



RESEARCH



HOME FIRES CAUSED BY ELECTRICAL DISTRIBUTION AND LIGHTING EQUIPMENT

Supporting Tables

February 2022

Richard Campbell

Copyright © February 2022 National Fire Protection Association® (NFPA®)

Home Fires Caused by Electrical Distribution and Lighting Equipment: Supporting Tables

The tables in this document are a companion to the report of the same name. The table topics are listed below.

Home Fires Involving Electrical Distribution and Lighting Equipment by:	Page
Table 1. Year	2
Table 2. Month	4
Table 3. Day of the Week	5
Table 4. Time of Day	6
Table 5. Type of Equipment	7
Table 6. Cause of Ignition	9
Table 7. Factor Contributing to Ignition	10
Table 8. Heat Source	11
Table 9. Area of Origin	12
Table 10. Item First Ignited	14

The national estimates of fires and losses in this analysis are presented as 2015–2019 annual averages. Estimates were derived from the US Fire Administration’s National Fire Incident Reporting System (NFIRS) and NFPA’s annual fire department experience survey and include proportional shares of unknown or missing data. Unless otherwise indicated, fires are rounded to the nearest 100, deaths and injuries to the nearest ten, and property loss to the nearest million dollars. Deaths in Table 1 only are rounded to the nearest one. Except for Table 1, property loss was not adjusted for inflation. Percentages were calculated on unrounded estimates. Sums might not equal totals due to rounding errors. Figures for 1999 and later reflect a proportional share of the home fires in which the factor contributing to ignition was unknown, unreported, none, or blank. Estimates for Tables 5–9 also include proportional shares of fires and losses in which data for the other variables was unknown. For more information on how these estimates were calculated, please see the [full report](#) and [How NFPA’s National Estimates Are Calculated for Home Structure Fires](#).

Table 1. Home Structure Fires Involving Electrical Distribution and Lighting Equipment by Year

Year	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage	Direct Property Damage in 2019 Dollars
1980	68,400	523	1,650	\$493	\$1,532
1981	62,300	553	1,500	\$459	\$1,289
1982	60,900	408	1,820	\$519	\$1,374
1983	56,700	500	1,570	\$548	\$1,406
1984	54,800	445	1,520	\$549	\$1,349
1985	56,500	470	1,400	\$720	\$1,709
1986	54,300	717	1,420	\$597	\$1,394
1987	51,600	522	1,580	\$512	\$1,152
1988	53,400	439	1,720	\$715	\$1,547
1989	47,900	610	1,500	\$642	\$1,325
1990	47,400	438	1,540	\$683	\$1,338
1991	49,000	354	1,890	\$958	\$1,798
1992	46,400	403	1,770	\$617	\$1,125
1993	48,900	418	1,900	\$818	\$1,448
1994	48,300	464	1,640	\$714	\$1,233
1995	47,200	489	1,650	\$775	\$1,300
1996	47,000	470	1,560	\$839	\$1,369
1997	46,600	352	1,580	\$865	\$1,378
1998	44,500	363	1,370	\$843	\$1,324
1999	34,800	183	530	\$806	\$1,237
2000	26,600	122	1,130	\$631	\$938
2001	26,200	436	1,030	\$717	\$1,036
2002	22,700	166	700	\$593	\$843
2003	19,200	320	600	\$698	\$971
2004	19,400	292	840	\$623	\$844
2005	20,800	498	1,060	\$858	\$1,124
2006	25,100	366	840	\$776	\$984
2007	25,200	274	1,050	\$663	\$817
2008	24,700	515	880	\$964	\$1,146
2009	21,000	318	1,000	\$935	\$1,114
2010	19,900	242	980	\$774	\$909
2011	21,300	295	840	\$822	\$936
2012	32,900	292	1,250	\$1,326	\$1,478
2013	37,000	601	1,290	\$1,418	\$1,555

**Table 1. Home Structure Fires Involving Electrical Distribution and Lighting Equipment by Year
(Continued)**

Year	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage	Direct Property Damage in 2019 Dollars
2014	37,900	535	1,290	\$1,433	\$1,546
2015	34,600	461	1,020	\$1,136	\$1,226
2016	32,900	562	1,120	\$1,020	\$1,088
2017	32,100	343	850	\$1,661	\$1,733
2018	32,100	437	1,160	\$1,336	\$1,360
2019	29,800	333	1,160	\$1,255	\$1,255

Note: Figures in parentheses exclude confined fires, which are fires reported as confined to a fuel burner or boiler, chimney or flue, cooking vessel, trash, incinerator, or commercial compactor. These are national estimates of fires reported to US municipal fire departments and so exclude fires reported to only federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of a small number of unusually serious fires. Fires are rounded to the nearest hundred, civilian deaths to the nearest one, civilian injuries to the nearest ten, and direct property damage to the nearest million dollars. Figures for 1980–1998 are based on ignition factors 54–55 and reflect a proportional share of the home fires with ignition factor unknown, unreported, none, or blank. Figures for 1999 and later reflect a proportional share of the home fires with factor contributing to ignition as unknown, reported, none, or blank. Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for these years are highly uncertain and must be used with caution. Inflation adjustment to 2019 dollars was calculated using the Consumer Price Index.

Source: NFIRS 5.0 and NFPA’s fire experience survey.

**Table 2. Home Fires Involving Electrical Distribution and Lighting Equipment by Month:
2015–2019 Annual Averages**

Month	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
January	3,840	(12%)	60	15%	120	(11%)	\$144	(11%)
February	3,080	(9%)	50	11%	80	(8%)	\$118	(9%)
March	2,830	(9%)	40	9%	90	(9%)	\$116	(9%)
April	2,430	(7%)	40	10%	120	(11%)	\$96	(7%)
May	2,550	(8%)	40	10%	80	(8%)	\$98	(7%)
June	2,550	(8%)	20	4%	70	(7%)	\$155	(12%)
July	2,700	(8%)	20	6%	90	(8%)	\$126	(9%)
August	2,370	(7%)	10	3%	90	(8%)	\$83	(6%)
September	2,140	(7%)	40	8%	80	(8%)	\$75	(6%)
October	2,330	(7%)	30	7%	70	(6%)	\$102	(8%)
November	2,620	(8%)	30	7%	70	(7%)	\$106	(8%)
December	3,180	(10%)	50	11%	110	(10%)	\$113	(9%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA’s fire experience survey.

**Table 3. Home Fires Involving Electrical Distribution and Lighting Equipment by Day of the Week:
2015–2019 Annual Averages**

Day of the Week	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	4,720	(14%)	50	(12%)	140	(13%)	\$191	(14%)
Monday	4,710	(14%)	70	(15%)	130	(12%)	\$183	(14%)
Tuesday	4,560	(14%)	70	(16%)	170	(16%)	\$186	(14%)
Wednesday	4,660	(14%)	80	(18%)	140	(13%)	\$245	(18%)
Thursday	4,470	(14%)	50	(13%)	170	(16%)	\$175	(13%)
Friday	4,640	(14%)	70	(16%)	160	(15%)	\$178	(13%)
Saturday	4,870	(15%)	40	(9%)	160	(15%)	\$176	(13%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA’s fire experience survey.

**Table 4. Home Fires Involving Electrical Distribution and Lighting Equipment by Time of Day:
2015–2019 Annual Averages**

Time of Day	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	1,120	(3%)	30	(6%)	30	(2%)	\$48	(4%)
1:00–1:59 a.m.	1,000	(3%)	40	(10%)	50	(4%)	\$54	(4%)
2:00–2:59 a.m.	850	(3%)	30	(7%)	50	(5%)	\$44	(3%)
3:00–3:59 a.m.	900	(3%)	30	(6%)	50	(4%)	\$47	(4%)
4:00–4:59 a.m.	830	(3%)	20	(6%)	30	(3%)	\$33	(2%)
5:00–5:59 a.m.	820	(3%)	30	(7%)	40	(4%)	\$43	(3%)
6:00–6:59 a.m.	1,020	(3%)	20	(5%)	40	(4%)	\$42	(3%)
7:00–7:59 a.m.	1,050	(3%)	20	(4%)	30	(3%)	\$44	(3%)
8:00–8:59 a.m.	1,160	(4%)	20	(5%)	50	(5%)	\$44	(3%)
9:00–9:59 a.m.	1,320	(4%)	20	(4%)	60	(6%)	\$50	(4%)
10:00–10:59 a.m.	1,420	(4%)	10	(2%)	50	(4%)	\$46	(3%)
11:00–11:59 a.m.	1,480	(5%)	10	(2%)	40	(4%)	\$54	(4%)
12:00–12:59 p.m.	1,510	(5%)	10	(3%)	40	(4%)	\$59	(4%)
1:00–1:59 p.m.	1,620	(5%)	10	(1%)	40	(4%)	\$54	(4%)
2:00–2:59 p.m.	1,650	(5%)	10	(3%)	40	(4%)	\$154	(12%)
3:00–3:59 p.m.	1,770	(5%)	10	(3%)	40	(4%)	\$71	(5%)
4:00–4:59 p.m.	1,750	(5%)	10	(1%)	50	(5%)	\$69	(5%)
5:00–5:59 p.m.	1,790	(5%)	10	(2%)	50	(4%)	\$52	(4%)
6:00–6:59 p.m.	1,750	(5%)	10	(3%)	50	(5%)	\$58	(4%)
7:00–7:59 p.m.	1,810	(6%)	10	(3%)	50	(5%)	\$70	(5%)
8:00–8:59 p.m.	1,740	(5%)	10	(2%)	40	(4%)	\$57	(4%)
9:00–9:59 p.m.	1,570	(5%)	10	(3%)	50	(5%)	\$51	(4%)
10:00–10:59 p.m.	1,420	(4%)	20	(4%)	50	(5%)	\$41	(3%)
11:00–11:59 p.m.	1,280	(4%)	20	(4%)	50	(5%)	\$50	(4%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA’s fire experience survey.

**Table 5. Home Fires Involving Electrical Distribution and Lighting Equipment
by Equipment Involved in Ignition: 2015–2019 Annual Averages**

Type of Equipment	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Wiring and related equipment	22,210	(68%)	180	(42%)	560	(53%)	\$802	(60%)
Outlet, receptacle	4,210	(13%)	40	(9%)	130	(12%)	\$120	(9%)
Electrical branch circuit	2,410	(7%)	20	(5%)	50	(5%)	\$108	(8%)
Panelboard, switchboard, circuit breaker board	1,360	(4%)	10	(3%)	20	(2%)	\$51	(4%)
Electrical service supply wires from utility	1,110	(3%)	0	(1%)	20	(2%)	\$38	(3%)
Electric meter, meter box	960	(3%)	0	(0%)	20	(2%)	\$29	(2%)
Electrical power (utility) line	930	(3%)	0	(0%)	10	(1%)	\$31	(2%)
Wiring from meter box to circuit breaker	820	(3%)	0	(0%)	10	(1%)	\$28	(2%)
Wall switch	280	(1%)	0	(0%)	10	(1%)	\$9	(1%)
Ground fault interrupter, GFI	100	(0%)	0	(0%)	0	(0%)	\$3	(0%)
Unclassified electrical wiring	10,050	(31%)	100	(22%)	280	(27%)	\$385	(29%)
Lamp, bulb, or lighting	4,460	(14%)	20	(6%)	140	(13%)	\$158	(12%)
Incandescent lighting fixture	880	(3%)	0	(0%)	10	(1%)	\$31	(2%)
Lamp — tabletop, floor, desk	710	(2%)	0	(0%)	40	(4%)	\$21	(2%)
Halogen lighting fixture or lamp	340	(1%)	10	(2%)	10	(1%)	\$12	(1%)
Light bulb	310	(1%)	0	(0%)	0	(0%)	\$8	(1%)
Fluorescent lighting fixture, ballast	290	(1%)	0	(0%)	10	(1%)	\$7	(1%)
Decorative lights, line voltage	190	(1%)	0	(0%)	10	(1%)	\$9	(1%)
Work light, trouble light	120	(0%)	0	(0%)	10	(1%)	\$7	(1%)
Decorative or landscape lighting, low voltage	60	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Nightlight	40	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Lantern, flashlight	30	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Sodium, mercury vapor lighting fixtures or lamps	10	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Sign	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified lamp, lighting	1,470	(5%)	10	(3%)	50	(4%)	\$56	(4%)
Cord or plug	3,210	(10%)	180	(41%)	190	(18%)	\$130	(10%)
Extension cord	1,780	(5%)	110	(26%)	110	(10%)	\$78	(6%)
Power cord, plug — detachable from appliance	500	(2%)	10	(3%)	30	(3%)	\$18	(1%)
Power cord, plug — permanently attached	380	(1%)	20	(6%)	20	(2%)	\$12	(1%)
Unclassified cord, plug	550	(2%)	30	(7%)	30	(3%)	\$22	(2%)

Table 5. Home Fires Involving Electrical Distribution and Lighting Equipment by Equipment Involved in Ignition: 2015–2019 Annual Averages (Continued)

Type of Equipment	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Transformers and power supplies	2,730	(8%)	50	(11%)	180	(16%)	\$242	(18%)
Surge protector	790	(2%)	30	(7%)	50	(5%)	\$45	(3%)
Battery charger, rectifier	660	(2%)	0	(0%)	30	(3%)	\$39	(3%)
Generator	510	(2%)	10	(3%)	50	(4%)	\$104	(8%)
Battery	430	(1%)	0	(0%)	40	(4%)	\$20	(2%)
Transformer, low voltage	100	(0%)	0	(0%)	0	(0%)	\$3	(0%)
Overcurrent, disconnect equipment	100	(0%)	0	(0%)	0	(0%)	\$25	(2%)
Transformer, distribution type	90	(0%)	0	(0%)	0	(0%)	\$4	(0%)
Uninterrupted power supply (UPS)	40	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Inverter	30	(0%)	0	(0%)	0	(0%)	\$2	(0%)
Fence, electric	10	(0%)	0	(0%)	0	(0%)	\$1	(0%)
Lightning rod, arrester/grounding device	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA's fire experience survey.

**Table 6. Home Fires Involving Electrical Distribution and Lighting Equipment by Cause of Ignition:
2015–2019 Annual Averages**

Cause of Ignition	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Unintentional	17,600	(54%)	240	(56%)	670	(62%)	\$865	(65%)
Failure of equipment or heat source	14,040	(43%)	190	(44%)	400	(37%)	\$436	(33%)
Act of nature	660	(2%)	0	(0%)	0	(0%)	\$23	(2%)
Unclassified cause	180	(1%)	0	(0%)	0	(0%)	\$5	(0%)
Intentional	140	(0%)	0	(0%)	0	(0%)	\$4	(0%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA’s fire experience survey.

Table 7. Home Fires Involving Electrical Distribution and Lighting Equipment by Factor Contributing to Ignition: 2015–2019 Annual Averages

Factor Contributing to Ignition	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical failure or malfunction	26,130	(80%)	330	(76%)	760	(71%)	\$1,012	(76%)
Non-confined	25,810	(79%)	330	(76%)	760	(71%)	\$1,012	(76%)
Confined	330	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Heat source too close to combustibles	1,820	(6%)	30	(6%)	80	(8%)	\$60	(5%)
Non-confined	1,710	(5%)	30	(6%)	80	(8%)	\$60	(5%)
Confined	110	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Mechanical failure or malfunction	1,630	(5%)	20	(4%)	60	(6%)	\$50	(4%)
Non-confined	1,570	(5%)	20	(4%)	60	(5%)	\$50	(4%)
Confined	60	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Equipment overloaded	940	(3%)	50	(11%)	60	(6%)	\$42	(3%)
Non-confined	930	(3%)	50	(11%)	60	(6%)	\$42	(3%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified misuse of material or product	560	(2%)	20	(6%)	30	(3%)	\$20	(1%)
Non-confined	540	(2%)	20	(6%)	30	(3%)	\$20	(1%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Other known factor contributing to ignition	3,280	(10%)	50	(12%)	140	(13%)	\$235	(18%)
Non-confined	3,170	(10%)	50	(12%)	140	(13%)	\$235	(18%)
Confined	100	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Total Fires	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)
Non-confined	32,020	(98%)	430	(100%)	1,060	(99%)	\$1,332	(100%)
Confined	600	(2%)	0	(0%)	10	(1%)	\$0	(0%)
Total Factors	34,360	(105%)	490	(114%)	1,130	(106%)	\$1,420	(107%)
Non-confined	33,730	(103%)	490	(114%)	1,308	(105%)	\$1,419	(107%)
Confined	630	(2%)	0	(0%)	10	(1%)	\$0	(0%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA's fire experience survey.

**Table 8. Home Fires Involving Electrical Distribution and Lighting Equipment by Heat Source:
2015–2019 Annual Averages**

Heat Source	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Arcing	23,760	(73%)	310	(72%)	700	(65%)	\$873	(65%)
Non-confined	23,510	(72%)	310	(72%)	700	(65%)	\$873	(65%)
Confined	250	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified heat from powered equipment	3,950	(12%)	40	(9%)	170	(16%)	\$184	(14%)
Non-confined	3,800	(12%)	40	(9%)	170	(16%)	\$184	(14%)
Confined	140	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Radiated or conducted heat from operating equipment	2,590	(8%)	50	(12%)	100	(9%)	\$163	(12%)
Non-confined	2,470	(8%)	50	(12%)	100	(9%)	\$163	(12%)
Confined	120	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Spark, ember, or flame from operating equipment	860	(3%)	10	(2%)	50	(5%)	\$38	(3%)
Non-confined	830	(3%)	10	(2%)	50	(5%)	\$38	(3%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified hot or smoldering object	580	(2%)	10	(3%)	20	(2%)	\$41	(3%)
Non-confined	560	(2%)	10	(3%)	20	(2%)	\$41	(3%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Other known heat source	890	(3%)	10	(3%)	30	(2%)	\$34	(3%)
Non-confined	860	(3%)	10	(3%)	30	(2%)	\$34	(3%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)
Non-confined	32,020	(98%)	430	(100%)	1,060	(99%)	\$1,332	(100%)
Confined	600	(2%)	0	(0%)	10	(1%)	\$0	(0%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA's fire experience survey.

**Table 9. Home Fires Involving Electrical Distribution and Lighting Equipment by Area of Origin:
2015–2019 Annual Averages**

Area of Origin	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Bedroom	5,360	(16%)	100	(24%)	330	(31%)	\$199	(15%)
Non-confined	5,280	(16%)	100	(24%)	330	(31%)	\$199	(15%)
Confined	80	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Attic or ceiling/roof assembly or concealed space	3,610	(11%)	10	(2%)	50	(5%)	\$156	(12%)
Non-confined	3,600	(11%)	10	(2%)	50	(5%)	\$156	(12%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Wall assembly or concealed space	2,730	(8%)	30	(6%)	40	(4%)	\$86	(6%)
Non-confined	2,710	(8%)	30	(6%)	40	(4%)	\$86	(6%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Common room, living room, family room, lounge, or den	2,290	(7%)	150	(34%)	160	(15%)	\$103	(8%)
Non-confined	2,260	(7%)	150	(34%)	160	(15%)	\$103	(8%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Exterior wall surface	2,200	(7%)	10	(2%)	30	(3%)	\$51	(4%)
Non-confined	2,190	(7%)	10	(2%)	30	(3%)	\$51	(4%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Kitchen or cooking area	2,110	(6%)	30	(6%)	70	(6%)	\$65	(5%)
Non-confined	1,950	(6%)	30	(6%)	60	(6%)	\$65	(5%)
Confined	160	(0%)	0	(0%)	10	(0%)	\$0	(0%)
Garage or vehicle storage area	1,730	(5%)	0	(0%)	70	(6%)	\$124	(9%)
Non-confined	1,710	(5%)	0	(0%)	70	(6%)	\$124	(9%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified function area	1,160	(4%)	20	(5%)	50	(4%)	\$51	(4%)
Non-confined	1,150	(4%)	20	(5%)	50	(4%)	\$51	(4%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Crawl space or substructure space	1,150	(4%)	20	(4%)	20	(2%)	\$37	(3%)
Non-confined	1,150	(4%)	20	(4%)	20	(2%)	\$37	(3%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Ceiling/floor assembly or concealed space	1,040	(3%)	10	(1%)	20	(2%)	\$52	(4%)
Non-confined	1,040	(3%)	10	(1%)	20	(2%)	\$52	(4%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)

**Table 9. Home Fires Involving Electrical Distribution and Lighting Equipment by Area of Origin:
2015–2019 Annual Averages (Continued)**

Area of Origin	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Lavatory, bathroom, locker room, or check room	1,020	(3%)	0	(0%)	10	(1%)	\$23	(2%)
Non-confined	1,000	(3%)	0	(0%)	10	(1%)	\$23	(2%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Laundry room or area	960	(3%)	0	(0%)	20	(2%)	\$29	(2%)
Non-confined	930	(3%)	0	(0%)	20	(2%)	\$29	(2%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Closet	640	(2%)	0	(0%)	20	(2%)	\$23	(2%)
Non-confined	630	(2%)	0	(0%)	20	(2%)	\$23	(2%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Exterior balcony or unenclosed porch	620	(2%)	0	(0%)	20	(2%)	\$32	(2%)
Non-confined	600	(2%)	0	(0%)	20	(2%)	\$32	(2%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified outside area	570	(2%)	0	(0%)	10	(1%)	\$13	(1%)
Non-confined	530	(2%)	0	(0%)	10	(1%)	\$13	(1%)
Confined	40	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Confined chimney or flue fire	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Other known area of origin	5,420	(17%)	60	(13%)	150	(14%)	\$287	(22%)
Non-confined	5,300	(16%)	60	(13%)	150	(14%)	\$287	(22%)
Confined	120	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)
Non-confined	32,020	(98%)	430	(100%)	1,060	(99%)	\$1,332	(100%)
Confined	600	(2%)	0	(0%)	10	(1%)	\$0	(0%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA's fire experience survey.

**Table 10. Home Fires Involving Electrical Distribution and Lighting Equipment by Item First Ignited:
2015-2019 Annual Averages**

Item First Ignited	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Electrical wire or cable insulation	10,540	(32%)	120	(27%)	280	(26%)	\$344	(26%)
Non-confined	10,360	(32%)	120	(27%)	280	(26%)	\$344	(26%)
Confined	180	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Structural member or framing	5,110	(16%)	30	(7%)	110	(10%)	\$332	(25%)
Non-confined	5,110	(16%)	30	(7%)	110	(10%)	\$332	(25%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Exterior wall covering or finish	2,130	(7%)	10	(2%)	30	(3%)	\$77	(6%)
Non-confined	2,130	(7%)	10	(2%)	30	(3%)	\$77	(6%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Insulation within structural area	2,040	(6%)	10	(2%)	20	(2%)	\$59	(4%)
Non-confined	2,040	(6%)	10	(2%)	20	(2%)	\$59	(4%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Interior wall covering, excluding drapes	1,520	(5%)	30	(6%)	60	(6%)	\$64	(5%)
Non-confined	1,520	(5%)	30	(6%)	60	(6%)	\$64	(5%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified structural component or finish	1,500	(5%)	20	(4%)	50	(5%)	\$62	(5%)
Non-confined	1,500	(5%)	20	(4%)	50	(5%)	\$62	(5%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Mattress or bedding	1,040	(3%)	20	(4%)	100	(9%)	\$31	(2%)
Non-confined	1,010	(3%)	20	(4%)	100	(9%)	\$31	(2%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	810	(2%)	10	(1%)	20	(2%)	\$27	(2%)
Non-confined	800	(2%)	10	(1%)	20	(2%)	\$26	(2%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Interior ceiling cover or finish	680	(2%)	10	(1%)	0	(0%)	\$35	(3%)
Non-confined	680	(2%)	10	(1%)	0	(0%)	\$35	(3%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Floor covering rug, carpet, or mat	630	(2%)	10	(3%)	30	(3%)	\$28	(2%)
Non-confined	630	(2%)	10	(3%)	30	(3%)	\$28	(2%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Clothing	590	(2%)	40	(10%)	30	(3%)	\$21	(2%)
Non-confined	550	(2%)	40	(10%)	30	(3%)	\$21	(2%)
Confined	30	(0%)	0	(0%)	0	(0%)	\$0	(0%)

**Table 10. Home Fires Involving Electrical Distribution and Lighting Equipment by Item First Ignited:
2015–2019 Annual Averages (Continued)**

Item First Ignited	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Appliance housing or casing	580	(2%)	10	(1%)	20	(2%)	\$13	(1%)
Non-confined	520	(2%)	10	(1%)	10	(1%)	\$13	(1%)
Confined	60	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Upholstered furniture or vehicle seat	560	(2%)	40	(8%)	60	(6%)	\$34	(3%)
Non-confined	550	(2%)	40	(8%)	60	(6%)	\$34	(3%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Multiple items first ignited	520	(2%)	30	(7%)	30	(3%)	\$35	(3%)
Non-confined	500	(2%)	30	(7%)	30	(3%)	\$35	(3%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified furniture or utensils	510	(2%)	30	(7%)	30	(2%)	\$22	(2%)
Non-confined	490	(1%)	30	(7%)	30	(2%)	\$22	(2%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Other known item first ignited	3,880	(12%)	40	(9%)	180	(17%)	\$147	(11%)
Non-confined	3,640	(11%)	40	(9%)	180	(17%)	\$147	(11%)
Confined	240	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Total	32,620	(100%)	430	(100%)	1,070	(100%)	\$1,333	(100%)
Non-confined	32,020	(98%)	430	(100%)	1,060	(99%)	\$1,332	(100%)
Confined	600	(2%)	0	(0%)	10	(1%)	\$0	(0%)

Note: Totals may not equal sums due to rounding errors.

Source: NFIRS 5.0 and NFPA's fire experience survey.

Acknowledgments

The National Fire Protection Association thanks all the fire departments and state fire authorities who participate in the National Fire Incident Reporting System (NFIRS) and the annual NFPA fire experience survey. These firefighters are the original sources of the detailed data that makes this analysis possible. Their contributions allow us to estimate the size of the fire problem.

We are also grateful to the US Fire Administration for its work in developing, coordinating, and maintaining NFIRS.

To learn more about research at NFPA visit nfpa.org/research.

Email: research@nfpa.org.

NFPA No. USS117-ST