

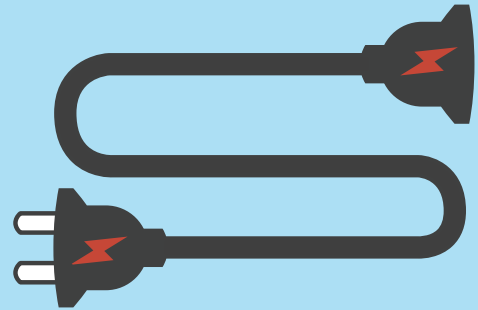
WORKPLACE ELECTRICAL SAFETY

Top Electrical OSHA Violations

Lockout / Tagout



Electrical Wiring Methods



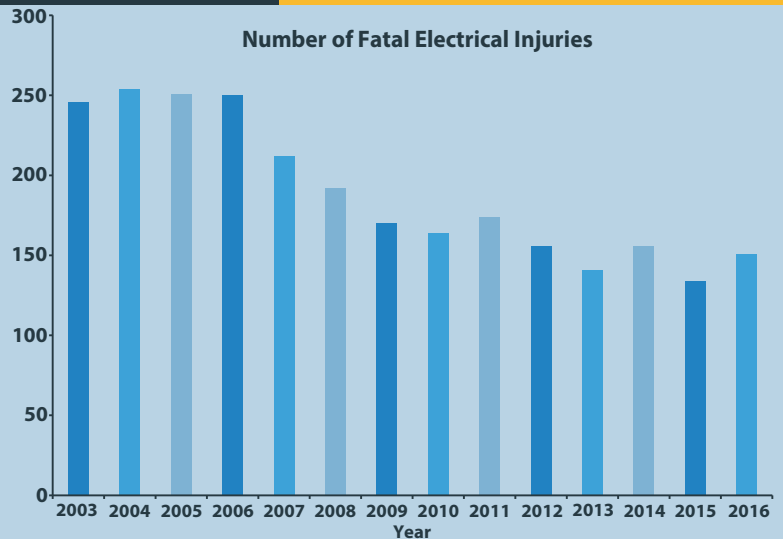
Electrical Fatalities

Electrical Fatalities: 2003 - 2016

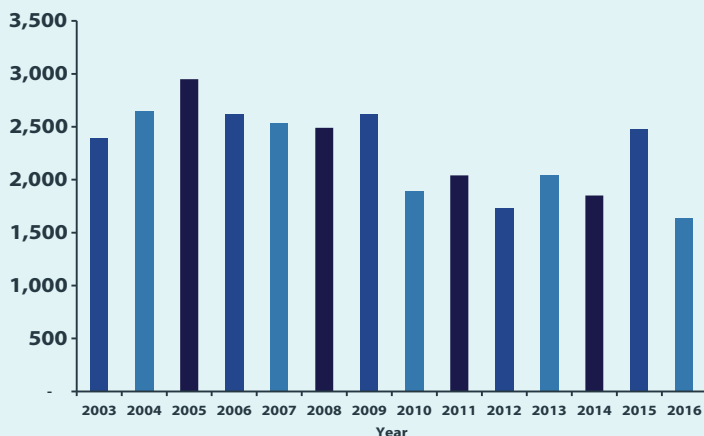
15% increase in electrical fatalities between 2015 and 2016

53% of electrical fatalities occurred in the construction industry

2.3x younger workers experience fatalities 2.3 times more than experienced workers



Electrical Injuries



Electrical Injuries: 2003 - 2016

1/3 drop in non-fatal electrical injuries in 2016 over 2015

420 electrical injuries occurred in construction industry in 2016

5 the median number of days away from work due to injury

Table 1

Fatalities by EVENT, all ownerships, 2003-2016																
Rank	Event or Exposure	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
1	Transportation, excluding water, rail, air	2,041	2,118	2,173	2,081	2,057	1,829	1,516	1,600	1,670	1,695	1,628	1,737	1,821	1,855	25,821
2	Assaults and Violent acts	902	809	792	788	864	816	837	832	791	803	773	765	703	866	11,341
3	Falls	696	822	770	827	847	700	645	646	681	704	724	818	800	849	10,529
4	Struck by object or equipment	531	602	607	589	504	520	420	404	476	519	509	503	519	533	7,236
5	Exposure to harmful substances or environments, excluding electrical	240	210	250	297	285	247	234	250	245	184	194	236	290	364	3,526
6	Caught in or compressed by equipment or objects	238	269	278	283	296	302	233	228	145	124	131	132	99	117	2,875
7	Contact with / Exposure to electric current	246	254	251	250	212	192	170	164	174	156	141	154	134	154	2,652
8	Aircraft	211	231	149	217	174	191	159	152	145	127	136	135	139	130	2,296
9	Caught in or crushed in collapsing materials	126	117	109	108	108	100	80	91	84	73	78	74	90	82	1,320
10	Explosions	75	75	65	99	75	80	60	80	82	88	67	84	75	55	1,060
11	Water Vehicle	69	91	88	96	71	76	86	60	72	63	60	55	44	48	979
12	Railway	43	50	83	65	49	34	34	45	50	38	41	57	50	50	689
	Other	157	116	119	140	115	127	77	138	78	54	103	71	72	87	1,454
	Total Fatalities (all causes)	5,575	5,764	5,734	5,840	5,657	5,214	4,551	4,690	4,693	4,628	4,585	4,821	4,836	5,190	71,778

Compiled by the Electrical Safety Foundation International using data from the U.S. Bureau of Labor Statistics, CFI, 2003-2016

Table 2

Electrical fatalities by Event and Nature of Injury, all ownerships, 2011-2016													
Event	Event Code	Electrocutions, electric shocks						Electrical burns					
		2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
Exposure to electricity	51	171	152	135	146	130	150	3	-	6	7	4	4
Direct exposure to electricity	511	94	75	83	81	81	86	1	-	2	5		-
Direct exposure to electricity, 220 volts or less	5111	26	18	26	24	27	29	-	-	-	-		-
Direct exposure to electricity, greater than 220 volts	5112	55	52	48	54	52	51	1	-	2	5		-
Indirect exposure to electricity	512	73	73	49	65	47	62	-	-	3	-		-
Indirect exposure to electricity, 220 volts or less	5121	11	5	5	7	7	5	-	-	-	-		-
Indirect exposure to electricity, greater than 220 volts	5122	60	66	41	58	40	41	-	-	-	-		-

Rows, columns may not sum to total.

Dashes [-] indicate no data or data that do not meet BLS publication criteria.

Compiled by the Electrical Safety Foundation International using data from the U.S. Bureau of Labor Statistics, CFOI, 2011-2016

Table 3

Number of electrical fatalities in selected industries, by EVENT, Private Industry, 2003-2016															
Industry Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Construction	132	122	107	126	108	89	89	76	69	66	71	74	81	82	1,292
Professional and business services	23	29	39	21	25	27	24	20	23	30	20	19	18	28	346
Trade, transportation, and utilities	17	30	29	32	19	19	18	19	16	16	13	17	9	9	263
Natural resources and mining	16	20	27	27	24	13	9	18	24	21	14	16	9	11	249
Manufacturing	22	22	17	14	17	19	15	11	20	11	9	12	7	8	204
Other services	7	6	10	6	5	5	5	-	5	-	5	-	-	4	54
Leisure and hospitality	4	3	6	5	-	3	-	3	4	-	3	6	-	5	42
Information	3	6	4	3	-	-	-	4	3	1	-	-	-	-	24
Financial activities	5	-	-	5	3	-	-	4	1	3	-	3	-	-	24
Total	246	254	251	250	212	192	170	164	174	156	141	156	134	154	2,654

NOTES:

Dashes [-] indicate no data or data that do not meet publication criteria.

Totals for major categories may include subcategories not shown separately.

Data may not sum to totals due to missing data or categories not shown.

Compiled by the Electrical Safety Foundation International using data from the U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, CFOI, 2003-2016

Table 4

Nonfatal electrical injuries involving days away from work, by Event, Private Industry, 1992-2016	
Year	Total
1992	4,806
1993	4,995
1994	6,018
1995	4,744
1996	4,126
1997	3,710
1998	3,910
1999	4,224
2000	3,704
2001	3,394
2002	2,967
2003	2,390
2004	2,650
2005	2,950
2006	2,620
2007	2,540
2008	2,490
2009	2,620
2010	1,890
2011	2,040
2012	1,730
2013	2,040
2014	1,850
2015	2,480
2016	1,640
Total	78,528

Compiled by the Electrical Safety Foundation International using data from the U.S. Bureau of Labor Statistics, CFOI, 1992-2016

Table 5

Median Number of Days Away from Work for NonFatal Electrical injuries, by Event, Private Industry, 2011 - 2016							
Event	Event Code	Electrocutions, Electric Shocks					
		2011	2012	2013	2014	2015	2016
Exposure to electricity	51	6	4	14	3	5	5
Direct Exposure to Electricity	511	9	4	27	5	5	7
Direct Exposure to Electricity, 220 Volts or less	5111	6	4	3	9	5	2
Direct Exposure to Electricity, Greater than 220 Volts	5112	45	2	24	10	2	22
Indirect Exposure to Electricity	512	5	5	3	1	20	5
Indirect Exposure to Electricity, 220 Volts or Less	5121	2	9	2	1	5	5
Indirect Exposure to Electricity, Greater than 220 Volts	5122	5	6	63	10	49	2

Compiled by the Electrical Safety Foundation International using data from the 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, 2011-2016

Table 6

Fatal occupational injuries by selected worker characteristics and selected event or exposure, All U.S., all ownerships, 2011 - 2016							
Characteristic	All events ⁽¹⁾	Exposure to electricity (code 51XXXX)					
		2016	2011	2012	2013	2014	2015
Total:	5190	174	156	141	154	134	154
Employee status:							
Wage and salary workers ⁽²⁾	4098	141	125	114	126	107	114
Self-employed ⁽³⁾	1092	33	31	27	28	27	40
Gender:							
Women	387	5	–	–	2	–	4
Men	4803	169	154	141	152	134	150
Age:							
Under 16 years	13	3	–	–	–	–	–
16 to 17 years	17	–	–	–	–	–	1
18 to 19 years	43	3	3	–	–	1	3
20 to 24 years	310	16	17	11	16	12	14
25 to 34 years	834	47	44	42	38	34	41
35 to 44 years	979	42	41	35	36	30	35
45 to 54 years	1145	44	35	31	33	36	32
55 to 64 years	1160	12	10	16	23	14	21
65 years and over	688	6	4	6	6	7	7
Race or ethnic origin⁽⁴⁾:							
White, non-Hispanic	3481	117	111	95	103	93	103
Black or African-American, non-Hispanic	587	7	7	9	10	9	10
Hispanic or Latino	879	47	35	35	38	31	38
American Indian or Alaska Native, non-Hispanic	38	–	–	–	–	–	–
Asian, non-Hispanic	160	–	–	–	–	–	3
Native Hawaiian or Pacific Islander, non-Hispanic	7	–	–	–	–	–	–
Person of multiple races, non-Hispanic	15	–	–	–	–	–	–
Other races or not reported, non-Hispanic	23	–	–	–	–	–	–
Primary source⁽¹⁾⁽⁵⁾:							
Chemicals and chemical products	267	–	–	–	–	–	–
Containers, furniture, and fixtures	71	7	3	–	8	7	6
Machinery	390	26	29	17	16	15	26
Agriculture and garden machinery	73	1	3	–	–	–	–
Construction, logging, and mining machinery	147	4	3	4	3	–	–
Material and personnel handling machinery	105	8	9	–	4	8	8
Parts and materials	177	84	71	79	66	72	58
Machine, tool, and electric parts	69	74	58	71	60	66	55
Persons, plants, animals, and minerals	1090	7	3	4	–	–	5
Person-other than injured or ill worker	520	1	–	–	–	–	–
Relative or domestic partner of injured or ill worker	43	–	–	–	–	–	–
Co-worker or work associate of injured or ill worker	74	1	–	–	–	–	–
Assailant, suspect, inmate	259	–	–	–	–	–	–
Robber	152	–	–	–	–	–	–
Plants, trees, vegetation--not processed	173	6	3	4	–	–	5
Trees, logs, limbs	165	6	3	4	–	–	5
Structures and surfaces	602	6	7	5	9	3	–
Buildings--office, plant, residential	43	–	–	–	–	–	–
Structures other than buildings	101	–	4	–	7	–	1
Scaffolds, staging	70	2	–	–	–	–	1

Table 6 (continued)
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Fatal occupational injuries by selected worker characteristics and selected event or exposure, All U.S., all ownerships, 2011 - 2016							
Characteristic	All events ⁽¹⁾	Exposure to electricity (code 51XXXX)					
		2016	2011	2012	2013	2014	2015
Other structural elements	199	–	1	–	–	–	–
Roofs	151	–	–	–	–	–	–
Tools, instruments, and equipment	223	29	21	20	27	22	29
Ladders	183	9	11	4	8	10	11
Vehicles	2246	11	16	13	22	5	14
Highway vehicles, motorized	1693	8	14	11	20	4	12
Passenger vehicles--automobiles, buses, and passenger vans	374	–	–	–	–	–	–
Trucks--motorized freight hauling and utility	999	7	14	11	18	4	12
Multi-purpose highway vehicles	317	–	–	–	2	–	–
Off-road and industrial vehicles--powered	322	3	1	–	–	–	2
Industrial vehicles, material hauling and transport--powered	77	–	1	–	–	–	–
Forklift, order picker, platform truck--powered	72	–	1	–	–	–	–
Tractors, PTOs	168	–	–	–	–	–	2
Secondary source ⁽¹⁾⁽⁶⁾ :							
Chemicals and chemical products	48	–	–	–	–	–	–
Containers, furniture, and fixtures	58	–	–	–	–	–	–
Machinery	142	4	3	–	4	–	–
Parts and materials	263	73	73	49	63	47	63
Machine, tool, and electric parts	104	71	72	48	62	46	63
Persons, plants, animals, and minerals	262	–	–	1	–	–	–
Plants, trees, vegetation--not processed	241	–	–	1	–	–	–
Trees, logs, limbs	236	–	–	1	–	–	–
Structures and surfaces	458	1	–	3	–	–	–
Confined spaces	38	1	–	3	–	–	–
Structures other than buildings	165	–	–	–	–	–	–
Floors, walkways, ground surfaces	137	–	–	–	–	–	–
Tools, instruments, and equipment	706	–	–	–	–	–	–
Vehicles	862	1	2	–	–	3	–
Highway vehicles, motorized	751	1	2	–	–	3	–
Off-road and industrial vehicles--powered	35	–	–	–	–	–	–
Nature ⁽¹⁾ :							
Traumatic injuries to bones, nerves, spinal cord	198	–	–	–	–	–	–
Traumatic injuries to muscles, tendons, ligaments, joints, etc.	28	–	–	–	–	–	–
Open wounds	648	–	–	–	–	–	–
Gunshot wounds	545	–	–	–	–	–	–
Surface wounds and bruises	5	–	–	–	–	–	–
Burns and corrosions	76	3	–	6	7	–	–
Intracranial injuries	795	–	–	–	–	–	–
Effects of environmental conditions	45	–	–	–	–	–	–
Multiple traumatic injuries and disorders	1940	–	–	–	–	3	–
Burns and other injuries, except fractures	100	–	–	–	–	–	–
Intracranial injuries and injuries to internal organs	362	–	–	–	–	–	–
Other traumatic injuries and disorders	1446	171	154	135	146	130	150
Asphyxiations, strangulations, suffocations	279	–	–	–	–	–	–
Drownings	148	–	–	–	–	–	–
Electrocutions, electric shocks	155	171	154	135	146	130	150
Internal injuries to organs and blood vessels of the trunk	542	–	–	–	–	–	–
Other poisoning, toxic, noxious, or allergenic effects	318	–	–	–	–	–	–

Fatal occupational injuries by selected worker characteristics and selected event or exposure, All U.S., all ownerships, 2011 - 2016							
Characteristic	All events ⁽¹⁾	Exposure to electricity (code 51XXXX)					
	2016	2011	2012	2013	2014	2015	2016
Part of body⁽²⁾:							
Head	1018	-	-	-	-	-	-
Neck, including throat	258	-	-	-	-	-	-
Trunk	854	-	-	-	-	-	-
Chest, including ribs, internal organs	379	-	-	-	-	-	-
Back, including spine, spinal cord	60	-	-	-	-	-	-
Upper extremities	29	-	-	-	-	-	-
Lower extremities	74	1	-	-	-	-	-
Body systems	792	171	154	136	147	131	151
Multiple body parts	2165	-	-	5	7	3	3
Head and neck	122	-	-	-	-	-	-
Head, neck, and trunk	154	-	-	-	-	-	-
Head and trunk	388	-	-	-	-	-	-
Other multiple body parts	476	-	-	-	4	3	1
Whole Body	64	-	-	-	-	-	-
Worker activity:							
Vehicular and transportation operations	2154	5	-	-	10	5	7
Using or operating tools, machinery	392	41	33	28	34	22	29
Constructing, repairing, cleaning	1023	102	97	92	88	85	97
Protective service activities	160	-	-	-	1	-	1
Materials handling operations	230	16	17	12	13	17	10
Physical activities	342	4	5	4	5	3	6
Other activities	444	-	-	-	3	-	-
Tending a retail establishment, waiting on customers	185	-	-	-	-	-	1
Location:							
Private residence	597	49	46	44	52	40	57
Farm	411	23	16	9	10	11	10
Mine and quarry	26	-	-	1	3	-	-
Industrial place and premises	1061	50	47	46	46	40	45
Place for recreation and sport	91	3	-	-	3	5	6
Street and highway	1684	21	18	18	19	17	16
Public building	586	20	11	12	14	10	15
Residential institution	37	-	-	-	-	1	-
Occupation⁽⁷⁾:							
Management occupations	377	5	9	4	8	3	5
Business and financial operations occupations	27	-	-	-	-	-	-
Computer and mathematical occupations	16	-	-	-	-	-	-
Architecture and engineering occupations	41	-	3	-	-	-	1
Life, physical, and social science occupations	15	-	1	-	-	-	1
Community and social services occupations	27	-	-	-	-	-	-
Legal occupations	13	-	-	-	-	-	-
Education, training, and library occupations	32	-	-	-	-	-	-
Arts, design, entertainment, sports, and media occupations	64	-	-	1	-	-	-
Healthcare practitioners and technical occupations	60	-	-	-	-	-	-
Healthcare support occupations	30	-	-	-	-	-	-
Protective service occupations	281	-	-	-	-	1	2
Food preparation and serving related occupations	92	-	-	-	1	-	-
Building and grounds cleaning and maintenance occupations	329	21	19	16	17	11	23
Personal care and service occupations	55	-	-	-	-	-	-
Sales and related occupations	254	-	-	-	-	-	1

Fatal occupational injuries by selected worker characteristics and selected event or exposure, All U.S., all ownerships, 2011 - 2016							
Characteristic	All events ⁽¹⁾	Exposure to electricity (code 51XXXX)					
	2016	2011	2012	2013	2014	2015	2016
Office and administrative support occupations	78	–	–	–	–	–	–
Farming, fishing, and forestry occupations	290	15	8	7	5	4	3
Construction and extraction occupations	970	69	76	65	68	68	69
Installation, maintenance, and repair occupations	470	37	32	31	33	31	38
Production occupations	216	11	3	6	8	8	6
Transportation and material moving occupations	1388	8	5	3	10	7	–
Military specific occupations ⁽⁸⁾	62	–	–	–	–	–	–
Industry ⁽⁹⁾ :							
Private industry	4693	166	152	137	147	130	151
Goods-producing	1991	113	98	94	101	97	101
Natural resources and mining ⁽¹⁰⁾	682	24	21	14	15	9	11
Construction	991	69	66	71	74	81	82
Manufacturing	318	20	11	9	12	7	8
Service-providing	2702	53	54	43	46	33	50
Trade, transportation, and utilities	1316	16	16	13	16	9	9
Information	46	3	1	–	–	–	–
Financial activities	117	1	3	–	3	–	–
Professional and business services	540	23	30	20	19	18	28
Education and health services	159	–	–	–	–	–	–
Leisure and hospitality	298	4	–	3	6	–	5
Other services	223	5	–	5	–	–	4
Government ⁽¹¹⁾	497	8	4	4	7	4	3
Federal government	107	–	–	–	–	–	–
State government	97	3	–	–	–	2	1
Local government	291	5	–	3	6	–	–
Footnotes:							
(1) Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward.							
(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 race categories shown exclude data for Hispanics and							
(5) 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.							
(6) 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.							
(7) CFOI has used several versions of the Standard Occupation Classification (SOC) system since 2003 to define occupation. For							
(8) Includes fatal injuries to persons identified as resident armed forces regardless of individual occupation listed.							
(9) 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: https://www.bls.gov/iif/oshcdef.htm .							
(10) 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.							
(11) Includes all fatal occupational injuries meeting this ownership criterion across all specified years, regardless of industry classification system.							

Table 7

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and event or exposure, All U.S., private industry, 2011 - 2016							
Characteristic	events	Exposure to electricity (code 51XXXX)					
	2016	2011	2012	2013	2014	2015	2016
Total:	892270	2250	1700	2090	1850	2480	1640
Sex:							
Men	549920	1910	1400	1750	1530	2190	1290
Women	337390	350	280	330	310	270	330
Age:							
Under 14	-	-	-	-	-	-	-
14 to 15	270	-	-	-	-	-	-
16 to 19	22430	30	-	40	80	20	30
20 to 24	85110	280	250	230	210	260	360
25 to 34	192670	520	480	450	560	590	470
35 to 44	176080	560	300	660	580	590	380
45 to 54	204110	640	430	500	270	540	190
55 to 64	160430	150	110	190	140	450	150
65 and over	34640	20	70	-	-	-	-
Occupation⁽²⁾:							
Management, business, financial	26260	50	90	20	-	40	30
Computer, engineering, and science	5620	30	30	30	30	20	20
Education, legal, community service, arts, and media	26850	-	-	-	40	-	-
Healthcare practitioners and technical	46830	30	30	80	20	40	20
Service	215840	380	200	380	270	760	280
Sales and related	56070	30	50	30	60	60	80
Office and administrative support	64580	50	60	30	20	70	30
Farming, fishing, and forestry	14380	20	-	20	-	-	30
Construction and extraction	77780	580	350	460	600	570	420
Installation, maintenance, and repair	78670	700	560	800	450	580	430
Production	99070	220	240	160	240	300	210
Transportation and material moving	178620	130	90	60	90	30	90
Length of service with employer:							
Less than 3 months	103160	260	170	180	120	350	160
3 months to 11 months	180470	410	310	380	550	500	530
1 year to 5 years	301530	710	620	970	680	800	550
More than 5 years	292420	820	580	540	470	810	350

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and event or exposure, All U.S., private industry, 2011 - 2016							
Characteristic	events	Exposure to electricity (code 51XXXX)					
		2011	2012	2013	2014	2015	2016
Race or ethnic origin:							
White	325760	1420	750	680	810	1180	650
Black or African American	73460	160	120	120	160	290	170
Hispanic or Latino	127490	200	210	190	290	340	200
Asian	13070	–	40	–	–	20	–
Native Hawaiian or other Pacific Islander	2610	–	–	–	–	–	–
American Indian or Alaska Native	3900	–	30	–	40	30	–
Hispanic and other	1140	–	–	–	–	–	–
Multi-race	1210	–	–	–	–	–	–
Not reported	343640	450	550	1090	540	630	610
Number of days away from work:							
Cases involving 1 day	127310	350	570	280	630	330	330
Cases involving 2 days	98040	400	160	370	220	400	260
Cases involving 3-5 days	153940	330	250	190	170	530	250
Cases involving 6-10 days	105670	220	190	120	150	120	230
Cases involving 11-20 days	97910	270	110	120	120	340	50
Cases involving 21-30 days	58120	170	60	100	110	100	110
Cases involving 31 or more days	251280	530	370	900	450	650	410
Median days away from work ⁽³⁾	8	6	4	16	4	5	5
Industry sector:							
Goods producing industries ⁽⁴⁾	221780	1030	600	780	1040	1170	860
Natural resources and mining ^{(4), (5)}	20970	30	–	70	30	50	100
hunting ⁽⁴⁾	16600	–	–	60	20	20	40
Mining ⁽⁵⁾	4370	20	–	–	20	20	60
Construction	82760	610	340	500	630	790	420
Manufacturing	118050	390	250	210	380	330	340
Service providing industries	670490	1230	1100	1300	820	1310	780
Trade, transportation and utilities ⁽⁶⁾	275850	480	440	720	270	280	360
Wholesale trade	54290	80	110	50	20	80	90
Retail trade	122390	260	110	520	100	140	170
Transportation and warehousing ⁽⁶⁾	95300	90	120	50	50	30	50
Utilities	3880	60	90	100	100	30	50
Information	13460	30	–	20	70	110	30
Financial activities	25590	120	40	20	–	90	20
Finance and insurance	7510	–	20	–	–	20	20
Real estate and rental and leasing	18080	110	30	–	–	70	–
Professional and business services	71630	100	210	130	100	140	80
services	16190	40	70	60	–	–	40
enterprises	5670	–	–	30	–	20	–
management and remediation	49770	60	130	50	70	110	40
Education and health services	166530	210	120	190	170	400	80
Educational services	11840	–	20	–	–	–	–
Health care and social assistance	154680	200	100	170	170	390	70
Leisure and hospitality	91250	260	170	210	160	240	190
Arts, entertainment, and recreation	15130	20	50	30	20	60	–
Accommodation and food services	76120	240	130	190	140	180	180
Other services	26170	30	110	–	30	50	–
administration	26170	30	110	–	30	50	–
Public administration	–	–	–	–	–	–	–

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and event or exposure, All U.S., private industry, 2011 - 2016							
Characteristic	events	Exposure to electricity (code 51XXXX)					
		2011	2012	2013	2014	2015	2016
Musculoskeletal disorders⁽⁷⁾:							
Musculoskeletal disorders	285950	-	-	-	-	-	-
Nature of injury, illness⁽⁸⁾:							
Fractures	79530	-	-	-	-	-	-
Sprains, strains, tears	317530	-	-	-	-	-	-
Amputations	5060	-	-	-	-	-	-
Cuts, lacerations, punctures	91340	-	-	-	-	-	-
Cuts, lacerations	76950	-	-	-	-	-	-
Punctures (except gunshot wounds)	14390	-	-	-	-	-	-
Bruises, contusions	76950	-	-	-	-	-	-
Chemical burns and corrosions	3540	-	-	-	-	-	-
Heat (thermal) burns	13540	-	-	-	-	-	-
Multiple traumatic injuries	20880	-	-	-	-	-	-
With sprains and other injuries	8470	-	-	-	-	-	-
With fractures and other injuries	4020	-	-	-	-	-	-
Soreness, pain	142990	-	-	-	-	-	-
Carpal tunnel syndrome	5390	-	-	-	-	-	-
Tendonitis	2500	-	-	-	-	-	-
All other	133020	2250	1690	2090	1850	2480	1640
Part of body affected⁽⁸⁾:							
Head	75040	70	80	60	260	70	30
Eye	22030	40	40	20	-	50	20
Neck	12020	-	-	-	-	-	-
Trunk	207670	-	-	20	-	-	-
Back	154180	-	-	-	-	-	-
Upper extremities	283900	650	500	220	270	290	410
Shoulder	70240	-	-	-	-	-	-
Arm	43650	110	90	40	40	30	90
Wrist	34550	-	-	-	-	50	-
Hand	118400	360	370	130	180	210	250
Lower extremities	204520	-	-	-	-	40	20
Knee	74240	-	-	-	-	-	-
Ankle	46600	-	-	-	-	-	-
Foot	45830	-	-	-	-	-	-
Toe, toenail	11880	-	-	-	-	-	-
Body systems	17720	1200	940	1520	1070	1890	940
Multiple	84800	310	130	270	240	150	230
All other	6590	-	30	-	-	30	-

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and event or exposure, All U.S., private industry, 2011 - 2016							
Characteristic	events	Exposure to electricity (code 51XXXX)					
	2016	2011	2012	2013	2014	2015	2016
Source of injury, illness⁽⁸⁾:							
Chemicals, chemical products	12480	-	-	-	-	-	-
Containers	104200	20	-	-	-	-	-
Furniture, fixtures	37170	60	50	100	60	210	50
Machinery	49470	420	380	410	250	480	360
Parts and materials	78020	1290	990	1370	1270	1090	1030
Person, injured or ill worker	134770	-	-	-	-	-	-
Worker motion or position	128450	-	-	-	-	-	-
Person, other than injured or ill workers	64410	110	-	-	-	-	-
Health care patient	43960	-	-	-	-	-	-
Floors, walkways, ground surfaces	146340	-	-	-	-	-	-
Handtools	42040	150	60	30	40	270	60
Ladders	20520	-	-	-	-	-	-
Vehicles	91680	40	50	20	-	-	-
Trucks	22190	-	40	-	-	-	-
Cart, dolly, hand truck--nonpowered	14130	-	-	-	-	-	-
All other	111170	170	140	120	190	410	110
Secondary source of injury, illness⁽⁸⁾:							
Containers, furniture, and fixtures	21770	60	-	-	-	-	-
Machinery	6620	80	20	20	-	30	50
Computers and peripheral equipment	1260	-	-	-	-	-	-
Tools, instruments, and equipment	10810	30	-	-	70	-	30
self-defense equipment	380	-	-	-	-	-	-
Vehicles	27020	-	-	-	-	-	-
Highway vehicle, motorized	20550	-	-	-	-	-	-
Ice, sleet, snow	16880	-	-	-	-	-	-
Liquids-nonchemical	13050	30	-	50	-	-	-
Day of Week:							
Sunday	58340	40	50	140	100	170	40
Monday	157470	350	280	290	380	430	270
Tuesday	161580	460	260	420	330	390	440
Wednesday	154230	430	310	240	230	320	210
Thursday	146580	460	390	630	250	560	220
Friday	139480	370	230	270	480	240	260
Saturday	74580	140	180	100	90	380	210

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and event or exposure, All U.S., private industry, 2011 - 2016							
Characteristic	events	Exposure to electricity (code 51XXX)					
		2011	2012	2013	2014	2015	2016
Time of Day:							
12:01 AM - 4:00 AM	28360	40	40	30	50	50	20
4:01 AM - 8:00 AM	84020	230	160	130	170	480	150
8:01 AM - 12:00 PM	252810	920	630	870	500	740	470
12:01 PM - 4:00 PM	195220	460	400	510	680	380	460
4:01 PM - 8:00 PM	97260	180	190	210	210	210	210
8:01 PM - 12:00 AM	52670	90	100	40	100	160	70
Not reported	181920	350	170	290	150	460	260
Hours Worked:							
Occurred before shift began	5880	-	-	-	-	-	-
Less than 1 hour	70220	310	180	90	60	490	80
1 - 2 hours	85740	170	100	130	120	260	110
2 - 4 hours	178910	550	470	820	340	370	310
4 - 6 hours	139610	300	250	280	640	340	280
6 - 8 hours	118530	350	300	230	350	290	250
8 - 10 hours	61120	130	80	160	50	180	200
10 - 12 hours	18090	40	80	30	70	-	30
12 - 16 hours	7370	-	-	-	20	20	60
More than 16 hours	1060	-	-	-	-	-	-
Not reported	205740	410	210	330	190	530	330
Footnotes:							
(1) Days away from work include those that result in days away from work with or without job transfer or restriction.							
(2) Standard Occupational Classification Manual, 2010, Office of Management and Budget							
(3) Median days away from work is the measure used to summarize the varying lengths of absences from work among the cases with days away from work. Half the cases involved more days and half involved less days than a specified median. Median days away from work are represented in actual values.							
(4) Excludes farms with fewer than 11 employees.							
(5) Data for mining (Sector 21 in the North American Industry Classification System -- United States, 2007) include establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in oil and gas extraction and related support activities. Data for mining operators in coal, metal, and nonmetal mining are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries. These data do not reflect the changes Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable with estimates for other industries.							
(6) Data for employers in railroad transportation are provided to BLS by the Federal Railroad Administration, U.S. Department of Transportation. These data do not reflect the changes Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable with estimates for other industries.							
(7) Musculoskeletal disorders (MSDs) include cases where the nature of the injury or illness is pinched nerve; herniated disc; meniscus tear; sprains, strains, tears; hernia (traumatic and nontraumatic); pain, swelling, and numbness; carpal or tarsal tunnel syndrome; Raynaud's syndrome or phenomenon; musculoskeletal system and connective tissue diseases and disorders, when the event or exposure leading to the injury or illness is overexertion and bodily reaction, unspecified; overexertion involving outside sources; repetitive motion involving microtasks; other and multiple exertions or bodily reactions; and rubbed, abraded, or jarred by vibration.							
(8) Occupational Injury and Illness Classification System 2.01							
NOTE: Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals. Dashes indicate data that do not meet publication guidelines. The scientifically selected probability sample used was one of many possible samples, each of which could have produced different estimates. A measure of sampling variability for each estimate is available upon request -- please contact iifstaff@bls.gov or call (202) 691-6170. For additional information about methodology and coding structures, see the BLS Handbook of Methods chapter 9: https://www.bls.gov/opub/hom/homch9.htm .							
SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Feb 21, 2018							

Table 8

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All natures	Electrocutions, electric shocks (code 193XXX)					
	2016	2011	2012	2013	2014	2015	2016
Total:	892270	1290	980	1530	1080	1910	960
Sex:							
Men	549920	1030	740	1230	820	1640	630
Women	337390	250	240	300	250	250	310
Age:							
Under 14	–	–	–	–	–	–	–
14 to 15	270	–	–	–	–	–	–
16 to 19	22430	30	–	30	80	20	30
20 to 24	85110	170	200	170	160	180	270
25 to 34	192670	280	290	330	380	500	250
35 to 44	176080	220	200	570	240	400	180
45 to 54	204110	440	180	320	160	460	110
55 to 64	160430	80	50	120	60	330	90
65 and over	34640	–	–	–	–	–	–
Occupation ⁽²⁾ :							
Management, business, financial	26260	40	60	20	–	40	20
Computer, engineering, and science	5620	20	–	20	20	20	20
Education, legal, community service, arts, and media	26850	–	–	–	40	–	–
Healthcare practitioners and technical	46830	20	30	80	20	30	–
Service	215840	310	130	300	260	730	240
Sales and related	56070	30	40	20	40	50	80
Office and administrative support	64580	20	50	20	20	70	30
Farming, fishing, and forestry	14380	–	–	20	–	–	30
Construction and extraction	77780	220	150	310	150	370	110
Installation, maintenance, and repair	78670	370	250	530	260	330	210
Production	99070	170	160	140	200	230	130
Transportation and material moving	178620	60	80	60	70	30	70
Length of service with employer:							
Less than 3 months	103160	140	150	120	70	280	80
3 months to 11 months	180470	240	170	320	220	440	290
1 year to 5 years	301530	370	350	790	500	570	320
More than 5 years	292420	480	300	290	270	600	220
Race or ethnic origin:							
White	325760	790	370	460	380	970	320
Black or African American	73460	100	50	100	150	260	150
Hispanic or Latino	127490	70	120	100	210	230	100
Asian	13070	–	20	–	–	–	–
Native Hawaiian or other Pacific Islander	2610	–	–	–	–	–	–
American Indian or Alaska Native	3900	–	30	–	–	–	–
Hispanic and other	1140	–	–	–	–	–	–
Multi-race	1210	–	–	–	–	–	–
Not reported	343640	330	390	860	300	430	380
Number of days away from work:							
Cases involving 1 day	127310	290	420	220	350	270	270
Cases involving 2 days	98040	270	140	350	180	370	180
Cases involving 3-5 days	153940	220	100	90	140	440	200
Cases involving 6-10 days	105670	90	80	70	60	80	90
Cases involving 11-20 days	97910	100	40	70	50	190	20
Cases involving 21-30 days	58120	70	20	20	60	50	60
Cases involving 31 or more days	251280	240	160	720	240	510	140
Median days away from work ⁽³⁾	8	4	2	16	3	5	3

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽⁴⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All natures	Electrocutions, electric shocks (code 193XXX)					
	2016	2011	2012	2013	2014	2015	2016
Industry sector:							
Goods producing industries ⁽⁴⁾	221780	460	320	570	440	840	380
Natural resources and mining ^{(4), (5)}	20970	–	–	50	20	30	40
Agriculture, forestry, fishing and hunting ⁽⁴⁾	16600	–	–	50	20	20	40
Mining ⁽⁵⁾	4370	–	–	–	–	–	–
Construction	82760	190	140	340	170	610	150
Manufacturing	118050	250	170	170	260	200	180
Service providing industries	670490	830	660	970	640	1060	580
Trade, transportation and utilities ⁽⁶⁾	275850	330	250	550	180	210	230
Wholesale trade	54290	–	30	40	–	50	20
Retail trade	122390	250	90	480	90	120	170
Transportation and warehousing ⁽⁶⁾	95300	60	90	20	40	20	30
Utilities	3880	20	30	–	30	20	–
Information	13460	30	–	20	60	60	30
Financial activities	25590	20	–	–	–	30	20
Finance and insurance	7510	–	–	–	–	20	20
Real estate and rental and leasing	18080	–	–	–	–	–	–
Professional and business services	71630	90	160	70	70	120	70
Professional, scientific, and technical services	16190	30	40	–	–	–	30
Management of companies and enterprises	5670	–	–	–	–	–	–
Administrative and support and waste management and remediation services	49770	60	110	30	50	110	30
Education and health services	166530	120	60	170	160	380	60
Educational services	11840	–	–	–	–	–	–
Health care and social assistance	154680	110	60	150	160	370	50
Leisure and hospitality	91250	240	100	160	140	220	170
Arts, entertainment, and recreation	15130	20	30	–	–	60	–
Accommodation and food services	76120	220	70	140	130	150	160
Other services	26170	–	70	–	–	50	–
Other services, except public administration	26170	–	70	–	–	50	–
Public administration	–	–	–	–	–	–	–
Musculoskeletal disorders ⁽⁷⁾ :							
Musculoskeletal disorders	285950	–	–	–	–	–	–
Event or exposure ⁽⁸⁾ :							
Violence and other injuries by persons or animal	37090	–	–	–	–	–	–
Intentional injury by other person	16890	–	–	–	–	–	–
Injury by person unintentional or intent unknown	10310	–	–	–	–	–	–
Animal and insect related incidents	9640	–	–	–	–	–	–
Transportation incidents	46680	–	–	–	–	–	–
Roadway incidents involving motorized land vehicles	31980	–	–	–	–	–	–
Fires, explosions	1420	–	–	–	–	–	–
Falls, slips, trips	229240	–	–	–	–	–	–
Slips, trips without fall	33340	–	–	–	–	–	–
Fall on same level	141600	–	–	–	–	–	–
Fall to lower level	48060	–	–	–	–	–	–
Exposure to harmful substances or environments	38490	1290	970	1530	1080	1900	940
Contact with object, equipment	232940	–	–	–	–	–	–
Struck by object	140690	–	–	–	–	–	–
Struck against object	46020	–	–	–	–	–	–
Caught in object, equipment, material	32580	–	–	–	–	–	–
Overexertion and bodily reaction	300420	–	–	–	–	–	–
Overexertion in lifting or lowering	94740	–	–	–	–	–	–
Repetitive motion involving microtasks	20850	–	–	–	–	–	–
All other	5990	–	–	–	–	–	–

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All natures	Electrocutions, electric shocks (code 193XXX)					
	2016	2011	2012	2013	2014	2015	2016
Part of body affected ⁽⁸⁾ :							
Head	75040	--	--	--	--	--	--
Eye	22030	--	--	--	--	--	--
Neck	12020	--	--	--	--	--	--
Trunk	207670	--	--	--	--	--	--
Back	154180	--	--	--	--	--	--
Upper extremities	283900	80	20	--	--	--	--
Shoulder	70240	--	--	--	--	--	--
Arm	43650	--	--	--	--	--	--
Wrist	34550	--	--	--	--	--	--
Hand	118400	70	--	--	--	--	--
Lower extremities	204520	--	--	--	--	--	--
Knee	74240	--	--	--	--	--	--
Ankle	46600	--	--	--	--	--	--
Foot	45830	--	--	--	--	--	--
Toe, toenail	11880	--	--	--	--	--	--
Body systems	17720	1200	940	1520	1070	1900	960
Multiple	84800	--	--	--	--	--	--
All other	6590	--	--	--	--	--	--
Source of injury, illness ⁽⁸⁾ :							
Chemicals, chemical products	12480	--	--	--	--	--	--
Containers	104200	20	--	--	--	--	--
Furniture, fixtures	37170	50	30	90	50	200	40
Machinery	49470	380	320	360	200	400	270
Parts and materials	78020	610	430	930	610	640	510
Person, injured or ill worker	134770	--	--	--	--	--	--
Worker motion or position	128450	--	--	--	--	--	--
Person, other than injured or ill workers	64410	--	--	--	--	--	--
Health care patient	43960	--	--	--	--	--	--
Floors, walkways, ground surfaces	146340	--	--	--	--	--	--
Handtools	42040	100	40	30	30	260	--
Ladders	20520	--	--	--	--	--	--
Vehicles	91680	40	40	--	--	--	--
Trucks	22190	--	--	--	--	--	--
Cart, dolly, hand truck--nonpowered	14130	--	--	--	--	--	--
All other	111170	90	90	70	160	380	90
Secondary source of injury, illness ⁽⁸⁾ :							
Containers, furniture, and fixtures	21770	--	--	--	--	--	--
Machinery	6620	60	--	--	--	--	--
Computers and peripheral equipment	1260	--	--	--	--	--	--
Tools, instruments, and equipment	10810	--	--	--	50	--	30
Firearms, law enforcement, and other self-defense equipment	380	--	--	--	--	--	--
Vehicles	27020	--	--	--	--	--	--
Highway vehicle, motorized	20550	--	--	--	--	--	--
Ice, sleet, snow	16880	--	--	--	--	--	--
Liquids-nonchemical	13050	30	--	50	--	--	--
Day of Week:							
Sunday	58340	40	30	120	80	160	30
Monday	157470	180	170	180	300	290	190
Tuesday	161580	260	130	360	200	290	210
Wednesday	154230	190	180	140	140	270	160
Thursday	146580	270	180	540	180	420	110
Friday	139480	270	120	110	110	130	140
Saturday	74580	80	160	80	70	360	120

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All natures	Electrocutions, electric shocks (code 193XXX)					
	2016	2011	2012	2013	2014	2015	2016
Time of Day:							
12:01 AM - 4:00 AM	28360	30	–	30	20	50	–
4:01 AM - 8:00 AM	84020	150	60	80	90	420	70
8:01 AM - 12:00 PM	252810	520	380	690	290	560	300
12:01 PM - 4:00 PM	195220	210	270	380	330	270	240
4:01 PM - 8:00 PM	97260	100	130	180	180	160	100
8:01 PM - 12:00 AM	52670	70	50	30	60	140	60
Not reported	181920	200	80	140	110	320	190
Hours Worked:							
Occurred before shift began	5880	–	–	–	–	–	–
Less than 1 hour	70220	140	60	60	40	440	60
1 - 2 hours	85740	110	60	80	50	180	90
2 - 4 hours	178910	380	300	710	190	260	190
4 - 6 hours	139610	160	140	200	270	250	180
6 - 8 hours	118530	200	200	190	280	250	130
8 - 10 hours	61120	20	70	100	30	150	50
10 - 12 hours	18090	–	70	20	70	–	–
12 - 16 hours	7370	–	–	–	–	–	–
More than 16 hours	1060	–	–	–	–	–	–
Not reported	205740	250	90	150	120	370	250
Footnotes:							
(1) Days away from work include those that result in days away from work with or without job transfer or restriction.							
(2) Standard Occupational Classification Manual, 2010, Office of Management and Budget							
(3) Median days away from work is the measure used to summarize the varying lengths of absences from work among the cases with days away from work. Half the cases involved more days and half involved less days than a specified median. Median days away from work are represented in actual values.							
(4) Excludes farms with fewer than 11 employees.							
(5) Data for mining (Sector 21 in the North American Industry Classification System -- United States, 2007) include establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in oil and gas extraction and related support activities. Data for mining operators in coal, metal, and nonmetal mining are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries. These data do not reflect the changes Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable with estimates for other industries.							
(6) Data for employers in railroad transportation are provided to BLS by the Federal Railroad Administration, U.S. Department of Transportation. These data do not reflect the changes Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable with estimates for other industries.							
(7) Musculoskeletal disorders (MSDs) include cases where the nature of the injury or illness is pinched nerve; herniated disc; meniscus tear; sprains, strains, tears; hernia (traumatic and nontraumatic); pain, swelling, and numbness; carpal or tarsal tunnel syndrome; Raynaud's syndrome or phenomenon; musculoskeletal system and connective tissue diseases and disorders, when the event or exposure leading to the injury or illness is overexertion and bodily reaction, unspecified; overexertion involving outside sources; repetitive motion involving microtasks; other and multiple exertions or bodily reactions; and rubbed, abraded, or jarred by vibration.							
(8) Occupational Injury and Illness Classification System 2.01							
NOTE: Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals. Dashes indicate data that do not meet publication guidelines. The scientifically selected probability sample used was one of many possible samples, each of which could have produced different estimates. A measure of sampling variability for each estimate is available upon request -- please contact iifstaff@bls.gov or call (202) 691-6170. For additional information about methodology and coding structures, see the BLS Handbook of Methods chapter 9: https://www.bls.gov/opub/hom/homch9.htm .							
SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Feb 21, 2018							

Table 9

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All	Electrical burns (code 153XXX)					
	2016	2011	2012	2013	2014	2015	2016
Total:	892270	1020	740	560	780	580	760
Sex:							
Men	549920	920	680	520	730	550	730
Women	337390	90	50	30	50	20	20
Age:							
Under 14	-	-	-	-	-	-	-
14 to 15	270	-	-	-	-	-	-
16 to 19	22430	-	-	20	-	-	-
20 to 24	85110	110	50	60	60	90	90
25 to 34	192670	250	200	120	180	90	220
35 to 44	176080	340	110	90	340	190	240
45 to 54	204110	230	250	190	110	80	80
55 to 64	160430	70	70	70	80	120	60
65 and over	34640	-	70	-	-	-	20
Occupation⁽²⁾:							
Management, business, financial	26260	-	20	-	-	-	-
Computer, engineering, and science	5620	-	30	-	20	-	-
Education, legal, community service, arts, and media	26850	-	-	-	-	-	-
Healthcare practitioners and technical	46830	-	-	-	-	-	-
Service	215840	70	70	80	20	30	40
Sales and related	56070	-	-	-	30	-	-
Office and administrative support	64580	20	-	-	-	-	-
Farming, fishing, and forestry	14380	-	-	-	-	-	-
Construction and extraction	77780	390	210	150	460	190	310
Installation, maintenance, and repair	78670	340	310	270	190	250	260
Production	99070	50	80	20	40	70	80
Transportation and material moving	178620	70	-	-	20	-	40
Length of service with employer:							
Less than 3 months	103160	120	20	60	50	80	110
3 months to 11 months	180470	200	140	60	340	60	240
1 year to 5 years	301530	350	270	190	180	230	230
More than 5 years	292420	350	300	250	200	220	160
Race or ethnic origin:							
White	325760	650	380	220	430	210	370
Black or African American	73460	60	60	20	20	20	40
Hispanic or Latino	127490	150	100	90	80	100	100
Asian	13070	-	20	-	-	20	-
Native Hawaiian or other Pacific Islander	2610	-	-	-	-	-	-
American Indian or Alaska Native	3900	-	-	-	-	30	-
Hispanic and other	1140	-	-	-	-	-	-
Multi-race	1210	-	-	-	-	-	-
Not reported	343640	140	180	230	240	200	230
Number of days away from work:							
Cases involving 1 day	127310	60	150	70	280	70	140
Cases involving 2 days	98040	120	20	30	50	30	80
Cases involving 3-5 days	153940	110	150	100	40	90	40
Cases involving 6-10 days	105670	150	110	50	100	50	130
Cases involving 11-20 days	97910	170	80	50	70	150	30
Cases involving 21-30 days	58120	110	30	80	50	50	50
Cases involving 31 or more days	251280	290	210	180	210	140	280
Median days away from work ⁽³⁾	8	13	7	15	9	13	10

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All	Electrical burns (code 153XXX)					
	2016	2011	2012	2013	2014	2015	2016
Industry sector:							
Goods producing industries ⁽⁴⁾	221780	600	310	230	610	330	490
Natural resources and mining ^{(4), (5)}	20970	30	-	30	30	-	70
Agriculture, forestry, fishing and hunting ⁽⁴⁾	16600	-	-	-	-	-	-
Mining ⁽⁵⁾	4370	30	-	20	20	-	70
Construction	82760	430	210	160	460	190	270
Manufacturing	118050	140	90	40	120	130	160
Service providing industries	670490	420	430	340	170	250	260
Trade, transportation and utilities ⁽⁶⁾	275850	170	180	180	100	80	170
Wholesale trade	54290	60	80	-	-	40	60
Retail trade	122390	-	20	40	-	20	40
Transportation and warehousing ⁽⁶⁾	95300	40	20	30	-	-	20
Utilities	3880	50	50	90	70	20	50
Information	13460	-	-	-	-	50	-
Financial activities	25590	100	30	20	-	60	-
Finance and insurance	7510	-	-	-	-	-	-
Real estate and rental and leasing	18080	100	-	-	-	60	-
Professional and business services	71630	-	50	60	30	20	-
Professional, scientific, and technical services	16190	-	30	-	-	-	-
Management of companies and enterprises	5670	-	-	-	-	20	-
Administrative and support and waste management and remediation services	49770	-	20	20	30	-	-
Education and health services	166530	100	60	20	-	20	20
Educational services	11840	-	-	-	-	-	-
Health care and social assistance	154680	100	40	20	-	20	20
Leisure and hospitality	91250	20	70	60	20	20	40
Arts, entertainment, and recreation	15130	-	20	-	-	-	-
Accommodation and food services	76120	20	50	40	-	20	40
Other services	26170	30	40	-	-	-	-
Other services, except public administration	26170	30	40	-	-	-	-
Public administration	-	-	-	-	-	-	-
Musculoskeletal disorders⁽⁷⁾:							
Musculoskeletal disorders	285950	-	-	-	-	-	-
Event or exposure⁽⁸⁾:							
Violence and other injuries by persons or animal	37090	-	-	-	-	-	-
Intentional injury by other person	16890	-	-	-	-	-	-
Injury by person unintentional or intent unknown	10310	-	-	-	-	-	-
Animal and insect related incidents	9640	-	-	-	-	-	-
Transportation incidents	46680	-	-	-	-	-	-
Roadway incidents involving motorized land vehicles	31980	-	-	-	-	-	-
Fires, explosions	1420	40	20	-	-	-	50
Falls, slips, trips	229240	-	-	-	-	-	-
Slips, trips without fall	33340	-	-	-	-	-	-
Fall on same level	141600	-	-	-	-	-	-
Fall to lower level	48060	-	-	-	-	-	-
Exposure to harmful substances or environments	38490	970	720	560	770	580	710
Contact with object, equipment	232940	-	-	-	-	-	-
Struck by object	140690	-	-	-	-	-	-
Struck against object	46020	-	-	-	-	-	-
Caught in object, equipment, material	32580	-	-	-	-	-	-
Overexertion and bodily reaction	300420	-	-	-	-	-	-
Overexertion in lifting or lowering	94740	-	-	-	-	-	-
Repetitive motion involving microtasks	20850	-	-	-	-	-	-
All other	5990	-	-	-	-	-	-

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All	Electrical burns (code 153XXX)					
	2016	2011	2012	2013	2014	2015	2016
Part of body affected⁽⁸⁾:							
Head	75040	70	90	60	250	70	70
Eye	22030	40	40	20	-	50	20
Neck	12020	-	-	-	-	-	-
Trunk	207670	-	-	20	-	-	-
Back	154180	-	-	-	-	-	-
Upper extremities	283900	570	490	210	260	290	420
Shoulder	70240	-	-	-	-	-	-
Arm	43650	100	70	40	40	30	90
Wrist	34550	-	-	-	-	50	-
Hand	118400	290	370	130	180	210	250
Lower extremities	204520	-	-	-	-	40	20
Knee	74240	-	-	-	-	-	-
Ankle	46600	-	-	-	-	-	-
Foot	45830	-	-	-	-	-	-
Toe, toenail	11880	-	-	-	-	-	-
Body systems	17720	-	-	-	-	-	-
Multiple	84800	340	120	270	240	150	230
All other	6590	-	30	-	-	30	20
Source of injury, illness⁽⁸⁾:							
Chemicals, chemical products	12480	-	-	-	-	-	-
Containers	104200	-	-	-	-	-	-
Furniture, fixtures	37170	-	20	-	-	-	-
Machinery	49470	60	70	50	40	70	90
Parts and materials	78020	700	570	450	660	460	520
Person, injured or ill worker	134770	-	-	-	-	-	-
Worker motion or position	128450	-	-	-	-	-	-
Person, other than injured or ill workers	64410	110	-	-	-	-	-
Health care patient	43960	-	-	-	-	-	-
Floors, walkways, ground surfaces	146340	-	-	-	-	-	-
Handtools	42040	50	20	-	-	-	60
Ladders	20520	-	-	-	-	-	-
Vehicles	91680	-	-	-	-	-	-
Trucks	22190	-	-	-	-	-	-
Cart, dolly, hand truck--nonpowered	14130	-	-	-	-	-	-
All other	111170	90	50	50	30	30	30
Secondary source of injury, illness⁽⁸⁾:							
Containers, furniture, and fixtures	21770	-	-	-	-	-	-
Machinery	6620	20	-	-	-	20	50
Computers and peripheral equipment	1260	-	-	-	-	-	-
Tools, instruments, and equipment	10810	30	-	-	20	-	20
Firearms, law enforcement, and other self-defense equipment	380	-	-	-	-	-	-
Vehicles	27020	-	-	-	-	-	-
Highway vehicle, motorized	20550	-	-	-	-	-	-
Ice, sleet, snow	16880	-	-	-	-	-	-
Liquids-nonchemical	13050	-	-	-	-	-	-
Day of Week:							
Sunday	58340	30	20	20	20	-	-
Monday	157470	170	100	110	80	150	80
Tuesday	161580	210	140	60	130	100	230
Wednesday	154230	250	130	100	90	60	50
Thursday	146580	190	220	90	70	140	130
Friday	139480	110	120	160	370	110	120
Saturday	74580	60	20	20	20	20	130

Number of nonfatal occupational injuries and illnesses involving days away from work ⁽¹⁾ by selected worker and case characteristics and nature of condition, All U.S., private industry, 2011 - 2016							
Characteristic	All	Electrical burns (code 153XXX)					
	2016	2011	2012	2013	2014	2015	2016
Time of Day:							
12:01 AM - 4:00 AM	28360	–	30	–	20	–	–
4:01 AM - 8:00 AM	84020	80	110	50	90	70	90
8:01 AM - 12:00 PM	252810	410	260	180	210	180	200
12:01 PM - 4:00 PM	195220	270	140	130	360	110	260
4:01 PM - 8:00 PM	97260	80	60	40	30	50	110
8:01 PM - 12:00 AM	52670	20	50	–	40	20	–
Not reported	181920	140	100	150	40	140	70
Hours Worked:							
Occurred before shift began	5880	–	–	–	–	–	–
Less than 1 hour	70220	160	130	30	20	40	20
1 - 2 hours	85740	80	40	50	70	80	40
2 - 4 hours	178910	180	190	110	140	110	110
4 - 6 hours	139610	140	110	80	370	90	140
6 - 8 hours	118530	160	110	40	70	40	130
8 - 10 hours	61120	110	–	60	20	30	150
10 - 12 hours	18090	20	20	–	–	–	20
12 - 16 hours	7370	–	–	–	–	20	50
More than 16 hours	1060	–	–	–	–	–	–
Not reported	205740	170	130	180	80	150	90

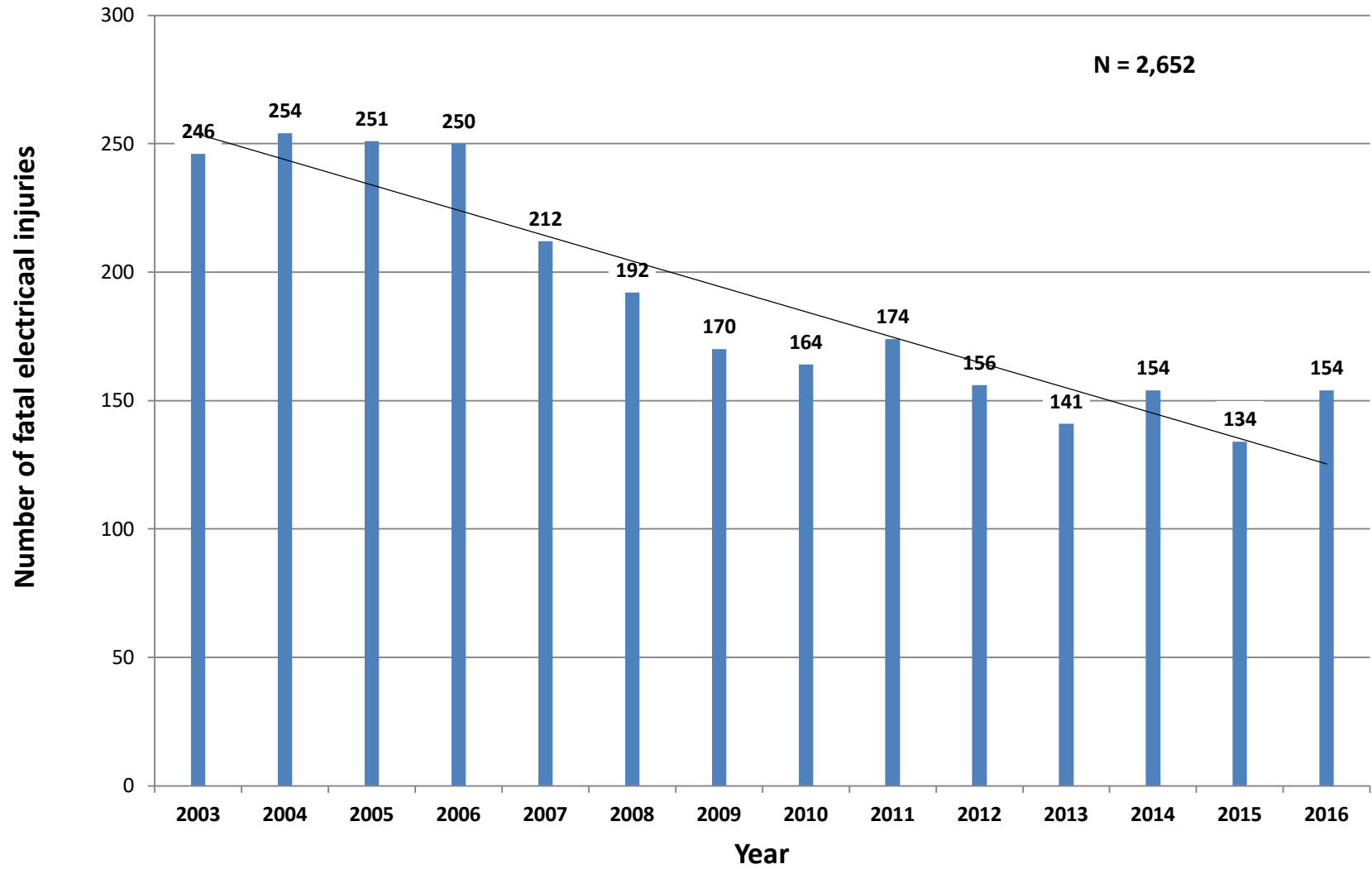
Footnotes:

- (1) Days away from work include those that result in days away from work with or without job transfer or restriction.
- (2) Standard Occupational Classification Manual, 2010, Office of Management and Budget
- (3) Median days away from work is the measure used to summarize the varying lengths of absences from work among the cases with days away from work. Half the cases involved more days and half involved less days than a specified median. Median days away from work are represented in actual values.
- (4) Excludes farms with fewer than 11 employees.
- (5) Data for mining (Sector 21 in the North American Industry Classification System -- United States, 2007) include establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in oil and gas extraction and related support activities. Data for mining operators in coal, metal, and nonmetal mining are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries. These data do not reflect the changes Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable with estimates for other industries.
- (6) Data for employers in railroad transportation are provided to BLS by the Federal Railroad Administration, U.S. Department of Transportation. These data do not reflect the changes Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable with estimates for other industries.
- (7) Musculoskeletal disorders (MSDs) include cases where the nature of the injury or illness is pinched nerve; herniated disc; meniscus tear; sprains, strains, tears; hernia (traumatic and nontraumatic); pain, swelling, and numbness; carpal or tarsal tunnel syndrome; Raynaud's syndrome or phenomenon; musculoskeletal system and connective tissue diseases and disorders, when the event or exposure leading to the injury or illness is overexertion and bodily reaction, unspecified; overexertion involving outside sources; repetitive motion involving microtasks; other and multiple exertions or bodily reactions; and rubbed, abraded, or jarred by vibration.
- (8) Occupational Injury and Illness Classification System 2.01

NOTE: Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals. Dashes indicate data that do not meet publication guidelines. The scientifically selected probability sample used was one of many possible samples, each of which could have produced different estimates. A measure of sampling variability for each estimate is available upon request -- please contact iifstaff@bls.gov or call (202) 691-6170. For additional information about methodology and coding structures, see the BLS Handbook of Methods chapter 9: <https://www.bls.gov/opub/hom/homch9.htm>.

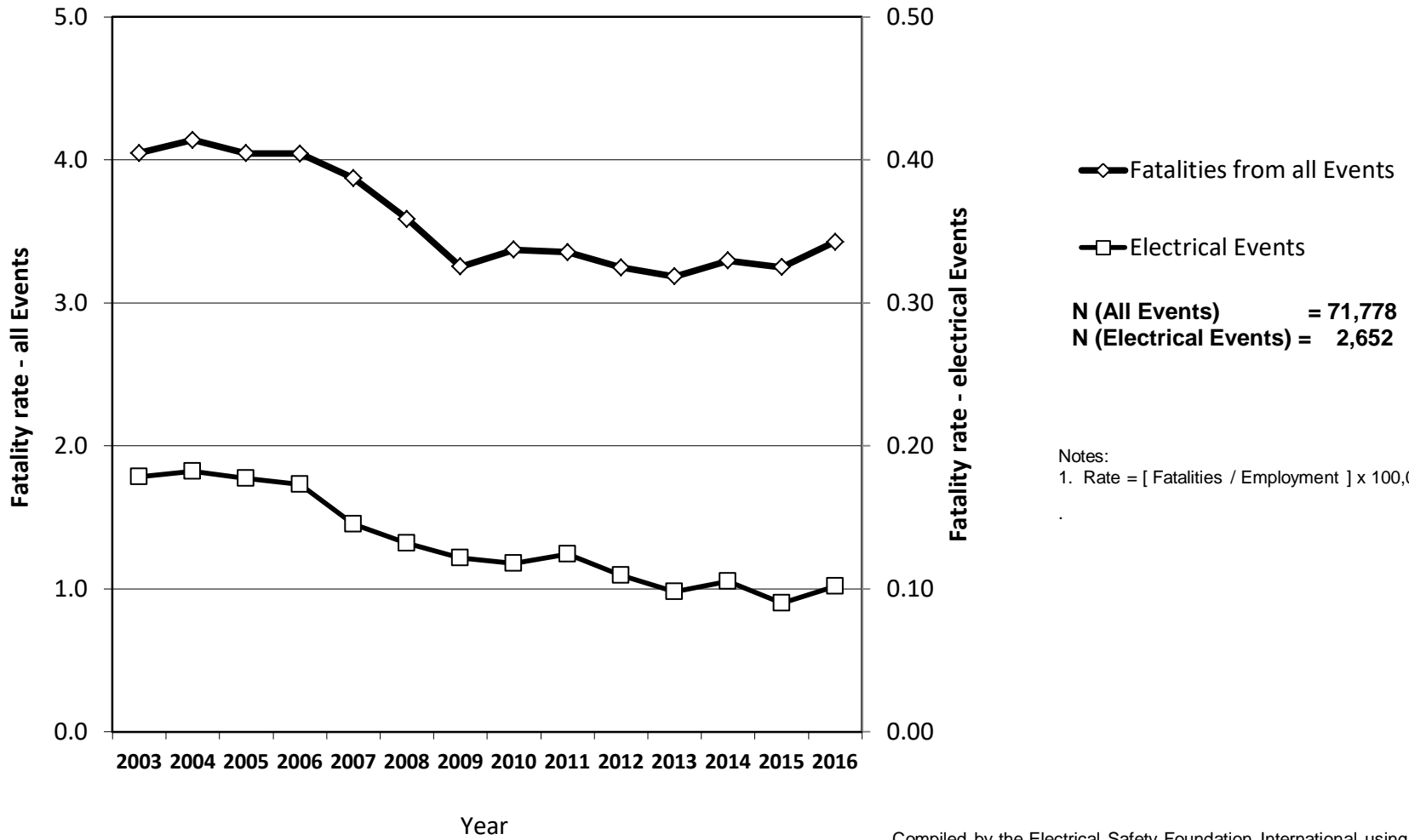
SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Feb 21, 2018

Number of fatal electrical injuries, by Event Code, all ownerships, 2003-2016



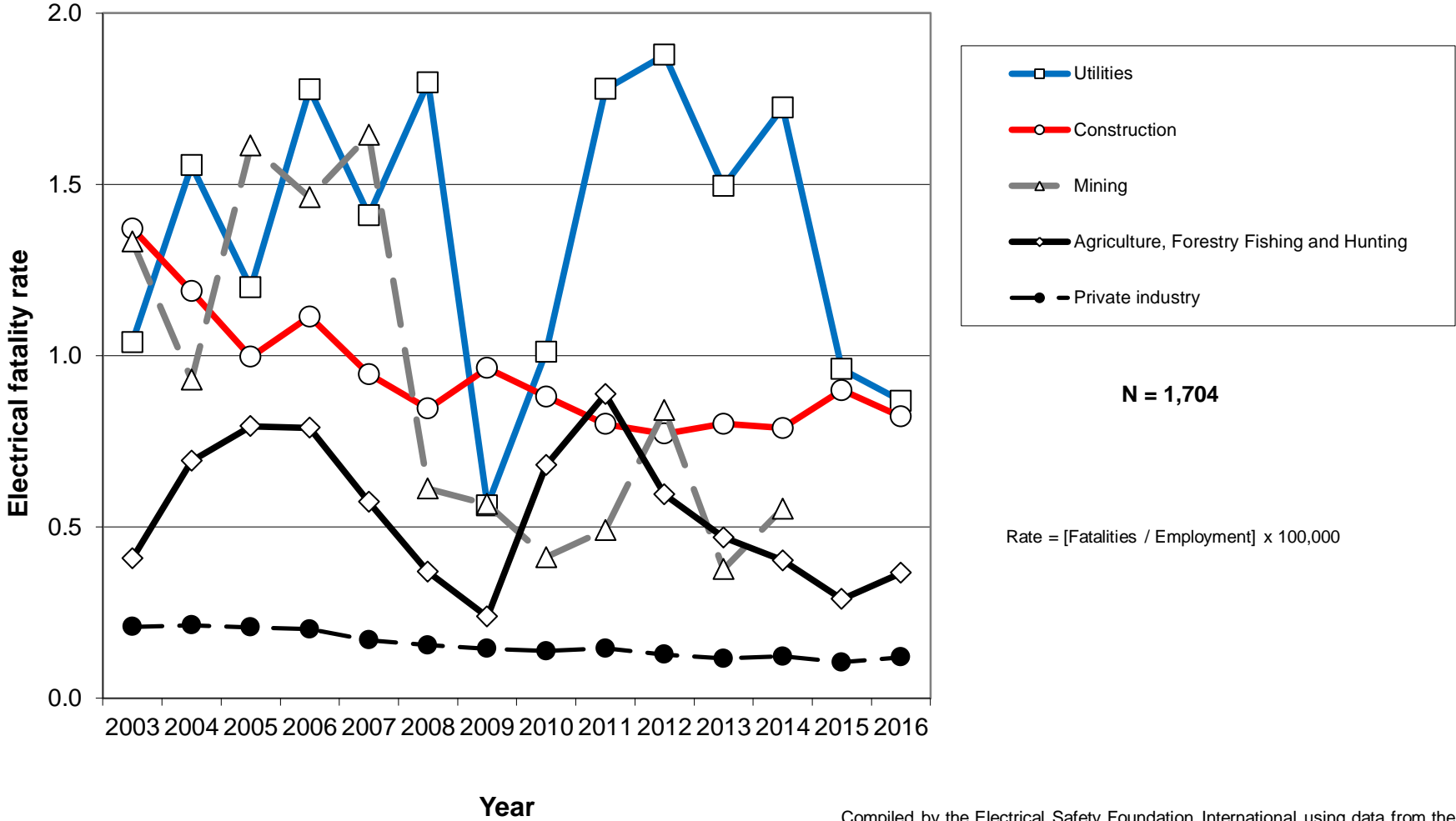
Compiled by the Electrical Safety Foundation International using data from the U.S. Bureau of Labor Statistics, CFOI, 2003 -2016

Fatality rates for all Events vs. electrical Events, all ownerships, 2003-2016



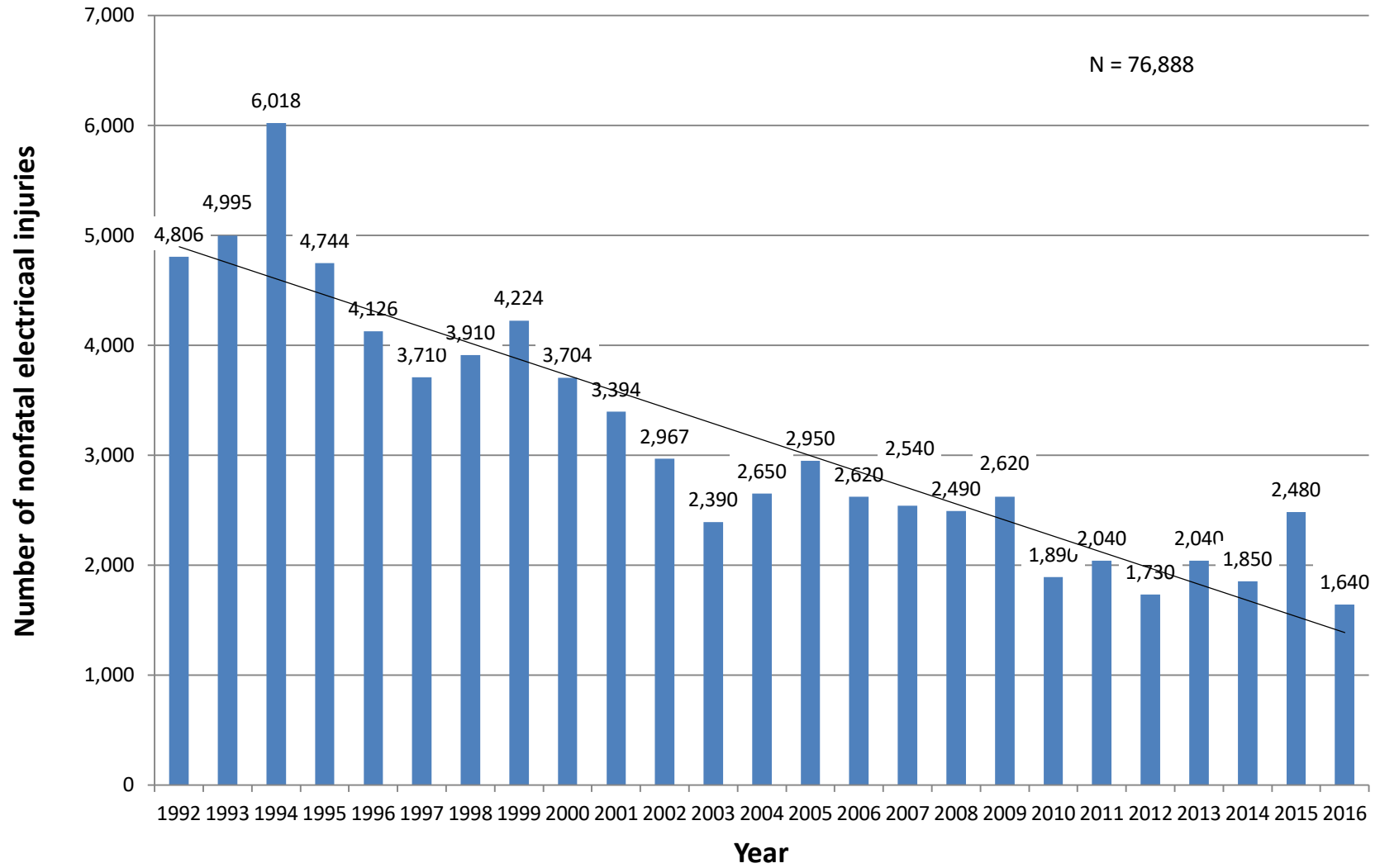
Compiled by the Electrical Safety Foundation International using data from the BLS, CFOI, 2003-2016, and the Current Population Survey

Electrical fatality rates for selected industries, Private Industry, 2003-2016



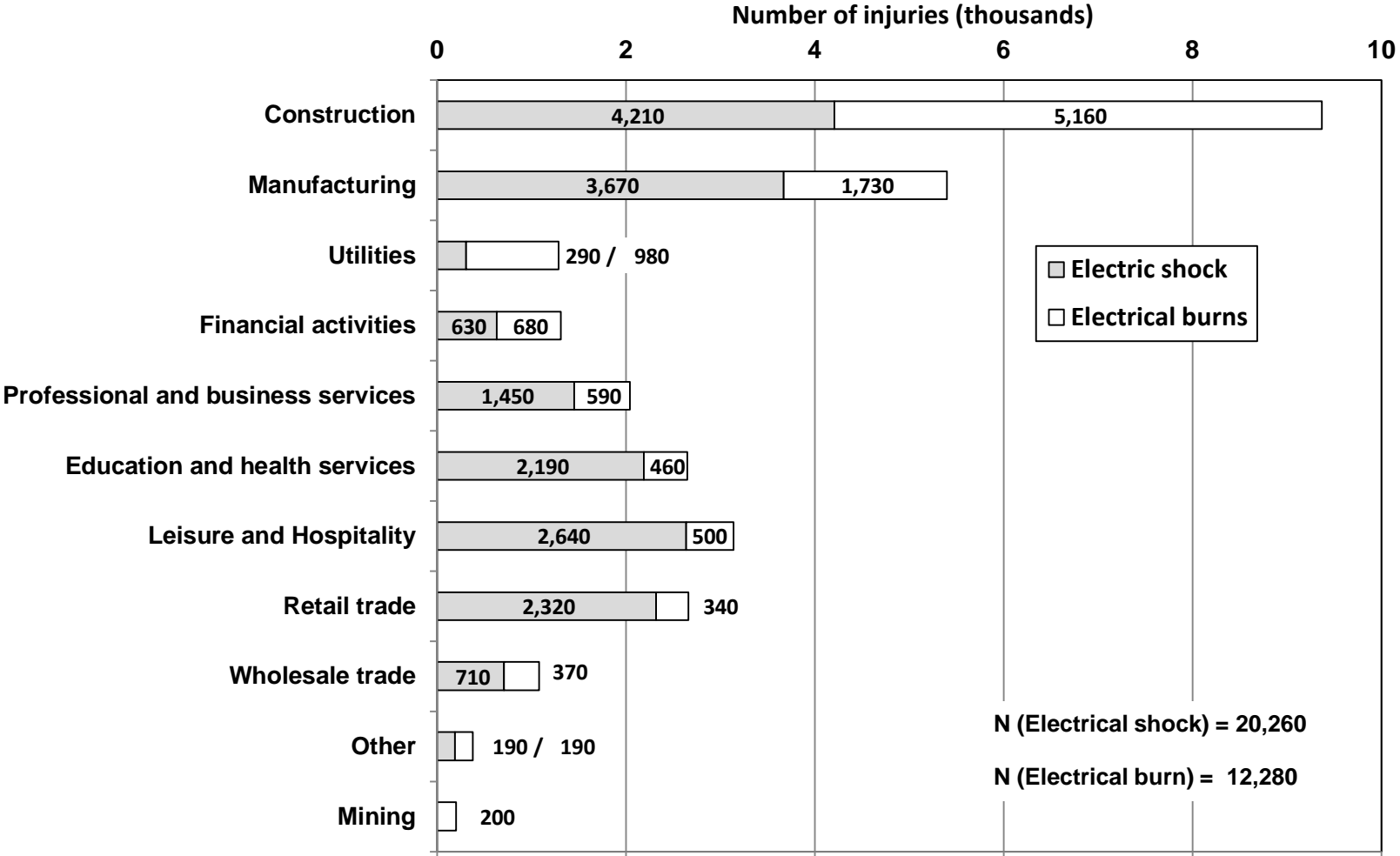
Compiled by the Electrical Safety Foundation International using data from the U.S. Department of Labor, Bureau of Labor Statistics, CFOI, 2003-2016

Number of nonfatal electrical injuries, by Event, Private Industry, 1992-2016



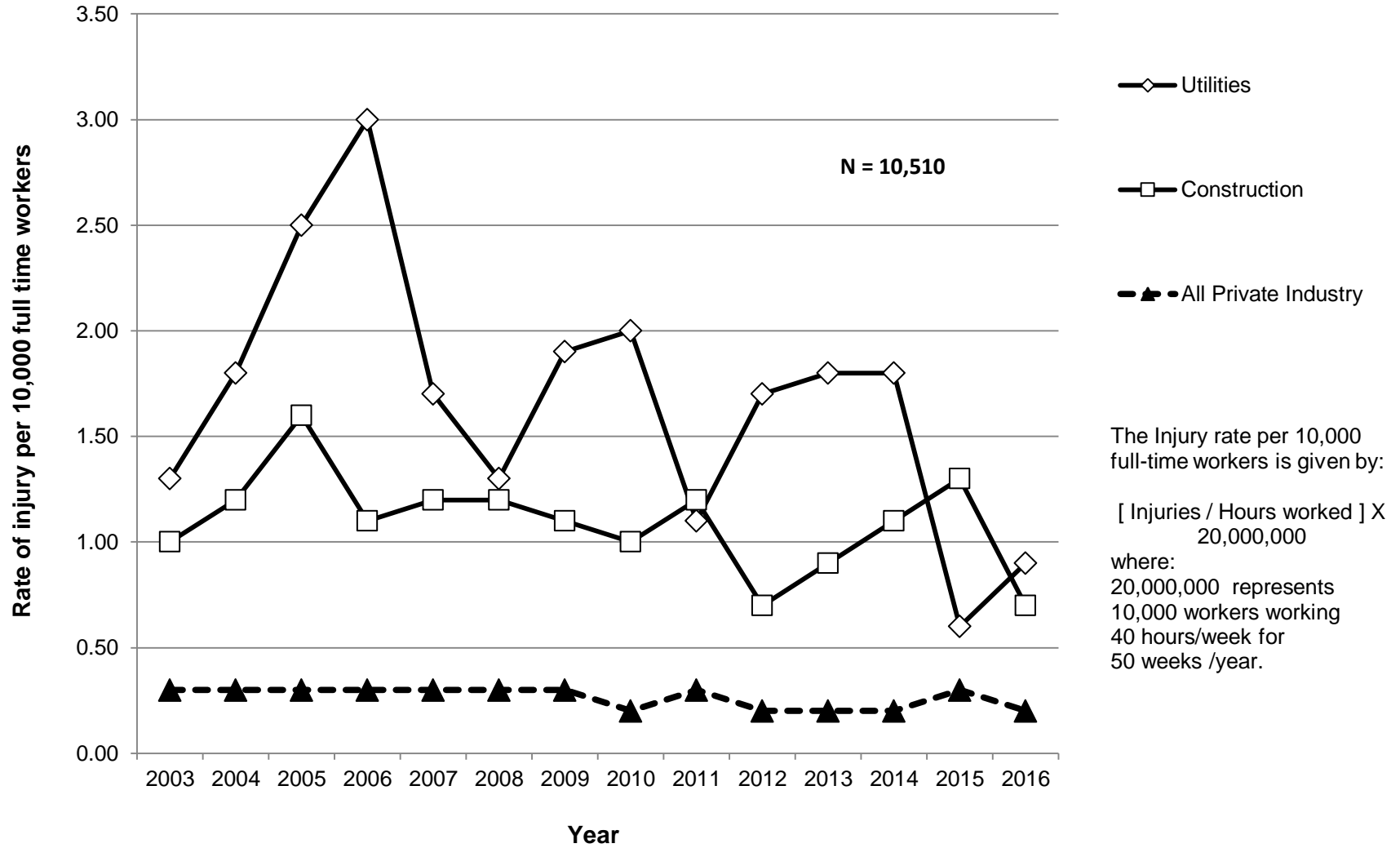
Compiled by the Electrical Safety Foundation International
using data from the U.S. Bureau of Labor Statistics, SOII, 1992-2016

Number of nonfatal electrical injuries, Private Industry, by Nature of Injury (Electrical shock / Electrical burns), 2003-2016



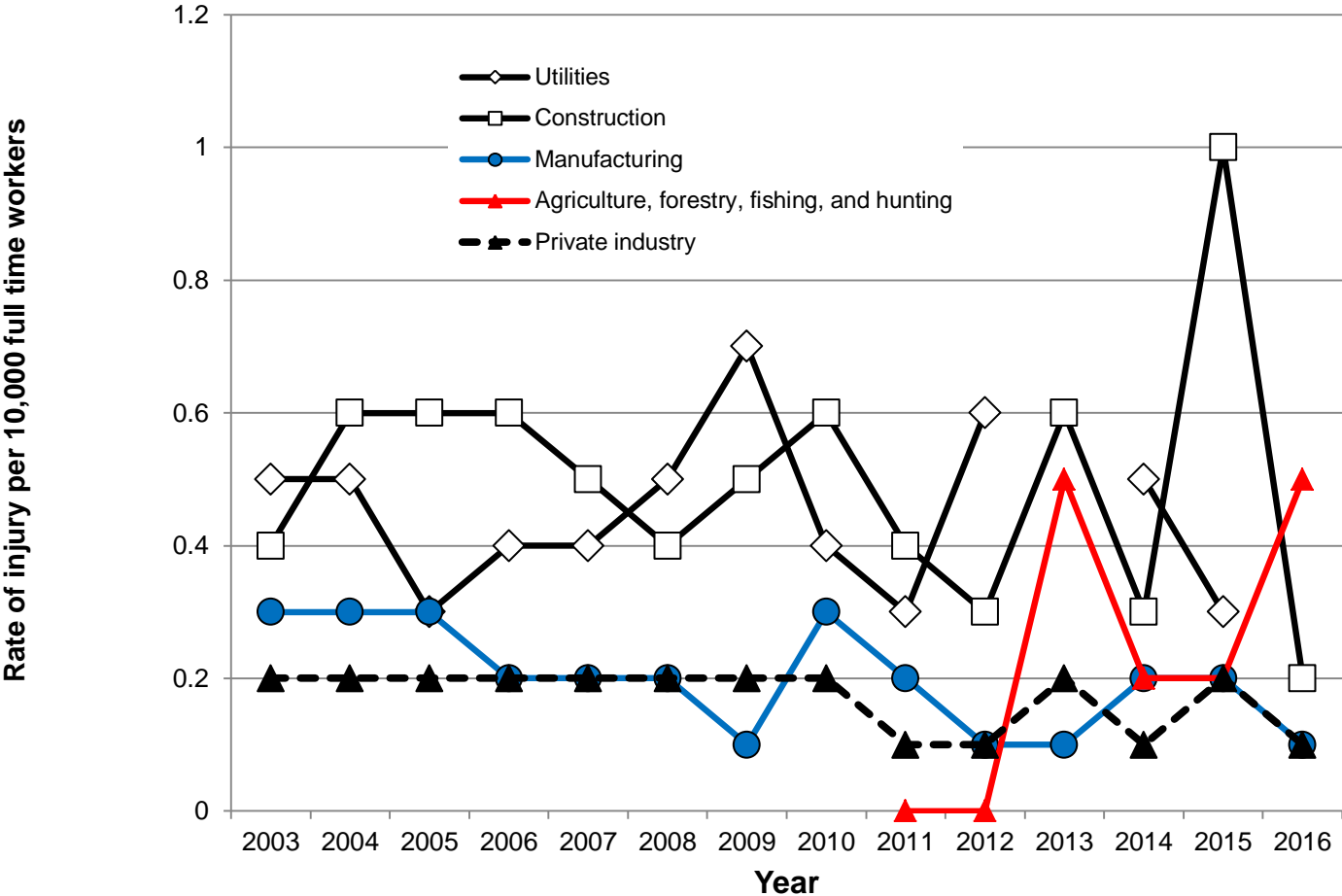
Compiled by the Electrical Safety Foundation International using data from the BLS SOII, 2003-2016

Rates of nonfatal electrical injury involving days away from work for selected industries, by Event, Private Industry, 2003-2016



Compiled by the Electrical Safety Foundation International using data from the U.S. Department of Labor, Bureau of Labor Statistics, SOII, 2003-2016

Rates of nonfatal electrical shock injury involving days away from work for selected industries, by Nature of Injury, Private Industry, 2003-2016

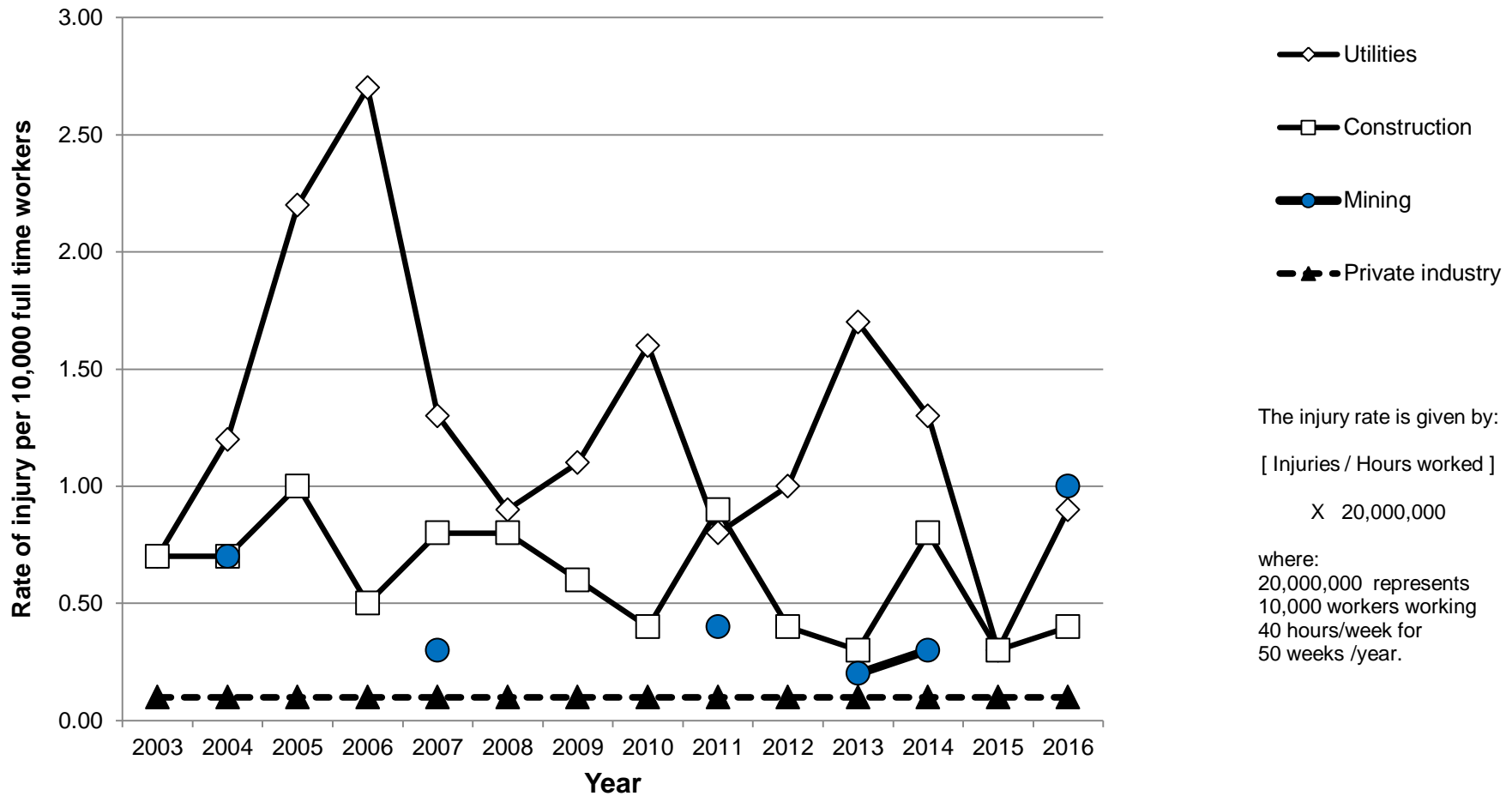


The injury rate is given by:
[Injuries / Hours worked]
X 20,000,000
where:
20,000,000 represents
10,000 workers working
40 hours/week for
50 weeks /year.

Compiled by the Electrical Safety Foundation International using data from the U.S. Department of Labor, Bureau of Labor Statistics, SOII, 2003-2016

Rates of nonfatal electrical burn injury involving days away from work for selected industries, by Nature of Injury, Private Industry, 2003-2016

Fig. 10



Compiled by the Electrical Safety Foundation International using data from the U.S. Department of Labor, Bureau of Labor Statistics, SOII, 2003-2016