



**RESEARCH**

# **Playing with Fire: Structure Fires Supporting Tables**

---

May 2021

Richard Campbell

# Playing with Fire: Structure Fires Supporting Tables

The tables in this document are a companion to the report of the same name. Firefighter deaths and injuries have been excluded from this analysis.

Most tables — with the exception of fires by year — show estimates of 2014–2018 annual averages. Fires that occurred outside the home and not on the structure have been excluded. Estimates were derived from the US Fire Administration’s [National Fire Incident Reporting System \(NFIRS\)](#) and NFPA’s annual fire experience survey, and they include proportional shares of unknown or missing data. Except for trend tables, fires, deaths and injuries have been rounded to the nearest 10, and property loss has been rounded to the nearest million dollars. Inflation adjustments were made only for the trend tables. Due to the small numbers, deaths have not been included in the tables on non-home structure fires. Percentages were calculated on unrounded estimates.

The estimates include proportional shares of fires in which the equipment involved was unknown or not reported. Other causal factors were allocated separately. 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](#).

## List of Tables

Table		Page
<a href="#">Table 1.</a>	Structure Fires Caused by Playing with Fire by Property Use	2
	Playing with Fire in Home Structure Fires by:	
<a href="#">Table 2.</a>	Year	3
<a href="#">Table 3.</a>	Age of Fire Setter	5
<a href="#">Table 4.</a>	Sex of Fire Setter	5
<a href="#">Table 5.</a>	Month	5
<a href="#">Table 6.</a>	Time of Day	6
<a href="#">Table 7.</a>	Day of Week	7
<a href="#">Table 8.</a>	Heat Source	8
<a href="#">Table 9.</a>	Area of Origin	10
<a href="#">Table 10.</a>	Item First Ignited	12
	Playing with Fire in Non-Home Structure Fires by:	
<a href="#">Table 11.</a>	Year	14
<a href="#">Table 12.</a>	Age of Fire Setter	16
<a href="#">Table 13.</a>	Sex of Fire Setter	16
<a href="#">Table 14.</a>	Month	16
<a href="#">Table 15.</a>	Time of Day	17
<a href="#">Table 16.</a>	Day of Week	18
<a href="#">Table 17.</a>	Heat Source	19
<a href="#">Table 18.</a>	Area of Origin	20
<a href="#">Table 19.</a>	Item First Ignited	22

## Acknowledgments

The National Fire Protection Association thanks all the fire departments and state fire authorities who participate in the 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](https://nfpa.org/research).

Email: [research@nfpa.org](mailto:research@nfpa.org)

NFPA No. USS17S/ST

**Table 1. Structure Fires Caused by Playing with Fire by Property Use: 2014–2018 Annual Averages**

<b>Property Use</b>	<b>Fires</b>		<b>Civilian Deaths</b>		<b>Civilian Injuries</b>		<b>Direct Property Damage (in Millions)</b>	
Residential	5,270	(65%)	50	(93%)	420	(93%)	\$117	(82%)
<i>Homes</i>	<i>4,960</i>	<i>(61%)</i>	<i>50</i>	<i>(91%)</i>	<i>400</i>	<i>(88%)</i>	<i>\$112</i>	<i>(79%)</i>
Outside or special property	890	(11%)	0	(2%)	0	(0%)	\$1	(1%)
Educational	680	(8%)	0	(0%)	10	(1%)	\$3	(2%)
Storage	550	(7%)	0	(1%)	10	(1%)	\$7	(5%)
Assembly	300	(4%)	0	(0%)	0	(0%)	\$5	(4%)
Mercantile or office	210	(3%)	0	(1%)	10	(2%)	\$4	(3%)
Health care, detention, or correction	110	(1%)	0	(0%)	10	(2%)	\$0	(0%)
Other property type	90	(1%)	0	(3%)	0	(0%)	\$6	(4%)
<b>Total</b>	<b>8,100</b>	<b>(100%)</b>	<b>50</b>	<b>(100%)</b>	<b>450</b>	<b>(100%)</b>	<b>\$143</b>	<b>(100%)</b>

Source: NFIRS and NFPA fire experience survey.

**Table 2. Playing with Fire in Home Structure Fires Reported to US Fire Departments: 1980–2018**

Year	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)		
							As Reported	2018 Dollars	
1980	43,800		430		2,060		\$140		\$427
1981	37,900		300		1,770		\$145		\$400
1982	30,400		280		1,870		\$131		\$341
1983	29,000		310		2,010		\$154		\$388
1984	29,000		300		2,020		\$162		\$391
1985	27,700		390		2,040		\$189		\$441
1986	27,000		380		2,020		\$186		\$427
1987	26,300		490		2,330		\$203		\$449
1988	26,300		510		2,420		\$208		\$442
1989	24,200		460		2,360		\$229		\$464
1990	21,700		330		2,250		\$206		\$396
1991	22,400		430		2,610		\$285		\$526
1992	23,800		370		2,810		\$206		\$369
1993	23,500		400		2,840		\$269		\$468
1994	24,000		410		2,620		\$269		\$456
1995	19,800		300		2,310		\$255		\$420
1996	18,700		280		2,020		\$255		\$409
1997	17,000		270		1,940		\$262		\$410
1998	15,100		220		1,650		\$210		\$324
1999	14,000	(13,600)	230	(230)	2,090	(2,090)	\$238	(\$238)	\$359
2000	11,700	(11,200)	270	(270)	1,450	(1,320)	\$275	(\$273)	\$401
2001	11,800	(10,800)	200	(200)	1,200	(1,180)	\$246	(\$246)	\$349
2002	10,000	(8,900)	200	(200)	1,050	(1,050)	\$233	(\$233)	\$325
2003	7,900	(6,900)	180	(180)	870	(870)	\$227	(\$227)	\$310
2004	7,600	(6,500)	80	(80)	850	(840)	\$203	(\$203)	\$270
2005	7,600	(6,400)	130	(130)	740	(740)	\$225	(\$225)	\$289
2006	8,500	(7,000)	120	(120)	770	(750)	\$202	(\$202)	\$252
2007	8,100	(6,800)	110	(110)	740	(720)	\$160	(\$160)	\$194
2008	7,600	(6,200)	70	(70)	780	(780)	\$202	(\$202)	\$236
2009	6,600	(5,200)	70	(70)	740	(720)	\$175	(\$175)	\$205
2010	6,400	(5,400)	90	(90)	750	(730)	\$159	(\$159)	\$183
2011	6,700	(5,600)	40	(40)	740	(730)	\$165	(\$165)	\$184
2012	7,100	(5,800)	70	(70)	670	(660)	\$197	(\$196)	\$215
2013	6,000	(4,900)	90	(90)	580	(580)	\$139	(\$139)	\$150

**Table 2. Playing with Fire in Home Structure Fires Reported to US Fire Departments: 1980–2018 (Continued)**

Year	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)		
							As Reported	2018 Dollars	
2014	5,200	(4,300)	60	(60)	430	(430)	\$115	(\$114)	\$121
2015	5,400	(4,100)	60	(60)	380	(360)	\$117	(\$117)	\$124
2016	4,900	(3,600)	30	(30)	340	(330)	\$94	(\$94)	\$98
2017	5,000	(3,800)	40	(40)	360	(360)	\$116	(\$116)	\$119
2018	4,400	(3,500)	50	(50)	480	(470)	\$122	(\$122)	\$122

Source: NFIRS and NFPA survey. Estimates for 1999–2011 are based on data originally collected in NFIRS 5.0 only. Due to the smaller share of NFIRS data collected in 1999–2001, statistics for these years should be viewed with caution. Inflation adjustments were based on the Consumer Price Index Purchasing Power of the Dollar. Numbers in parentheses exclude fires reported with an NFIRS “confined fire” incident type.

**Table 3. Home Structure Fires Caused by Playing with Fire by Age of Fire Setter: 2014–2018 Annual Averages**

Age of Fire Setter	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
5 years or younger	1,790	(36%)	20	(46%)	170	(43%)	\$44	(39%)
6 to 10 years	2,150	(43%)	20	(42%)	170	(44%)	\$51	(46%)
11 to 17 years	970	(20%)	0	(7%)	50	(12%)	\$16	(14%)
18 and older	50	(1%)	0	(4%)	10	(2%)	\$1	(1%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 4. Home Structure Fires Caused by Playing with Fire by Sex of Fire Setter: 2014–2018 Annual Averages**

Sex of Fire Setter	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Male	4,050	(82%)	40	(77%)	320	(80%)	\$93	(83%)
Female	910	(18%)	10	(23%)	80	(20%)	\$19	(17%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 5. Home Structure Fires Caused by Playing with Fire by Month: 2014–2018 Annual Averages**

Month	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
January	410	(8%)	10	(17%)	40	(10%)	\$9	(8%)
February	390	(8%)	10	(14%)	40	(9%)	\$8	(7%)
March	440	(9%)	10	(19%)	40	(9%)	\$13	(11%)
April	420	(8%)	0	(2%)	40	(9%)	\$11	(10%)
May	420	(8%)	0	(7%)	40	(10%)	\$11	(10%)
June	430	(9%)	0	(0%)	30	(7%)	\$11	(10%)
July	590	(12%)	0	(5%)	40	(10%)	\$11	(10%)
August	440	(9%)	0	(2%)	30	(8%)	\$8	(7%)
September	370	(8%)	0	(5%)	30	(7%)	\$7	(6%)
October	340	(7%)	10	(12%)	30	(8%)	\$7	(7%)
November	380	(8%)	10	(15%)	30	(7%)	\$9	(8%)
December	330	(7%)	0	(2%)	30	(6%)	\$7	(7%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 6. Home Structure Fires Caused by Playing with Fire by Time of Day: 2014–2018 Annual Averages**

Time of Day	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	100	(2%)	0	(2%)	10	(2%)	\$3	(3%)
1:00–1:59 a.m.	80	(2%)	0	(2%)	10	(3%)	\$1	(1%)
2:00–2:59 a.m.	60	(1%)	0	(2%)	0	(1%)	\$2	(1%)
3:00–3:59 a.m.	50	(1%)	0	(0%)	0	(1%)	\$1	(1%)
4:00–4:59 a.m.	40	(1%)	0	(2%)	10	(2%)	\$1	(1%)
5:00–5:59 a.m.	40	(1%)	0	(0%)	0	(0%)	\$1	(1%)
6:00–6:59 a.m.	50	(1%)	0	(0%)	10	(1%)	\$1	(1%)
7:00–7:59 a.m.	80	(2%)	0	(9%)	10	(2%)	\$1	(1%)
8:00–8:59 a.m.	140	(3%)	10	(12%)	10	(4%)	\$4	(4%)
9:00–9:59 a.m.	180	(4%)	0	(5%)	20	(4%)	\$5	(4%)
10:00–10:59 a.m.	230	(5%)	0	(10%)	30	(7%)	\$5	(5%)
11:00–11:59 a.m.	260	(5%)	0	(7%)	20	(6%)	\$4	(4%)
12:00–12:59 p.m.	250	(5%)	0	(5%)	20	(6%)	\$7	(6%)
1:00–1:59 p.m.	310	(6%)	0	(10%)	20	(5%)	\$7	(7%)
2:00–2:59 p.m.	290	(6%)	0	(5%)	30	(7%)	\$6	(5%)
3:00–3:59 p.m.	360	(7%)	0	(0%)	20	(5%)	\$9	(8%)
4:00–4:59 p.m.	430	(9%)	0	(7%)	30	(7%)	\$10	(9%)
5:00–5:59 p.m.	380	(8%)	0	(5%)	20	(6%)	\$12	(10%)
6:00–6:59 p.m.	370	(7%)	0	(2%)	30	(7%)	\$8	(7%)
7:00–7:59 p.m.	370	(7%)	0	(5%)	30	(7%)	\$7	(6%)
8:00–8:59 p.m.	280	(6%)	0	(0%)	20	(5%)	\$5	(5%)
9:00–9:59 p.m.	260	(5%)	0	(2%)	20	(5%)	\$4	(3%)
10:00–10:59 p.m.	200	(4%)	0	(2%)	20	(6%)	\$3	(3%)
11:00–11:59 p.m.	140	(3%)	0	(5%)	10	(2%)	\$3	(2%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 7. Home Structure Fires Caused by Playing with Fire by Day of Week: 2014–2018 Annual Averages**

Day of the Week	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	680	(14%)	20	(31%)	60	(15%)	\$14	(13%)
Monday	720	(15%)	0	(9%)	60	(16%)	\$17	(15%)
Tuesday	700	(14%)	0	(5%)	50	(13%)	\$17	(15%)
Wednesday	680	(14%)	0	(10%)	40	(11%)	\$16	(14%)
Thursday	650	(13%)	10	(24%)	50	(14%)	\$14	(13%)
Friday	680	(14%)	0	(7%)	70	(16%)	\$17	(15%)
Saturday	850	(17%)	10	(14%)	60	(15%)	\$18	(16%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)

Source: NFIRS and NFPA fire experience survey.



**Table 8. Home Structure Fires Caused by Playing with Fire by Heat Source: 2014–2018 Annual Averages**

Heat Source	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Lighter	2,730	(55%)	20	(42%)	270	(69%)	\$66.5	(59%)
Non-confined	2,300	(46%)	20	(42%)	270	(67%)	\$66.4	(59%)
Confined	430	(9%)	0	(0%)	10	(1%)	\$0.0	(0%)
Match	680	(14%)	20	(33%)	30	(7%)	\$17.3	(15%)
Non-confined	510	(10%)	20	(33%)	30	(7%)	\$17.3	(15%)
Confined	170	(3%)	0	(0%)	0	(0%)	\$0.0	(0%)
Fireworks	230	(5%)	0	(3%)	10	(3%)	\$4.4	(4%)
Non-confined	190	(4%)	0	(3%)	10	(3%)	\$4.4	(4%)
Confined	50	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Candle	190	(4%)	0	(9%)	20	(5%)	\$6.2	(6%)
Non-confined	160	(3%)	0	(9%)	20	(5%)	\$6.2	(6%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified hot or smoldering object	120	(2%)	0	(0%)	0	(1%)	\$1.8	(2%)
Non-confined	90	(2%)	0	(0%)	0	(1%)	\$1.8	(2%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Flame or torch used for lighting	120	(2%)	0	(0%)	10	(2%)	\$2.7	(2%)
Non-confined	90	(2%)	0	(0%)	10	(2%)	\$2.7	(2%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Radiated or conducted heat from operating equipment	120	(2%)	0	(0%)	10	(2%)	\$0.4	(0%)
Non-confined	50	(1%)	0	(0%)	10	(2%)	\$0.4	(0%)
Confined	70	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Unclassified heat from powered equipment	120	(2%)	0	(3%)	0	(0%)	\$0.5	(0%)
Non-confined	40	(1%)	0	(3%)	0	(0%)	\$0.5	(0%)
Confined	70	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Heat from direct flame or convection currents	110	(2%)	0	(0%)	10	(4%)	\$3.1	(3%)
Non-confined	80	(2%)	0	(0%)	10	(3%)	\$3.1	(3%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Hot ember or ash	100	(2%)	0	(3%)	10	(2%)	\$1.5	(1%)
Non-confined	60	(1%)	0	(3%)	10	(2%)	\$1.5	(1%)
Confined	40	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)

**Table 8. Home Structure Fires Caused by Playing with Fire by Heat Source: 2014–2018 Annual Averages  
(Continued)**

Heat Source	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified heat source	100	(2%)	0	(0%)	0	(1%)	\$1.1	(1%)
Non-confined	50	(1%)	0	(0%)	0	(1%)	\$1.1	(1%)
Confined	50	(1%)	0	(0%)	0	(0%)	\$0.0	(0%)
Other known heat source	340	(7%)	0	(8%)	20	(4%)	\$6.9	(6%)
Non-confined	240	(5%)	0	(8%)	20	(4%)	\$6.8	(6%)
Confined	90	(2%)	0	(0%)	0	(0%)	\$0.0	(0%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112.5	(100%)
Non-confined	3,870	(78%)	50	(100%)	390	(98%)	\$112.4	(100%)
Confined	1,090	(22%)	0	(0%)	10	(2%)	\$0.1	(0%)

Source: NFIRS and NFPA fire experience survey.

**Table 9. Home Structure Fires Caused by Playing with Fire by Area of Origin: 2014–2018 Annual Averages**

Area of Origin	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Bedroom	1,660	(33%)	20	(42%)	190	(47%)	\$54	(48%)
Non-confined	1,560	(32%)	20	(42%)	180	(46%)	\$54	(48%)
Confined	90	(2%)	0	(0%)	0	(1%)	\$0	(0%)
Kitchen or cooking area	420	(8%)	0	(7%)	20	(4%)	\$3	(3%)
Non-confined	200	(4%)	0	(7%)	20	(4%)	\$3	(3%)
Confined	220	(4%)	0	(0%)	0	(0%)	\$0	(0%)
Living room	290	(6%)	10	(29%)	50	(13%)	\$9	(8%)
Non-confined	260	(5%)	10	(29%)	50	(13%)	\$9	(8%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Lavatory or bathroom	280	(6%)	0	(0%)	20	(4%)	\$2	(1%)
Non-confined	190	(4%)	0	(0%)	20	(4%)	\$2	(1%)
Confined	90	(2%)	0	(0%)	0	(0%)	\$0	(0%)
Closet	270	(6%)	0	(0%)	20	(5%)	\$5	(5%)
Non-confined	250	(5%)	0	(0%)	20	(5%)	\$5	(5%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified outside area	250	(5%)	0	(0%)	0	(1%)	\$3	(2%)
Non-confined	110	(2%)	0	(0%)	0	(1%)	\$3	(2%)
Confined	140	(3%)	0	(0%)	0	(0%)	\$0	(0%)
Garage or vehicle storage area	210	(4%)	0	(2%)	10	(3%)	\$7	(6%)
Non-confined	170	(3%)	0	(2%)	10	(3%)	\$7	(6%)
Confined	40	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified function area	140	(3%)	0	(5%)	20	(5%)	\$5	(4%)
Non-confined	120	(2%)	0	(5%)	20	(5%)	\$5	(4%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Exterior wall surface	140	(3%)	0	(0%)	10	(2%)	\$3	(2%)
Non-confined	130	(3%)	0	(0%)	10	(2%)	\$3	(2%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Exterior balcony or unenclosed porch	130	(3%)	0	(0%)	10	(1%)	\$4	(3%)
Non-confined	100	(2%)	0	(0%)	10	(1%)	\$4	(3%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0	(0%)

**Table 9. Home Structure Fires Caused by Playing with Fire by Area of Origin: 2014–2018 Annual Averages  
(Continued)**

Area of Origin	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Laundry room or area	90	(2%)	0	(2%)	0	(1%)	\$1	(1%)
Non-confined	60	(1%)	0	(2%)	0	(1%)	\$1	(1%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Trash or rubbish chute, area, or container	80	(2%)	0	(0%)	0	(0%)	\$0	(0%)
Non-confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Confined	70	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Crawl space or substructure space	80	(2%)	0	(0%)	10	(2%)	\$1	(1%)
Non-confined	60	(1%)	0	(0%)	10	(2%)	\$1	(1%)
Confined	20	(0%)	0	(0%)	0	(1%)	\$0	(0%)
Confined chimney or flue fire	39	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Other known area of origin	890	(18%)	10	(12%)	40	(11%)	\$17	(15%)
Non-confined	660	(13%)	10	(12%)	40	(10%)	\$17	(15%)
Confined	240	(5%)	0	(0%)	0	(0%)	\$0	(0%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)
Non-confined	3,870	(78%)	50	(100%)	390	(98%)	\$112	(100%)
Confined	1,090	(22%)	0	(0%)	10	(2%)	\$0	(0%)

Source: NFIRS and NFPA fire experience survey.

**Table 10. Home Structure Fires Caused by Playing with Fire by Item First Ignited: 2014–2018 Annual Averages**

Item First Ignited	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Mattress or bedding	910	(18%)	10	(27%)	120	(30%)	\$32	(28%)
Non-confined	870	(18%)	10	(27%)	120	(30%)	\$32	(28%)
Confined	40	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Magazine, newspaper, or writing paper	590	(12%)	10	(14%)	30	(8%)	\$10	(9%)
Non-confined	370	(8%)	10	(14%)	30	(8%)	\$10	(9%)
Confined	210	(4%)	0	(0%)	0	(0%)	\$0	(0%)
Rubbish, trash, or waste	420	(9%)	0	(0%)	10	(2%)	\$3	(2%)
Non-confined	170	(4%)	0	(0%)	10	(2%)	\$3	(2%)
Confined	250	(5%)	0	(0%)	0	(0%)	\$0	(0%)
Clothing	420	(8%)	0	(3%)	40	(10%)	\$9	(8%)
Non-confined	370	(7%)	0	(3%)	40	(10%)	\$9	(8%)
Confined	50	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Upholstered furniture	230	(5%)	10	(14%)	50	(12%)	\$9	(8%)
Non-confined	210	(4%)	10	(14%)	50	(12%)	\$9	(8%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Multiple items first ignited	180	(4%)	0	(0%)	10	(3%)	\$5	(4%)
Non-confined	120	(2%)	0	(0%)	10	(3%)	\$5	(4%)
Confined	60	(1%)	0	(0%)	0	(1%)	\$0	(0%)
Unclassified furniture or utensils	180	(4%)	10	(16%)	10	(3%)	\$6	(6%)
Non-confined	160	(3%)	10	(16%)	10	(3%)	\$6	(6%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Light vegetation, including grass	170	(3%)	0	(3%)	10	(2%)	\$4	(3%)
Non-confined	130	(3%)	0	(3%)	10	(1%)	\$4	(3%)
Confined	50	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Box, carton, bag, basket, or barrel	160	(3%)	0	(0%)	10	(4%)	\$3	(3%)
Non-confined	120	(2%)	0	(0%)	10	(3%)	\$3	(3%)
Confined	50	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Unclassified soft goods or wearing apparel	150	(3%)	0	(3%)	10	(2%)	\$3	(3%)
Non-confined	130	(3%)	0	(3%)	10	(2%)	\$3	(3%)
Confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)

**Table 10. Home Structure Fires Caused by Playing with Fire by Item First Ignited: 2014–2018 Annual Averages  
(Continued)**

Item First Ignited	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified item first ignited	150	(3%)	0	(5%)	10	(2%)	\$3	(3%)
Non-confined	100	(2%)	0	(5%)	10	(2%)	\$3	(3%)
Confined	40	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Floor covering rug, carpet, or mat	110	(2%)	0	(0%)	10	(2%)	\$2	(2%)
Non-confined	110	(2%)	0	(0%)	10	(2%)	\$2	(2%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Toy or game	110	(2%)	0	(3%)	10	(3%)	\$1	(1%)
Non-confined	70	(1%)	0	(3%)	10	(3%)	\$1	(1%)
Confined	40	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Curtain, blinds, drapery, or tapestry	110	(2%)	0	(8%)	10	(3%)	\$3	(2%)
Non-confined	110	(2%)	0	(8%)	10	(3%)	\$3	(2%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Flammable or combustible liquid or gas, piping, or filter	110	(2%)	0	(3%)	20	(4%)	\$2	(2%)
Non-confined	100	(2%)	0	(3%)	20	(4%)	\$2	(2%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Linen other than bedding	90	(2%)	0	(0%)	10	(1%)	\$1	(1%)
Non-confined	80	(2%)	0	(0%)	10	(1%)	\$1	(1%)
Confined	10	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Exterior wall covering or finish	80	(2%)	0	(0%)	0	(0%)	\$2	(1%)
Non-confined	80	(2%)	0	(0%)	0	(0%)	\$2	(1%)
Confined	0	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Cooking materials, including food	80	(2%)	0	(0%)	0	(0%)	\$0	(0%)
Non-confined	20	(0%)	0	(0%)	0	(0%)	\$0	(0%)
Confined	60	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Rolled or wound material	80	(2%)	0	(0%)	10	(1%)	\$1	(1%)
Non-confined	50	(1%)	0	(0%)	10	(1%)	\$1	(1%)
Confined	30	(1%)	0	(0%)	0	(0%)	\$0	(0%)
Other known item first ignited	620	(12%)	0	(3%)	30	(7%)	\$13	(12%)
Non-confined	480	(10%)	0	(3%)	30	(6%)	\$13	(12%)
Confined	140	(3%)	0	(0%)	0	(0%)	\$0	(0%)
Total	4,960	(100%)	50	(100%)	400	(100%)	\$112	(100%)
Non-confined	3,870	(78%)	50	(100%)	390	(98%)	\$112	(100%)
Confined	1,090	(22%)	0	(0%)	10	(2%)	\$0	(0%)

Source: NFIRS and NFPA fire experience survey.

**Table 11. Playing with Fire in Non-Home Structure Fires Reported to US Fire Departments: 1980–2018**

Year	Fires		Civilian Injuries		Direct Property Damage (in Millions)		
					As Reported	2018 Dollars	
1980	16,600		90		\$27		
1981	17,700		160		\$37		
1982	14,100		120		\$22		
1983	11,700		150		\$30		
1984	11,100		90		\$19		
1985	9,300		110		\$26		
1986	8,500		100		\$18		
1987	8,100		100		\$20		
1988	7,300		120		\$28		
1989	5,800		160		\$15		
1990	4,700		130		\$17		
1991	5,000		80		\$19		
1992	5,500		100		\$20		
1993	4,800		130		\$28		
1994	5,500		120		\$23		
1995	5,100		60		\$27		
1996	4,300		80		\$20		
1997	3,100		60		\$19		
1998	3,600		20		\$19		
1999	4,700	(3,000)	70	(70)	\$27	(\$27)	(\$41)
2000	3,800	(2,900)	100	(100)	\$32	(\$32)	(\$47)
2001	4,900	(3,600)	60	(60)	\$50	(\$50)	(\$71)
2002	3,700	(2,800)	100	(100)	\$87	(\$87)	(\$122)
2003	3,700	(2,300)	100	(100)	\$50	(\$50)	(\$68)
2004	3,200	(2,000)	50	(50)	\$43	(\$43)	(\$57)
2005	4,900	(2,100)	40	(40)	\$47	(\$47)	(\$60)
2006	6,000	(2,300)	40	(40)	\$126	(\$126)	(\$157)
2007	4,900	(2,400)	40	(40)	\$48	(\$48)	(\$58)
2008	4,500	(2,300)	60	(60)	\$69	(\$69)	(\$81)
2009	4,100	(1,900)	60	(60)	\$60	(\$60)	(\$70)
2010	3,500	(1,600)	60	(60)	\$32	(\$32)	(\$37)
2011	3,500	(1,600)	40	(40)	\$20	(\$20)	(\$22)
2012	4,000	(1,800)	70	(70)	\$68	(\$68)	(\$74)
2013	3,500	(1,500)	60	(60)	\$52	(\$52)	(\$56)

**Table 11. Playing with Fire in Non-Home Structure Fires Reported to US Fire Departments: 1980–2018  
(Continued)**

Year	Fires		Civilian Injuries		Direct Property Damage (in Millions)		
					As Reported	2018 Dollars	
2014	3,500	(1,600)	100	(80)	\$18	(\$18)	(\$19)
2015	3,300	(1,600)	20	(20)	\$30	(\$30)	(\$32)
2016	2,900	(1,500)	70	(70)	\$58	(\$58)	(\$61)
2017	3,500	(1,600)	50	(50)	\$30	(\$27)	(\$31)
2018	2,500	(1,200)	10	(10)	\$15	(\$15)	(\$15)

Source: NFIRS and NFPA survey. Estimates for 1999–2018 are based on data originally collected in NFIRS 5.0 only. Due to the smaller share of NFIRS data collected in 1999–2001, statistics for these years should be viewed with caution. Inflation adjustments were based on the Consumer Price Index Purchasing Power of the Dollar. Numbers in parentheses exclude fires reported as a “confined fire” incident type.



**Table 12. Non-Home Structure Fires Caused by Playing with Fire by Age of Fire Setter: 2014–2018 Annual Averages**

Age of Fire Setter	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
5 years or younger	280	(9%)	10	(27%)	\$2	(7%)
6 to 10 years	1,220	(39%)	30	(51%)	\$10	(32%)
11 to 17 years	1,610	(51%)	10	(22%)	\$18	(60%)
18 and older	40	(1%)	0	(0%)	\$0	(0%)
Total	3,140	(100%)	50	(100%)	\$30	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 13. Non-Home Structure Fire Caused by Playing with Fire by Sex of Fire Setter: 2014–2018 Annual Averages**

Sex of Fire Setter	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Male	2,760	(88%)	40	(71%)	\$29	(96%)
Female	380	(12%)	10	(29%)	\$1	(4%)
Total	3,140	(100%)	50	(100%)	\$30	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 14. Non-Home Structure Fires Caused by Playing with Fire by Month: 2014–2018 Annual Averages**

Month	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
January	250	(8%)	0	(0%)	\$2	(6%)
February	220	(7%)	10	(11%)	\$1	(3%)
March	300	(9%)	0	(7%)	\$1	(5%)
April	320	(10%)	0	(9%)	\$2	(5%)
May	290	(9%)	10	(10%)	\$3	(9%)
June	270	(9%)	0	(2%)	\$5	(18%)
July	340	(11%)	10	(26%)	\$2	(8%)
August	210	(7%)	0	(6%)	\$7	(23%)
September	230	(7%)	10	(12%)	\$1	(4%)
October	240	(8%)	0	(5%)	\$1	(4%)
November	240	(8%)	0	(6%)	\$3	(9%)
December	230	(7%)	0	(8%)	\$2	(7%)
Total	3,140	(100%)	50	(100%)	\$30	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 15. Non-Home Structure Fires Caused by Playing with Fire by Time of Day: 2014–2018 Annual Averages**

Time of Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	70	(2%)	0	(0%)	\$1	(4%)
1:00–1:59 a.m.	50	(1%)	0	(0%)	\$0	(1%)
2:00–2:59 a.m.	40	(1%)	0	(0%)	\$0	(1%)
3:00–3:59 a.m.	50	(2%)	10	(18%)	\$1	(4%)
4:00–4:59 a.m.	30	(1%)	2	(4%)	\$1	(2%)
5:00–5:59 a.m.	30	(1%)	0	(0%)	\$0	(0%)
6:00–6:59 a.m.	40	(1%)	0	(0%)	\$1	(3%)
7:00–7:59 a.m.	50	(2%)	0	(5%)	\$0	(1%)
8:00–8:59 a.m.	100	(3%)	0	(0%)	\$0	(2%)
9:00–9:59 a.m.	120	(4%)	0	(9%)	\$0	(1%)
10:00–10:59 a.m.	170	(5%)	0	(3%)	\$0	(1%)
11:00–11:59 a.m.	170	(5%)	0	(4%)	\$1	(2%)
12:00–12:59 p.m.	200	(6%)	10	(10%)	\$2	(7%)
1:00–1:59 p.m.	210	(7%)	0	(6%)	\$0	(1%)
2:00–2:59 p.m.	220	(7%)	0	(4%)	\$1	(2%)
3:00–3:59 p.m.	200	(6%)	0	(4%)	\$2	(6%)
4:00–4:59 p.m.	240	(8%)	0	(5%)	\$3	(9%)
5:00–5:59 p.m.	240	(8%)	0	(9%)	\$5	(18%)
6:00–6:59 p.m.	190	(6%)	0	(9%)	\$5	(17%)
7:00–7:59 p.m.	200	(6%)	0	(5%)	\$1	(3%)
8:00–8:59 p.m.	160	(5%)	0	(3%)	\$1	(4%)
9:00–9:59 p.m.	140	(4%)	0	(0%)	\$2	(5%)
10:00–10:59 p.m.	110	(3%)	0	(0%)	\$0	(2%)
11:00–11:59 p.m.	110	(4%)	0	(1%)	\$1	(3%)
Total	3,140	(100%)	50	(100%)	\$30	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 16. Non-Home Structure Fires Caused by Playing with Fire by Day of Week: 2014–2018 Annual Averages**

Day of the Week	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	430	(14%)	0	(1%)	\$3	(11%)
Monday	480	(15%)	0	(9%)	\$8	(25%)
Tuesday	420	(13%)	10	(13%)	\$2	(7%)
Wednesday	510	(16%)	20	(41%)	\$6	(20%)
Thursday	410	(13%)	0	(3%)	\$5	(16%)
Friday	460	(15%)	10	(23%)	\$2	(8%)
Saturday	440	(14%)	10	(11%)	\$4	(13%)
Total	3,140	(100%)	50	(100%)	\$30	(100%)

Source: NFIRS and NFPA fire experience survey.

**Table 17. Non-Home Structure Fires Caused by Playing with Fire by Heat Source:  
2014–2018 Annual Averages**

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lighter	1,490	(47%)	20	(34%)	\$19	(62%)
Non-confined	820	(26%)	20	(34%)	\$18	(59%)
Confined	670	(21%)	0	(0%)	\$1	(3%)
Match	630	(20%)	10	(20%)	\$5	(16%)
Non-confined	220	(7%)	10	(20%)	\$5	(16%)
Confined	410	(13%)	0	(0%)	\$0	(0%)
Fireworks	180	(6%)	10	(24%)	\$1	(4%)
Non-confined	100	(3%)	10	(24%)	\$1	(4%)
Confined	80	(3%)	0	(0%)	\$0	(0%)
Smoking materials	160	(5%)	0	(5%)	\$1	(3%)
Non-confined	30	(1%)	0	(1%)	\$1	(3%)
Confined	130	(4%)	0	(3%)	\$0	(0%)
Unclassified heat source	110	(3%)	0	(0%)	\$1	(2%)
Non-confined	40	(1%)	0	(0%)	\$1	(2%)
Confined	70	(2%)	0	(0%)	\$0	(0%)
Unclassified hot or smoldering object	110	(3%)	0	(4%)	\$0	(1%)
Non-confined	40	(1%)	0	(4%)	\$0	(1%)
Confined	60	(2%)	0	(0%)	\$0	(0%)
Flame or torch used for lighting	100	(3%)	0	(4%)	\$2	(7%)
Non-confined	50	(2%)	0	(4%)	\$2	(7%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Hot ember or ash	80	(3%)	0	(0%)	\$0	(1%)
Non-confined	40	(1%)	0	(0%)	\$0	(1%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Incendiary device	60	(2%)	0	(4%)	\$0	(0%)
Non-confined	20	(1%)	0	(4%)	\$0	(0%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Other known heat source	230	(7%)	0	(4%)	\$1	(4%)
Non-confined	150	(5%)	0	(1%)	\$1	(4%)
Confined	90	(3%)	0	(3%)	\$0	(0%)
Total	3,140	(100%)	50	(100%)	\$30	(100%)
Non-confined	1,500	(48%)	50	(94%)	\$29	(97%)
Confined	1,640	(52%)	0	(6%)	\$1	(3%)

Source: NFIRS and NFPA fire experience survey.

**Table 18. Non-Home Structure Fires Caused by Playing with Fire by Area of Origin: 2014–2018 Annual Averages**

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lavatory, bathroom, or locker room	730	(23%)	0	(9%)	\$1	(3%)
Non-confined	300	(10%)	0	(9%)	\$1	(3%)
Confined	420	(14%)	0	(0%)	\$0	(0%)
Unclassified outside area	450	(14%)	0	(1%)	\$0	(2%)
Non-confined	80	(3%)	0	(1%)	\$0	(2%)
Confined	370	(12%)	0	(0%)	\$0	(0%)
On or near highway, public way, or street	180	(6%)	0	(0%)	\$0	(0%)
Non-confined	10	(0%)	0	(0%)	\$0	(0%)
Confined	170	(5%)	0	(0%)	\$0	(0%)
Bedroom	160	(5%)	10	(25%)	\$2	(6%)
Non-confined	110	(4%)	10	(19%)	\$2	(6%)
Confined	40	(1%)	0	(6%)	\$0	(0%)
Lawn, field, or open area	150	(5%)	0	(0%)	\$0	(1%)
Non-confined	30	(1%)	0	(0%)	\$0	(1%)
Confined	120	(4%)	0	(0%)	\$0	(0%)
Trash or rubbish chute, area, or container	150	(5%)	0	(0%)	\$0	(0%)
Non-confined	10	(0%)	0	(0%)	\$0	(0%)
Confined	140	(5%)	0	(0%)	\$0	(0%)
Unclassified storage area	130	(4%)	0	(0%)	\$3	(9%)
Non-confined	110	(4%)	0	(0%)	\$3	(9%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Garage or vehicle storage area	130	(4%)	0	(5%)	\$2	(5%)
Non-confined	110	(4%)	0	(5%)	\$2	(5%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Unclassified area of origin	90	(3%)	0	(5%)	\$0	(2%)
Non-confined	40	(1%)	0	(5%)	\$0	(2%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Storage of supplies or tools or dead storage	80	(2%)	0	(1%)	\$2	(8%)
Non-confined	70	(2%)	0	(1%)	\$2	(8%)
Confined	10	(0%)	0	(0%)	\$0	(0%)

**Table 18. Non-Home Structure Fires Caused by Playing with Fire by Area of Origin: 2014–2018 Annual Averages  
(Continued)**

<b>Area of Origin</b>	<b>Fires</b>		<b>Civilian Injuries</b>		<b>Direct Property Damage (in Millions)</b>	
Exterior wall surface	70	(2%)	0	(0%)	\$1	(3%)
Non-confined	70	(2%)	0	(0%)	\$1	(3%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Storage room, area, tank, or bin	60	(2%)	0	(0%)	\$0	(1%)
Non-confined	40	(1%)	0	(0%)	\$0	(1%)
Confined	10	(0%)	0	(0%)	\$0	(0%)
Vacant structural area	60	(2%)	2	(3%)	\$5	(15%)
Non-confined	40	(1%)	2	(3%)	\$5	(15%)
Confined	10	(0%)	0	(0%)	\$0	(0%)
Other known area of origin	710	(23%)	30	(50%)	\$14	(46%)
Non-confined	460	(15%)	30	(50%)	\$13	(43%)
Confined	250	(8%)	0	(0%)	\$1	(3%)
<b>Total</b>	<b>3,140</b>	<b>(100%)</b>	<b>50</b>	<b>(100%)</b>	<b>\$30</b>	<b>(100%)</b>
Non-confined	1,500	(48%)	50	(94%)	\$29	(97%)
Confined	1,640	(52%)	0	(6%)	\$1	(3%)

Source: NFIRS and NFPA fire experience survey.

**Table 19. Non-Home Structure Fires Caused by Playing with Fire by Item First Ignited: 2014–2018 Annual Averages**

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Rubbish, trash, or waste	840	(27%)	0	(5%)	\$7	(25%)
Non-confined	140	(4%)	0	(5%)	\$7	(24%)
Confined	700	(22%)	0	(0%)	\$0	(0%)
Magazine, newspaper, or writing paper	390	(12%)	0	(3%)	\$2	(8%)
Non-confined	170	(5%)	0	(0%)	\$2	(8%)
Confined	220	(7%)	0	(3%)	\$0	(0%)
Rolled or wound material	240	(8%)	0	(5%)	\$1	(2%)
Non-confined	130	(4%)	0	(5%)	\$1	(2%)
Confined	110	(4%)	0	(0%)	\$0	(0%)
Light vegetation, including grass	190	(6%)	0	(0%)	\$0	(1%)
Non-confined	100	(3%)	0	(0%)	\$0	(1%)
Confined	90	(3%)	0	(0%)	\$0	(0%)
Mattress or bedding	160	(5%)	10	(18%)	\$2	(5%)
Non-confined	100	(3%)	10	(18%)	\$2	(5%)
Confined	50	(2%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	120	(4%)	0	(0%)	\$1	(3%)
Non-confined	80	(3%)	0	(0%)	\$1	(3%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Flammable or combustible liquid or gas, piping, or filter	110	(3%)	0	(6%)	\$1	(2%)
Non-confined	80	(3%)	0	(6%)	\$1	(2%)
Confined	30	(1%)	0	(0%)	\$0	(0%)
Multiple items first ignited	100	(3%)	0	(4%)	\$2	(5%)
Non-confined	60	(2%)	0	(4%)	\$2	(5%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Box, carton, bag, basket, or barrel	90	(3%)	0	(0%)	\$1	(3%)
Non-confined	50	(2%)	0	(0%)	\$1	(3%)
Confined	40	(1%)	0	(0%)	\$0	(0%)
Clothing	80	(2%)	10	(16%)	\$2	(6%)
Non-confined	50	(2%)	10	(12%)	\$1	(3%)
Confined	30	(1%)	0	(3%)	\$1	(3%)

**Table 19. Home Structure Fires Caused by Playing with Fire by Item First Ignited: 2014–2018 Annual Averages  
(Continued)**

<b>Item First Ignited</b>	<b>Fires</b>		<b>Civilian Injuries</b>		<b>Direct Property Damage (in Millions)</b>	
Upholstered furniture	80	(2%)	0	(0%)	\$1	(3%)
Non-confined	50	(1%)	0	(0%)	\$1	(3%)
Confined	30	(1%)	0	(0%)	\$0	(0%)
Unclassified furniture or utensils	70	(2%)	0	(0%)	\$0	(1%)
Non-confined	40	(1%)	0	(0%)	\$0	(1%)
Confined	30	(1%)	0	(0%)	\$0	(0%)
Exterior wall covering or finish	60	(2%)	0	(0%)	\$0	(2%)
Non-confined	60	(2%)	0	(0%)	\$0	(2%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Other known item first ignited	610	(20%)	20	(43%)	\$10	(34%)
Non-confined	390	(12%)	20	(43%)	\$10	(34%)
Confined	220	(7%)	0	(0%)	\$0	(0%)
<b>Total</b>	<b>3,140</b>	<b>(100%)</b>	<b>50</b>	<b>(100%)</b>	<b>\$30</b>	<b>(100%)</b>
Non-confined	1,500	(48%)	50	(94%)	\$29	(97%)
Confined	1,640	(52%)	0	(6%)	\$1	(3%)

Source: NFIRS and NFPA fire experience survey.