

TABLE A-8. Fatal occupational injuries by event or exposure and major private industry division, 1998

Event or exposure ¹	Total	Private industry ² (percent)								
		Agriculture, forestry, and fishing	Mining	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total	6,026	13.8	2.4	19.4	11.5	15.0	3.8	9.4	1.5	12.6
Transportation incidents	2,630	17.0	1.6	11.4	7.7	24.6	4.5	6.1	1.4	12.1
Highway	1,431	7.5	1.2	10.3	7.7	30.9	6.9	8.2	2.2	12.0
Collision between vehicles, mobile equipment	701	7.6	.9	9.6	9.0	23.0	7.6	9.1	3.1	13.8
Re-entrant collision	14	—	—	—	—	35.7	—	—	—	21.4
Moving in same direction	118	8.5	—	6.8	5.1	39.8	3.4	8.5	2.5	10.2
Moving in opposite directions, oncoming	271	5.2	1.5	9.2	11.1	15.9	9.2	10.7	4.1	18.1
Moving in intersection	142	12.7	—	14.1	9.2	13.4	7.7	7.0	2.8	9.2
Moving and standing vehicle, mobile equipment-in roadway	39	7.7	—	12.8	—	25.6	12.8	—	—	12.8
Moving and standing vehicle, mobile equipment-side of road	14	—	—	—	—	50.0	—	—	—	—
Vehicle struck stationary object or equipment in roadway	18	—	—	—	—	44.4	16.7	—	—	—
Vehicle struck stationary object or equipment on side of road	288	3.5	—	8.7	7.6	45.8	4.5	7.6	1.0	11.1
Noncollision	373	11.0	2.4	13.1	5.9	32.7	7.5	7.0	1.6	7.0
Jack-knifed or overturned--no collision	300	11.0	3.0	13.0	5.3	33.7	7.3	5.7	1.7	8.3
Ran off highway--no collision	32	—	—	12.5	—	40.6	9.4	15.6	—	—
Struck by shifting load	9	—	—	—	—	44.4	—	—	—	—
Sudden start or stop, n.e.c.	4	—	—	—	—	—	—	—	—	—
Nonhighway (farm, industrial premises)	384	55.2	3.9	10.9	8.3	6.2	1.3	2.1	—	7.0
Collision between vehicles or mobile equipment	9	—	—	—	33.3	—	—	—	—	—
Vehicle, mobile equipment struck stationary object	29	24.1	10.3	—	10.3	10.3	—	13.8	—	20.7
Noncollision accident	329	59.9	2.7	11.6	7.3	5.8	1.2	.9	—	5.8
Fall from moving vehicle, mobile equipment	18	38.9	—	—	—	—	—	—	—	16.7
Fell from and struck by vehicle, mobile equipment	70	67.1	—	14.3	—	4.3	—	—	—	4.3
Overturned	216	62.0	3.2	10.2	7.9	4.2	—	—	—	6.0
Loss of control	4	—	—	—	—	—	—	—	—	—
Struck by shifting load	3	—	—	—	—	—	—	—	—	—
Aircraft	223	5.4	—	—	5.4	25.6	1.3	4.0	—	23.3
Worker struck by vehicle, mobile equipment	413	11.6	—	24.9	7.5	19.6	2.2	5.6	—	12.3
Worker struck by vehicle, mobile equipment in roadway	131	5.3	—	34.4	3.1	19.1	—	5.3	—	8.4
Worker struck by vehicle, mobile equipment on side of road	66	4.5	—	22.7	—	18.2	—	4.5	—	18.2
Worker struck by vehicle, mobile equipment in parking lot or non-road area	199	17.6	—	19.1	11.6	22.1	3.0	6.5	—	13.6
Water vehicle	112	60.7	4.5	—	4.5	20.5	—	—	—	5.4
Collision	9	66.7	—	—	—	—	—	—	—	—
Fall from ship or boat, n.e.c.	49	51.0	—	—	10.2	24.5	—	—	—	8.2
Fall on ship, boat	6	—	—	—	—	66.7	—	—	—	—
Sinking, capsized water vehicle	37	81.1	—	—	—	—	—	—	—	—
Railway	60	—	5.0	10.0	18.3	28.3	—	6.7	—	13.3
Collision between railway vehicle and other vehicle	48	—	—	12.5	16.7	25.0	—	8.3	—	14.6
Fell from and struck by railway vehicle ...	5	—	—	—	—	—	—	—	—	—
Assaults and violent acts	960	5.0	.5	4.0	6.9	8.4	3.1	33.9	3.2	20.2
Homicides	709	2.7	—	2.8	5.2	9.7	3.0	40.3	3.1	19.3
Hitting, kicking, beating	48	—	—	—	8.3	—	—	35.4	—	27.1
Shooting	569	3.0	—	2.6	4.7	10.4	3.0	40.4	3.0	17.6
Stabbing	61	—	—	—	6.6	11.5	—	44.3	—	26.2
Assaults and violent acts by person(s), n.e.c.	24	—	—	—	—	—	—	29.2	—	29.2

See footnotes at end of table.

TABLE A-8. **Fatal occupational injuries by event or exposure and major private industry division, 1998** — Continued

Event or exposure ¹	Total	Private industry ² (percent)								
		Agriculture, forestry, and fishing	Mining	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Self-inflicted injury	223	5.8	1.3	8.1	13.0	5.4	4.0	17.0	4.0	22.9
Assaults by animals	24	66.7	—	—	—	—	—	—	—	20.8
Contact with objects and equipment	941	19.2	5.0	22.2	26.1	8.1	4.8	2.8	.3	7.8
Struck by object	517	18.8	3.5	18.0	29.2	9.3	4.8	2.1	—	9.9
Struck by falling object	317	15.8	3.5	21.1	30.9	8.2	5.0	3.2	—	8.5
Struck by flying object	58	8.6	5.2	13.8	37.9	—	—	—	—	13.8
Struck by discharged object or substance	19	15.8	—	—	36.8	—	—	—	—	—
Struck by swinging or slipping object	30	16.7	10.0	13.3	33.3	13.3	—	—	—	—
Struck by rolling, sliding objects on floor or ground level	75	36.0	—	8.0	16.0	17.3	4.0	—	—	14.7
Caught in or compressed by equipment or objects	266	24.8	3.8	16.9	28.9	6.4	6.4	3.8	—	5.3
Caught in running equipment or machinery	129	27.9	6.2	10.9	36.4	5.4	5.4	2.3	—	—
Compressed or pinched by rolling, sliding, or shifting objects	62	19.4	—	21.0	16.1	9.7	11.3	6.5	—	12.9
Caught in or crushed in collapsing materials	140	12.9	13.6	48.6	8.6	6.4	2.1	—	—	2.9
Excavation or trenching cave-in	46	8.7	—	78.3	—	—	—	—	—	—
Other cave-in	15	—	80.0	—	—	—	—	—	—	—
Caught in or crushed in collapsing structure	42	—	7.1	66.7	—	11.9	—	—	—	—
Falls	702	8.3	2.3	54.6	8.0	4.0	2.4	4.3	2.0	10.0
Fall to lower level	623	8.2	2.4	59.7	7.4	3.9	2.6	2.7	1.9	7.5
Fall down stairs or steps	12	—	—	—	33.3	—	—	—	—	25.0
Fall from floor, dock, or ground level	33	—	—	54.5	15.2	9.1	—	—	—	12.1
Fall through existing floor opening	21	—	—	61.9	—	—	—	—	—	14.3
Fall through floor surface	3	—	—	—	—	—	—	—	—	—
Fall from ground level to lower level	3	—	—	—	—	—	—	—	—	—
Fall from ladder	111	9.0	—	48.6	4.5	3.6	3.6	10.8	5.4	5.4
Fall from piled or stacked material	3	—	—	—	—	—	—	—	—	—
Fall from roof	156	1.9	—	78.8	6.4	—	—	—	1.9	7.1
Fall through existing roof opening	12	—	—	100.0	—	—	—	—	—	—
Fall through roof surface	20	—	—	70.0	15.0	—	—	—	—	15.0
Fall through skylight	22	—	—	77.3	13.6	—	—	—	—	—
Fall from roof edge	47	—	—	85.1	—	—	—	—	—	—
Fall from scaffold, staging	97	—	—	86.6	3.1	—	—	—	—	3.1
Fall from building girders or other structural steel	45	—	—	86.7	—	—	—	—	—	—
Fall from nonmoving vehicle	48	12.5	—	31.2	12.5	16.7	8.3	6.2	—	6.2
Fall to lower level, n.e.c.	105	23.8	4.8	27.6	11.4	6.7	3.8	—	—	14.3
Fall on same level	51	7.8	—	9.8	5.9	5.9	—	17.6	—	37.3
Fall to floor, walkway, or other surface	34	—	—	—	—	8.8	—	20.6	—	38.2
Fall onto or against objects	8	—	—	—	—	—	—	—	—	37.5
Exposure to harmful substances or environments	572	14.7	2.4	37.2	12.2	9.3	1.2	2.6	1.2	12.6
Contact with electric current	334	12.0	1.5	51.2	12.6	8.1	1.2	2.1	.9	7.5
Contact with electric current of machine, tool, appliance, light fixture	51	5.9	—	23.5	31.4	—	—	5.9	—	19.6
Contact with wiring, transformers, or other electrical component	84	—	3.6	64.3	11.9	10.7	—	—	—	3.6
Contact with overhead power lines	153	17.0	—	54.9	7.8	9.2	—	2.0	—	4.6
Contact with underground, buried power lines	9	—	—	88.9	—	—	—	—	—	—
Struck by lightning	21	33.3	—	23.8	—	—	—	—	—	14.3
Contact with temperature extremes	46	26.1	—	28.3	13.0	8.7	—	—	—	8.7
Exposure to environmental heat	34	32.4	—	26.5	—	11.8	—	—	—	—
Contact with hot objects or substances	10	—	—	30.0	40.0	—	—	—	—	—
Exposure to caustic, noxious, or allergenic substances	104	11.5	3.8	14.4	17.3	10.6	—	6.7	—	26.0
Inhalation of substance	48	14.6	6.2	18.8	22.9	—	—	—	—	18.8

See footnotes at end of table.

TABLE A-8. **Fatal occupational injuries by event or exposure and major private industry division, 1998** — Continued

Event or exposure ¹	Total	Private industry ² (percent)								
		Agriculture, forestry, and fishing	Mining	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Inhalation in enclosed, restricted, or confined space ³	27	25.9	—	29.6	25.9	—	—	—	—	—
Inhalation in open or nonconfined space	14	—	—	—	28.6	—	—	—	—	28.6
Contact with skin or other exposed tissue	4	—	—	—	—	—	—	—	—	—
Injections, stings, venomous bites	11	—	—	—	—	—	—	—	—	36.4
Bee, wasp, hornet sting	6	—	—	—	—	—	—	—	—	—
Ingestion of substance	20	—	—	20.0	—	15.0	—	15.0	—	30.0
Oxygen deficiency	87	23.0	4.6	16.1	4.6	12.6	—	—	—	17.2
Drowning, submersion	75	26.7	5.3	13.3	—	12.0	—	—	—	18.7
Depletion of oxygen in other enclosed, restricted, or confined space ³	7	—	—	42.9	—	—	—	—	—	—
Fires and explosions	205	4.9	10.7	13.2	25.4	8.8	4.9	5.4	—	12.7
Fires--unintended or uncontrolled	116	6.0	10.3	8.6	24.1	4.3	6.9	6.9	—	12.1
Fires, unspecified	3	—	—	—	—	—	—	—	—	—
Fire in residence, building, or other structure	69	5.8	4.3	7.2	21.7	—	7.2	10.1	—	15.9
Forest, brush, or other outdoor fire	14	—	50.0	—	—	—	—	—	—	—
Ignition of clothing from controlled heat source	3	—	—	—	—	—	—	—	—	—
Explosion	89	3.4	11.2	19.1	27.0	14.6	—	3.4	—	13.5
Explosion, unspecified	4	—	—	—	—	—	—	—	—	—
Explosion of pressure vessel or piping ...	39	—	10.3	17.9	33.3	12.8	—	—	—	10.3
Other events or exposures⁴	16	—	—	—	—	18.8	—	—	—	31.2

¹ Based on the 1992 BLS Occupational Injury and Illness Classification Manual.

² Classified according to the *Standard Industrial Classification Manual, 1987*.

³ Includes fatalities that are not considered to be permit required confined spaces as defined by the Occupational Safety and Health Administration in its regulation of these structures.

⁴ Includes the category "Bodily reaction and exertion."

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