	6	5
Pickup truck	—	—	6	—	—	5	5
Other sources	—	—	6	7	5	6	—
Environmental and elemental conditions	—	—	6	6	—	—	—
Weather and atmospheric conditions	—	—	6	6	—	—	—
Not reported	96	126	136	157	154	179	67
Worker activity							
Vehicular and transportation operations	26	22	37	37	36	41	43
Driving, operating	20	19	21	24	23	28	30
Truck	11	8	13	16	17	16	18
Industrial or construction vehicle	—	—	—	—	—	5	—
Riding in, on	—	—	8	7	6	6	—
Truck	—	—	—	6	6	—	—
Walking in or near roadway, etc., n.e.c.	—	—	5	—	5	7	5
Using or operating tools, machinery	12	17	8	12	18	10	6
Operating heavy equipment	5	—	—	5	—	—	—
Using power tools	—	—	—	—	5	—	—
Constructing, repairing, cleaning	94	130	121	128	128	158	165
Construction, assembling, dismantling	43	83	72	79	82	94	95
Constructing, assembling	9	20	13	11	21	21	22
Installing	23	31	33	39	43	56	49
Dismantling, removing	—	8	8	8	9	7	6

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Worker activity							
Repair, maintenance	21	14	20	23	14	24	27
Repairing	13	12	16	13	6	17	21
Inspecting or checking	—	5	—	—	—	6	5
Painting, etc.	10	12	10	15	10	10	19
Materials handling operations	5	11	14	16	9	7	8
Carrying materials	—	6	—	—	—	—	—
Loading, unloading (packing, unpacking) materials	—	—	—	—	5	—	—
Materials handling, n.e.c.	—	—	5	5	—	—	—
Physical activity⁸, n.e.c.	11	16	16	27	19	27	17
All other activities	—	8	7	12	11	23	33
Activity, n.e.c.	—	7	6	12	9	23	33
Location							
Private residence	103	160	140	169	147	184	193
Apartment	—	—	—	6	—	—	7
Residential construction ⁹	69	131	99	122	113	136	138
Industrial place or premise	21	20	21	29	32	35	28
Construction site	18	14	19	20	27	29	25
Street or highway	23	18	31	27	36	32	38
Interstate, freeway, or expressway	—	—	6	—	6	8	9
Other highway (State or U.S.)	10	5	11	15	13	10	14
Local road or street	7	10	13	9	16	12	12
Public building	—	—	6	—	—	—	5
Other specified place	—	—	—	7	—	9	5
Parking lot, garage (employer's premises)	—	—	—	—	—	5	—

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Occupation¹⁰ (SOC)							
Management occupations	—	9	5	5	—	—	5
Other management occupations	—	8	—	5	—	—	—
Construction managers	—	8	—	5	—	—	—
Construction managers	—	8	—	5	—	—	—
Construction and extraction occupations	129	186	178	213	201	229	238
Supervisors, construction and extraction workers	20	31	22	42	33	30	44
First-line supervisors/managers of construction trades and extraction workers	20	31	22	42	33	30	44
First-line supervisors/managers of construction trades and extraction workers	20	31	22	42	33	30	44
Construction trades workers	104	153	151	167	165	196	190
Brickmasons, blockmasons, and stonemasons	5	—	—	8	6	—	5
Brickmasons and blockmasons	—	—	—	—	—	—	5
Carpenters	18	29	35	26	40	52	44
Carpenters	18	29	35	26	40	52	44
Cement masons, concrete finishers, and terrazzo workers	—	5	—	—	—	—	—
Cement masons and concrete finishers	—	5	—	—	—	—	—
Construction laborers	31	56	62	66	52	66	64
Construction laborers	31	56	62	66	52	66	64
Construction equipment operators	6	—	—	—	—	—	—
Operating engineers and other construction equipment operators	5	—	—	—	—	—	—
Drywall installers, ceiling tile installers, and tapers	—	—	—	—	5	—	—
Drywall and ceiling tile installers	—	—	—	—	5	—	—
Electricians	—	8	8	8	10	11	6
Electricians	—	8	8	8	10	11	6
Painters and paperhangers	11	7	9	10	13	7	19
Painters, construction and maintenance	11	7	9	10	13	7	19
Pipelayers, plumbers, pipefitters, and steamfitters	—	6	5	8	10	8	9
Plumbers, pipefitters, and steamfitters	—	6	5	8	10	8	9
Roofers	18	29	24	30	19	34	32
Roofers	18	29	24	30	19	34	32
Installation, maintenance, and repair occupations	10	—	10	9	8	25	9
Other installation, maintenance, and repair occupations	7	—	7	9	7	18	7

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Occupation¹⁰							
(SOC)							
Heating, air conditioning, and refrigeration mechanics and installers	5	—	6	—	5	13	—
Heating, air conditioning, and refrigeration mechanics and installers	5	—	6	—	5	13	—
Transportation and material moving occupations	6	—	9	—	5	7	14
Motor vehicle operators	6	—	—	—	—	5	13
Driver/sales workers and truck drivers	6	—	—	—	—	5	13
Truck drivers, heavy and tractor-trailer	6	—	—	—	—	—	13
Material moving workers	—	—	5	—	—	—	—
Industry¹¹							
(NAICS)							
Private industry¹²	154	205	203	234	221	266	272
Goods-producing	154	205	203	234	221	266	272
Construction	154	205	203	234	221	266	272
Construction	154	205	203	234	221	266	272
Construction of buildings	72	89	99	107	106	128	135
Residential building construction	72	89	99	107	106	128	135
Residential building construction	72	89	99	107	106	128	135
New Single-Family Housing Construction (except For-Sale Builders)	22	28	28	33	29	33	39
New Multifamily Housing Construction (except For-Sale Builders)	—	—	5	—	5	8	10
Residential remodelers	38	41	47	55	52	62	66
Specialty trade contractors	82	116	104	127	115	138	137
Foundation, structure, and building exterior contractors	38	66	53	53	49	59	64
Poured concrete foundation and structure contractors	—	10	5	7	6	5	—
Residential concrete foundation and structure contractors	—	10	5	7	6	5	—
Framing contractors	—	11	17	6	11	11	11
Residential framing contractors	—	11	17	6	11	11	11
Masonry contractors	9	5	—	8	—	—	10
Residential masonry contractors	9	5	—	8	—	—	10

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Industry¹¹ (NAICS)							
Roofing contractors	21	31	23	28	19	33	29
Residential roofing contractors	21	31	23	28	19	33	29
Siding contractors	—	7	—	—	5	—	—
Residential siding contractors	—	7	—	—	5	—	—
Other foundation, structure, and building exterior contractors ...	—	—	—	—	—	—	5
Residential other foundation, structure, and building exterior contractors	—	—	—	—	—	—	5

See footnotes at end of table.

Fatal occupational injuries in the private residential construction industries¹ by selected characteristics, 2011-2017 — Continued

Characteristics	2011	2012	2013	2014	2015	2016	2017
Industry¹¹ (NAICS)							
Building equipment contractors	12	20	24	26	29	33	25
Electrical contractors	—	8	8	10	11	11	7
Residential electrical contractors	—	8	8	10	11	11	7
Plumbing, heating, and air-conditioning contractors	9	11	16	15	18	21	16
Residential plumbing, heating, and air-conditioning contractors	9	11	16	15	18	21	16
Building finishing contractors	22	20	16	23	26	28	29
Drywall and insulation contractors	—	7	—	6	6	—	—
Residential drywall and insulation contractors	—	7	—	6	6	—	—
Painting and wall covering contractors	11	8	8	10	11	7	18
Residential painting and wall covering contractors	11	8	8	10	11	7	18
Finish carpentry contractors	8	—	—	—	6	11	5
Residential finish carpentry contractors	8	—	—	—	6	11	5
Other specialty trade contractors	10	8	11	24	11	18	17
Site preparation contractors	8	—	10	14	9	9	11
Residential site preparation contractors	8	—	10	14	9	9	11
All other specialty trade contractors	—	6	—	10	—	9	6
Residential all other specialty trade contractors	—	6	—	10	—	9	6

¹ Residential construction industries include residential building construction industries (NAICS 2361) as well as additional specialty trade contractors that were added by the BLS during the implementation of the North American Industry Classification System.

² May include volunteers and workers receiving other types of compensation.

³ Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

⁴ Persons identified as Hispanic or Latino may be of any race. The racial categories shown exclude data for Hispanics and Latinos.

⁵ Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward.

⁶ Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward. 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.

⁷ Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward. 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.

⁸ Includes, but is not limited to, walking, sitting, running, and climbing ladders or stairs.

⁹ The residential construction location category was implemented in 1998.

¹⁰ Occupation data from 2003 to 2010 are based on the Standard Occupational Classification system, 2000. Occupation data from 2011 to the present are based on the Standard Occupational Classification system, 2010.

¹¹ Industry data from 2003 to 2008 are based on the 2002 North American Industry Classification System. Industry data from 2009 to 2013 are based on the 2007 North American Industry Classification System. Industry data from 2014 to the present are based on the 2012 North American Industry Classification System.

¹² Includes all fatal occupational injuries meeting these ownership criteria across all specified years, regardless of industry classification system.

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 fatality 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