



RESEARCH

Structure Fires in Schools

Supporting Tables

September 2020

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Structure Fires in Schools: Supporting Tables

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

Most tables, with the exception of fires by year, show estimates of 2014–2018 annual averages. Estimates were derived from the US Fire Administration’s [National Fire Incident Reporting System \(NFIRS\)](#) and the NFPA annual fire department experience survey and include proportional shares of unknown or missing data. Fires are rounded to the nearest hundred, deaths and injuries are rounded to the nearest ten, and property loss is rounded to the nearest million dollars. Inflation adjustments were made only for the trend table. Percentages were calculated on unrounded estimates.

NFIRS 5.0 includes a category of structure fires collectively referred to as confined fires, identified by NFIRS incident type codes 113–118. These include confined cooking fires, confined chimney or flue fires, confined trash fires, and confined fuel burner or boiler fires. Losses are generally minimal in these fires, which, by definition, are assumed to have been limited to the object of origin. Although causal data is not required for these fires, it is sometimes present. To obtain estimates for these fires, unknown data for confined and non-confined fires were analyzed separately and the results summed.

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
Table 1. Structure fires by property use	3
Table 2. Structure fires in school properties by property use	4
Structure fires in schools by:	
Table 3. Year	5
Table 4. Leading cause	6
Table 5. Month	7
Table 6. Day of week	8
Table 7. Time of day	9
Table 8. Cause of ignition	10
Table 9. Area of origin	11
Table 10. Item first ignited	13
Table 11. Factor contributing to ignition	15
Table 12. Heat source	17
Table 13. Equipment involved in ignition	19
Structure fires in high schools and middle schools by:	
Table 14. Leading cause	21
Table 15. Month	22
Table 16. Day of week	23
Table 17. Time of day	24
Table 18. Cause of ignition	25
Table 19. Area of origin	26
Table 20. Item first ignited	28
Table 21. Factor contributing to ignition	30
Table 22. Heat source	32
Table 23. Equipment involved in ignition	34
Structure fires in elementary schools by:	
Table 24. Leading cause	36
Table 25. Month	37
Table 26. Day of week	38
Table 27. Time of day	39
Table 28. Cause of ignition	40
Table 29. Area of origin	41
Table 30. Item first ignited	43
Table 31. Factor contributing to ignition	45
Table 32. Heat source	47
Table 33. Equipment involved in ignition	49

Table 1. Structure Fires by Property Use, 2014–2018 Annual Averages

Property Use	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Residential	382,400	(77%)	2,746	(97%)	11,477	(90%)	\$7,562	(72%)
Outside or special property	27,420	(6%)	19	(1%)	113	(1%)	\$136	(1%)
Storage	22,400	(5%)	32	(1%)	299	(2%)	\$637	(6%)
Mercantile, business	18,970	(4%)	15	(1%)	282	(2%)	\$849	(8%)
Assembly	15,980	(3%)	14	(0%)	176	(1%)	\$333	(3%)
Other or unclassified property	6,950	(1%)	7	(0%)	56	(0%)	\$80	(1%)
Health care, detention, correction	6,720	(1%)	5	(0%)	156	(1%)	\$57	(1%)
Manufacturing, processing	5,270	(1%)	3	(0%)	167	(1%)	\$510	(5%)
Educational	4,760	(1%)	1	(0%)	50	(0%)	\$65	(1%)
<i>Preschool through grade 12</i>	<i>3,230</i>	<i>(1%)</i>	<i>1</i>	<i>(0%)</i>	<i>39</i>	<i>(0%)</i>	<i>\$37</i>	<i>(0%)</i>
Industrial, utility, defense, agriculture, mining	2,930	(1%)	2	(0%)	36	(0%)	\$230	(2%)
Total	493,800	(100%)	2,844	(100%)	12,812	(100%)	\$10,459	(100%)

Note: Sums may not equal totals due to rounding errors.

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

**Table 2. Fires in School Properties, by Property Use,
2014–2018 Annual Averages**

Property Use	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
High school and middle school	1,540	(48%)	29	75%	\$18	(50%)
Elementary school, including kindergarten	1,020	(32%)	7	17%	\$14	(37%)
Unclassified non-adult schools	470	(15%)	2	6%	\$3	(9%)
Preschool	200	(6%)	1	2%	\$1	(4%)
Total	3,230	(100%)	39	100%	\$37	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 3. Fires in School Properties, by Year, 2000–2018

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions)	
			As Reported	In 2018 Dollars
2000	4,490	95	\$79	\$115
2001	4,740	52	\$50	\$72
2002	4,460	89	\$81	\$113
2003	5,000	85	\$46	\$63
2004	5,100	49	\$52	\$69
2005	4,810	73	\$89	\$115
2006	4,560	55	\$110	\$137
2007	4,670	28	\$115	\$139
2008	4,610	102	\$46	\$54
2009	3,920	82	\$115	\$135
2010	3,510	41	\$46	\$54
2011	3,570	99	\$29	\$33
2012	3,390	48	\$65	\$71
2013	3,450	52	\$56	\$61
2014	3,360	46	\$37	\$39
2015	3,400	40	\$55	\$58
2016	2,990	38	\$32	\$34
2017	3,390	36	\$33	\$33
2018	3,000	34	\$27	\$27

Note: These are national estimates of fires reported to US municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. Fires are rounded to the nearest ten, civilian injuries are rounded to the nearest one, and direct property damage is rounded to the nearest million dollars. Inflation adjustments were based on the consumer price index found in the US Census Bureau’s Statistical Abstract of the United States: 2018, “Table 724, Purchasing Power of the Dollar.”

Source: NFIRS and NFPA fire experience survey.

Table 4. Fires in School Properties, by Leading Cause, 2014–2018 Annual Averages

Leading Cause	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Intentional	1,380	(43%)	23	(60%)	\$20	(54%)
Cooking equipment	1,010	(31%)	3	(7%)	\$1	(3%)
Playing with heat source	630	(19%)	6	(14%)	\$2	(6%)
Heating equipment	340	(10%)	4	(9%)	\$1	(3%)
Electrical distribution and lighting equipment	280	(9%)	8	(21%)	\$4	(11%)
Smoking materials	80	(3%)	0	(0%)	\$6	(17%)
Clothes dryer or washer	50	(2%)	1	(3%)	\$0	(1%)
Torch, burner, or soldering iron	40	(1%)	1	(4%)	\$4	(12%)

Note: Sums may not equal totals due to rounding errors. This table summarizes findings from multiple fields, meaning that the same fire may be listed under multiple causes.

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

Table 5. Fires in School Properties, by Month, 2014–2018 Annual Averages

Month	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
January	300	(9%)	2	(5%)	\$2	(5%)
February	310	(10%)	5	(13%)	\$3	(8%)
March	330	(10%)	5	(13%)	\$3	(7%)
April	300	(9%)	3	(7%)	\$3	(9%)
May	320	(10%)	6	(15%)	\$3	(8%)
June	200	(6%)	1	(2%)	\$2	(6%)
July	170	(5%)	1	(3%)	\$4	(11%)
August	190	(6%)	1	(4%)	\$7	(19%)
September	240	(7%)	4	(10%)	\$4	(11%)
October	290	(9%)	4	(10%)	\$1	(3%)
November	300	(9%)	5	(13%)	\$3	(7%)
December	280	(9%)	3	(7%)	\$2	(6%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 6. Fires in School Properties, by Day of Week, 2014–2018 Annual Averages

Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	180	(6%)	0	(1%)	\$5	(15%)
Monday	530	(16%)	11	(28%)	\$4	(12%)
Tuesday	570	(18%)	6	(16%)	\$4	(10%)
Wednesday	570	(18%)	11	(27%)	\$8	(22%)
Thursday	590	(18%)	3	(7%)	\$4	(10%)
Friday	580	(18%)	6	(15%)	\$6	(15%)
Saturday	200	(6%)	2	(5%)	\$6	(16%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 7. Fires in School Properties, by Time of Day, 2014–2018 Annual Averages

Time of Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	40	(1%)	0	(1%)	\$1	(3%)
1:00–1:59 a.m.	30	(1%)	0	(0%)	\$3	(9%)
2:00–2:59 a.m.	20	(1%)	0	(0%)	\$1	(4%)
3:00–3:59 a.m.	20	(1%)	0	(0%)	\$3	(8%)
4:00–4:59 a.m.	30	(1%)	0	(0%)	\$1	(1%)
5:00–5:59 a.m.	30	(1%)	0	(0%)	\$1	(2%)
6:00–6:59 a.m.	70	(2%)	0	(0%)	\$1	(3%)
7:00–7:59 a.m.	130	(4%)	4	(10%)	\$0	(1%)
8:00–8:59 a.m.	220	(7%)	5	(13%)	\$1	(2%)
9:00–9:59 a.m.	270	(9%)	5	(13%)	\$1	(2%)
10:00–10:59 a.m.	310	(10%)	5	(13%)	\$3	(8%)
11:00–11:59 a.m.	310	(10%)	4	(11%)	\$1	(3%)
12:00–12:59 p.m.	310	(10%)	6	(15%)	\$1	(3%)
1:00–1:59 p.m.	280	(9%)	2	(6%)	\$2	(6%)
2:00–2:59 p.m.	240	(7%)	4	(9%)	\$1	(3%)
3:00–3:59 p.m.	180	(6%)	2	(5%)	\$1	(3%)
4:00–4:59 p.m.	140	(4%)	0	(1%)	\$1	(2%)
5:00–5:59 p.m.	120	(4%)	0	(1%)	\$1	(2%)
6:00–6:59 p.m.	110	(3%)	0	(1%)	\$1	(4%)
7:00–7:59 p.m.	100	(3%)	0	(1%)	\$4	(11%)
8:00–8:59 p.m.	80	(3%)	0	(0%)	\$1	(4%)
9:00–9:59 p.m.	70	(2%)	0	(0%)	\$2	(6%)
10:00–10:59 p.m.	50	(2%)	0	(0%)	\$1	(2%)
11:00–11:59 p.m.	40	(1%)	0	(0%)	\$2	(6%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)

Note: Sums may not equal totals due to rounding errors.

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

**Table 8. Fires in School Properties, by Cause of Ignition,
2014–2018 Annual Averages**

Cause of Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Intentional	1,380	(43%)	23	(60%)	\$20	(54%)
Non-confined	450	(14%)	17	(44%)	\$19	(53%)
Confined	920	(29%)	7	(17%)	\$0	(1%)
Unintentional	1,220	(38%)	10	(26%)	\$9	(25%)
Non-confined	470	(14%)	10	(26%)	\$9	(25%)
Confined	760	(23%)	0	(0%)	\$0	(0%)
Failure of equipment or heat source	570	(18%)	5	(14%)	\$4	(12%)
Non-confined	350	(11%)	4	(10%)	\$4	(11%)
Confined	230	(7%)	1	(4%)	\$0	(0%)
Other or Unknown	60	(2%)	0	(0%)	\$3	(9%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)
Non-confined	1,300	(40%)	31	(80%)	\$36	(99%)
Confined	1,930	(60%)	8	(20%)	\$1	(1%)

Note: Sums may not equal totals due to rounding errors

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

Table 9. Fires in School Properties, by Area of Origin, 2014–2018 Annual Averages

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lavatory, bathroom, locker room, or check room	850	(26%)	9	(22%)	\$1	(2%)
Non-confined	280	(9%)	7	(17%)	\$1	(2%)
Confined	570	(18%)	2	(5%)	\$0	(0%)
Kitchen or cooking area	500	(15%)	5	(13%)	\$1	(3%)
Non-confined	70	(2%)	1	(2%)	\$1	(2%)
Confined	440	(14%)	4	(11%)	\$0	(0%)
Small assembly area, less than 100-person capacity	160	(5%)	5	(13%)	\$4	(10%)
Non-confined	90	(3%)	5	(13%)	\$4	(10%)
Confined	70	(2%)	0	(0%)	\$0	(0%)
Unclassified outside area	140	(4%)	0	(0%)	\$2	(6%)
Non-confined	30	(1%)	0	(0%)	\$2	(6%)
Confined	110	(3%)	0	(0%)	\$0	(0%)
Unclassified area of origin	120	(4%)	0	(0%)	\$0	(1%)
Non-confined	40	(1%)	0	(0%)	\$0	(1%)
Confined	80	(2%)	0	(0%)	\$0	(0%)
Trash or rubbish chute area or container	110	(3%)	0	(0%)	\$1	(2%)
Non-confined	10	(0%)	0	(0%)	\$1	(2%)
Confined	110	(3%)	0	(0%)	\$0	(0%)
Hallway, corridor, or mall	90	(3%)	1	(1%)	\$0	(1%)
Non-confined	30	(1%)	1	(1%)	\$0	(1%)
Confined	60	(2%)	0	(0%)	\$0	(0%)
Heating equipment room	90	(3%)	2	(6%)	\$4	(10%)
Non-confined	30	(1%)	0	(1%)	\$3	(10%)
Confined	60	(2%)	2	(5%)	\$0	(0%)
Office	70	(2%)	1	(3%)	\$2	(4%)
Non-confined	40	(1%)	1	(3%)	\$2	(4%)
Confined	30	(1%)	0	(0%)	\$0	(0%)
Exterior roof surface	60	(2%)	1	(2%)	\$4	(10%)
Non-confined	60	(2%)	1	(2%)	\$4	(10%)
Confined	10	(0%)	0	(0%)	\$0	(0%)

Table 9. Fires in School Properties, by Area of Origin, 2014–2018 Annual Averages (Continued)

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified function area	60	(2%)	0	(1%)	\$3	(7%)
Non-confined	40	(1%)	0	(1%)	\$3	(7%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Duct for HVAC, cable, exhaust, heating, or AC	60	(2%)	0	(0%)	\$0	(0%)
Non-confined	40	(1%)	0	(0%)	\$0	(0%)
Confined	10	(0%)	0	(0%)	\$0	(0%)
Other known area of origin	920	(28%)	15	(39%)	\$16	(44%)
Non-confined	540	(17%)	15	(39%)	\$16	(44%)
Confined	380	(12%)	0	(0%)	\$0	(0%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)
Non-confined	1,300	(40%)	31	(80%)	\$36	(99%)
Confined	1,930	(60%)	8	(20%)	\$1	(1%)

Note: Sums may not equal totals due to rounding errors.

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

Table 10. Fires in School Properties, by Item First Ignited, 2014–2018 Annual Averages

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Rubbish, trash, or waste	640	(20%)	2	(5%)	\$1	(2%)
Non-confined	90	(3%)	0	(0%)	\$1	(2%)
Confined	550	(17%)	2	(5%)	\$0	(0%)
Cooking materials, including food	470	(15%)	3	(7%)	\$0	(0%)
Non-confined	10	(0%)	0	(0%)	\$0	(0%)
Confined	460	(14%)	3	(7%)	\$0	(0%)
Magazine, newspaper, or writing paper	290	(9%)	1	(2%)	\$2	(6%)
Non-confined	100	(3%)	1	(2%)	\$2	(6%)
Confined	200	(6%)	0	(0%)	\$0	(0%)
Electrical wire or cable insulation	270	(9%)	4	(11%)	\$1	(4%)
Non-confined	220	(7%)	4	(11%)	\$1	(4%)
Confined	60	(2%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	260	(8%)	4	(10%)	\$1	(4%)
Non-confined	130	(4%)	2	(5%)	\$1	(4%)
Confined	130	(4%)	2	(6%)	\$0	(0%)
Rolled or wound material	210	(6%)	3	(9%)	\$0	(1%)
Non-confined	100	(3%)	3	(9%)	\$0	(1%)
Confined	110	(3%)	0	(0%)	\$0	(0%)
Flammable or combustible liquids or gases, piping, or filters	110	(4%)	7	(17%)	\$5	(14%)
Non-confined	50	(2%)	6	(15%)	\$5	(14%)
Confined	60	(2%)	1	(2%)	\$0	(0%)
Appliance housing or casing	100	(3%)	1	(3%)	\$1	(3%)
Non-confined	50	(2%)	1	(3%)	\$1	(3%)
Confined	50	(1%)	0	(0%)	\$0	(0%)
Box, carton, bag, basket, or barrel	100	(3%)	0	(0%)	\$0	(1%)
Non-confined	40	(1%)	0	(0%)	\$0	(1%)
Confined	60	(2%)	0	(0%)	\$0	(0%)
Multiple items first ignited	70	(2%)	0	(0%)	\$2	(6%)
Non-confined	40	(1%)	0	(0%)	\$2	(6%)
Confined	40	(1%)	0	(0%)	\$0	(0%)

Table 10. Fires in School Properties, by Item First Ignited, 2014–2018 Annual Averages (Continued)

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Other known item first ignited	700	(22%)	14	(36%)	\$22	(60%)
Non-confined	460	(14%)	14	(36%)	\$22	(60%)
Confined	230	(7%)	0	(0%)	\$0	(0%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)
Non-confined	1,300	(40%)	31	(80%)	\$36	(99%)
Confined	1,930	(60%)	8	(20%)	\$1	(1%)

Note: Sums may not equal totals due to rounding errors.

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

Table 11. Fires in School Properties, by Factor Contributing to Ignition, 2014–2018 Annual Averages

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Playing with heat source	630	(19%)	6	(14%)	\$2	(6%)
Non-confined	200	(6%)	6	(14%)	\$2	(6%)
Confined	420	(13%)	0	(0%)	\$0	(0%)
Electrical failure or malfunction	440	(14%)	8	(20%)	\$8	(21%)
Non-confined	340	(11%)	8	(20%)	\$8	(21%)
Confined	100	(3%)	0	(0%)	\$0	(0%)
Unclassified misuse of material or product	410	(13%)	6	(16%)	\$1	(3%)
Non-confined	140	(4%)	6	(16%)	\$1	(3%)
Confined	280	(9%)	0	(0%)	\$0	(0%)
Mechanical failure or malfunction	370	(11%)	1	(4%)	\$8	(23%)
Non-confined	180	(6%)	0	(0%)	\$8	(22%)
Confined	190	(6%)	1	(4%)	\$0	(0%)
Heat source too close to combustibles	270	(8%)	3	(8%)	\$1	(2%)
Non-confined	110	(3%)	3	(8%)	\$1	(2%)
Confined	160	(5%)	0	(0%)	\$0	(0%)
Abandoned or discarded material or product	240	(7%)	1	(3%)	\$0	(1%)
Non-confined	50	(2%)	0	(0%)	\$0	(1%)
Confined	190	(6%)	1	(3%)	\$0	(0%)
Unclassified factor contributed to ignition	220	(7%)	6	(16%)	\$3	(8%)
Non-confined	100	(3%)	2	(6%)	\$3	(8%)
Confined	130	(4%)	4	(10%)	\$0	(0%)
Equipment unattended	200	(6%)	2	(4%)	\$0	(0%)
Non-confined	20	(1%)	0	(0%)	\$0	(0%)
Confined	180	(6%)	2	(4%)	\$0	(0%)
Failure to clean	100	(3%)	1	(2%)	\$0	(0%)
Non-confined	20	(1%)	1	(2%)	\$0	(0%)
Confined	80	(3%)	0	(0%)	\$0	(0%)
Equipment not being operated properly	70	(2%)	1	(1%)	\$0	(0%)
Non-confined	10	(0%)	1	(1%)	\$0	(0%)
Confined	60	(2%)	0	(0%)	\$0	(0%)

Table 11. Fires in School Properties, by Factor Contributing to Ignition, 2014–2018 Annual Averages (Continued)

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Accidentally turned on, not turned off	70	(2%)	0	(0%)	\$3	(7%)
Non-confined	20	(1%)	0	(0%)	\$3	(7%)
Confined	50	(2%)	0	(0%)	\$0	(0%)
Unclassified operational deficiency	60	(2%)	0	(0%)	\$0	(0%)
Non-confined	10	(0%)	0	(0%)	\$0	(0%)
Confined	50	(2%)	0	(0%)	\$0	(0%)
Other known factor contributing to ignition	290	(9%)	10	(30%)	\$11	(30%)
Non-confined	160	(5%)	10	(30%)	\$11	(30%)
Confined	130	(4%)	0	(0%)	\$0	(0%)
Total fires	3,230	(100%)	39	(100%)	\$37	(100%)
Non-confined	1,300	(40%)	31	(80%)	\$36	(99%)
Confined	1,930	(60%)	8	(20%)	\$1	(1%)
Total factors	3,380	(105%)	46	(118%)	\$37	(102%)
Non-confined	1,350	(42%)	38	(98%)	\$37	(100%)
Confined	2,030	(63%)	8	(20%)	\$1	(1%)

Note: Sums may not equal totals due to rounding errors. Multiple entries are allowed in this field, so total factors add up to more than total fires. Electrical failures or malfunctions and mechanical failures or malfunctions were summed from NFIRS factors contributing to ignition codes 30-37 and 20-27, respectively.

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

Table 12. Fires in School Properties, by Heat Source, 2014–2018 Annual Averages

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lighter	660	(20%)	9	(22%)	\$2	(6%)
Non-confined	240	(8%)	9	(22%)	\$2	(6%)
Confined	420	(13%)	0	(0%)	\$0	(0%)
Unclassified heat from powered equipment	580	(18%)	3	(8%)	\$6	(15%)
Non-confined	240	(7%)	3	(8%)	\$6	(15%)
Confined	340	(11%)	0	(0%)	\$0	(0%)
Radiated or conducted heat from operating equipment	460	(14%)	4	(11%)	\$1	(3%)
Non-confined	130	(4%)	1	(3%)	\$1	(3%)
Confined	330	(10%)	3	(9%)	\$0	(0%)
Arcing	300	(9%)	5	(13%)	\$5	(13%)
Non-confined	230	(7%)	5	(13%)	\$5	(13%)
Confined	80	(2%)	0	(0%)	\$0	(0%)
Match	230	(7%)	3	(8%)	\$0	(0%)
Non-confined	50	(2%)	3	(8%)	\$0	(0%)
Confined	180	(6%)	0	(0%)	\$0	(0%)
Unclassified heat source	210	(6%)	0	(0%)	\$2	(5%)
Non-confined	60	(2%)	0	(0%)	\$2	(5%)
Confined	150	(5%)	0	(0%)	\$0	(0%)
Unclassified hot or smoldering object	160	(5%)	2	(5%)	\$1	(3%)
Non-confined	70	(2%)	2	(5%)	\$1	(3%)
Confined	100	(3%)	0	(0%)	\$0	(0%)
Spark, ember, or flame from operating equipment	150	(5%)	6	(15%)	\$2	(5%)
Non-confined	80	(2%)	3	(9%)	\$2	(5%)
Confined	70	(2%)	2	(6%)	\$0	(0%)
Smoking materials	80	(3%)	0	(0%)	\$6	(17%)
Non-confined	20	(1%)	0	(0%)	\$6	(17%)
Confined	60	(2%)	0	(0%)	\$0	(0%)
Flame or torch used for lighting	60	(2%)	1	(3%)	\$2	(5%)
Non-confined	30	(1%)	1	(3%)	\$2	(5%)
Confined	30	(1%)	0	(0%)	\$0	(0%)

Table 12. Fires in School Properties, by Heat Source, 2014–2018 Annual Averages (Continued)

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Spontaneous combustion or chemical reaction	60	(2%)	0	(0%)	\$5	(14%)
Non-confined	20	(1%)	0	(0%)	\$5	(14%)
Confined	30	(1%)	0	(0%)	\$0	(0%)
Heat from direct flame or convection currents	60	(2%)	5	(12%)	\$0	(1%)
Non-confined	20	(1%)	4	(9%)	\$0	(1%)
Confined	40	(1%)	1	(3%)	\$0	(0%)
Hot ember or ash	50	(2%)	0	(0%)	\$0	(0%)
Non-confined	20	(1%)	0	(0%)	\$0	(0%)
Confined	30	(1%)	0	(0%)	\$0	(0%)
Other known heat source	170	(5%)	0	(0%)	\$4	(12%)
Non-confined	100	(3%)	0	(0%)	\$4	(12%)
Confined	80	(2%)	0	(0%)	\$0	(0%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)
Non-confined	1,300	(40%)	31	(80%)	\$36	(99%)
Confined	1,930	(60%)	8	(20%)	\$1	(1%)

Note: Sums may not equal totals due to rounding errors. The statistics on smoking materials and lighters include a proportional share of fires in which the heat source was heat from an unclassified open flame or smoking material.

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

**Table 13. Fires in School Properties, by Equipment Involved in Ignition,
2014–2018 Annual Averages**

Equipment Involved	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Cooking equipment	1,010	(31%)	3	(7%)	\$1	(3%)
Confined cooking fire	920	(29%)	3	(7%)	\$0	(0%)
Range with or without oven, cooking surface	40	(1%)	0	(0%)	\$1	(2%)
Portable cooking or warming equipment	20	(1%)	0	(0%)	\$0	(0%)
Other known cooking equipment	30	(1%)	0	(0%)	\$0	(1%)
Contained trash or rubbish fire	780	(24%)	4	(10%)	\$0	(1%)
Heating equipment	340	(10%)	4	(9%)	\$1	(3%)
Confined fuel burner or boiler fire	190	(6%)	1	(4%)	\$0	(0%)
Fixed or portable space heater	70	(2%)	0	(0%)	\$1	(1%)
Central heat	20	(1%)	0	(0%)	\$0	(1%)
Water heater	20	(1%)	2	(6%)	\$0	(0%)
Other known heating equipment	30	(1%)	0	(0%)	\$0	(0%)
No equipment involved in ignition	290	(9%)	11	(27%)	\$18	(50%)
Electrical distribution and lighting equipment	280	(9%)	8	(21%)	\$4	(11%)
Lamp, bulb or lighting	120	(4%)	1	(1%)	\$2	(5%)
Wiring and related equipment	110	(3%)	3	(7%)	\$2	(5%)
Transformers and power supplies	40	(1%)	5	(12%)	\$0	(1%)
Other known electrical distribution or lighting equipment	20	(0%)	0	(0%)	\$0	(0%)
Fan	90	(3%)	0	(0%)	\$3	(7%)
Air conditioner	90	(3%)	1	(2%)	\$2	(6%)
Clothes dryer or washer	50	(2%)	1	(3%)	\$0	(1%)
Torch, burner or soldering iron	40	(1%)	1	(4%)	\$4	(12%)
Unclassified equipment involved in ignition	30	(1%)	1	(2%)	\$1	(3%)
Refrigerator or refrigerator/freezer	20	(1%)	2	(5%)	\$0	(0%)
Heat pump	20	(1%)	0	(0%)	\$0	(0%)
Computer	20	(1%)	0	(0%)	\$0	(0%)
Other known equipment involved in ignition	180	(6%)	4	(10%)	\$1	(4%)
Total	3,230	(100%)	39	(100%)	\$37	(100%)

**Table 13. Fires in School Properties, by Equipment Involved in Ignition, 2014–2018 Annual Averages
(Continued)**

Note: Sums may not equal totals due to rounding errors. Non-confined fires in which the equipment involved in ignition was unknown or not reported have been allocated proportionally among fires with known equipment involved. The same approach was used with confined cooking fires. Fires in which the equipment involved in ignition was entered as none, but the heat source indicated equipment involvement, or the heat source was unknown were also treated as unknown and allocated proportionally among fires with known equipment involved. Non-confined fires in which the equipment was partially unclassified (i.e., unclassified kitchen or cooking equipment, unclassified heating, cooling, or air condition equipment; etc.) were allocated proportionally among fires in that grouping (kitchen or cooking equipment; heating, cooling, or air conditioning equipment; etc.) The same approach was used with confined cooking fires. The estimates of fires involving fireplaces or chimneys include all fires with the confined chimney or flue incident type regardless of what may have been coded as equipment involved. Likewise, the estimates of fires involving furnaces, central heat, or boilers include all fires with a confined fuel burner or boiler incident type. The estimates shown should be considered upper bounds. Non-cooking confined fires were not analyzed separately. Estimates of other types of equipment exclude confined fires.

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

Table 14. Fires in High Schools and Middle Schools, by Leading Cause, 2014–2018 Annual Averages

Leading Cause	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Intentional	680	(44%)	9	(30%)	\$5	(26%)
Cooking equipment	370	(24%)	2	(5%)	\$0	(2%)
Playing with heat source	310	(20%)	4	(14%)	\$1	(4%)
Electrical distribution and lighting equipment	150	(10%)	7	(24%)	\$2	(10%)
Heating equipment	110	(7%)	1	(4%)	\$0	(2%)
Clothes dryer or washer	50	(3%)	1	(5%)	\$0	(1%)
Smoking materials	50	(3%)	0	(0%)	\$0	(1%)
Electronic, office, or entertainment equipment	40	(2%)	0	(0%)	\$0	(2%)
Torch, burner, or soldering iron	20	(1%)	1	(5%)	\$4	(19%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)

Note: Sums may not equal totals due to rounding errors. This table summarizes findings from multiple fields, meaning that the same fire may be listed under multiple causes.

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

Table 15. Fires in High Schools and Middle Schools, by Month, 2014–2018 Annual Averages

Month	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
January	140	(9%)	2	(5%)	\$1	(5%)
February	160	(11%)	4	(15%)	\$2	(12%)
March	170	(11%)	5	(16%)	\$2	(12%)
April	150	(10%)	2	(5%)	\$3	(14%)
May	160	(10%)	5	(18%)	\$1	(3%)
June	90	(6%)	0	(1%)	\$1	(3%)
July	60	(4%)	1	(4%)	\$2	(10%)
August	80	(5%)	0	(1%)	\$5	(27%)
September	110	(7%)	4	(13%)	\$1	(4%)
October	130	(9%)	2	(6%)	\$1	(5%)
November	140	(9%)	3	(10%)	\$1	(6%)
December	140	(9%)	2	(6%)	\$0	(1%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 16. Fires in High Schools and Middle Schools, by Day of Week, 2014–2018 Annual Averages

Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	60	(4%)	0	(1%)	\$1	(4%)
Monday	260	(17%)	10	(34%)	\$3	(17%)
Tuesday	280	(18%)	3	(12%)	\$1	(6%)
Wednesday	280	(18%)	9	(31%)	\$7	(40%)
Thursday	300	(19%)	2	(5%)	\$1	(8%)
Friday	280	(18%)	4	(15%)	\$3	(16%)
Saturday	80	(5%)	0	(1%)	\$2	(9%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 17. Fires in High Schools and Middle Schools, by Time of Day, 2014–2018 Annual Averages

Time of Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	20	(1%)	0	(1%)	\$0	(1%)
1:00–1:59 a.m.	10	(1%)	0	(0%)	\$3	(17%)
2:00–2:59 a.m.	10	(1%)	0	(0%)	\$1	(6%)
3:00–3:59 a.m.	10	(1%)	0	(0%)	\$2	(11%)
4:00–4:59 a.m.	10	(1%)	0	(0%)	\$0	(1%)
5:00–5:59 a.m.	10	(1%)	0	(0%)	\$1	(4%)
6:00–6:59 a.m.	30	(2%)	0	(0%)	\$0	(3%)
7:00–7:59 a.m.	50	(3%)	3	(12%)	\$0	(1%)
8:00–8:59 a.m.	100	(6%)	5	(17%)	\$0	(1%)
9:00–9:59 a.m.	130	(8%)	3	(10%)	\$0	(3%)
10:00–10:59 a.m.	150	(10%)	2	(7%)	\$3	(16%)
11:00–11:59 a.m.	150	(10%)	3	(11%)	\$1	(4%)
12:00–12:59 p.m.	170	(11%)	5	(18%)	\$0	(2%)
1:00–1:59 p.m.	160	(10%)	2	(6%)	\$0	(1%)
2:00–2:59 p.m.	140	(9%)	3	(9%)	\$0	(2%)
3:00–3:59 p.m.	90	(6%)	2	(7%)	\$0	(2%)
4:00–4:59 p.m.	70	(4%)	0	(1%)	\$0	(2%)
5:00–5:59 p.m.	50	(3%)	0	(0%)	\$0	(1%)
6:00–6:59 p.m.	50	(3%)	0	(0%)	\$1	(6%)
7:00–7:59 p.m.	40	(3%)	0	(1%)	\$1	(7%)
8:00–8:59 p.m.	30	(2%)	0	(0%)	\$1	(3%)
9:00–9:59 p.m.	30	(2%)	0	(0%)	\$1	(4%)
10:00–10:59 p.m.	20	(1%)	0	(0%)	\$0	(1%)
11:00–11:59 p.m.	20	(1%)	0	(0%)	\$0	(1%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)

Note: Sums may not equal totals due to rounding errors.

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

**Table 18. Fires in High Schools and Middle Schools, by Cause of Ignition,
2014–2018 Annual Averages**

Cause of Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Intentional	680	(44%)	9	(30%)	\$5	(26%)
Non-confined	280	(18%)	9	(30%)	\$5	(26%)
Confined	390	(26%)	0	(0%)	\$0	(1%)
Unintentional	600	(39%)	15	(53%)	\$11	(61%)
Non-confined	240	(16%)	14	(48%)	\$11	(60%)
Confined	360	(24%)	1	(5%)	\$0	(1%)
Failure of equipment or heat source	240	(15%)	5	(17%)	\$2	(9%)
Non-confined	150	(10%)	3	(10%)	\$1	(8%)
Confined	90	(6%)	2	(7%)	\$0	(0%)
Other or unknown	20	(1%)	0	(0%)	\$1	(4%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 19. Fires in High Schools and Middle Schools, by Area of Origin, 2014–2018 Annual Averages

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lavatory, bathroom, locker room, or check room	490	(32%)	6	(20%)	\$0	(2%)
Non-confined	190	(12%)	6	(20%)	\$0	(2%)
Confined	300	(20%)	0	(0%)	\$0	(0%)
Kitchen or cooking area	190	(12%)	4	(14%)	\$1	(3%)
Non-confined	30	(2%)	1	(2%)	\$1	(3%)
Confined	160	(10%)	4	(13%)	\$0	(0%)
Small assembly area, less than 100-person capacity	80	(5%)	4	(14%)	\$1	(7%)
Non-confined	50	(3%)	4	(14%)	\$1	(7%)
Confined	30	(2%)	0	(0%)	\$0	(0%)
Hallway, corridor, or mall	50	(3%)	1	(2%)	\$0	(0%)
Non-confined	20	(1%)	1	(2%)	\$0	(0%)
Confined	30	(2%)	0	(0%)	\$0	(0%)
Trash or rubbish chute area or container	50	(3%)	0	(0%)	\$1	(3%)
Non-confined	0	(0%)	0	(0%)	\$1	(3%)
Confined	50	(3%)	0	(0%)	\$0	(0%)
Unclassified outside area	50	(3%)	0	(0%)	\$2	(11%)
Non-confined	10	(1%)	0	(0%)	\$2	(11%)
Confined	40	(3%)	0	(0%)	\$0	(0%)
Unclassified area of origin	40	(3%)	0	(0%)	\$0	(1%)
Non-confined	20	(1%)	0	(0%)	\$0	(1%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Heating equipment room	30	(2%)	0	(1%)	\$3	(16%)
Non-confined	10	(1%)	0	(1%)	\$3	(16%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Office	30	(2%)	1	(4%)	\$1	(7%)
Non-confined	20	(1%)	1	(4%)	\$1	(7%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Exterior roof surface	30	(2%)	1	(2%)	\$0	(2%)
Non-confined	30	(2%)	1	(2%)	\$0	(2%)
Confined	0	(0%)	0	(0%)	\$0	(0%)

**Table 19. Fires in High Schools and Middle Schools, by Area of Origin, 2014–2018 Annual Averages
(Continued)**

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Laundry room or area	30	(2%)	1	(4%)	\$0	(0%)
Non-confined	20	(1%)	1	(4%)	\$0	(0%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Laboratory	30	(2%)	3	(11%)	\$0	(1%)
Non-confined	10	(1%)	3	(11%)	\$0	(1%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Unclassified function area	20	(1%)	0	(1%)	\$2	(10%)
Non-confined	20	(1%)	0	(1%)	\$2	(10%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Other known area of origin	419	(27%)	8	(27%)	\$6	(35%)
Non-confined	260	(17%)	8	(27%)	\$6	(34%)
Confined	159	(10%)	0	(0%)	\$0	(0%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)
Non-confined	680	(44%)	25	(87%)	\$18	(98%)
Confined	850	(56%)	4	(13%)	\$0	(2%)

Note: Sums may not equal totals due to rounding errors.

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

Table 20. Fires in High Schools and Middle Schools, by Item First Ignited, 2014–2018 Annual Averages

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Rubbish, trash, or waste	330	(22%)	0	(0%)	\$0	(1%)
Non-confined	50	(4%)	0	(0%)	\$0	(1%)
Confined	280	(18%)	0	(0%)	\$0	(0%)
Cooking materials, including food	180	(12%)	2	(6%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	170	(11%)	2	(6%)	\$0	(0%)
Magazine, newspaper, or writing paper	150	(10%)	1	(2%)	\$1	(8%)
Non-confined	50	(3%)	1	(2%)	\$1	(8%)
Confined	90	(6%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	120	(8%)	2	(6%)	\$1	(6%)
Non-confined	70	(5%)	2	(6%)	\$1	(6%)
Confined	50	(3%)	0	(0%)	\$0	(0%)
Electrical wire or cable insulation	120	(8%)	4	(12%)	\$1	(4%)
Non-confined	100	(6%)	4	(12%)	\$1	(4%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Rolled or wound material	120	(8%)	2	(8%)	\$0	(1%)
Non-confined	60	(4%)	2	(8%)	\$0	(1%)
Confined	50	(3%)	0	(0%)	\$0	(0%)
Flammable or combustible liquids or gases, piping, or filters	70	(4%)	8	(26%)	\$5	(29%)
Non-confined	30	(2%)	6	(19%)	\$5	(29%)
Confined	30	(2%)	2	(7%)	\$0	(0%)
Box, carton, bag, basket, or barrel	40	(3%)	0	(0%)	\$0	(1%)
Non-confined	20	(1%)	0	(0%)	\$0	(1%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Appliance housing or casing	40	(3%)	1	(2%)	\$0	(2%)
Non-confined	30	(2%)	1	(2%)	\$0	(1%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Multiple items first ignited	40	(2%)	0	(0%)	\$1	(7%)
Non-confined	20	(1%)	0	(0%)	\$1	(7%)
Confined	20	(1%)	0	(0%)	\$0	(0%)

Table 20. Fires in High Schools and Middle Schools, by Item First Ignited, 2014–2018 Annual Averages (Continued)

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Dust, fiber, lint, including sawdust or excelsior	30	(2%)	0	(1%)	\$0	(1%)
Non-confined	20	(1%)	0	(1%)	\$0	(1%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Other known item first ignited	310	(20%)	11	(36%)	\$7	(38%)
Non-confined	220	(15%)	11	(36%)	\$7	(38%)
Confined	80	(5%)	0	(0%)	\$0	(0%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)
Non-confined	680	(44%)	25	(87%)	\$18	(98%)
Confined	850	(56%)	4	(13%)	\$0	(2%)

Note: Sums may not equal totals due to rounding errors.

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

Table 21. Fires in High Schools and Middle Schools, by Factor Contributing to Ignition, 2014–2018 Annual Averages

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Playing with heat source	310	(20%)	4	(14%)	\$1	(4%)
Non-confined	120	(8%)	4	(14%)	\$1	(4%)
Confined	190	(12%)	0	(0%)	\$0	(0%)
Unclassified misuse of material or product	240	(16%)	6	(19%)	\$0	(2%)
Non-confined	80	(6%)	6	(19%)	\$0	(2%)
Confined	160	(10%)	0	(0%)	\$0	(0%)
Electrical failure or malfunction	180	(12%)	6	(20%)	\$2	(14%)
Non-confined	150	(10%)	6	(20%)	\$2	(13%)
Confined	30	(2%)	0	(0%)	\$0	(0%)
Mechanical failure or malfunction	160	(10%)	2	(7%)	\$6	(32%)
Non-confined	80	(5%)	0	(0%)	\$6	(32%)
Confined	80	(5%)	2	(7%)	\$0	(0%)
Heat source too close to combustibles	140	(9%)	2	(8%)	\$0	(2%)
Non-confined	70	(4%)	2	(8%)	\$0	(2%)
Confined	70	(5%)	0	(0%)	\$0	(0%)
Unclassified factor contributed to ignition	130	(9%)	4	(13%)	\$1	(4%)
Non-confined	60	(4%)	2	(8%)	\$1	(3%)
Confined	70	(4%)	2	(6%)	\$0	(0%)
Abandoned or discarded material or product	100	(6%)	0	(0%)	\$0	(1%)
Non-confined	20	(2%)	0	(0%)	\$0	(1%)
Confined	80	(5%)	0	(0%)	\$0	(0%)
Equipment unattended	70	(5%)	0	(0%)	\$0	(0%)
Non-confined	10	(1%)	0	(0%)	\$0	(0%)
Confined	60	(4%)	0	(0%)	\$0	(0%)
Equipment not being operated properly	40	(3%)	0	(2%)	\$0	(0%)
Non-confined	10	(0%)	0	(2%)	\$0	(0%)
Confined	40	(2%)	0	(0%)	\$0	(0%)
Failure to clean	40	(3%)	1	(2%)	\$0	(0%)
Non-confined	10	(1%)	1	(2%)	\$0	(0%)
Confined	30	(2%)	0	(0%)	\$0	(0%)

Table 21. Fires in High Schools and Middle Schools, by Factor Contributing to Ignition, 2014–2018 Annual Averages (Continued)

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Accidentally turned on, not turned off	30	(2%)	0	(0%)	\$2	(11%)
Non-confined	10	(1%)	0	(0%)	\$2	(11%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Other known factor contributing to ignition	160	(11%)	10	(38%)	\$6	(30%)
Non-confined	90	(6%)	10	(38%)	\$5	(30%)
Confined	70	(5%)	0	(0%)	\$0	(0%)
Total Fires	1,540	(100%)	29	(100%)	\$18	(100%)
Non-confined	680	(44%)	25	(87%)	\$18	(98%)
Confined	850	(56%)	4	(13%)	\$0	(2%)
Total Factors	1,610	(105%)	36	(124%)	\$18	(101%)
Non-confined	710	(46%)	32	(111%)	\$18	(99%)
Confined	890	(58%)	4	(13%)	\$0	(2%)

Note: Sums may not equal totals due to rounding errors. Multiple entries are allowed in this field, so total factors will add up to more than total fires. Electrical failures or malfunctions and mechanical failures or malfunctions were summed from NFIRS factors contributing to ignition codes 30-37 and 20-27, respectively.

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

Table 22. Fires in High Schools and Middle Schools, by Heat Source, 2014–2018 Annual Averages

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lighter	370	(24%)	7	(23%)	\$3	(16%)
Non-confined	160	(10%)	7	(23%)	\$3	(16%)
Confined	220	(14%)	0	(0%)	\$0	(0%)
Unclassified heat from powered equipment	240	(16%)	2	(8%)	\$4	(20%)
Non-confined	120	(8%)	2	(8%)	\$4	(20%)
Confined	120	(8%)	0	(0%)	\$0	(0%)
Radiated or conducted heat from operating equipment	200	(13%)	3	(12%)	\$1	(4%)
Non-confined	70	(4%)	1	(3%)	\$1	(4%)
Confined	130	(9%)	2	(9%)	\$0	(0%)
Arcing	130	(8%)	4	(13%)	\$1	(6%)
Non-confined	100	(6%)	4	(13%)	\$1	(6%)
Confined	30	(2%)	0	(0%)	\$0	(0%)
Match	110	(7%)	3	(11%)	\$0	(0%)
Non-confined	30	(2%)	3	(11%)	\$0	(0%)
Confined	80	(5%)	0	(0%)	\$0	(0%)
Unclassified heat source	90	(6%)	0	(0%)	\$1	(7%)
Non-confined	30	(2%)	0	(0%)	\$1	(7%)
Confined	60	(4%)	0	(0%)	\$0	(0%)
Unclassified hot or smoldering object	80	(5%)	2	(5%)	\$0	(3%)
Non-confined	30	(2%)	2	(5%)	\$0	(3%)
Confined	40	(3%)	0	(0%)	\$0	(0%)
Spark, ember, or flame from operating equipment	60	(4%)	3	(11%)	\$1	(6%)
Non-confined	40	(3%)	3	(11%)	\$1	(6%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Smoking materials	50	(3%)	0	(0%)	\$0	(1%)
Non-confined	10	(1%)	0	(0%)	\$0	(1%)
Confined	30	(2%)	0	(0%)	\$0	(0%)
Spontaneous combustion or chemical reaction	40	(3%)	0	(0%)	\$5	(29%)
Non-confined	10	(1%)	0	(0%)	\$5	(29%)
Confined	30	(2%)	0	(0%)	\$0	(0%)

Table 22. Fires in High Schools and Middle Schools, by Heat Source, 2014–2018 Annual Averages (Continued)

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Flame or torch used for lighting	40	(2%)	0	(1%)	\$0	(3%)
Non-confined	10	(1%)	0	(1%)	\$0	(2%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Heat from direct flame or convection currents	30	(2%)	3	(12%)	\$0	(1%)
Non-confined	10	(1%)	3	(12%)	\$0	(1%)
Confined	20	(1%)	0	(0%)	\$0	(0%)
Hot ember or ash	20	(2%)	0	(0%)	\$0	(0%)
Non-confined	10	(1%)	0	(0%)	\$0	(0%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Other known heat source	80	(5%)	0	(0%)	\$1	(4%)
Non-confined	40	(3%)	0	(0%)	\$1	(4%)
Confined	40	(2%)	0	(0%)	\$0	(0%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)
Non-confined	680	(44%)	25	(87%)	\$18	(98%)
Confined	850	(56%)	4	(13%)	\$0	(2%)

Note: Sums may not equal totals due to rounding errors. The statistics on smoking materials and lighters include a proportional share of fires in which the heat source was heat from an unclassified open flame or smoking material.

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

Table 23. Fires in High Schools and Middle Schools, by Equipment Involved in Ignition, 2014–2018 Annual Averages

Equipment Involved	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Contained trash or rubbish fire	460	(30%)	2	(7%)	\$0	(2%)
Cooking equipment	370	(24%)	2	(5%)	\$0	(2%)
Confined cooking fire	320	(21%)	2	(5%)	\$0	(0%)
Range with or without oven, cooking surface	20	(2%)	0	(0%)	\$0	(2%)
Portable cooking or warming equipment	10	(1%)	0	(0%)	\$0	(0%)
Other known cooking equipment	20	(1%)	0	(0%)	\$0	(0%)
No equipment involved in ignition	170	(11%)	8	(27%)	\$10	(52%)
Electrical distribution and lighting equipment	150	(10%)	7	(24%)	\$2	(10%)
Lamp, bulb, or lighting	60	(4%)	0	(0%)	\$1	(4%)
Wiring and related equipment	60	(4%)	2	(8%)	\$1	(5%)
Transformers and power supplies	20	(1%)	5	(16%)	\$0	(1%)
Other known electrical distribution or lighting equipment	10	(0%)	0	(0%)	\$0	(0%)
Heating equipment	110	(7%)	1	(4%)	\$0	(2%)
Confined fuel burner or boiler fire	60	(4%)	0	(0%)	\$0	(0%)
Fixed or portable space heater	20	(2%)	0	(0%)	\$0	(2%)
Confined chimney or flue fire	10	(1%)	0	(0%)	\$0	(0%)
Other known heating equipment	20	(1%)	1	(4%)	\$0	(0%)
Clothes dryer	40	(3%)	1	(5%)	\$0	(1%)
Air conditioner	40	(2%)	1	(4%)	\$0	(3%)
Fan	30	(2%)	0	(0%)	\$0	(1%)
Torch, burner, or soldering iron	20	(1%)	1	(5%)	\$4	(19%)
Unclassified equipment involved in ignition	20	(1%)	1	(3%)	\$1	(4%)
Computer	10	(1%)	0	(0%)	\$0	(0%)
Industrial furnace or kiln	10	(1%)	0	(0%)	\$0	(0%)
Heat pump	10	(1%)	0	(0%)	\$0	(0%)
Cigarette lighter or pipe lighter	10	(1%)	0	(0%)	\$0	(0%)
Other known equipment involved in ignition	90	(6%)	4	(13%)	\$1	(4%)
Total	1,540	(100%)	29	(100%)	\$18	(100%)

Table 23. Fires in High Schools and Middle Schools, by Equipment Involved in Ignition, 2014–2018 Annual Averages (Continued)

Note: Sums may not equal totals due to rounding errors. Non-confined fires in which the equipment involved in ignition was unknown or not reported have been allocated proportionally among fires with known equipment involved. The same approach was used with confined cooking fires. Fires in which the equipment involved in ignition was entered as none, but for which the heat source indicated equipment involvement, or where the heat source was unknown were also treated as unknown and allocated proportionally among fires with known equipment involved. Non-confined fires in which the equipment was partially unclassified (i.e., unclassified kitchen or cooking equipment; unclassified heating, cooling, or air conditioning equipment; etc.) were allocated proportionally among fires in that grouping (kitchen or cooking equipment; heating, cooling, or air conditioning equipment; etc.) The same approach was used with confined cooking fires. The estimates of fires involving fireplaces or chimneys include all fires with the confined chimney or flue incident type regardless of what may have been coded as equipment involved. Likewise, the estimates of fires involving furnaces, central heat, or boilers include all fires with confined fuel burner or boiler incident type. The estimates shown should be considered upper bounds. Non-cooking confined fires were not analyzed separately. Estimates of other types of equipment exclude confined fires.

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

Table 24. Fires in Elementary Schools, by Leading Cause, 2014–2018 Annual Averages

Leading Cause	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Intentional	340	(33%)	1	(18%)	\$2	(15%)
Cooking equipment	310	(30%)	1	(20%)	\$0	(3%)
Playing with heat source	230	(22%)	1	(18%)	\$1	(4%)
Heating equipment	130	(13%)	1	(21%)	\$1	(5%)
Electrical distribution and lighting equipment	80	(8%)	0	(7%)	\$1	(10%)
Smoking materials	20	(2%)	0	(0%)	\$5	(33%)
Torch, burner, or soldering iron	10	(1%)	0	(0%)	\$0	(3%)

Note: Sums may not equal totals due to rounding errors. This table summarizes findings from multiple fields, meaning that the same fire may be listed under multiple causes.

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

Table 25. Fires in Elementary Schools, by Month, 2014–2018 Annual Averages

Month	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
January	90	(9%)	0	(7%)	\$0	(4%)
February	90	(9%)	1	(11%)	\$0	(2%)
March	100	(10%)	0	(0%)	\$0	(2%)
April	90	(9%)	1	(20%)	\$1	(4%)
May	100	(10%)	1	(8%)	\$2	(15%)
June	70	(7%)	0	(5%)	\$2	(12%)
July	60	(6%)	0	(0%)	\$2	(13%)
August	70	(7%)	0	(7%)	\$1	(8%)
September	80	(8%)	0	(0%)	\$3	(22%)
October	90	(9%)	0	(5%)	\$0	(1%)
November	90	(9%)	2	(25%)	\$1	(10%)
December	80	(8%)	1	(11%)	\$1	(8%)
Total	1,020	(100%)	7	(100%)	\$14	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 26. Fires in Elementary Schools, by Day of Week, 2014–2018 Annual Averages

Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Sunday	70	(7%)	0	(0%)	\$4	(31%)
Monday	160	(16%)	0	(7%)	\$1	(6%)
Tuesday	180	(17%)	2	(36%)	\$2	(12%)
Wednesday	180	(17%)	1	(18%)	\$1	(6%)
Thursday	180	(18%)	1	(20%)	\$1	(6%)
Friday	180	(18%)	1	(20%)	\$2	(16%)
Saturday	70	(7%)	0	(0%)	\$3	(23%)
Total	1,020	(100%)	7	(100%)	\$14	(100%)

Note: Sums may not equal totals due to rounding errors.

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

Table 27. Fires in Elementary Schools, by Time of Day, 2014–2018 Annual Averages

Time of Day	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Midnight–12:59 a.m.	20	2%	0	(0%)	\$0	(2%)
1:00–1:59 a.m.	10	1%	0	(0%)	\$0	(2%)
2:00–2:59 a.m.	10	1%	0	(0%)	\$0	(2%)
3:00–3:59 a.m.	10	1%	0	(0%)	\$1	(7%)
4:00–4:59 a.m.	10	1%	0	(0%)	\$0	(1%)
5:00–5:59 a.m.	10	1%	0	(0%)	\$0	(1%)
6:00–6:59 a.m.	20	2%	0	(0%)	\$0	(3%)
7:00–7:59 a.m.	50	4%	0	(5%)	\$0	(1%)
8:00–8:59 a.m.	70	7%	0	(0%)	\$0	(3%)
9:00–9:59 a.m.	80	8%	2	(25%)	\$0	(1%)
10:00–10:59 a.m.	100	10%	1	(19%)	\$0	(1%)
11:00–11:59 a.m.	90	9%	1	(13%)	\$0	(1%)
12:00–12:59 p.m.	90	9%	1	(11%)	\$0	(1%)
1:00–1:59 p.m.	80	8%	1	(8%)	\$2	(12%)
2:00–2:59 p.m.	60	6%	1	(11%)	\$0	(1%)
3:00–3:59 p.m.	60	6%	0	(0%)	\$1	(4%)
4:00–4:59 p.m.	50	4%	0	(0%)	\$0	(3%)
5:00–5:59 p.m.	50	4%	0	(0%)	\$0	(1%)
6:00–6:59 p.m.	40	4%	0	(7%)	\$0	(1%)
7:00–7:59 p.m.	30	3%	0	(0%)	\$3	(20%)
8:00–8:59 p.m.	30	3%	0	(0%)	\$0	(3%)
9:00–9:59 p.m.	30	3%	0	(0%)	\$2	(11%)
10:00–10:59 p.m.	20	2%	0	(0%)	\$0	(4%)
11:00–11:59 p.m.	20	2%	0	(0%)	\$2	(14%)
Total	1,020	100%	7	(100%)	\$14	(100%)

Note: Sums may not equal totals due to rounding errors.

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

**Table 28. Fires in Elementary Schools, by Cause of Ignition,
2014–2018 Annual Averages**

Cause of Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unintentional	440	(43%)	5	(73%)	\$6	(47%)
Non-confined	140	(14%)	1	(8%)	\$6	(46%)
Confined	290	(29%)	4	(64%)	\$0	(1%)
Intentional	340	(33%)	1	(18%)	\$2	(15%)
Non-confined	140	(14%)	1	(18%)	\$2	(15%)
Confined	200	(19%)	0	(0%)	\$0	(0%)
Failure of equipment or heat source	230	(22%)	1	(10%)	\$2	(14%)
Non-confined	140	(14%)	1	(10%)	\$2	(14%)
Confined	80	(8%)	0	(0%)	\$0	(0%)
Other or unknown	11	(1%)	0	(0%)	\$0	(0%)
Total	1,020	(100%)	7	(100%)	\$14	(100%)

Note: Sums may not equal totals due to rounding errors.

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

**Table 29. Fires in Elementary Schools, by Area of Origin,
2014–2018 Annual Averages**

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Lavatory, bathroom, locker room, or check room	210	(20%)	2	(34%)	\$0	(1%)
Non-confined	70	(7%)	1	(12%)	\$0	(1%)
Confined	140	(13%)	1	(21%)	\$0	(0%)
Kitchen or cooking area	150	(15%)	1	(21%)	\$0	(1%)
Non-confined	30	(3%)	0	(0%)	\$0	(1%)
Confined	130	(12%)	1	(21%)	\$0	(0%)
Small assembly area, less than 100-person capacity	50	(5%)	1	(17%)	\$2	(16%)
Non-confined	30	(3%)	1	(17%)	\$2	(16%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Unclassified outside area	50	(5%)	0	(0%)	\$0	(1%)
Non-confined	10	(1%)	0	(0%)	\$0	(1%)
Confined	40	(4%)	0	(0%)	\$0	(0%)
Unclassified area of origin	50	(5%)	0	(0%)	\$0	(0%)
Non-confined	20	(2%)	0	(0%)	\$0	(0%)
Confined	30	(3%)	0	(0%)	\$0	(0%)
Trash or rubbish chute, area or container	40	(4%)	0	(0%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	40	(4%)	0	(0%)	\$0	(0%)
Heating equipment room	40	(4%)	1	(22%)	\$1	(4%)
Non-confined	10	(1%)	0	(0%)	\$1	(4%)
Confined	30	(3%)	1	(22%)	\$0	(0%)
Duct for HVAC, cable, exhaust, heating, or AC	30	(3%)	0	(0%)	\$0	(0%)
Non-confined	20	(2%)	0	(0%)	\$0	(0%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Exterior roof surface	30	(3%)	0	(0%)	\$3	(23%)
Non-confined	20	(2%)	0	(0%)	\$3	(23%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Office	30	(3%)	0	(0%)	\$0	(1%)
Non-confined	10	(1%)	0	(0%)	\$0	(1%)
Confined	10	(1%)	0	(0%)	\$0	(0%)

**Table 29. Fires in Elementary Schools, by Area of Origin,
2014–2018 Annual Averages (Continued)**

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Unclassified function area	20	(2%)	0	(0%)	\$1	(4%)
Non-confined	20	(2%)	0	(0%)	\$1	(4%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Hallway, corridor, or mall	20	(2%)	0	(0%)	\$0	(2%)
Non-confined	10	(1%)	0	(0%)	\$0	(2%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
On or near highway, public way, or street	20	(2%)	0	(0%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Other known area of origin	280	(27%)	0	(7%)	\$6	(46%)
Non-confined	180	(18%)	0	(7%)	\$6	(46%)
Confined	100	(9%)	0	(0%)	\$0	(0%)
Total	1,020	(100%)	7	(100%)	\$14	(100%)
Non-confined	440	(43%)	2	(36%)	\$14	(99%)
Confined	580	(57%)	4	(64%)	\$0	(1%)

Note: Sums may not equal totals due to rounding errors.

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

Table 30. Fires in Elementary Schools, by Item First Ignited, 2014–2018 Annual Averages

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Rubbish, trash, or waste	180	(17%)	1	(21%)	\$1	(4%)
Non-confined	30	(3%)	0	(0%)	\$1	(4%)
Confined	150	(15%)	1	(21%)	\$0	(0%)
Cooking materials, including food	150	(15%)	1	(21%)	\$0	(1%)
Non-confined	10	(0%)	0	(0%)	\$0	(0%)
Confined	150	(14%)	1	(21%)	\$0	(0%)
Electrical wire or cable insulation	110	(11%)	0	(0%)	\$1	(4%)
Non-confined	90	(9%)	0	(0%)	\$0	(4%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Magazine, newspaper, or writing paper	90	(9%)	0	(0%)	\$0	(1%)
Non-confined	30	(3%)	0	(0%)	\$0	(1%)
Confined	60	(6%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	90	(8%)	1	(22%)	\$0	(2%)
Non-confined	50	(5%)	0	(0%)	\$0	(1%)
Confined	40	(4%)	1	(22%)	\$0	(0%)
Rolled or wound material	50	(5%)	1	(12%)	\$0	(0%)
Non-confined	30	(3%)	1	(12%)	\$0	(0%)
Confined	30	(3%)	0	(0%)	\$0	(0%)
Appliance housing or casing	40	(4%)	0	(7%)	\$0	(3%)
Non-confined	20	(2%)	0	(7%)	\$0	(3%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Box, carton, bag, basket, or barrel	40	(3%)	0	(0%)	\$0	(1%)
Non-confined	10	(1%)	0	(0%)	\$0	(1%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Flammable or combustible liquids or gases, piping, or filters	30	(3%)	0	(0%)	\$0	(0%)
Non-confined	10	(1%)	0	(0%)	\$0	(0%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Multiple items first ignited	20	(2%)	0	(0%)	\$0	(3%)
Non-confined	10	(1%)	0	(0%)	\$0	(3%)
Confined	10	(1%)	0	(0%)	\$0	(0%)

Table 30. Fires in Elementary School Fires, by Item First Ignited, 2014–2018 Annual Averages (Continued)

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Exterior roof covering or finish	20	(2%)	0	(0%)	\$2	(14%)
Non-confined	20	(2%)	0	(0%)	\$2	(14%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Other known item first ignited	210	(20%)	1	(17%)	\$9	(68%)
Non-confined	140	(13%)	1	(17%)	\$9	(68%)
Confined	70	(7%)	0	(0%)	\$0	(0%)
Total	1,020	(100%)	7	(100%)	\$14	(100%)
Non-confined	440	(43%)	2	(36%)	\$14	(99%)
Confined	580	(57%)	4	(64%)	\$0	(1%)

Note: Sums may not equal totals due to rounding errors.

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

Table 31. Fires in Elementary Schools, by Factor Contributing to Ignition, 2014–2018 Annual Averages

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Playing with heat source	230	(22%)	1	(18%)	\$1	(4%)
Non-confined	70	(7%)	1	(18%)	\$1	(4%)
Confined	160	(15%)	0	(0%)	\$0	(0%)
Electrical failure or malfunction	180	(17%)	1	(10%)	\$4	(28%)
Non-confined	130	(13%)	1	(10%)	\$4	(28%)
Confined	40	(4%)	0	(0%)	\$0	(0%)
Mechanical failure or malfunction	150	(14%)	0	(0%)	\$1	(5%)
Non-confined	80	(7%)	0	(0%)	\$1	(5%)
Confined	70	(7%)	0	(0%)	\$0	(1%)
Unclassified misuse of material or product	80	(8%)	1	(8%)	\$1	(5%)
Non-confined	40	(4%)	1	(8%)	\$1	(5%)
Confined	40	(4%)	0	(0%)	\$0	(0%)
Abandoned or discarded material or product	80	(7%)	1	(14%)	\$0	(2%)
Non-confined	20	(2%)	0	(0%)	\$0	(2%)
Confined	60	(6%)	1	(14%)	\$0	(0%)
Heat source too close to combustibles	70	(7%)	0	(0%)	\$0	(2%)
Non-confined	30	(3%)	0	(0%)	\$0	(2%)
Confined	40	(4%)	0	(0%)	\$0	(0%)
Equipment unattended	60	(6%)	1	(18%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	60	(6%)	1	(18%)	\$0	(0%)
Unclassified factor contributed to ignition	50	(4%)	2	(32%)	\$1	(9%)
Non-confined	20	(2%)	0	(0%)	\$1	(9%)
Confined	20	(2%)	2	(32%)	\$0	(0%)
Unclassified operational deficiency	30	(3%)	0	(0%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	30	(3%)	0	(0%)	\$0	(0%)
Failure to clean	30	(3%)	0	(0%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	30	(2%)	0	(0%)	\$0	(0%)

Table 31. Fires in Elementary Schools, by Factor Contributing to Ignition, 2014–2018 Annual Averages (Continued)

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Accidentally turned on, not turned off	20	(2%)	0	(0%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	20	(2%)	0	(0%)	\$0	(0%)
Other known factor contributing to ignition	100	(10%)	0	(0%)	\$6	(46%)
Non-confined	50	(5%)	0	(0%)	\$6	(46%)
Confined	50	(4%)	0	(0%)	\$0	(0%)
Total fires	1,020	(100%)	7	(100%)	\$14	(100%)
Non-confined	440	(43%)	2	(36%)	\$14	(99%)
Confined	580	(57%)	4	(64%)	\$0	(1%)
Total factors	1,060	(104%)	7	(100%)	\$14	(101%)
Non-confined	450	(45%)	2	(36%)	\$14	(100%)
Confined	600	(59%)	4	(64%)	\$0	(1%)

Note: Sums may not equal totals due to rounding errors. Multiple entries are allowed in this field, so total factors will add up to more than total fires. Electrical failures or malfunctions and mechanical failures or malfunctions were summed from NFIRS factors contributing to ignition codes 30-37 and 20-27, respectively.

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

Table 32. Fires in Elementary Schools, by Heat Source, 2014–2018 Annual Averages

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	\$	(%)
Unclassified heat from powered equipment	210	(21%)	0	(7%)	\$2	(13%)
Non-confined	80	(8%)	0	(7%)	\$2	(13%)
Confined	130	(13%)	0	(0%)	\$0	(0%)
Lighter	190	(18%)	2	(23%)	\$0	(1%)
Non-confined	70	(7%)	2	(23%)	\$0	(1%)
Confined	120	(12%)	0	(0%)	\$0	(0%)
Radiated or conducted heat from operating equipment	120	(12%)	1	(18%)	\$0	(3%)
Non-confined	40	(4%)	0	(0%)	\$0	(3%)
Confined	80	(8%)	1	(18%)	\$0	(0%)
Arcing	120	(11%)	0	(6%)	\$2	(14%)
Non-confined	90	(9%)	0	(6%)	\$2	(14%)
Confined	30	(3%)	0	(0%)	\$0	(0%)
Match	70	(7%)	0	(0%)	\$0	(1%)
Non-confined	20	(2%)	0	(0%)	\$0	(1%)
Confined	60	(5%)	0	(0%)	\$0	(0%)
Unclassified heat source	70	(7%)	0	(0%)	\$1	(4%)
Non-confined	20	(2%)	0	(0%)	\$1	(4%)
Confined	50	(5%)	0	(0%)	\$0	(0%)
Spark, ember, or flame from operating equipment	60	(6%)	2	(33%)	\$1	(4%)
Non-confined	30	(3%)	0	(0%)	\$1	(4%)
Confined	30	(3%)	2	(33%)	\$0	(0%)
Unclassified hot or smoldering object	50	(5%)	0	(0%)	\$0	(1%)
Non-confined	20	(2%)	0	(0%)	\$0	(1%)
Confined	30	(3%)	0	(0%)	\$0	(0%)
Smoking materials	20	(2%)	0	(0%)	\$5	(33%)
Non-confined	10	(1%)	0	(0%)	\$5	(33%)
Confined	10	(1%)	0	(0%)	\$0	(0%)
Hot ember or ash	20	(2%)	0	(0%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	10	(1%)	0	(0%)	\$0	(0%)

**Table 32. Fires in Elementary Schools, by Heat Source,
2014–2018 Annual Averages (Continued)**

Heat Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Other known heat source	90	(9%)	0	(14%)	\$4	(26%)
Non-confined	60	(6%)	0	(0%)	\$4	(26%)
Confined	30	(3%)	0	(14%)	\$0	(0%)
Total	1,020	(100%)	10	(100%)	\$14	(100%)
Non-confined	440	(43%)	0	(36%)	\$14	(99%)
Confined	580	(57%)	0	(64%)	\$0	(1%)

Note: Sums may not equal totals due to rounding errors. The statistics on smoking materials and lighters include a proportional share of fires in which the heat source was heat from an unclassified open flame or smoking material.

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

Table 33. Fires in Elementary Schools, by Equipment Involved in Ignition, 2014–2018 Annual Averages

Equipment Involved	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Cooking equipment	310	(30%)	1	(20%)	\$0	(3%)
Confined cooking fire	270	(27%)	1	(20%)	\$0	(0%)
Range with or without oven, cooking surface	10	(1%)	0	(0%)	\$0	(2%)
Oven, rotisserie	10	(1%)	0	(0%)	\$0	(1%)
Portable cooking or warming equipment	10	(1%)	0	(0%)	\$0	(0%)
Other known cooking equipment	10	(1%)	0	(0%)	\$0	(0%)
Contained trash or rubbish fire	230	(23%)	2	(24%)	\$0	(0%)
Heating equipment	130	(13%)	1	(21%)	\$1	(5%)
Confined fuel burner or boiler fire	60	(6%)	1	(21%)	\$0	(1%)
Fixed or portable space heater	30	(3%)	0	(0%)	\$0	(1%)
Central heat	20	(2%)	0	(0%)	\$0	(3%)
Water heater	10	(1%)	0	(0%)	\$0	(0%)
Other known heating equipment	10	(1%)	0	(0%)	\$0	(0%)
No equipment involved in ignition	90	(8%)	1	(20%)	\$6	(45%)
Electrical distribution and lighting equipment	80	(8%)	0	(7%)	\$1	(10%)
Lamp, bulb, or lighting	30	(3%)	0	(0%)	\$1	(4%)
Wiring and related equipment	30	(3%)	0	(7%)	\$1	(5%)
Cord or plug	10	(1%)	0	(0%)	\$0	(0%)
Transformers and power supplies	10	(1%)	0	(0%)	\$0	(1%)
Fan	40	(3%)	0	(0%)	\$3	(20%)
Air conditioner	30	(3%)	0	(0%)	\$1	(8%)
Unclassified equipment involved in ignition	10	(1%)	0	(0%)	\$0	(1%)
Refrigerator or refrigerator/freezer	10	(1%)	1	(8%)	\$0	(1%)
Torch, burner, or soldering iron	10	(1%)	0	(0%)	\$0	(3%)
Heat pump	10	(1%)	0	(0%)	\$0	(0%)
Clothes dryer	10	(1%)	0	(0%)	\$0	(0%)
Confined commercial compact fire	10	(1%)	0	(0%)	\$0	(0%)
Computer	10	(1%)	0	(0%)	\$0	(0%)
Other known equipment involved in ignition	50	(5%)	0	(0%)	\$0	(3%)
Total	1,020	(100%)	7	(100%)	\$14	(100%)

**Table 33. Fires in Elementary Schools, by Equipment Involved in Ignition,
2014–2018 Annual Averages (Continued)**

Note: Sums may not equal totals due to rounding errors. Non-confined fires in which the equipment involved in ignition was unknown or not reported have been allocated proportionally among fires with known equipment involved. The same approach was used with confined cooking fires. Fires in which the equipment involved in ignition was entered as none, but for which the heat source indicated equipment involvement, or where the heat source was unknown were also treated as unknown and allocated proportionally among fires with known equipment involved. Non-confined fires in which the equipment was partially unclassified (i.e., unclassified kitchen or cooking equipment; unclassified heating, cooling, or air conditioning equipment; etc.) were allocated proportionally among fires in that grouping (kitchen or cooking equipment; heating, cooling or air conditioning equipment; etc.) The same approach was used with confined cooking fires. The estimates of fires involving fireplaces or chimneys include all fires with the confined chimney or flue incident type regardless of what may have been coded as equipment involved. Likewise, the estimates of fires involving furnaces, central heat, or boilers include all fires with the confined fuel burner or boiler incident type. The estimates shown should be considered upper bounds. Non-cooking confined fires were not analyzed separately. Estimates of other types of equipment exclude confined fires.

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 make 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.

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NFPA No. PKG14ST