

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008

Characteristics	2004	2005	2006	2007	2008
Total .....	119	165	139	106	101
<b>State of incident</b>					
Alabama .....	-	4	-	-	-
Arkansas .....	-	-	-	4	-
California .....	8	8	10	3	-
Colorado .....	-	5	8	-	-
Connecticut .....	3	-	-	-	-
Florida .....	6	18	7	6	5
Georgia .....	5	9	7	7	8
Illinois .....	6	3	3	3	5
Indiana .....	4	-	12	3	3
Kentucky .....	-	4	3	-	-
Louisiana .....	4	-	-	-	-
Maryland .....	-	4	3	-	-
Michigan .....	5	-	-	-	-
Minnesota .....	-	3	-	-	-
Mississippi .....	-	-	3	-	-
Missouri .....	-	3	7	-	-
Nebraska .....	5	3	-	-	-
Nevada .....	-	-	3	-	-
New Jersey .....	-	5	-	6	4
New York (including N.Y.C.) .....	3	7	3	6	-
North Carolina .....	9	-	-	-	5
Ohio .....	6	6	4	4	-
Oklahoma .....	3	3	-	-	3
Oregon .....	-	3	-	-	-
Pennsylvania .....	8	8	5	7	8
South Carolina .....	-	4	-	-	-
South Dakota .....	-	5	-	-	-
Tennessee .....	5	8	-	5	6
Texas .....	8	20	16	16	13
Virginia .....	4	4	4	-	3
Washington .....	-	-	6	3	3
West Virginia .....	-	3	-	-	-
Wisconsin .....	-	-	7	-	-
<b>Employee status</b>					
Wage and salary workers <sup>1</sup> .....	117	161	134	105	98
Self-employed <sup>2</sup> .....	-	4	5	-	3
<b>Sex</b>					
Men .....	116	162	133	103	98
Women .....	3	3	6	3	3
<b>Age</b>					
18 to 19 years .....	-	-	4	-	-
20 to 24 years .....	8	11	7	10	6
25 to 34 years .....	29	24	32	15	14
35 to 44 years .....	28	41	31	22	27
45 to 54 years .....	35	51	34	29	34
55 to 64 years .....	12	26	26	23	17
65 and over .....	5	10	5	4	-
<b>Race or ethnic origin<sup>3</sup></b>					
White .....	78	116	104	71	68

See footnotes at end of table.

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008 — Continued

Characteristics	2004	2005	2006	2007	2008
<b>Race or ethnic origin<sup>3</sup></b>					
<b>- continued</b>					
Black or African American .....	16	21	13	14	10
Hispanic or Latino .....	24	27	20	17	23
Asian, Native Hawaiian or Pacific Islander .....	-	-	-	3	-
<b>Event or exposure<sup>4</sup></b>					
<b>Transportation incidents</b> .....	82	126	110	71	71
Highway .....	22	28	22	20	22
Collision between vehicles, mobile equipment .....	16	20	15	13	17
Moving in same direction .....	5	8	3	9	-
Moving and standing vehicle, mobile equipment-in roadway .....	6	8	8	3	10
Vehicle struck stationary object or equipment on side of road .....	-	5	-	5	-
Noncollision .....	5	3	5	-	5
Jack-knifed or overturned--no collision .....	-	-	4	-	4
Nonhighway (farm, industrial premises) .....	7	17	13	5	5
Noncollision accident .....	7	16	12	5	5
Fell from and struck by vehicle, mobile equipment .....	3	-	5	-	3
Overturned .....	-	13	4	5	-
Pedestrian struck by vehicle, mobile equipment .....	51	80	75	46	43
Pedestrian struck by vehicle, mobile equipment in roadway .....	33	60	48	26	28
Pedestrian struck by vehicle, mobile equipment on side of road .....	11	11	19	12	10
Pedestrian struck by vehicle, mobile equipment in parking lot or non-road area .....	6	9	8	6	5
<b>Contact with objects and equipment</b> .....	25	22	18	16	16
Struck by object or equipment .....	15	12	8	9	9
Struck by falling object or equipment .....	6	9	4	7	5
Struck by swinging or slipping object .....	-	-	-	-	3
Struck by rolling, sliding objects or equipment on floor or ground level .....	5	-	-	-	-
Caught in or compressed by equipment or objects .....	6	6	6	5	3
Compressed or pinched by rolling, sliding, or shifting objects .....	-	3	-	-	-
Caught in or crushed in collapsing materials .....	4	3	4	-	-
Excavation or trenching cave-in .....	3	-	3	-	-
<b>Falls</b> .....	6	4	4	13	3
Fall to lower level .....	6	4	4	11	3
Fall from scaffold, staging .....	3	-	-	4	-
Fall to lower level, n.e.c. ....	-	-	-	4	-
<b>Exposure to harmful substances or environments</b> .....	6	12	4	5	10
Contact with electric current .....	-	8	3	3	9
Contact with overhead power lines .....	-	7	3	3	8
Oxygen deficiency .....	4	-	-	-	-
Drowning, submersion .....	3	-	-	-	-
<b>Primary source<sup>5</sup></b>					
<b>Vehicles</b> .....	64	98	94	57	59
Highway vehicle, motorized .....	61	98	93	57	57
Automobile .....	12	21	16	12	10
Truck .....	47	68	73	39	45
Dump truck .....	12	23	22	10	11
Pickup truck .....	6	6	18	7	11
Semitrailer, tractor trailer, trailer truck .....	12	19	18	15	10
Van-passenger or light delivery .....	-	4	4	4	-
<b>Structures and surfaces</b> .....	10	6	7	16	10
Floors, walkways, ground surfaces .....	7	4	6	10	7
Ground .....	3	3	-	5	-
Street, road .....	-	-	3	-	-
Surfaces below ground level, n.e.c. ....	-	-	-	-	5
Ditches, channels, trenches, excavations .....	-	-	-	-	5

See footnotes at end of table.

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008 — Continued

Characteristics	2004	2005	2006	2007	2008
<b>Primary source<sup>5</sup> - continued</b>					
Structures .....	3	-	-	5	-
<b>Machinery</b> .....	28	40	29	22	23
Construction, logging, and mining machinery .....	24	34	25	19	14
Excavating machinery .....	5	7	8	3	7
Backhoes .....	3	-	3	3	3
Bulldozers .....	-	4	-	-	-
Loaders .....	3	4	-	-	-
Front end loaders .....	3	3	-	-	-
Road grading and surfacing machinery .....	16	19	10	12	5
Graders, levellers, planers, scrapers .....	-	5	3	3	-
Steam rollers, road pavers .....	10	13	5	7	-
Material handling (cranes, conveyers, jacks) .....	3	5	3	-	9
Cranes .....	-	3	-	-	3
Cranes--mobile, truck, rail mounted .....	-	-	-	-	3
Elevators, aerial lifts .....	-	-	-	-	5
Bucket or basket hoist--truck mounted .....	-	-	-	-	3
<b>Parts and materials</b> .....	9	13	4	8	4
Building materials--solid elements .....	3	7	-	5	-
Structural metal materials .....	-	4	-	3	-
Machine, tool, and electrical parts .....	-	5	-	-	3
Electric parts .....	-	3	-	-	3
Vehicle and mobile equipment parts .....	4	-	-	-	-
<b>Persons, plants, animals, and minerals</b> .....	3	-	-	-	-
<b>Other</b> .....	5	-	3	-	-
Atmospheric and environmental conditions .....	-	-	3	-	-
Steam, vapors, liquids .....	3	-	-	-	-
Liquids .....	3	-	-	-	-
Water .....	3	-	-	-	-
<b>Secondary source<sup>6</sup></b>					
<b>Vehicles</b> .....	23	31	28	14	26
Highway vehicle, motorized .....	22	30	28	14	26
Automobile .....	3	3	-	-	-
Truck .....	19	26	25	12	26
Dump truck .....	-	4	4	-	5
Pickup truck .....	-	3	-	3	-
Semitrailer, tractor trailer, trailer truck .....	10	17	18	8	18
<b>Structures and surfaces</b> .....	15	15	7	15	6
Floors, walkways, ground surfaces .....	4	3	3	-	3
Structures .....	10	12	4	11	-
Bridges, dams, locks .....	3	5	4	4	-
Scaffolds, staging .....	3	-	-	3	-
Other structures .....	-	4	-	-	-
<b>Machinery</b> .....	6	7	7	9	3
Construction, logging, and mining machinery .....	3	4	4	7	-
Excavating machinery .....	-	3	-	3	-
Material handling (cranes, conveyers, jacks) .....	3	3	3	-	-
Cranes .....	-	3	-	-	-
<b>Parts and materials</b> .....	-	11	3	4	11
Machine, tool, and electrical parts .....	-	7	-	-	8
Electric parts .....	-	7	-	-	7
Power lines, transformers, convertors .....	-	6	-	-	7
<b>Persons, plants, animals, and minerals</b> .....	-	3	3	-	-
<b>Other</b> .....	3	-	-	-	-

See footnotes at end of table.

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008 — Continued

Characteristics	2004	2005	2006	2007	2008
<b>Secondary source<sup>6</sup> - continued</b>					
<b>Not reported</b> .....	70	95	89	62	53
<b>Nature<sup>4</sup></b>					
<b>Traumatic injuries to bones, nerves, spinal cord</b> .....	—	—	3	—	—
Multiple traumatic injuries to bones, nerves, spinal cord .....	—	—	3	—	—
<b>Open wounds</b> .....	—	3	—	—	—
<b>Intracranial injuries</b> .....	30	20	16	17	10
Multiple intracranial injuries .....	17	16	12	4	—
<b>Multiple traumatic injuries and disorders</b> .....	52	96	83	62	58
Intracranial injuries and injuries to internal organs .....	13	25	24	7	5
Other combinations of traumatic injuries .....	4	19	13	7	7
<b>Other traumatic injuries and disorders</b> .....	35	43	32	25	28
Asphyxiations/strangulations, suffocations <sup>7</sup> .....	9	5	3	—	6
Drownings .....	4	—	—	—	—
Electrocutions, electric shocks .....	—	7	3	3	8
Internal injuries to organs and blood vessels of the trunk .....	19	27	24	19	11
Other poisonings and toxic effects .....	—	4	—	—	—
Other poisonings and toxic effects, n.e.c. ....	—	4	—	—	—
<b>Part of body<sup>4</sup></b>					
<b>Head</b> .....	30	22	17	17	11
Cranial region, including skull .....	30	21	16	17	11
Brain .....	30	21	16	17	10
<b>Trunk</b> .....	22	28	26	20	12
Chest, including ribs, internal organs .....	7	13	11	6	4
Multiple trunk locations .....	11	8	13	10	5
<b>Body systems</b> .....	14	17	8	5	17
<b>Multiple body parts</b> .....	51	96	85	63	59
<b>Worker activity</b>					
<b>Vehicular and transportation operations</b> .....	62	99	94	58	52
Driving, operating .....	18	40	29	24	19
Truck .....	12	19	16	12	9
Industrial or construction vehicle .....	3	18	11	9	7
Riding in, on .....	9	3	3	—	—
Truck .....	4	3	3	—	—
Industrial/construction vehicle .....	5	—	—	—	—
Boarding, alighting .....	—	—	3	—	3
Resurfacing, blacktopping, etc. ....	—	8	9	7	—
Directing, flagging traffic .....	8	19	18	6	10
Walking in or near roadway, etc., n.e.c. ....	23	23	31	18	16
<b>Using or operating tools, machinery</b> .....	10	11	6	8	6
Operating heavy equipment .....	8	5	3	—	4
Using nonpowered hand tools .....	—	3	—	—	—
<b>Constructing, repairing, cleaning</b> .....	32	43	32	30	31
Construction, assembling, dismantling .....	14	27	16	20	14
Constructing, assembling .....	7	10	6	9	5
Installing .....	3	9	6	4	4
Dismantling, removing .....	4	—	—	4	—
Repair, maintenance .....	10	10	7	4	12

See footnotes at end of table.

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008 — Continued

Characteristics	2004	2005	2006	2007	2008
<b>Worker activity - continued</b>					
Repairing .....	9	5	3	—	9
Maintenance .....	—	3	4	—	—
Inspecting or checking .....	3	4	5	—	—
Painting, etc. ....	—	—	—	—	3
<b>Materials handling operations</b> .....	5	4	—	4	3
<b>Physical activity<sup>8</sup>, n.e.c.</b> .....	10	6	4	5	5
<b>Location</b>					
<b>Street or highway</b> .....	119	165	139	106	101
Road construction <sup>9</sup> .....	119	165	139	106	101
<b>Occupation<sup>10</sup> (SOC)</b>					
<b>Management occupations</b> .....	5	4	5	—	—
Other management occupations .....	4	4	4	—	—
Construction managers .....	4	4	4	—	—
Construction managers .....	4	4	4	—	—
<b>Architecture and engineering occupations</b> .....	9	3	3	3	—
Engineers .....	8	—	3	—	—
Civil engineers .....	6	—	3	—	—
Civil engineers .....	6	—	3	—	—
<b>Protective service occupations</b> .....	3	7	9	6	5
Other protective service workers .....	3	7	7	4	3
Miscellaneous protective service workers .....	3	6	6	4	3
Crossing guards .....	3	6	6	4	3
<b>Building and grounds cleaning and maintenance occupations</b> .....	—	—	—	—	3
<b>Construction and extraction occupations</b> .....	77	110	91	70	72
Supervisors, construction and extraction workers .....	6	21	9	7	8
First-line supervisors/managers of construction trades and extraction workers .....	6	21	9	7	8
First-line supervisors/managers of construction trades and extraction workers .....	6	21	9	7	8
Construction trades workers .....	60	76	67	56	55
Carpenters .....	4	—	—	4	—
Carpenters .....	4	—	—	4	—
Cement masons, concrete finishers, and terrazzo workers .....	—	—	3	—	—
Cement masons and concrete finishers .....	—	—	3	—	—
Construction laborers .....	28	38	40	31	29
Construction laborers .....	28	38	40	31	29
Construction equipment operators .....	18	27	20	16	15
Paving, surfacing, and tamping equipment operators .....	8	14	5	7	5
Operating engineers and other construction equipment operators .....	9	13	14	9	10
Painters and paperhangers .....	4	—	—	—	4
Painters, construction and maintenance .....	4	—	—	—	4
Other construction and related workers .....	11	11	15	6	9
Construction and building inspectors .....	—	—	4	—	—
Construction and building inspectors .....	—	—	4	—	—
Highway maintenance workers .....	9	10	10	3	8
Highway maintenance workers .....	9	10	10	3	8
<b>Installation, maintenance, and repair occupations</b> .....	4	9	6	3	6
Vehicle and mobile equipment mechanics, installers, and repairers .....	—	3	—	—	—
Heavy vehicle and mobile equipment service technicians and mechanics .....	—	3	—	—	—
Mobile heavy equipment mechanics, except engines .....	—	3	—	—	—
Other installation, maintenance, and repair occupations .....	4	6	3	3	5

See footnotes at end of table.

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008 — Continued

Characteristics	2004	2005	2006	2007	2008
<b>Occupation<sup>10</sup></b>					
<b>(SOC) - continued</b>					
Line installers and repairers .....	4	5	3	—	3
Electrical power-line installers and repairers .....	4	4	—	—	3
<b>Production occupations</b> .....	—	—	—	3	—
<b>Transportation and material moving occupations</b> .....	18	28	22	18	14
Motor vehicle operators .....	16	23	20	17	12
Driver/sales workers and truck drivers .....	15	21	19	16	12
Truck drivers, heavy and tractor-trailer .....	13	20	18	16	12
Material moving workers .....	—	5	—	—	—
<b>Industry<sup>11</sup></b>					
<b>(NAICS)</b>					
<b>Private industry</b> .....	104	147	115	91	90
<b>Goods-producing</b> .....	79	113	87	69	70
<b>Construction</b> .....	79	108	86	68	67
<b>Construction</b> .....	79	108	86	68	67
Heavy and civil engineering construction .....	67	92	78	61	56
Utility system construction .....	—	10	8	9	5
Water and sewer line and related structures construction .....	—	5	7	4	—
Power and communication line and related structures construction .....	—	5	—	4	3
Highway, street, and bridge construction .....	63	81	70	52	51
Highway, street, and bridge construction .....	63	81	70	52	51
Specialty trade contractors .....	10	11	8	7	10
Foundation, structure, and building exterior contractors .....	—	4	—	—	—
Other specialty trade contractors .....	7	5	6	5	6
Site preparation contractors .....	6	—	5	3	5
Nonresidential site preparation contractors .....	4	—	—	—	—
All other specialty trade contractors .....	—	3	—	—	—
<b>Service-providing</b> .....	25	34	28	22	20
<b>Trade, transportation, and utilities</b> .....	16	21	18	15	11
<b>Transportation and warehousing</b> .....	9	16	13	12	9
Truck transportation .....	7	15	12	12	9
General freight trucking .....	7	10	9	9	8
General freight trucking, long-distance .....	5	8	6	9	6
General freight trucking, long-distance, truckload .....	—	5	3	5	4
Specialized freight trucking .....	—	5	3	3	—
Specialized freight (except used goods) trucking, local .....	—	3	—	—	—
<b>Utilities</b> .....	3	3	—	—	—
Utilities .....	3	3	—	—	—
Electric power generation, transmission and distribution .....	—	3	—	—	—
<b>Professional and business services</b> .....	6	11	7	6	5
<b>Professional, scientific, and technical services</b> .....	6	3	—	—	—
Professional, scientific, and technical services .....	6	3	—	—	—
Architectural, engineering, and related services .....	5	3	—	—	—
Engineering services .....	5	3	—	—	—
<b>Administrative and waste services</b> .....	—	8	5	4	5
Administrative and support services .....	—	8	4	3	4
Employment services .....	—	5	—	—	—
Temporary help services .....	—	4	—	—	—
Other support services .....	—	3	—	—	—
All other support services .....	—	3	—	—	—

See footnotes at end of table.

## ROAD CONSTRUCTION SITES

### Fatal occupational injuries at road construction sites by selected characteristics, 2004-2008 — Continued

Characteristics	2004	2005	2006	2007	2008
<b>Industry<sup>11</sup> (NAICS) - continued</b>					
<b>Government<sup>12</sup></b> .....	15	18	24	15	11
<b>State government</b> .....	8	6	12	5	6
<b>Goods-producing</b> .....	7	5	10	4	6
<b>Construction</b> .....	7	5	10	4	6
<b>Construction</b> .....	7	5	10	4	6
Heavy and civil engineering construction .....	6	5	10	4	6
Highway, street, and bridge construction .....	6	5	10	4	6
Highway, street, and bridge construction .....	6	5	10	4	6
<b>Local government</b> .....	7	12	12	10	5
<b>Goods-producing</b> .....	6	10	10	8	—
<b>Construction</b> .....	6	10	10	8	—
<b>Construction</b> .....	6	10	10	8	—
Heavy and civil engineering construction .....	6	10	10	8	—
Highway, street, and bridge construction .....	6	10	9	8	—
Highway, street, and bridge construction .....	6	10	9	8	—
<b>Service-providing</b> .....	—	—	—	—	3

<sup>1</sup> May include volunteers and workers receiving other types of compensation.

<sup>2</sup> 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.

<sup>3</sup> Persons identified as Hispanic or Latino may be of any race. The racial categories shown exclude data for Hispanics and Latinos.

<sup>4</sup> Based on the BLS Occupational Injury and Illness Classification Manual.

<sup>5</sup> The primary source of injury identifies the object, substance, or exposure that directly produced or inflicted the injury. For most transportation incidents, the primary source identifies the vehicle in which the deceased was an occupant. For most falls, the primary source identifies the surface or object contacted.

<sup>6</sup> 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 "assailant" is the secondary source. For most falls, the secondary source identifies the equipment or surface from which the worker fell.

<sup>7</sup> May include some asphyxiations due to chest compressions.

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

<sup>9</sup> The road construction location category was implemented in 1995. Includes road construction workers and vehicle occupants fatally injured in work zones. Work zones include construction, maintenance, and utility work on a road, street, or highway.

<sup>10</sup> Based on the 2000 Standard Occupational Classification system.

<sup>11</sup> Based on the North American Industry Classification System, 2002.

<sup>12</sup> Includes fatalities to workers employed by governmental organizations regardless of industry.

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