



RESEARCH

Home Grill Fires: Supporting Tables

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Marty Ahrens

Home Grill Fires: Supporting Tables

These tables provide more detailed supporting information for NFPA’s 2020 report, *Home Grill Fires*. Estimates of grill fires and grill fire circumstances were derived from the US Fire Administration’s [National Fire Incident Reporting System \(NFIRS\)](#) and NFPA’s annual survey of US fire departments. Fires reported to federal or state fire departments or industrial fire brigades are not included in these estimates. Only civilian (non-firefighter) casualties are included in this analysis.

Grills were identified by NFIRS equipment involved in ignition (EII) code 643, grill, hibachi, or barbecue. Fires with NFIRS structure fire incident type code 113, Confined cooking fire in or on a structure, and the non-confined structure fire incident type codes (111–112 and 120–123) were analyzed separately and summed. Fires with other confined fire incident types were excluded from the analysis. Outside non-rubbish and unclassified fires (NFIRS incident type codes 100, 140–149, and 160–199) and outside rubbish fires (NFIRS incident type codes 150–159) were also analyzed separately and summed.

Only fires on home properties (NFIRS property use codes 419, one-or two-family home, including manufactured housing, and 429, apartments or other multi-family homes) were included. Grill fires on properties coded as lawns or other open areas are not captured here.

Caution should be used in interpreting the trend tables. NFIRS 5.0, first introduced in 1999, originally defined EII as the piece of equipment that provided the principal heat source that caused ignition if the equipment malfunctioned or was used improperly. [Change 290](#), effective in 2006, amended the definition to include any equipment that was the principal heat source. Beginning in 2012, change 337 required EII to be completed if the heat source or the factor contributing to ignition indicated some type of operating equipment was involved. This was removed, effective with 2015 data. Consequently, some of the changes might be due to changes in data collection, as well as actual fire experience.

For more information on the methodology used for this report, see “[How NFPA’s National Estimates Are Calculated for Home Structure Fires.](#)”

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**Table 1. Home Fires Involving Grills by Power Source
2014–2018 Annual Averages**

A. Structure Fires

Power Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
All gas-fueled	3,900	(81%)	80	(76%)	\$99	(73%)
LP-Gas or other heavier than air gas	3,400	(70%)	70	(69%)	\$78	(58%)
Natural gas or other lighter than air gas	500	(9%)	10	(7%)	\$19	(14%)
Unclassified gas	100	(2%)	0	(0%)	\$2	(1%)
All solid-fueled	600	(13%)	20	(21%)	\$30	(22%)
Charcoal or coal	600	(12%)	20	(17%)	\$28	(21%)
Wood or paper	0	(1%)	0	(1%)	\$1	(1%)
Unclassified solid-fueled	0	(0%)	0	(2%)	\$1	(0%)
Electric	200	(4%)	0	(2%)	\$4	(3%)
Other known or unclassified power source	100	(1%)	0	(1%)	\$2	(2%)
Total	4,900	(100%)	100	(100%)	\$135	(100%)

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 1. Home Fires Involving Grills by Power Source
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Power Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
All gas-fueled	4,900	(86%)	50	(88%)	\$12	(88%)
LP-Gas or other heavier than air gas	4,300	(75%)	50	(83%)	\$10	(73%)
Natural gas or other lighter than air gas	500	(9%)	0	(3%)	\$2	(14%)
Unclassified gas	100	(2%)	0	(2%)	\$0	(0%)
All solid-fueled	600	(11%)	0	(7%)	\$1	(8%)
Charcoal or coal	500	(9%)	0	(6%)	\$1	(7%)
Wood or paper	100	(2%)	0	(1%)	\$0	(1%)
Unclassified solid-fueled	0	(0%)	0	(0%)	\$0	(0%)
Electric	100	(1%)	0	(4%)	\$0	(1%)
Other known or unclassified power source	100	(2%)	0	(1%)	\$0	(3%)
Total	5,700	(100%)	60	(100%)	\$14	(100%)

C. Structure Fires and Outside or Unclassified Fires Combined

Power Source	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
	Count	(%)	Count	(%)	Count	(%)
All gas-fueled	8,900	(84%)	130	(81%)	\$111	(75%)
LP-Gas or other heavier than air gas	7,700	(73%)	120	(74%)	\$88	(59%)
Natural gas or other lighter than air gas	1,000	(9%)	10	(6%)	\$21	(14%)
Unclassified gas	200	(2%)	0	(1%)	\$2	(1%)
All solid-fueled	1,300	(12%)	30	(16%)	\$31	(21%)
Charcoal or coal	1,100	(10%)	20	(13%)	\$29	(19%)
Wood or paper	100	(1%)	0	(1%)	\$2	(1%)
Unclassified solid-fueled	0	(0%)	0	(2%)	\$1	(0%)
Electric	300	(3%)	0	(3%)	\$4	(3%)
Other known or unclassified power source	200	(1%)	0	(1%)	\$3	(2%)
Total	10,600	(100%)	160	(100%)	\$149	(100%)

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 2. Home Fires Involving Grills by Area of Origin
2014–2018 Annual Averages**

A. Structure Fires

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Exterior balcony or unenclosed porch	1,400	(29%)	30	(31%)	\$59	(44%)
Non-confined	700	(14%)	30	(28%)	\$59	(44%)
Confined	700	(15%)	0	(3%)	\$0	(0%)
Courtyard, terrace, or patio	1,300	(27%)	30	(28%)	\$24	(18%)
Non-confined	400	(9%)	20	(20%)	\$24	(18%)
Confined	900	(19%)	10	(8%)	\$0	(0%)
Unclassified outside area	800	(16%)	10	(7%)	\$8	(6%)
Non-confined	200	(3%)	10	(6%)	\$8	(6%)
Confined	600	(13%)	0	(1%)	\$0	(0%)
Kitchen or cooking area	300	(6%)	10	(9%)	\$4	(3%)
Non-confined	100	(2%)	10	(7%)	\$4	(3%)
Confined	200	(4%)	0	(3%)	\$0	(0%)
Exterior wall surface	200	(4%)	10	(7%)	\$10	(8%)
Non-confined	200	(4%)	10	(7%)	\$10	(8%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Unclassified area of origin	200	(3%)	0	(0%)	\$1	(0%)
Non-confined	0	(0%)	0	(0%)	\$1	(0%)
Confined	200	(3%)	0	(0%)	\$0	(0%)
Garage* or vehicle storage area	100	(3%)	0	(4%)	\$7	(5%)
Non-confined	100	(2%)	0	(4%)	\$7	(5%)
Confined	100	(1%)	0	(0%)	\$0	(0%)
Lawn, field, or open area	100	(2%)	0	(4%)	\$0	(0%)
Non-confined	0	(0%)	0	(1%)	\$0	(0%)
Confined	100	(1%)	0	(3%)	\$0	(0%)
Unclassified function area	100	(2%)	0	(2%)	\$6	(4%)
Non-confined	0	(1%)	0	(2%)	\$6	(4%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Other known area of origin	400	(8%)	10	(10%)	\$16	(12%)
Non-confined	200	(4%)	10	(8%)	\$16	(12%)
Confined	200	(4%)	0	(1%)	\$0	(0%)
Total	4,900	(100%)	100	(100%)	\$135	(100%)
Non-confined	1,900	(39%)	80	(81%)	\$135	(100%)
Confined	3,000	(61%)	20	(19%)	\$0	(0%)

* Does not include garage coded as separate property.

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 2. Home Fires Involving Grills by Area of Origin
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Courtyard, terrace, or patio	2,100	(37%)	20	(42%)	\$5	(36%)
Unclassified outside area	1,500	(26%)	10	(18%)	\$2	(11%)
Exterior balcony or unenclosed porch	800	(13%)	10	(13%)	\$1	(7%)
Lawn, field, or open area	300	(5%)	0	(8%)	\$0	(2%)
Unclassified area of origin	300	(4%)	0	(5%)	\$0	(2%)
Kitchen or cooking area	200	(3%)	0	(3%)	\$1	(5%)
Other known area of origin	600	(11%)	10	(11%)	\$5	(35%)
Total	5,700	(100%)	60	(100%)	\$14	(100%)

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 3. Home Fires Involving Gas-Fueled Grills by Area of Origin
2014–2018 Annual Averages**

A. Structure Fires

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Courtyard, terrace, or patio	1,200	(30%)	20	(31%)	\$19	(19%)
Non-confined	300	(8%)	20	(21%)	\$19	(19%)
Confined	900	(22%)	10	(10%)	\$0	(0%)
Exterior balcony or unenclosed porch	1,100	(27%)	20	(29%)	\$42	(42%)
Non-confined	400	(11%)	20	(27%)	\$42	(42%)
Confined	700	(17%)	0	(2%)	\$0	(0%)
Unclassified outside area	700	(17%)	10	(6%)	\$6	(6%)
Non-confined	100	(3%)	10	(6%)	\$6	(6%)
Confined	500	(14%)	0	(0%)	\$0	(0%)
Kitchen or cooking area	200	(6%)	10	(11%)	\$3	(3%)
Non-confined	100	(2%)	10	(8%)	\$3	(3%)
Confined	200	(4%)	0	(4%)	\$0	(0%)
Unclassified area of origin	100	(4%)	0	(0%)	\$1	(1%)
Non-confined	0	(0%)	0	(0%)	\$1	(1%)
Confined	100	(3%)	0	(0%)	\$0	(0%)
Exterior wall surface	100	(4%)	0	(4%)	\$8	(8%)
Non-confined	100	(3%)	0	(4%)	\$8	(8%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Garage* or vehicle storage area	100	(3%)	0	(5%)	\$4	(4%)
Non-confined	100	(2%)	0	(5%)	\$4	(4%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Lawn, field, or open area	100	(2%)	0	(2%)	\$0	(0%)
Non-confined	0	(0%)	0	(0%)	\$0	(0%)
Confined	100	(2%)	0	(2%)	\$0	(0%)
Other known area of origin	300	(8%)	10	(12%)	\$17	(17%)
Non-confined	100	(4%)	10	(10%)	\$17	(17%)
Confined	200	(5%)	0	(2%)	\$0	(0%)
Total	3,900	(100%)	80	(100%)	\$99	(100%)
Non-confined	1,300	(32%)	60	(81%)	\$98	(100%)
Confined	2,700	(68%)	20	(19%)	\$0	(0%)

* Does not include garage coded as separate property.

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 3. Home Fires Involving Gas-Fueled Grills by Area of Origin
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Courtyard, terrace, or patio	1,900	(39%)	20	(47%)	\$5	(38%)
Unclassified outside area	1,200	(25%)	10	(19%)	\$1	(10%)
Exterior balcony or unenclosed porch	700	(14%)	10	(15%)	\$1	(6%)
Unclassified area of origin	200	(5%)	0	(3%)	\$0	(1%)
Lawn, field, or open area	200	(4%)	0	(5%)	\$0	(1%)
Kitchen or cooking area	200	(3%)	0	(4%)	\$1	(6%)
Unclassified equipment or service area	100	(2%)	0	(1%)	\$3	(26%)
Garage* or vehicle storage area	100	(2%)	0	(1%)	\$0	(2%)
Other known area of origin	300	(7%)	0	(5%)	\$1	(10%)
Total	4,900	(100%)	50	(100%)	\$12	(100%)

* Does not include garage coded as separate property.

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 4. Home Fires Involving Solid-Fueled Grills by Area of Origin
2014–2018 Annual Averages**

A. Structure Fires

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Exterior balcony or unenclosed porch	300	(43%)	10	(44%)	\$18	(60%)
Non-confined	200	(38%)	10	(37%)	\$18	(60%)
Confined	0	(5%)	0	(7%)	\$0	(0%)
Courtyard, terrace, or patio	100	(18%)	0	(16%)	\$2	(8%)
Non-confined	100	(16%)	0	(9%)	\$2	(8%)
Confined	0	(2%)	0	(7%)	\$0	(0%)
Unclassified outside area	100	(11%)	0	(7%)	\$2	(5%)
Non-confined	0	(5%)	0	(0%)	\$2	(5%)
Confined	0	(6%)	0	(7%)	\$0	(0%)
Other known area of origin	200	(12%)	10	(32%)	\$4	(13%)
Non-confined	200	(10%)	10	(32%)	\$4	(13%)
Confined	0	(3%)	0	(0%)	\$0	(0%)
Total	600	(100%)	20	(100%)	\$30	(100%)
Non-confined	500	(82%)	20	(79%)	\$30	(100%)
Confined	100	(18%)	0	(21%)	\$0	(0%)

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 4. Home Fires Involving Solid-Fueled Grills by Area of Origin
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Area of Origin	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Courtyard, terrace, or patio	200	(30%)	0	(14%)	\$0	(34%)
Unclassified outside area	200	(29%)	0	(10%)	\$0	(22%)
Exterior balcony or unenclosed porch	100	(13%)	0	(0%)	\$0	(6%)
Lawn, field, or open area	100	(13%)	0	(46%)	\$0	(18%)
Other known area of origin	100	(15%)	0	(29%)	\$0	(21%)
Total	600	(100%)	0	(100%)	\$1	(100%)

Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 5. Home Fires Involving Grills by Factor Contributing to Ignition
2014–2018 Annual Averages**

A. Structure Fires

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Failure to clean	1,400	(29%)	0	(1%)	\$1	(1%)
Non-confined	100	(2%)	0	(1%)	\$1	(1%)
Confined	1,300	(27%)	0	(0%)	\$0	(0%)
Equipment unattended	800	(16%)	20	(17%)	\$34	(25%)
Non-confined	400	(8%)	20	(15%)	\$34	(25%)
Confined	400	(8%)	0	(2%)	\$0	(0%)
Heat source too close to combustible	800	(16%)	20	(16%)	\$45	(33%)
Non-confined	600	(13%)	20	(16%)	\$45	(33%)
Confined	200	(3%)	0	(0%)	\$0	(0%)
Leak or break	400	(8%)	20	(15%)	\$13	(10%)
Non-confined	200	(3%)	10	(8%)	\$13	(10%)
Confined	200	(5%)	10	(6%)	\$0	(0%)
Outside or open fire for warming or cooking	400	(7%)	10	(13%)	\$13	(9%)
Non-confined	200	(4%)	10	(11%)	\$13	(9%)
Confined	200	(3%)	0	(2%)	\$0	(0%)
Unclassified mechanical failure or malfunction	300	(6%)	10	(6%)	\$4	(3%)
Non-confined	100	(2%)	10	(6%)	\$4	(3%)
Confined	200	(4%)	0	(0%)	\$0	(0%)
Equipment not being operated properly	200	(4%)	10	(9%)	\$4	(3%)
Non-confined	100	(1%)	10	(7%)	\$4	(3%)
Confined	100	(3%)	0	(2%)	\$0	(0%)
Abandoned or discarded material	200	(3%)	0	(2%)	\$5	(4%)
Non-confined	100	(2%)	0	(2%)	\$5	(4%)
Confined	100	(1%)	0	(0%)	\$0	(0%)
Unclassified misuse of material	200	(3%)	10	(6%)	\$2	(2%)
Non-confined	100	(1%)	0	(4%)	\$2	(2%)
Confined	100	(2%)	0	(2%)	\$0	(0%)
Unclassified factor contributed	100	(2%)	0	(2%)	\$1	(1%)
Non-confined	0	(1%)	0	(2%)	\$1	(1%)
Confined	100	(1%)	0	(0%)	\$0	(0%)
Unclassified operational deficiency	100	(2%)	0	(3%)	\$1	(1%)
Non-confined	0	(0%)	0	(1%)	\$1	(1%)
Confined	100	(1%)	0	(2%)	\$0	(0%)
Other known factor	500	(11%)	20	(23%)	\$29	(21%)
Non-confined	300	(7%)	20	(21%)	\$29	(21%)
Confined	200	(4%)	0	(2%)	\$0	(0%)

**Table 5. Home Fires Involving Grills by Factor Contributing to Ignition
2014–2018 Annual Averages (Continued)**

A. Structure Fires (Continued)

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Total fires	4,900	(100%)	100	(100%)	\$135	(0%)
Non-confined	1,900	(39%)	80	(81%)	\$135	(0%)
Confined	3,000	(61%)	20	(19%)	\$0	(0%)
Total factors	5,200	(107%)	120	(113%)	\$152	(113%)
Non-confined	2,100	(44%)	100	(94%)	\$152	(112%)
Confined	3,100	(63%)	20	(19%)	\$0	(0%)

Note: Multiple entries are allowed, resulting in more factor entries than fires. Home cooking fires involving cooking equipment and in which the factor contributing to ignition is listed as unknown, unreported, none, or blank have also been allocated proportionally. Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 5. Home Fires Involving Grills by Factor Contributing to Ignition
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Failure to clean	1,300	(22%)	0	(7%)	\$1	(8%)
Leak or break	1,100	(19%)	20	(31%)	\$3	(25%)
Equipment unattended	600	(11%)	0	(5%)	\$1	(8%)
Heat source too close to combustible	600	(10%)	0	(2%)	\$3	(19%)
Unclassified mechanical failure or malfunction	400	(7%)	10	(10%)	\$1	(4%)
Outside or open fire for warming or cooking	400	(7%)	0	(4%)	\$1	(6%)
Unclassified misuse of material or product	200	(4%)	0	(6%)	\$0	(1%)
Equipment not being operated properly	200	(3%)	10	(10%)	\$0	(1%)
Worn out	100	(2%)	0	(5%)	\$0	(2%)
Unclassified factor	100	(2%)	0	(2%)	\$1	(4%)
Abandoned or discarded material or product	100	(2%)	0	(0%)	\$0	(2%)
Unintentionally turned on or not turned off	100	(2%)	0	(3%)	\$1	(5%)
Flammable liquid or gas spilled	100	(2%)	0	(1%)	\$1	(5%)
Unclassified operational deficiency	100	(2%)	0	(1%)	\$0	(1%)
Other known factor	700	(12%)	10	(25%)	\$3	(21%)
Total fires	5,700	(100%)	60	(100%)	\$14	(100%)
Total factors	6,100	(107%)	70	(113%)	\$16	(111%)

Note: Multiple entries are allowed, resulting in more factor entries than fires. Home cooking fires involving cooking equipment and in which the factor contributing to ignition is listed as unknown, unreported, none, or blank have also been allocated proportionally. Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 6. Home Fires Involving Gas-Fueled Grills by Factor Contributing to Ignition
2014–2018 Annual Averages**

A. Structure Fires

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Failure to clean	1,300	(33%)	0	(2%)	\$1	(1%)
Non-confined	100	(2%)	0	(2%)	\$1	(1%)
Confined	1,200	(31%)	0	(0%)	\$0	(0%)
Equipment unattended	600	(15%)	10	(9%)	\$21	(21%)
Non-confined	200	(6%)	10	(7%)	\$21	(21%)
Confined	400	(9%)	0	(3%)	\$0	(0%)
Heat source too close to combustible	500	(13%)	10	(17%)	\$32	(32%)
Non-confined	400	(10%)	10	(17%)	\$32	(32%)
Confined	100	(3%)	0	(0%)	\$0	(0%)
Leak or break	400	(10%)	20	(20%)	\$13	(13%)
Non-confined	200	(4%)	10	(12%)	\$13	(13%)
Confined	200	(6%)	10	(8%)	\$0	(0%)
Unclassified mechanical failure or malfunction	300	(7%)	10	(8%)	\$4	(4%)
Non-confined	100	(2%)	10	(8%)	\$4	(4%)
Confined	200	(4%)	0	(0%)	\$0	(0%)
Outside or open fire for warming or cooking	200	(6%)	10	(13%)	\$7	(7%)
Non-confined	100	(2%)	10	(10%)	\$7	(7%)
Confined	100	(4%)	0	(3%)	\$0	(0%)
Equipment not being operated properly	200	(4%)	10	(8%)	\$2	(2%)
Non-confined	0	(1%)	10	(8%)	\$2	(2%)
Confined	100	(3%)	0	(0%)	\$0	(0%)
Unclassified misuse of product or material	100	(3%)	0	(3%)	\$2	(2%)
Non-confined	0	(1%)	0	(3%)	\$2	(2%)
Confined	100	(2%)	0	(0%)	\$0	(0%)
Abandoned material	100	(2%)	0	(0%)	\$2	(2%)
Non-confined	0	(1%)	0	(0%)	\$2	(2%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Unclassified factor	100	(2%)	0	(2%)	\$1	(1%)
Non-confined	0	(1%)	0	(2%)	\$1	(1%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Other known factor	500	(12%)	30	(32%)	\$25	(25%)
Non-confined	200	(6%)	20	(26%)	\$25	(25%)
Confined	200	(6%)	0	(5%)	\$0	(0%)

**Table 6. Home Fires Involving Gas-Fueled Grills by Factor Contributing to Ignition
2014–2018 Annual Averages (Continued)**

A. Structure Fires (Continued)

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Other known factor contributing to ignition	400	(11%)	20	(18%)	\$17	(21%)
Non-confined	300	(7%)	20	(18%)	\$17	(21%)
Confined	100	(4%)	0	(0%)	\$0	(0%)
Total fires	3,900	(100%)	80	(100%)	\$99	(100%)
Non-confined	1,300	(32%)	60	(81%)	\$98	(100%)
Confined	2,700	(68%)	20	(19%)	\$0	(0%)
Total factors	4,200	(106%)	90	(113%)	\$111	(112%)
Non-confined	1,400	(36%)	80	(94%)	\$110	(112%)
Confined	2,800	(70%)	20	(19%)	\$0	(0%)

Note: Multiple entries are allowed, resulting in more factor entries than fires. Home cooking fires involving cooking equipment and in which the factor contributing to ignition is listed as unknown, unreported, none, or blank have also been allocated proportionally. Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 6. Home Fires Involving Gas-Fueled Grills by Factor Contributing to Ignition
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Failure to clean	1,200	(25%)	0	(8%)	\$1	(7%)
Leak or break	1,100	(22%)	20	(35%)	\$4	(31%)
Equipment unattended	500	(9%)	0	(6%)	\$1	(8%)
Unclassified mechanical failure or malfunction	400	(8%)	10	(10%)	\$1	(5%)
Heat source too close to combustible	300	(7%)	0	(2%)	\$2	(13%)
Outside or open fire for warming or cooking	300	(6%)	0	(2%)	\$1	(5%)
Equipment not being operated properly	200	(3%)	10	(11%)	\$0	(1%)
Worn out	100	(3%)	0	(5%)	\$0	(2%)
Unclassified misuse of material or product	100	(3%)	0	(7%)	\$0	(1%)
Unclassified factor	100	(2%)	0	(1%)	\$0	(2%)
Unintentionally turned on or not turned off	100	(2%)	0	(4%)	\$1	(4%)
Unclassified operational deficiency	100	(2%)	0	(1%)	\$0	(1%)
Flammable liquid or gas spilled	100	(2%)	0	(1%)	\$1	(6%)
Improper start-up	100	(2%)	0	(3%)	\$0	(1%)
Other known factor	500	(10%)	10	(12%)	\$2	(19%)
Total fires	4,900	(100%)	50	(100%)	\$12	(100%)
Total factors	5,200	(106%)	60	(109%)	\$13	(106%)

Note: Multiple entries are allowed, resulting in more factor entries than fires. Home cooking fires involving cooking equipment and in which the factor contributing to ignition is listed as unknown, unreported, none, or blank have also been allocated proportionally. Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 7. Home Fires Involving Solid-Fueled Grills by Factor Contributing to Ignition
2014–2018 Annual Averages**

A. Structure Fires

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Heat source too close to combustible	200	(30%)	0	(17%)	\$9	(30%)
Non-confined	200	(30%)	0	(17%)	\$9	(30%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Equipment unattended	200	(25%)	10	(34%)	\$11	(35%)
Non-confined	100	(20%)	10	(34%)	\$11	(35%)
Confined	0	(5%)	0	(0%)	\$0	(0%)
Outside or open fire for warming or cooking	100	(14%)	0	(11%)	\$4	(15%)
Non-confined	100	(13%)	0	(11%)	\$4	(15%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Abandoned material	100	(13%)	0	(11%)	\$3	(9%)
Non-confined	100	(11%)	0	(11%)	\$3	(9%)
Confined	0	(1%)	0	(0%)	\$0	(0%)
Other known factor	200	(32%)	10	(43%)	\$7	(25%)
Non-confined	100	(22%)	0	(22%)	\$7	(25%)
Confined	100	(10%)	0	(21%)	\$0	(0%)
Total	600	(100%)	20	(100%)	\$30	(100%)
Non-confined	500	(82%)	20	(79%)	\$30	(100%)
Confined	100	(18%)	0	(21%)	\$0	(0%)
Total factors	700	(114%)	30	(117%)	\$34	(114%)
Non-confined	600	(96%)	20	(96%)	\$34	(114%)
Confined	100	(18%)	0	(21%)	\$0	(0%)

Note: Multiple entries are allowed, resulting in more factor entries than fires. Home cooking fires involving cooking equipment and in which the factor contributing to ignition is listed as unknown, unreported, none, or blank have also been allocated proportionally. Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 7. Home Fires Involving Solid-Fueled Grills by Factor Contributing to Ignition
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Factor Contributing to Ignition	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Heat source too close to combustible	200	(30%)	0	(0%)	\$1	(55%)
Equipment unattended	100	(24%)	0	(0%)	\$0	(11%)
Outside or open fire for warming or cooking	100	(14%)	0	(19%)	\$0	(19%)
Other known factor	300	(50%)	0	(114%)	\$1	(59%)
Total fires	600	(100%)	0	(100%)	\$1	(100%)
Total factors	700	(118%)	10	(133%)	\$2	(144%)

Note: Multiple entries are allowed, resulting in more factor entries than fires. Home cooking fires involving cooking equipment and in which the factor contributing to ignition is listed as unknown, unreported, none, or blank have also been allocated proportionally. Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 8. Home Fires Involving Grills by Item First Ignited
2014–2018 Annual Averages**

A. Structure Fires

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Cooking materials, including food	2,100	(44%)	10	(8%)	\$11	(8%)
Non-confined	200	(5%)	10	(5%)	\$11	(8%)
Confined	1,900	(39%)	0	(3%)	\$0	(0%)
Flammable or combustible liquids or gases, piping or filter	900	(18%)	40	(40%)	\$16	(12%)
Non-confined	300	(6%)	30	(32%)	\$16	(12%)
Confined	600	(12%)	10	(8%)	\$0	(0%)
Exterior wall covering or finish	500	(10%)	20	(22%)	\$61	(45%)
Non-confined	500	(10%)	20	(22%)	\$61	(45%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Structural member or framing	300	(5%)	10	(8%)	\$13	(10%)
Non-confined	200	(5%)	10	(8%)	\$13	(10%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	200	(4%)	10	(7%)	\$5	(3%)
Non-confined	100	(1%)	0	(1%)	\$5	(3%)
Confined	100	(2%)	10	(6%)	\$0	(0%)
Unclassified structural component or finish	100	(3%)	0	(1%)	\$6	(4%)
Non-confined	100	(3%)	0	(1%)	\$6	(4%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Appliance housing or casing	100	(3%)	0	(0%)	\$1	(1%)
Non-confined	0	(1%)	0	(0%)	\$1	(1%)
Confined	100	(2%)	0	(0%)	\$0	(0%)
Exterior trim, including doors	100	(2%)	0	(3%)	\$5	(4%)
Non-confined	100	(2%)	0	(3%)	\$5	(4%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Other known item first ignited	600	(12%)	10	(11%)	\$17	(12%)
Non-confined	300	(7%)	10	(9%)	\$17	(12%)
Confined	200	(5%)	0	(2%)	\$0	(0%)
Total	4,900	(100%)	100	(100%)	\$135	(100%)
Non-confined	1,900	(39%)	80	(81%)	\$135	(100%)
Confined	3,000	(61%)	20	(19%)	\$0	(0%)

Note: Totals may not equal sums because of rounding errors. Entries of zero may represent numbers that round to zero.

Unknowns have been allocated proportionally.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 8. Home Fires Involving Grills by Item First Ignited
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Flammable or combustible liquids or gases, piping or filter	2,100	(39%)	40	(73%)	\$7	(47%)
Cooking materials, including food	1,900	(32%)	10	(11%)	\$5	(32%)
Unclassified item first ignited	600	(10%)	0	(6%)	\$1	(7%)
Light vegetation, including grass	200	(4%)	0	(1%)	\$0	(2%)
Appliance housing or casing	200	(4%)	0	(6%)	\$0	(3%)
Rubbish, trash, or waste	100	(2%)	0	(0%)	\$0	(1%)
Fence or pole	100	(2%)	0	(0%)	\$0	(1%)
Other known item first ignited	600	(10%)	0	(3%)	\$1	(8%)
Total	5,700	(100%)	60	(100%)	\$14	(100%)

Note: Sums may not equal totals due to rounding errors. Unknowns have been allocated proportionally. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 9. Home Fires Involving Gas-Fueled Grills by Item First Ignited
2014–2018 Annual Averages**

A. Structure Fires

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Cooking materials, including food	1,900	(48%)	10	(7%)	\$8	(8%)
Non-confined	200	(5%)	0	(3%)	\$8	(8%)
Confined	1,700	(43%)	0	(4%)	\$0	(0%)
Flammable or combustible liquids or gases, piping, or filter	800	(21%)	40	(45%)	\$17	(17%)
Non-confined	300	(7%)	30	(39%)	\$17	(17%)
Confined	600	(14%)	10	(6%)	\$0	(0%)
Exterior wall covering or finish	300	(9%)	20	(21%)	\$45	(46%)
Non-confined	300	(8%)	20	(21%)	\$45	(46%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Unclassified item first ignited	200	(4%)	10	(6%)	\$2	(2%)
Non-confined	0	(1%)	0	(0%)	\$2	(2%)
Confined	100	(3%)	10	(6%)	\$0	(0%)
Structural member or framing	100	(3%)	10	(7%)	\$8	(8%)
Non-confined	100	(3%)	10	(7%)	\$8	(8%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Appliance housing or casing	100	(3%)	0	(0%)	\$1	(1%)
Non-confined	0	(1%)	0	(0%)	\$1	(1%)
Confined	100	(2%)	0	(0%)	\$0	(0%)
Other known item first ignited	500	(12%)	10	(14%)	\$18	(18%)
Non-confined	300	(7%)	10	(12%)	\$18	(18%)
Confined	200	(5%)	0	(2%)	\$0	(0%)
Total	3,900	(100%)	80	(100%)	\$99	(100%)
Non-confined	1,300	(32%)	60	(81%)	\$98	(100%)
Confined	2,700	(68%)	20	(19%)	\$0	(0%)

Note: Sums may not equal totals due to rounding errors. Unknowns have been allocated proportionally. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 9. Home Fires Involving Gas-Fueled Grills by Item First Ignited
2014–2018 Annual Averages (Continued)**

B. Outside or Unclassified Fires

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Flammable or combustible liquids or gases, piping, or filter	2,000	(41%)	40	(76%)	\$6	(51%)
Cooking materials, including food	1,700	(34%)	10	(11%)	\$4	(33%)
Unclassified item first ignited	500	(10%)	0	(7%)	\$1	(5%)
Appliance housing or casing	200	(4%)	0	(4%)	\$0	(3%)
Other known item first ignited	500	(11%)	0	(2%)	\$1	(8%)
Total	4,900	(100%)	50	(100%)	\$12	(100%)

Note: Sums may not equal totals due to rounding errors. Unknowns have been allocated proportionally. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

**Table 10. Home Fires Involving Solid-Fueled Grills by Item First Ignited
2014–2018 Annual Averages**

A. Structure Fires

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Cooking materials, including food	100	(19%)	0	(12%)	\$2	(7%)
Non-confined	0	(7%)	0	(12%)	\$2	(7%)
Confined	100	(12%)	0	(0%)	\$0	(0%)
Structural member or framing	100	(18%)	0	(18%)	\$6	(20%)
Non-confined	100	(18%)	0	(18%)	\$6	(20%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Exterior wall covering or finish	100	(17%)	10	(30%)	\$11	(38%)
Non-confined	100	(17%)	10	(30%)	\$11	(38%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Unclassified structural component or finish	100	(11%)	0	(0%)	\$3	(10%)
Non-confined	100	(11%)	0	(0%)	\$3	(10%)
Confined	0	(0%)	0	(0%)	\$0	(0%)
Other known item first ignited	200	(35%)	10	(39%)	\$8	(25%)
Non-confined	200	(30%)	0	(18%)	\$8	(25%)
Confined	0	(5%)	0	(21%)	\$0	(0%)
Total	600	(100%)	20	(100%)	\$30	(100%)
Non-confined	500	(82%)	20	(79%)	\$30	(100%)
Confined	100	(18%)	0	(21%)	\$0	(0%)

B. Outside or Unclassified Fires

Item First Ignited	Fires		Civilian Injuries		Direct Property Damage (in Millions)	
Light vegetation, including grass	100	(23%)	0	(19%)	\$0	(18%)
Cooking materials, including food	100	(21%)	0	(14%)	\$0	(24%)
Magazine, newspaper, or writing paper	100	(10%)	0	(0%)	\$0	(0%)
Rubbish, trash, or waste	100	(10%)	0	(0%)	\$0	(9%)
Unclassified item first ignited	100	(9%)	0	(0%)	\$0	(33%)
Other known item first ignited	300	(27%)	0	(67%)	\$0	(16%)
Total	600	(100%)	0	(100%)	\$1	(100%)

Note: Sums may not equal totals due to rounding errors. Unknowns have been allocated proportionally. Entries of zero may represent numbers that round to zero.

Sources: Data from NFIRS and NFPA fire experience survey.

Table 11. Home Fires Involving Grills by Year

A. Structure Fires

Year	Fires		Civilian Injuries		Direct Property Damage (in Millions)		
					as Reported		in 2018 Dollars
1980	2,400		90		\$9		\$27
1981	2,500		100		\$12		\$25
1982	2,200		80		\$15		\$31
1983	1,900		120		\$15		\$38
1984	2,300		70		\$16		\$36
1985	2,500		80		\$17		\$37
1986	2,500		90		\$18		\$39
1987	2,400		70		\$19		\$40
1988	2,700		130		\$37		\$40
1989	2,300		60		\$20		\$75
1990	2,500		120		\$24		\$38
1991	2,200		110		\$36		\$44
1992	2,400		100		\$41		\$64
1993	2,200		80		\$22		\$71
1994	2,200		90		\$21		\$37
1995	2,100		70		\$30		\$35
1996	2,000		110		\$29		\$48
1997	2,100		80		\$44		\$45
1998	1,900		90		\$53		\$68
1999	3,600	(2,900)	0	(0)	\$81	(\$81)	\$122
2000	2,300	(1,500)	110	(110)	\$61	(\$61)	\$89
2001	2,300	(1,400)	50	(50)	\$40	(\$40)	\$57
2002	2,900	(1,600)	90	(90)	\$56	(\$55)	\$77
2003	2,200	(1,100)	90	(70)	\$92	(\$92)	\$126
2004	2,700	(1,200)	110	(110)	\$47	(\$47)	\$63
2005	3,000	(1,300)	80	(60)	\$136	(\$136)	\$175
2006	3,400	(1,400)	90	(60)	\$48	(\$48)	\$60
2007	3,200	(1,500)	90	(70)	\$43	(\$42)	\$52
2008	3,500	(1,700)	100	(70)	\$90	(\$90)	\$105
2009	3,800	(1,320)	100	(80)	\$71	(\$71)	\$83
2010	4,000	(1,400)	150	(120)	\$128	(\$128)	\$148
2011	4,500	(1,700)	70	(70)	\$160	(\$160)	\$179
2012	4,000	(2,000)	120	(90)	\$147	(\$146)	\$161
2013	3,500	(1,500)	120	(100)	\$76	(\$76)	\$82
2014	3,600	(1,500)	90	(70)	\$80	(\$80)	\$85
2015	5,200	(1,900)	110	(110)	\$186	(\$186)	\$197
2016	5,400	(2,100)	120	(90)	\$131	(\$130)	\$137
2017	5,100	(2,000)	90	(70)	\$118	(\$117)	\$121
2018	5,200	(2,100)	110	(90)	\$159	(\$158)	\$159

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. Fires are rounded to the nearest hundred, civilian injuries are expressed to the nearest 10, and direct property damage is rounded to the nearest million dollars. The figures reflect a proportional share of the home fires with which the equipment involved in ignition is unknown or is reported as cooking or kitchen equipment of an undetermined or unclassified type. Because of their small numbers, annual estimates of fire deaths involving this equipment are unreliable and not included. During 2014–2018, grills were involved in an estimated average of 10 civilian fire deaths per year in home structure fires. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

Table 11. Home Fires Involving Grills by Year (Continued)

B. Outdoor and Unclassified Fires

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions) as Reported in 2018 Dollars	
1980	2,900	30	\$0	\$0
1981	3,200	10	\$0	\$0
1982	2,800	40	\$0	\$0
1983	2,900	30	\$0	\$0
1984	3,200	30	\$0	\$0
1985	3,600	20	\$0	\$0
1986	4,600	30	\$0	\$0
1987	5,800	30	\$0	\$0
1988	6,800	30	\$0	\$0
1989	6,800	30	\$1	\$2
1990	7,300	20	\$0	\$0
1991	7,700	40	\$0	\$0
1992	7,200	40	\$1	\$2
1993	7,900	20	\$0	\$0
1994	7,600	30	\$0	\$0
1995	8,400	50	\$1	\$2
1996	8,600	30	\$0	\$0
1997	10,400	40	\$0	\$0
1998	8,500	40	\$1	\$2
1999	5,600	90	\$0	\$0
2000	4,000	20	\$0	\$0
2001	5,400	70	\$0	\$0
2002	6,400	30	\$1	\$1
2003	4,800	20	\$0	\$0
2004	4,600	20	\$0	\$0
2005	5,000	30	\$0	\$0
2006	5,900	60	\$1	\$1
2007	5,600	20	\$7	\$8
2008	4,200	30	\$1	\$1
2009	4,700	30	\$3	\$4
2010	4,500	40	\$2	\$2
2011	4,700	50	\$1	\$1
2012	5,900	60	\$2	\$2
2013	5,100	50	\$2	\$2
2014	5,500	60	\$2	\$2
2015	6,400	50	\$29	\$31
2016	6,600	40	\$8	\$8
2017	4,900	60	\$21	\$22
2018	5,200	60	\$14	\$14

Note: National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* The figures reflect a proportional share of home fires in which the equipment involved in ignition is unknown or is reported as cooking or kitchen equipment of an undetermined or unclassified type. Fires reported as involving no equipment and that are lacking a confirming specific heat source (codes 40-99) are also treated as unknown equipment and allocated. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

**Table 11. Home Fires Involving Grills by Year
(Continued)**

C. Structure Fires and Outdoor and Unclassified Fires Combined

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions) as Reported in 2018 Dollars	
1980	5,300	120	\$9	\$27
1981	5,700	110	\$12	\$33
1982	5,000	120	\$15	\$39
1983	4,900	150	\$15	\$38
1984	5,500	110	\$16	\$39
1985	6,100	110	\$18	\$42
1986	7,100	120	\$18	\$41
1987	8,100	110	\$19	\$42
1988	9,500	150	\$37	\$79
1989	9,100	100	\$21	\$43
1990	9,900	140	\$25	\$48
1991	10,000	150	\$36	\$66
1992	9,600	140	\$42	\$75
1993	10,100	100	\$23	\$40
1994	9,800	120	\$21	\$36
1995	10,500	130	\$31	\$51
1996	10,600	150	\$30	\$48
1997	12,500	110	\$45	\$70
1998	10,500	140	\$54	\$83
1999	9,100	90	\$81	\$122
2000	6,200	130	\$61	\$89
2001	7,700	120	\$40	\$57
2002	9,400	110	\$56	\$78
2003	7,000	110	\$92	\$126
2004	7,300	130	\$47	\$63
2005	8,000	100	\$137	\$176
2006	9,200	160	\$49	\$61
2007	8,800	110	\$50	\$61
2008	7,700	130	\$91	\$106
2009	8,500	120	\$74	\$87
2010	8,500	190	\$130	\$150
2011	9,200	120	\$161	\$180
2012	9,900	170	\$148	\$162
2013	8,600	170	\$78	\$84
2014	9,100	150	\$82	\$87
2015	11,600	170	\$215	\$228
2016	12,000	160	\$139	\$146
2017	10,000	150	\$138	\$141
2018	10,400	190	\$169	\$169

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999-2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

Table 12. Home Fires Involving Gas-Fueled Grills by Year

A. Structure Fires

Year	Fires		Civilian Injuries		Direct Property Damage (in Millions)		
					as Reported	in 2018 Dollars	
1980	600		40		\$2		\$6
1981	900		70		\$3		\$8
1982	700		20		\$2		\$5
1983	600		50		\$6		\$15
1984	800		40		\$5		\$12
1985	1,000		50		\$7		\$16
1986	1,000		50		\$6		\$14
1987	1,100		40		\$7		\$15
1988	1,300		80		\$21		\$45
1989	1,300		40		\$9		\$18
1990	1,400		70		\$15		\$29
1991	1,300		100		\$19		\$35
1992	1,400		80		\$31		\$56
1993	1,300		60		\$15		\$26
1994	1,300		60		\$11		\$19
1995	1,200		40		\$11		\$18
1996	1,200		70		\$15		\$24
1997	1,300		60		\$24		\$38
1998	1,200		40		\$32		\$49
1999	1,300	(600)	0	(0)	\$1	(\$1)	\$2
2000	1,400	(500)	110	(110)	\$26	(\$26)	\$38
2001	1,400	(700)	0	(0)	\$17	(\$17)	\$24
2002	1,700	(900)	50	(50)	\$28	(\$27)	\$39
2003	1,500	(600)	80	(60)	\$76	(\$76)	\$104
2004	1,900	(700)	80	(80)	\$20	(\$20)	\$27
2005	2,400	(800)	60	(40)	\$119	(\$119)	\$153
2006	2,400	(800)	60	(20)	\$21	(\$21)	\$26
2007	2,400	(900)	40	(30)	\$26	(\$25)	\$31
2008	2,800	(1,100)	70	(50)	\$59	(\$59)	\$69
2009	3,100	(900)	70	(40)	\$41	(\$41)	\$48
2010	3,200	(900)	90	(60)	\$96	(\$95)	\$111
2011	3,600	(1,200)	50	(50)	\$83	(\$83)	\$93
2012	3,200	(1,300)	100	(70)	\$124	(\$123)	\$136
2013	2,800	(1,100)	100	(80)	\$60	(\$59)	\$65
2014	2,900	(1,000)	70	(50)	\$55	(\$55)	\$58
2015	4,300	(1,300)	90	(90)	\$139	(\$139)	\$147
2016	4,500	(1,500)	110	(80)	\$99	(\$99)	\$104
2017	4,100	(1,300)	60	(50)	\$90	(\$90)	\$92
2018	4,200	(1,400)	60	(60)	\$108	(\$108)	\$108

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

**Table 12. Home Fires Involving Gas-Fueled Grills by Year
(Continued)**

B. Outside or Unclassified Fires

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions)	
			as Reported	in 2018 Dollars
1980	2,100	0	\$0	\$0
1981	2,400	10	\$0	\$0
1982	1,800	40	\$0	\$0
1983	2,100	20	\$0	\$0
1984	2,100	20	\$0	\$0
1985	2,700	10	\$0	\$0
1986	3,300	30	\$0	\$0
1987	4,300	20	\$0	\$0
1988	5,300	20	\$0	\$0
1989	5,200	20	\$1	\$2
1990	5,600	10	\$0	\$0
1991	6,000	30	\$0	\$0
1992	5,500	30	\$1	\$2
1993	6,000	10	\$0	\$0
1994	5,700	20	\$0	\$0
1995	6,300	50	\$1	\$2
1996	6,700	20	\$0	\$0
1997	8,400	40	\$0	\$0
1998	6,700	40	\$1	\$2
1999	3,800	40	\$0	\$0
2000	3,200	20	\$0	\$0
2001	4,800	60	\$0	\$0
2002	5,600	30	\$1	\$1
2003	4,100	20	\$0	\$0
2004	3,900	10	\$0	\$0
2005	4,200	10	\$0	\$0
2006	5,200	40	\$1	\$1
2007	4,600	10	\$5	\$6
2008	3,600	30	\$1	\$1
2009	4,200	30	\$2	\$2
2010	4,100	40	\$2	\$2
2011	4,100	40	\$1	\$1
2012	4,800	60	\$1	\$1
2013	4,300	40	\$2	\$2
2014	4,500	50	\$1	\$1
2015	5,500	50	\$26	\$28
2016	6,000	40	\$8	\$8
2017	4,300	50	\$20	\$21
2018	4,400	60	\$8	\$8

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

Table 12. Home Fires Involving Gas-Fueled Grills by Year
(Continued)

C. Structure Fires and Outside or Unclassified Fires Combined

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions)	
			as Reported	in 2018 Dollars
1980	2,600	60	\$2	\$6
1981	3,300	70	\$3	\$8
1982	2,500	60	\$2	\$5
1983	2,700	70	\$6	\$15
1984	2,900	60	\$5	\$12
1985	3,600	60	\$7	\$16
1986	4,300	80	\$6	\$14
1987	5,400	60	\$7	\$15
1988	6,600	90	\$21	\$45
1989	6,400	60	\$10	\$20
1990	7,000	80	\$15	\$29
1991	7,300	130	\$19	\$35
1992	6,900	110	\$32	\$57
1993	7,400	80	\$15	\$26
1994	7,000	80	\$11	\$19
1995	7,500	80	\$12	\$20
1996	7,900	90	\$15	\$24
1997	9,700	100	\$24	\$38
1998	7,900	80	\$33	\$51
1999	5,100	40	\$1	\$2
2000	4,600	130	\$26	\$38
2001	6,200	60	\$17	\$24
2002	7,300	80	\$28	\$39
2003	5,500	100	\$76	\$104
2004	5,900	90	\$20	\$27
2005	6,500	70	\$120	\$154
2006	7,600	90	\$22	\$27
2007	7,000	60	\$31	\$38
2008	6,400	100	\$60	\$70
2009	7,300	90	\$43	\$50
2010	7,300	130	\$98	\$113
2011	7,700	90	\$85	\$95
2012	7,900	150	\$125	\$137
2013	7,100	140	\$61	\$66
2014	7,300	120	\$56	\$59
2015	9,800	140	\$164	\$174
2016	10,400	150	\$107	\$112
2017	8,400	110	\$110	\$113
2018	8,600	130	\$116	\$116

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

Table 13. Home Fires Involving Solid-Fueled Grills by Year

A. Structure Fires

Year	Fires		Civilian Injuries		Direct Property Damage (in Millions) as Reported in 2018 Dollars		
1980	1,500		40		\$4		\$12
1981	1,300		20		\$7		\$19
1982	1,100		50		\$6		\$16
1983	900		50		\$8		\$20
1984	1,100		20		\$10		\$24
1985	1,100		20		\$5		\$12
1986	1,100		30		\$9		\$21
1987	900		10		\$6		\$13
1988	1,000		30		\$13		\$28
1989	700		20		\$9		\$18
1990	800		20		\$6		\$12
1991	600		10		\$12		\$22
1992	600		0		\$7		\$13
1993	500		0		\$3		\$5
1994	600		30		\$7		\$12
1995	500		0		\$14		\$23
1996	400		40		\$4		\$6
1997	400		10		\$5		\$8
1998	300		10		\$5		\$8
1999	1,200	(1,200)	0	(0)	\$11	(\$11)	\$17
2000	700	(700)	0	(0)	\$5	(\$5)	\$7
2001	700	(600)	50	(50)	\$15	(\$15)	\$21
2002	600	(500)	0	(0)	\$28	(\$27)	\$39
2003	400	(400)	30	(10)	\$13	(\$13)	\$18
2004	500	(400)	30	(30)	\$20	(\$19)	\$27
2005	500	(400)	20	(20)	\$17	(\$17)	\$22
2006	600	(500)	40	(40)	\$27	(\$26)	\$34
2007	500	(500)	40	(40)	\$17	(\$17)	\$21
2008	500	(500)	10	(10)	\$29	(\$29)	\$34
2009	400	(400)	30	(30)	\$28	(\$28)	\$33
2010	500	(500)	60	(60)	\$31	(\$31)	\$36
2011	500	(400)	20	(20)	\$71	(\$70)	\$79
2012	700	(600)	10	(10)	\$21	(\$21)	\$23
2013	600	(400)	20	(20)	\$15	(\$15)	\$16
2014	500	(500)	20	(20)	\$20	(\$20)	\$21
2015	600	(500)	10	(10)	\$44	(\$44)	\$47
2016	600	(600)	10	(10)	\$25	(\$20)	\$26
2017	600	(500)	30	(20)	\$19	(\$19)	\$19
2018	800	(600)	40	(20)	\$40	(\$40)	\$40

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

**Table 13. Home Fires Involving Solid-Fueled Grills by Year
(Continued)**

B. Outside or Unclassified Fires

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions) as Reported in 2018 Dollars	
1980	500	10	\$0	\$0
1981	400	10	\$0	\$0
1982	500	0	\$0	\$0
1983	400	0	\$0	\$0
1984	500	0	\$0	\$0
1985	400	0	\$0	\$0
1986	400	0	\$0	\$0
1987	400	0	\$0	\$0
1988	500	0	\$0	\$0
1989	300	0	\$0	\$0
1990	500	0	\$0	\$0
1991	400	0	\$0	\$0
1992	400	0	\$0	\$0
1993	400	0	\$0	\$0
1994	400	0	\$0	\$0
1995	400	0	\$0	\$0
1996	400	0	\$0	\$0
1997	500	0	\$0	\$0
1998	400	0	\$0	\$0
1999	200	0	\$0	\$0
2000	100	0	\$0	\$0
2001	500	0	\$0	\$0
2002	800	0	\$0	\$0
2003	600	0	\$0	\$0
2004	600	10	\$0	\$0
2005	800	10	\$0	\$0
2006	600	20	\$0	\$0
2007	900	0	\$1	\$1
2008	500	10	\$0	\$0
2009	400	0	\$0	\$0
2010	400	10	\$0	\$0
2011	400	10	\$0	\$0
2012	900	0	\$1	\$1
2013	500	0	\$0	\$0
2014	800	0	\$0	\$0
2015	700	0	\$3	\$3
2016	300	0	\$0	\$0
2017	500	10	\$1	\$1
2018	600	10	\$2	\$2

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999–2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Dollar.

Sources: NFIRS and NFPA fire experience survey.

**Table 13. Home Fires Involving Solid-Fueled Grills by Year
(Continued)**

C. Structure Fires and Outside or Unclassified Fires Combined

Year	Fires	Civilian Injuries	Direct Property Damage (in Millions) as Reported in 2018 Dollars	
1980	2,000	50	\$4	\$12
1981	1,600	20	\$7	\$19
1982	1,600	50	\$6	\$16
1983	1,300	50	\$8	\$20
1984	1,600	20	\$10	\$24
1985	1,600	20	\$5	\$12
1986	1,400	30	\$9	\$21
1987	1,200	10	\$6	\$13
1988	1,500	30	\$13	\$28
1989	1,000	30	\$9	\$18
1990	1,300	30	\$6	\$12
1991	1,000	20	\$12	\$22
1992	1,000	0	\$7	\$13
1993	900	0	\$3	\$5
1994	1,100	30	\$7	\$12
1995	1,000	0	\$14	\$23
1996	800	40	\$4	\$6
1997	900	10	\$5	\$8
1998	700	10	\$5	\$8
1999	1,400	0	\$11	\$17
2000	800	0	\$5	\$7
2001	1,200	50	\$15	\$21
2002	1,400	0	\$28	\$39
2003	1,000	30	\$13	\$18
2004	1,000	40	\$20	\$27
2005	1,200	50	\$17	\$22
2006	1,200	90	\$27	\$34
2007	1,500	60	\$18	\$22
2008	1,100	50	\$29	\$34
2009	800	50	\$28	\$33
2010	900	90	\$31	\$36
2011	800	30	\$71	\$79
2012	1,600	40	\$22	\$24
2013	1,100	40	\$15	\$16
2014	1,400	50	\$20	\$21
2015	1,300	10	\$47	\$50
2016	1,000	10	\$26	\$27
2017	1,100	40	\$20	\$21
2018	1,400	50	\$41	\$41

Note: The numbers in parentheses exclude confined fires. Confined fires are fires reported as confined to a cooking vessel and that involve cooking equipment; they are analyzed separately. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. *Because of low participation in NFIRS Version 5.0 during 1999-2001, estimates for those years are highly uncertain and must be used with caution.* Unknowns have been allocated proportionally. The inflation adjustment to 2018 dollars was done using the Consumer Price Index Purchasing Power of the Consumer Dollar.

Sources: NFIRS and NFPA fire experience survey.

**Table 14. Grill-Related Thermal Injuries at Hospital Emergency Departments
2014–2018 Annual Averages**

Type of Injury	Estimate
All injuries	19,700
Thermal burns	9,500
Contact burns or burns with no fire or flame spread	5,200
<i>Contact burns to children under 5</i>	2,000
Fire or flame burns	4,300

Note: Estimates are based on National Electronic Injury Surveillance System (NEISS) data obtained from the US Consumer Product Safety Commission (CPSC) website, cpsc.gov, most recently accessed in April 2020. The following product codes were included: charcoal or woodburning grills (3218); electric grills (3229); gas or LP-grills or stoves (for outdoor use) (3248); grills, not specified (3249); kerosene grills or stoves (3230); and other grills or stoves (3233). Burns in which the fire involvement code 0, no fire involvement or flame spread, was used were counted as contact burns with fire or flame spread. No adjustments were made when the text indicated the use of non-grill or barbecue equipment or flame or flash burns with no fire involvement.

**Table 15. Usage Data from the Hearth, Patio & Barbecue Association’s (HPBA’s)
2020 Consumer Survey**

Usage Fact	Share or Percentage
Type of Grill Owned	
Gas	61%
Charcoal	49%
US Households with Grill or Smoker	64%
Percentage of US Grill Owners who Grill or Plan to Grill On	
July 4	68%
Memorial Day	56%
Labor Day	56%
Father’s Day	42%
Mother’s Day	29%
Super Bowl Sunday	23%
Thanksgiving	13%
New Year’s Day	9%

Sources: Hearth, Patio & Barbecue Association. “2020 State of the Barbecue Industry.” March 2020. Accessed at <https://www.hpba.org/Resources/PressRoom/ID/1911/2020-State-of-the-Barbecue-Industry> April 7, 2020.

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E-mail: research@nfpa.org.

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