

CHARACTERISTICS OF HOME FIRE VICTIMS

Jennifer D. Flynn

March 2010



**National Fire Protection Association
Fire Analysis and Research Division**

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Abstract

Children under age 5 are almost one and a half times as likely to die in a home fire as the average person, but their relative risk has been declining over time. Adults over the age of 65 are more than twice as likely to die in home fires as the average person. Alcohol or other drugs, disabilities and age-related limitations are all factors in the risk of home fire death.

Keywords: fire statistics, older adults, children, home fires, fire victims, residential fires, burns, smoke inhalation, fire deaths

Acknowledgements

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 U.S. Fire Administration for its work in developing, coordinating, and maintaining NFIRS.

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EXECUTIVE SUMMARY

Patterns by Age, Sex, Race, Ethnicity, and Region

The very young and the very old are at highest risk of death from home fires. Based on 2003-2007 experience data, children under age 5 are almost one and a half times as likely to die in a home fire as the general public. Older adults age 75 or over are nearly three times as likely to die as the general public. Risk increases with age. Adults 85 and over have more than three and a half times the risk of fire death as the general public.

Adults age 20 to 49 have the highest risk of reported non-fatal injury from home fires. Based on 2003-2007 experience, adults between 20-34 years old have a risk of injury almost 30% above the all-ages average. Adults between 35-49 years old have a risk of injury that is 17% higher than the all-ages average. Children in any age group have below-average or average risk of home fire injury, however, risk of injury increases from age 10 and up.

From 1980 to 2007, the share of home fire deaths accounted for by children under age 5 declined from 18% to 9%, while the share of older adults age 65 and over increased from 19% to 29%. The numbers of deaths and injuries for all age groups also declined from 1980, except for injuries in the age 35-49 and 50-64 groups, which increased slightly. The relative risk index for home fire deaths for children under age 5 has declined sharply since 1994, when the U.S. Consumer Product Safety Commission (CPSC) instituted requirements for child resistance in lighters.

In the U.S., males have a 29% higher risk of home fire death than females and a 16% higher risk of non-fatal home fire injury.

Seventy-one percent of the people who died of unintentional fire or flame injuries were white, while 23% were black. Black individuals faced a risk of fire death almost twice that of an individual of another race.

The Midwest region shows the highest risk for individuals dying in a home structure fire, followed by the South. Rural communities have the highest fire death rates in the nation.

Leading Causes of Fire

Smoking materials have historically caused the largest share of civilian deaths in home structure fires even though they account for 5% of the home structure fires. In home structure fires that result from smoking materials, adults over the age of 50 have the highest risk of dying.

Cooking equipment continues to be the leading cause of civilian fire injuries. People age 20-34 have a 50% higher chance of being injured in a cooking fire than does the general public of all ages.

Children under the age of 5 are almost eight times as likely to die in a fire caused by playing with heat source than are people of all ages.

Risk Factors

The majority of U.S. home fatal and non-fatal fire victims were in the area of fire origin when the fire began.

As age of victim increases, physical disabilities are cited much more frequently than other factors that contribute to injury.

More than one of every three (36%) fatal fire victims never wakes up before being injured. More than two of every five (43%) people injured (but not killed) in home fires were trying to fight the fire or rescue someone when they were injured.

Males are more likely than females to be attacking the risk (by fighting the fire or trying to rescue others from it) when injured, while females are more likely than males to be escaping the fire when injured.

Fatal Effects of Fire

Fire deaths due to toxic gases and/or oxygen deprivation, collectively called smoke inhalation, outnumber fire deaths due to burns. As of 1999 and later years, the smoke inhalation to burns ratio was 2-to-1, according to death certificate analysis. See Appendix D.



Characteristics of Home Fire Victims Fact Sheet

In the U.S., based on 2003-2007 experience data,

- The very young and the very old are at highest risk of death from home fires.
- Males are at a higher risk of death and injury from home fires than females.
- Black individuals are at a higher risk of death from home fires than Whites or Hispanics, who are at higher risk than Asian-Americans.

Estimates are derived from the U.S. Fire Administration National Fire Incident Reporting System (NFIRS) Version 5.0 and NFPA's annual fire department experience survey.



While children under the age of 5 and adults 65 and older are at highest risk for fire deaths and injuries, half (51%) of the home fire victims were between 20 and 64 years old.

From 1980 to 2007, the share of home fire deaths accounted for by

- Children under age 5 declined from 18% to 9%
- Older adults age 65 and over increased from 19% to 29%

Adults age 20 to 49 have the highest risk of reported non-fatal injury from home fires.

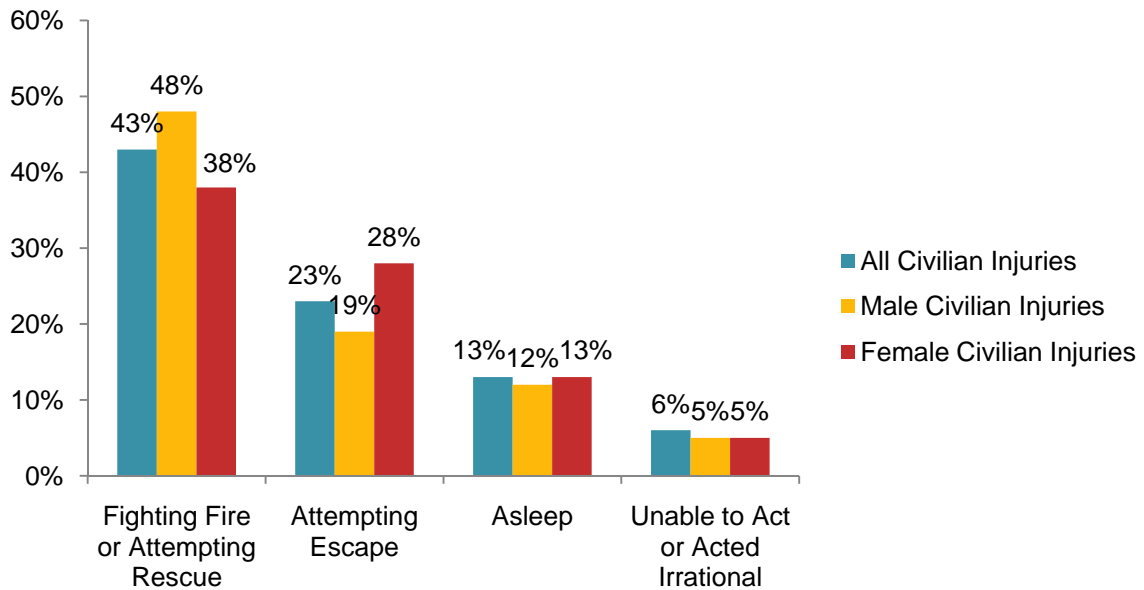
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The majority of U.S. home fatal and non-fatal fire victims were in the area of fire origin when the fire began.

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Civilian Fire Injuries in Homes by Activity when Injured and Sex of Victim



- More than two of every five (43%) people injured (but not killed) in home fires were trying to fight the fire or rescue someone when they were injured.
- Males are more likely than females to be fighting the fire or trying to rescue others from it when injured, while females are more likely than males to be escaping the risk when injured.

In home fires caused by cooking equipment, adults 85 and older are at highest risk of death in fires caused by cooking equipment, with a risk rating 4.5 times that of the general public.

Children under the age of 5 are almost eight times as likely to die in fire caused by playing with heat source than the general public.

PATTERNS BY AGE, SEX, RACE, AND REGION

In 2003-2007, 92% of all fire deaths occurred in the home, resulting in an estimated 2,850 civilian deaths.¹ The following report examines the characteristics of those victims that died or were injured in home structure fires annually during 2003-2007.

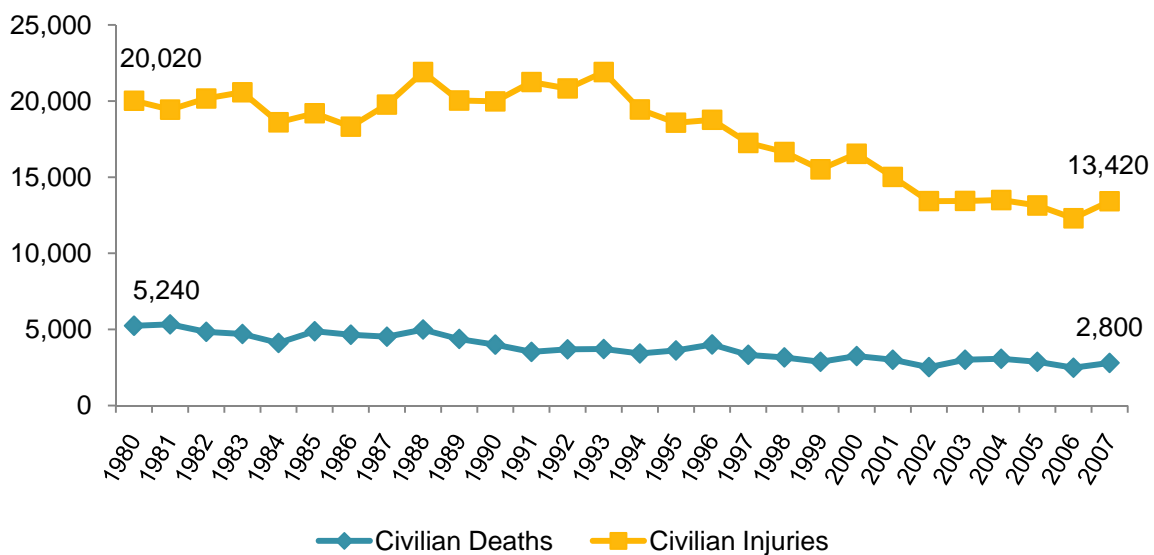
Certain characteristics that have historically been linked to fire death risk include age, sex, race, education level, poverty, family structure, age of the home, and the vacancy status of the home. Studies have shown that each factor has an impact on fire risk, but with varying relative strength. NFIRS 5.0 records data regarding age, sex, and race of the victim, but not education level, poverty, family structure, age of the home, and the vacancy status of the home. The following section contains info on demographics reported in NFIRS 5.0. Information about relative strength of factors and factors not collected in NFIRS 5.0 can be found in Appendix C.

Civilian Fire Death and Injury Trends

Civilian fire deaths and injuries in home structure fires are down.

Overall, civilian fire deaths in home structure fires were down 47% in 2007, compared to 1980. Civilian fire injuries in home structure fires in 2007 decreased 33%. NFIRS Version 5.0 was first introduced in 1999 and with it came some coding changes. From 2002-2007, civilian home fire deaths have fluctuated between a low of 2,480 and high of 3,070, but there does not appear to be a clear trend. There also does not appear to be a clear trend for home fire civilian injuries during the same time period. Civilian injuries have fluctuated between a low of 12,300 and a high of 13,500 during 2002-2007. (See Figure 1 and Table 2)

Figure 1. U.S. Civilian Home Fire Deaths and Injuries, 1980-2007

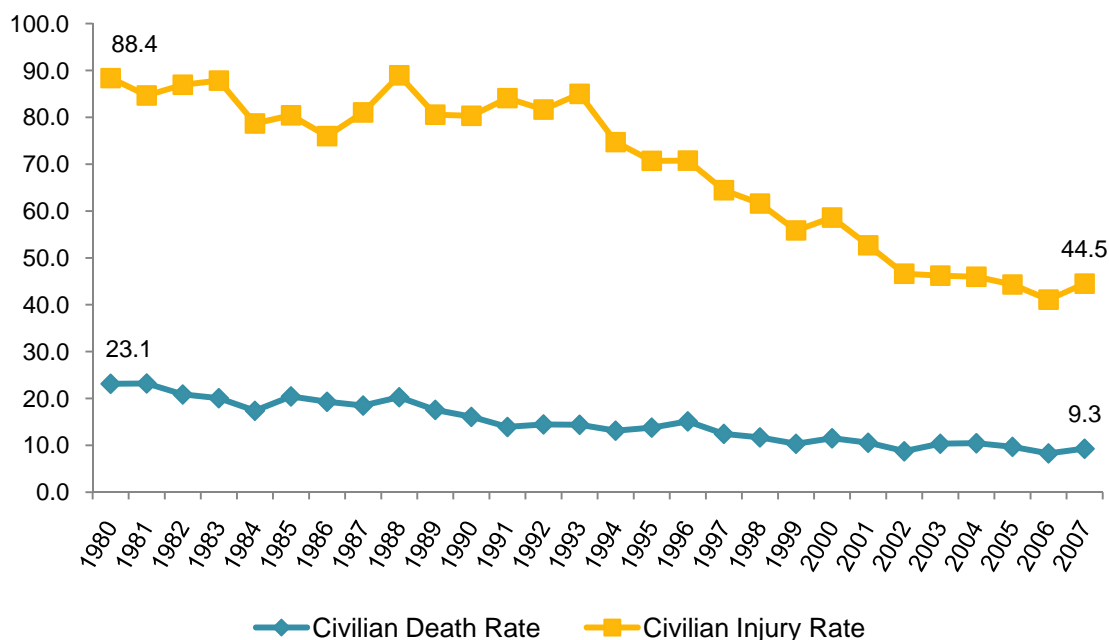


¹ Mike Karter, "Fire Loss in the United States During 2007," NFPA Division of Fire Analysis and Research, August 2008.

Civilian fire death and injury rates in home structure fires are down.

The civilian fire death rate in home structure fires was down 60% in 2007, compared to 1980. The civilian fire injury rate in home structure fires in 2007 decreased 50% from 1980. In 2002-2007, the civilian fire death rate has ranged from a low of 8.3 to a high of 10.5. During the same time period, civilian injury rates ranged from a low of 41.1 to a high of 46.6. (See Figure 2 and Table 2)

Figure 2. U.S. Civilian Home Fire Death and Injury Rates, 1980-2007



Source: NFIRS 5.0 and NFPA survey.

Age

The very old and the very young are at highest risk of death in home structure fires, as measured by deaths per million population.

Figure 3 shows the relative risk of fire death and injury by age group. Also see Table 1 A.

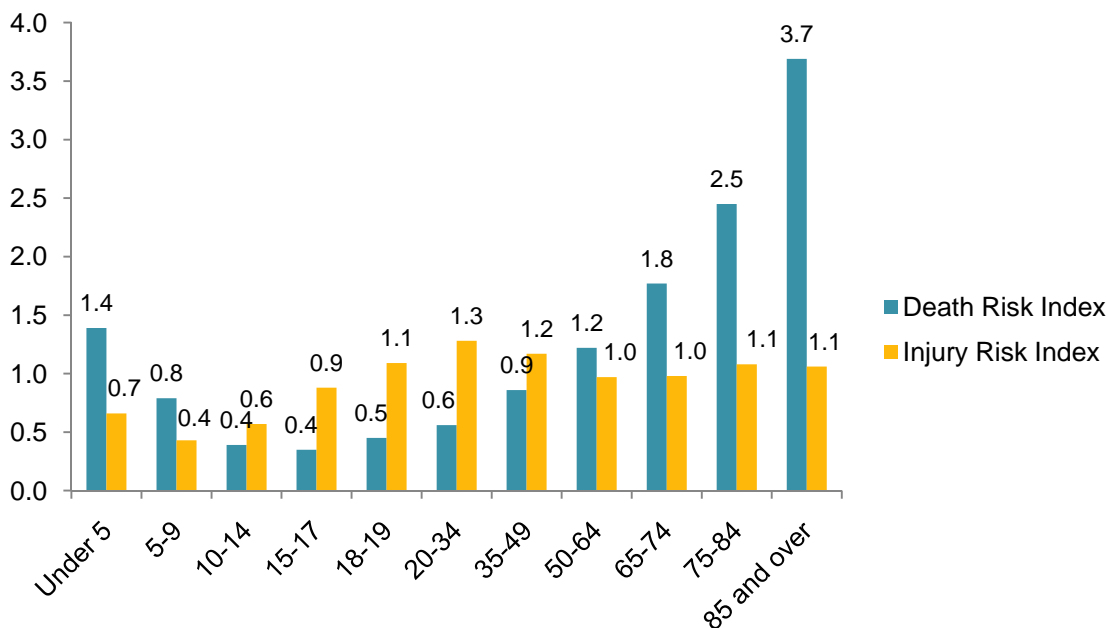
Civilian Fire Deaths in Homes by Age

On average: Forty percent of all civilian deaths in home structure fires involve victims that are between the ages of 35-64. Nineteen percent of civilian deaths involve adults between the ages of 35-49 and 21% between the ages of 50-64.

High risk victim: The very young and the very old are at highest risk of death in home structure fires. Children under the age of 5 are almost one and a half times as likely to die in home fires as the general public. Adults over the 75 are nearly three times as likely to die in a home structure fire than is the general public. Risk increases as age increases.

Children defined as those age 14 or under have roughly an average risk (15% below the all-ages average), as do children defined as those under age 18 (23% below the all-ages average). Young people between 10 and 17 had the lowest risk of dying in a fire compared to the general public.

**Figure 3. Risk of Civilian Death and Civilian Injury in Home Structure Fires
2003-2007 Annual Averages**



Source: NFIRS 5.0 and NFPA survey, population figures from U.S. Census Bureau.

*The risk index for an age group is the ratio of that age group's civilian fire deaths per million population to the civilian fire injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00. A risk index higher than 1.00 for a specific age group means that age group is at higher risk of death than the general public.

Adults age 20 to 49 have the highest risk of reported non-fatal injury from home fires, as measured by injuries per million population.

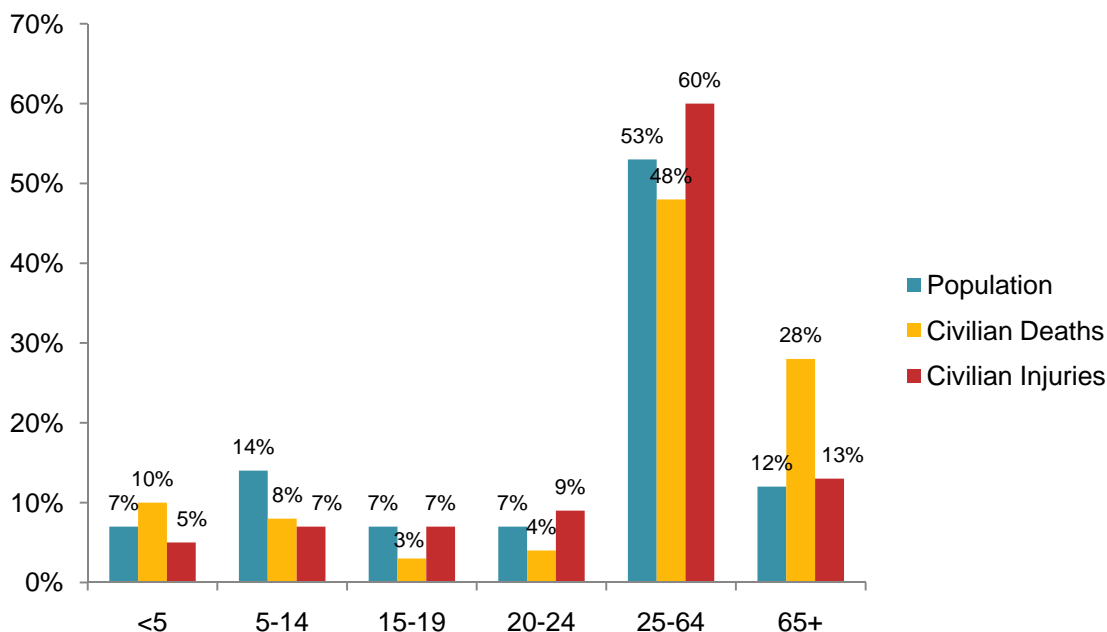
The statistics may suggest that parents or guardians are the injured victims, on average and are at the highest risk for injury in home structure fires. They may also suggest that members of this age group are more likely to drink which may impact their response to a fire. (See Figure 4 and Table 1B.)

Civilian Fire Injuries in Homes by Age

On average: More than half of all civilian fire injuries in home structure fires involve victims that are between the ages of 20-49. Twenty-one percent of civilian injuries involve adults between the ages of 20-34 and 22% between the ages of 35-49.

High risk victim: Children in any age group have below-average or average risk of home fire injury, although risk increases from age 10 and up. Adults age 20 to 49 have the highest risk of reported non-fatal injury from home fires. Adults age 20-34 are 1.3 times as likely to be injured in a home structure fire as the general public. Adults age 35-49 are 1.2 times as likely to be injured in a home structure fire as the general public.

**Figure 4. U.S. Home Structure Fire Deaths and Injuries by Age Group
2003-2007 Annual Averages**



Source: NFPA Annual Survey and NFIRS 5.0. U.S. Census Bureau, Population by Age 2003-2007 averages.

Since 2002, home fire deaths by children under 5 have declined, while deaths have increased for older adults age 65 and over.

From 1980 to 2007, the share of home fire deaths accounted for by children under age 5 declined from 18% to 9%, while the share of older adults age 65 and over increased from 19% to 29%. However, adults over the age of 65 have experienced a decrease in injuries of 18% since 1980. Civilian fire injuries show a similar trend. Since 2002, home fire injuries by children under 5 have declined 24%, while injuries increased 13% for older adults age 65 and over. (See Table 3.)

Table 4 shows that the relative risk index for home structure fire deaths by age over time. The risk of fire death for children under age 5 has declined sharply since 1994, when the U.S. Consumer Product Safety Commission instituted requirements for child resistance in lighters. In 2007, children under age 5 were only 24% more likely to die in a home fire as the average person.

Sex

Males have a higher risk of fire death and injury in home structure fires.

Males had a 29% higher risk of home fire death than females and a 16% higher risk of non-fatal home fire injury. Tables 5-8 also show that the differences in U.S. home fire death risk between males and females in 2003-2007 was greatest for adults age 20 to 49 years old and adults 65-74 and 85 and over, while the differences in home fire injury risk between males and females is greatest for children 9 and under and people age 15 to 49 years old.

Table A.
Risk of Civilian Death or Injury in Home Structure Fires by Sex
2003-2007 Annual Estimates

Sex	Civilian Death	Risk	Civilian Injuries	Risk
Male	1,580 (56%)	1.1	6,980 (53%)	1.1
Female	1,260 (44%)	0.9	6,180 (47%)	0.9
Total	2,850 (100%)	1.0	13,160 (100%)	1.0

Civilian Fire Deaths in Homes by Sex

On average: More than half (56%) of all civilian fatal fire victims in home structure fires are male. Twenty percent of male fatal victims are between the ages of 35 and 49 and another 23% are between the ages of 50 and 64. For females, 18% of home fatal fire victims are between the ages of 35 and 49 and 18% are between the ages of 50 and 64. (See Table 5.)

High risk victim: Males have a slightly higher risk of fatal injury in home structure fires than do females. Males under the age of 5 and over the age of 75 have the highest risk of fatal injury in home structure fires. Females over the age of 65 have the highest risk of fatal injury in home structure fires. Although males 75 and over are a high risk group for fatal injuries, they have a significantly lower risk of dying in a home structure fire compared to women of the same age. (See Table 6.)

Civilian Fire Injuries in Homes by Sex

On average: More than half (53%) of all civilian fire non-fatal victims in home structure fires are male. Twenty-eight percent of male non-fatal victims are between the ages of 20 and 34 and another 27% are between the ages of 35 and 49. For females, 25% of home non-fatal fire victims are between the ages of 20 and 34 and 25% are between the ages of 35 and 49. (See Table 7.)

High risk victim: Males have a slightly higher risk of injury in home structure fires than do females. Males between the ages of 20 and 49 have the highest risk of non-fatal injury in home structure fires. Females between the ages of 20 and 34 have the highest risk of fatal injury in home structure fires. (See Table 8.)

Race and Ethnicity

Black individuals face a risk of fire death almost twice that of an individual of another race.

Although almost three of every four (71%) of home fire fatal victims are white, blacks are at almost twice the risk of death than that of an individual of another race.

Table B.
Risk of Civilian Death or Injury in Home Structure Fires by Race
2003-2007 Annual Estimates

Race	Civilian Deaths		Risk	Civilian Injuries		Risk
White	2,030	(71%)	0.9	9,060	(69%)	0.9
Black	660	(23%)	1.8	3,050	(23%)	1.8
American Indian, Eskimo or Aleut	40	(2%)	1.5	80	(1%)	0.6
Asian	30	(1%)	0.3	200	(2%)	0.3
Native Hawaiian or Pacific Islander	0	(0%)	0.5	10	(0%)	0.5
Unclassified race, includes multi-racial	80	(3%)	1.7	760	(6%)	3.5
Total	2,850	(100%)	1.0	13,160	(100%)	1.0

Civilian Fire Deaths in Homes by Race

On average: Almost three of every four (71%) civilian fatal fire victims in home structure fires are white and 23% of fatal victims are black. Age breakdowns by race show that on average, 23% of white fatal victims are between the ages of 35-49 and 23% are between the ages of 50-64. The same age groupings are the peak age for fatal black victims - 18% are between the ages of 35-49 and 17% are between the ages of 50-64. Fatal victims that are not white or black show a different peak age grouping. Twenty-one percent of fatal victims that are not white or black are between the ages of 20-34 and 20% are under the age of five. (See Table 10A.)

High risk victim: Black people, multiracial people or cases where race was unclassified, and American Indians, Eskimos or Aleuts are at highest risk of fatal injury in home structure fires. Black individuals are at a higher risk of death from home fires than Whites or Hispanics, who are at higher risk than Asian-Americans. Black people over the age of 65 are more than three times as likely to die in a home structure fire than are blacks of all ages. Black children under the age of five also have higher risk of dying in home structure fires than does the general black population. White people over the age of 75 are almost three times more likely to die in a home structure fire than are whites of all ages. People of all races, excluding white or black, over the age of 85 have a risk of dying in fire that is almost four times greater than the risk of death to the general population of that same race category. Children under the age of five are also at high risk. They have more than two times the risk of dying in a home structure fire than does the general population, excluding whites and blacks. (See Table 10A.)

Civilian Fire Injuries in Homes by Race

On average: Almost two of every three (69%) non-fatal home fire victims are white and 23% are black. Twenty-seven percent of non-fatal white victims were between the ages of 35 and 49, 26% of black victims were between the ages of 35 and 49, while 33% of victims that were neither white nor black were between the ages of 20 and 34. (See Table 10B.)

High risk victim: Multiracial people or cases where race was unclassified are more than three times as likely to be injured in a home structure fire than are people of other races. The risk of fire injury to a black person 20 years or older is higher than the risk to the black population in general, but risk is highest for black people between the ages of 75-84. The risk of fire injury to a white person between the ages of 18-34 and over the age of 65 is higher than the risk to the white population in general. The risk of fire injury to a person that is not white or black is higher for people between the ages of 18-34 than the risk to the general population that is not white or black. (See Table 10B.)

Table C.
Risk of Civilian Death or Injury in Home Structure Fires by Ethnicity
2003-2007 Annual Estimates

Race	Civilian Deaths	Risk of Death	Civilian Injuries	Risk of Injury
Not Hispanic	2,550 (90%)	1.1	11,180 (85%)	1.0
Hispanic	300 (10%)	0.7	1,980 (15%)	1.0
Total	2,850 (100%)	1.0	13,160 (100%)	1.0

Civilian Fire Deaths in Homes by Ethnicity

On average: Nine out of every ten (90%) civilian fatal fire victims in home structure fires are Not Hispanic. Twenty-five percent of Hispanic home fire fatal victims are between the ages of 20 and 34 and 23% are under the age of 5. (See Table 11.)

High risk victim: Non-Hispanic people are at a slightly higher risk of dying in a home structure fire than are Hispanics. Age breakdowns of Hispanic fire victims shows that people over the age of 85 are almost six times as likely to die and children under the age of five are more than two times as likely to die in a home fire than are all Hispanics. (See Table 11.)

Civilian Fire Injuries in Homes by Ethnicity

On average: Six of every 7 (85%) civilian non-fatal fire victims in home structure fires are Not Hispanic. Thirty-four percent of Hispanic home fire non-fatal victims are between the ages of 20 and 34 and 25% are between the ages of 34 and 49. (See Table 11.)

High risk victim: Hispanic and Non-Hispanic people have the same level of risk of being injured in a home structure fire. Age breakdowns of Hispanic non-fatal fire victims shows that children under 15 were half as likely

to be injured in a home structure fire than that of the general, Hispanic population. (See Table 11.)

Region

In 2003-2007, the highest risk of fire death was for individuals living in the Midwest, followed closely by the South.

The Midwest had the highest risk of fire death for all U.S. regions in 2003-2007. The second highest risk of fire death is for individuals residing in the South. More statistics on fires, deaths, injuries and direct property damage by region is available in Mike Karter’s report, “U.S. Fire Experience by Region” 2010.

**Table D.
Risk of Civilian Death or Injury in Home Structure Fires by Region
2003-2007 Annual Estimates**

Region	Civilian Deaths	Risk of Death	Civilian Injuries	Risk of Injury
Northeast	370 (13%)	0.7	2,310 (18%)	1.0
Midwest	850 (30%)	1.4	4,310 (33%)	1.5
South	1,290 (45%)	1.2	4,690 (36%)	1.0
West	330 (12%)	0.5	1,850 (14%)	0.6
Total	2,850 (100%)	1.0	13,160 (100%)	1.0

Civilian Fire Deaths in Homes by Region

On average: Almost half (45%) of all civilian fire deaths occur in the South. Age breakdowns by region show similar trends for civilian fire deaths. For each region, the largest percentages of civilian fire deaths involve adults between the ages of 20-64. For all regions, 20-22% of civilian deaths in any particular region involve adults between the ages of 50-64. (See Table 12A.)

High risk victim: The Midwest region shows the highest risk for dying in a home structure fire, followed by the South. Age breakdowns by region show that for each region, adults over the age of 75 are typically more than twice as likely to die in a home structure fire than is the general population of that region. (See Table 12A.)

Civilian Fire Injuries in Homes by Region

On average: One of every three (36%) civilian non-fatal fire victims in home structure fires live in the South. Another 33% of home structure fire injury victims live in the Midwest. For each region, 50-54% of civilian injuries involved adults between the ages of 20-49. (See Table 12B.)

High risk victim: The Midwest shows the highest risk for being injured in a home structure fire. Age breakdowns by region show similar trends for risk

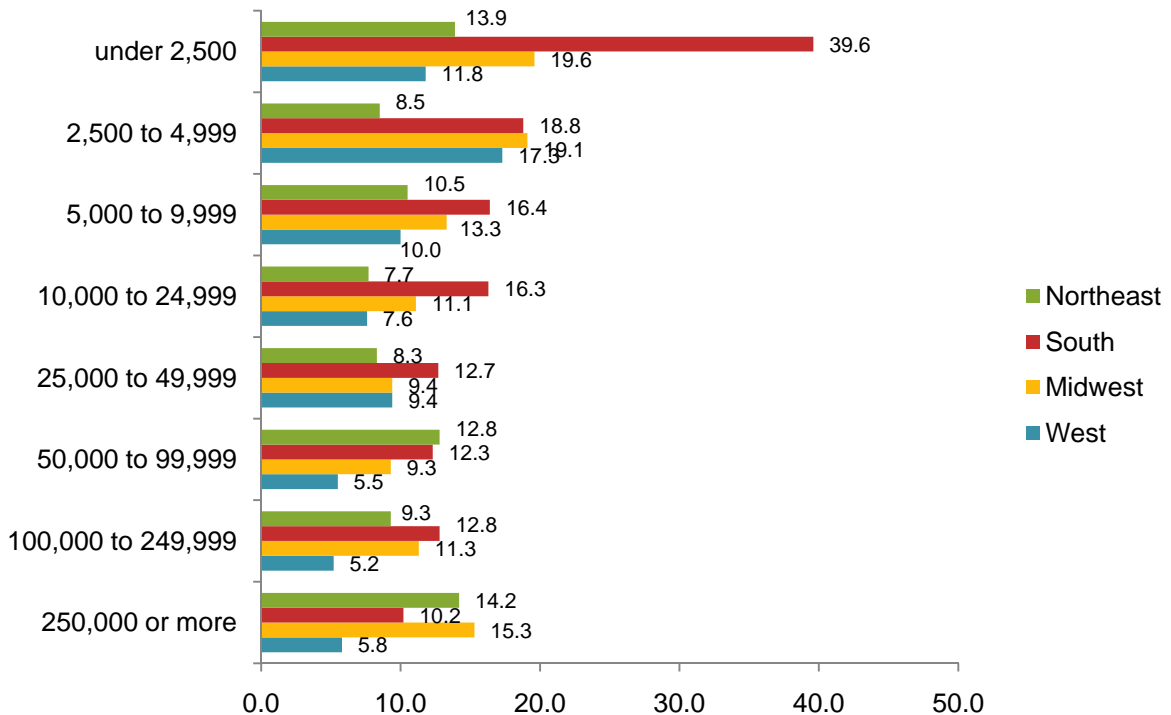
of injury in the Midwest, South, and West – where individuals 18-44 have a slightly higher than average risk of being injured in a home structure fire. In the Northeast, while adults between the ages of 25-44 also have a slightly higher risk of injury, adults over the age of 85 have the highest risk of home structure fire injury. (See Table 12B.)

Rural communities have the highest fire death rates in the nation.²

Rural populations under 2,500 had an average fire death rate of 30.9 per million population, annually, during 1997-2001 (excluding September 11th). With the exception of communities with populations of 2,500 to 5,000, the fire death in rural populations was at least twice that found in most other population intervals.

Fire incident data for 2004-2008, shows that overall, the smaller communities (populations under 5,000) had the highest fire incident rates. Regionally, the Northeast had the highest incident rates for larger communities (population of 100,000 or more), while the South had the highest rates for all other communities, including the smallest communities (population under 10,000).³

Figure 5. Fire Death Rates per Million Population by Region and Community Size: 2002-2006



² Sharon Gamache, et al., “Mitigation of the Rural Fire Problem,” U.S. Fire Administration, December 2007.

³ Source: Michael J. Karter, Jr., “U.S. Fire Experience by Region,” NFPA Fire Analysis and Research Division, 2010.

Other Characteristics

Education level, poverty, family structure, age of the home, and the vacancy status of the home have been linked to fire death risk.

These characteristics have historically been linked to fire death risk, but are not collected in NFIRS 5.0. *U.S. Unintentional Fire Death Rates by State*, by John R. Hall, Jr. has more information on some of these correlating variables and is available at www.nfpa.org/research.

Table 1.
U.S. Civilian Fire Deaths in Homes, by Age Group
Annual Average of 2003-2007 Structure Fires

A. Civilian Deaths

Age	Civilian Deaths		Population (in Millions)		Civilian Fire Deaths per Million Population	Risk Index
Under 5	270	(10%)	20.2	(7%)	13.4	1.39
5-9	150	(5%)	19.7	(7%)	7.6	0.79
10 to 14	80	(3%)	20.8	(7%)	3.7	0.39
15-17	40	(1%)	12.7	(4%)	3.3	0.35
18-19	40	(1%)	8.3	(3%)	4.3	0.45
20-34	330	(11%)	61.2	(21%)	5.3	0.56
35-49	550	(19%)	66.2	(22%)	8.2	0.86
50-64	590	(21%)	50.3	(17%)	11.8	1.22
65-74	320	(11%)	18.7	(6%)	17.0	1.77
75-84	310	(11%)	13.0	(4%)	23.5	2.45
85 and over	180	(6%)	5.1	(2%)	35.4	3.69
All ages	2,850	(100%)	296.4	(100%)	9.6	1.00
Selected Age Groups						
14 and under	500	(18%)	60.8	(21%)	8.2	0.85
Under 18	540	(19%)	73.5	(25%)	7.4	0.77
18-64	1,500	(53%)	186.0	(63%)	8.1	0.84
65 and over	800	(28%)	36.8	(12%)	21.8	2.27
75 and over	490	(17%)	18.1	(6%)	26.9	2.80

Table 1.
U.S. Civilian Fire Deaths in Homes, by Age Group
Annual Average of 2003-2007 Structure Fires
(Continued)

B. Civilian Injuries

Age	Civilian Injuries		Population (in Millions)		Civilian Fire Injuries per Million Population	Risk Index
Under 5	600	(4%)	20.2	(7%)	29.3	0.66
5-9	400	(3%)	19.7	(7%)	19.0	0.43
10 to 14	500	(4%)	20.8	(7%)	25.2	0.57
15-17	500	(4%)	12.7	(4%)	38.9	0.88
18-19	400	(3%)	8.3	(3%)	48.6	1.09
20-34	3,500	(27%)	61.2	(21%)	57.1	1.28
35-49	3,400	(26%)	66.2	(22%)	52.0	1.17
50-64	2,200	(16%)	50.3	(17%)	42.9	0.97
65-74	800	(6%)	18.7	(6%)	43.5	0.98
75-84	600	(5%)	13.0	(4%)	47.9	1.08
85 and over	200	(2%)	5.1	(2%)	47.1	1.06
All ages	13,200	(100%)	296.4	(100%)	44.4	1.00
Selected Age Groups						
14 and under	1,500	(11%)	60.8	(21%)	24.5	0.55
Under 18	2,000	(15%)	73.5	(25%)	27.0	0.61
18-64	9,500	(72%)	186.0	(63%)	51.0	1.15
65 and over	1,700	(13%)	36.8	(12%)	45.6	1.03
75 and over	900	(7%)	18.1	(6%)	49.7	1.12

*Rates (3rd column) are ratios of fire deaths and injuries (1st column) divided by population (2nd column). Rates cannot be meaningfully summed across age groups. The risk index (4th column) for an age group is the ratio of that age group's civilian fire injuries per million population (3rd column). The risk index for all age groups combined is 1.00.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian injuries are estimated to the nearest hundred. Totals may not equal sums because of rounding.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 2.
U.S. Civilian Fire Deaths, Injuries, and Death or
Injury Rates in Home Structure Fires
by Year, 1980-2007

Year	Civilian Deaths	Civilian Injuries	Population (in Millions)	Civilian Death Rate	Civilian Injury Rate
1980	5,240	20,020	226.546	23.1	88.4
1981	5,330	19,440	229.637	23.2	84.7
1982	4,840	20,170	231.996	20.9	86.9
1983	4,700	20,580	234.284	20.1	87.8
1984	4,110	18,610	236.478	17.4	78.7
1985	4,880	19,200	238.742	20.4	80.4
1986	4,650	18,320	241.079	19.3	76.0
1987	4,520	19,770	243.942	18.5	81.0
1988	4,990	21,910	246.307	20.3	89.0
1989	4,370	20,040	248.761	17.6	80.6
1990	4,000	19,980	248.71	16.1	80.3
1991	3,520	21,250	252.685	13.9	84.1
1992	3,690	20,830	255.082	14.5	81.7
1993	3,710	21,910	257.783	14.4	85.0
1994	3,420	19,450	260.337	13.1	74.7
1995	3,620	18,580	262.757	13.8	70.7
1996	4,010	18,770	265.283	15.1	70.8
1997	3,330	17,250	267.635	12.4	64.5
1998	3,160	16,650	270.297	11.7	61.6
1999	2,870	15,520	277.841	10.3	55.9
2000	3,250	16,540	282.178	11.5	58.6
2001	3,010	15,020	285.094	10.6	52.7
2002	2,520	13,430	288.126	8.6	46.6
2003	3,010	13,440	290.796	10.4	46.2
2004	3,070	13,500	293.638	10.5	46.0
2005	2,870	13,140	296.507	9.7	44.3
2006	2,480	12,300	299.324	8.3	41.1
2007	2,800	13,420	301.539	9.3	44.5

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or individual fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths and injuries are rounded to the nearest ten. Totals may not equal sums because of rounding.

Source: NFIRS and NFPA survey

Table 3.
U.S. Civilian Fire Deaths and Injuries in Homes, by Age Group
1980-2007 Structure Fires, by Year

A. Deaths

Age	1980		1981		1982		1983		1984	
Under 5	950	(18%)	840	16%)	800	(17%)	730	(15%)	710	(17%)
5-9	440	(9%)	350	(7%)	390	(8%)	310	(6%)	320	(8%)
10-14	270	(5%)	270	(5%)	230	(5%)	240	(5%)	190	(5%)
15-19	220	(4%)	170	(3%)	210	(4%)	180	(4%)	150	(4%)
20-34	1,070	(20%)	930	(17%)	860	(18%)	900	(19%)	720	(17%)
35-49	620	(11%)	510	(10%)	520	(11%)	530	(11%)	520	(13%)
50-64	700	(13%)	880	(16%)	760	(16%)	630	(13%)	560	(14%)
65-74	430	(8%)	590	(11%)	450	(10%)	510	(11%)	410	(10%)
75 & over	550	(10%)	790	(15%)	630	(13%)	670	(14%)	540	(13%)
Total	5,240	(100%)	5,330	(100%)	4,840	(100%)	4,700	(100%)	4,110	(100%)
14 & under	1,660	(32%)	1,460	(27%)	1,420	(29%)	1,270	(27%)	1,210	(29%)
65 & over	980	(19%)	1,390	(26%)	1,080	(22%)	1,180	(25%)	950	(23%)

Age	1985		1986		1987		1988		1989	
Under 5	830	(17%)	890	(19%)	930	(21%)	910	(18%)	850	(19%)
5-9	410	(8%)	350	(8%)	370	(8%)	370	(7%)	360	(8%)
10-14	180	(4%)	170	(4%)	160	(4%)	180	(4%)	180	(4%)
15-19	160	(3%)	160	(4%)	150	(4%)	160	(3%)	110	(3%)
20-34	840	(17%)	840	(18%)	660	(14%)	800	(16%)	760	(17%)
35-49	560	(12%)	570	(12%)	550	(12%)	660	(13%)	530	(12%)
50-64	650	(13%)	540	(11%)	560	(12%)	710	(14%)	540	(12%)
65-74	530	(11%)	440	(10%)	450	(10%)	530	(11%)	430	(10%)
75 & over	730	(15%)	680	(15%)	690	(15%)	670	(13%)	620	(14%)
Total	4,880	(100%)	4,650	(100%)	4,520	(100%)	4,990	(100%)	4,370	4,370(100%)
14 & under	1,410	(29%)	1,410	(30%)	1,460	(32%)	1,460	(29%)	1,390	1,390(32%)
65 & over	1,260	(26%)	1,120	(24%)	1,150	(25%)	1,200	(24%)	1,040	1,040(24%)

Table 3.
U.S. Civilian Fire Deaths and Injuries in Homes, by Age Group
1980-2007 Structure Fires, by Year
(Continued)

A. Deaths

Age	1990		1991		1992		1993		1994	
Under 5	670	(17%)	690	(20%)	770	(21%)	750	(20%)	660	(19%)
5-9	240	(6%)	310	(9%)	210	(6%)	260	(7%)	280	(8%)
10-14	110	(3%)	130	(4%)	140	(4%)	120	(3%)	90	(3%)
15-17	60	(2%)	60	(2%)	50	(1%)	50	(1%)	40	(1%)
18-19	80	(2%)	40	(1%)	60	(2%)	50	(1%)	50	(2%)
20-34	690	(17%)	570	(16%)	57	(16%)	520	(14%)	510	(15%)
35-49	570	(14%)	510	(14%)	540	(15%)	570	(15%)	560	(16%)
50-64	550	(14%)	370	(10%)	440	(12%)	410	(11%)	400	(11%)
65-74	440	(11%)	360	(10%)	390	(11%)	380	(10%)	360	(11%)
75-84	380	(9%)	320	(9%)	320	(9%)	390	(10%)	290	(8%)
85 and over	220	(6%)	160	(5%)	200	(5%)	230	(6%)	180	(5%)
Total	4,000	(100%)	3,520	(100%)	3,690	(100%)	3,710	(100%)	3,420	(100%)
14 & under	1,030	(26%)	1,130	(32%)	1,120	(30%)	1,130	(30%)	1,040	(30%)
65 & over	1,030	(26%)	850	(24%)	920	(25%)	990	(27%)	830	(24%)

Age	1995		1996		1997		1998		1999	
Under 5	570	(16%)	580	(15%)	490	(15%)	340	(11%)	440	(15%)
5 – 9	260	(7%)	230	(6%)	270	(8%)	210	(7%)	220	(8%)
10 – 14	100	(3%)	120	(3%)	130	(4%)	140	(4%)	140	(5%)
15 – 17	120	(2%)	70	(2%)	50	(2%)	30	(1%)	170	(6%)
18 – 19	60	(1%)	40	(1%)	30	(1%)	40	(1%)	110	(4%)
20 – 34	460	(13%)	580	(15%)	380	(12%)	380	(12%)	360	(13%)
35 – 49	690	(19%)	720	(18%)	540	(16%)	650	(20%)	500	(17%)
50 – 64	460	(13%)	510	(13%)	480	(15%)	480	(15%)	330	(12%)
65 – 74	360	(10%)	440	(11%)	310	(9%)	340	(11%)	250	(9%)
75 – 84	350	(10%)	420	(10%)	420	(13%)	370	(12%)	250	(9%)
85 & over	240	(7%)	280	(7%)	220	(7%)	210	(7%)	110	(4%)
Total	3,620	(100%)	4,010	(100%)	3,330	(100%)	3,160	(100%)	2,870	(100%)
14 & under	960	(26%)	940	(23%)	890	(27%)	680	(22%)	800	(28%)
65 & over	960	(26%)	1,150	(29%)	950	(28%)	920	(29%)	610	(21%)

Table 3.
U.S. Civilian Fire Deaths and Injuries in Homes
by Age Group, 1980-2007 Structure Fires, by Year
(Continued)

A. Deaths

Age	2000		2001		2002		2003		2004	
Under 5	380	(12%)	350	(12%)	270	(11%)	320	(11%)	350	(11%)
5 – 9	250	(8%)	230	(8%)	130	(5%)	150	(5%)	190	(6%)
10 – 14	100	(3%)	110	(4%)	100	(4%)	80	(3%)	80	(3%)
15 – 17	30	(1%)	70	(2%)	20	(1%)	50	(2%)	50	(1%)
18 – 19	50	(2%)	40	(1%)	20	(1%)	40	(1%)	30	(1%)
20 – 34	300	(9%)	290	(10%)	330	(13%)	320	(11%)	400	(13%)
35 – 49	730	(23%)	620	(21%)	500	(20%)	570	(19%)	540	(18%)
50 – 64	530	(16%)	530	(17%)	480	(19%)	630	(21%)	600	(19%)
65 – 74	370	(11%)	340	(11%)	240	(10%)	320	(11%)	330	(11%)
75 – 84	380	(12%)	280	(9%)	260	(10%)	330	(11%)	320	(10%)
85 & over	120	(4%)	160	(5%)	160	(6%)	180	(6%)	190	(6%)
Total	3,250	(100%)	3,010	(100%)	2,520	(100%)	3,110	(100%)	3,070	(100%)
14 & under	730	(23%)	690	(23%)	500	(20%)	560	(19%)	620	(20%)
65 & over	870	(27%)	770	(26%)	660	(26%)	830	(28%)	840	(27%)

Age	2005		2006		2007	
Under 5	250	(9%)	200	(8%)	240	(9%)
5 – 9	150	(5%)	130	(5%)	130	(5%)
10 – 14	80	(3%)	60	(2%)	90	(3%)
15 – 17	50	(2%)	20	(1%)	40	(2%)
18 – 19	30	(1%)	40	(1%)	50	(2%)
20 – 34	310	(11%)	300	(12%)	310	(11%)
35 – 49	640	(22%)	470	(19%)	510	(18%)
50 – 64	580	(20%)	520	(21%)	630	(23%)
65 – 74	310	(11%)	310	(13%)	320	(11%)
75 – 84	310	(11%)	280	(11%)	290	(10%)
85 & over	180	(6%)	160	(6%)	190	(7%)
Total	2,860	(100%)	2,480	(100%)	2,800	(100%)
14 & under	480	(17%)	390	(16%)	450	(16%)
65 & over	790	(28%)	750	(30%)	800	(29%)

Table 3.
U.S. Civilian Fire Deaths and Injuries in Homes
by Age Group, 1980-2007 Structure Fires, by Year
(Continued)

B. Injuries

Age	1980		1981		1982		1983		1984	
Under 5	1410	(7%)	1,200	(6%)	1,320	(7%)	1,430	(7%)	1,340	(7%)
5 – 9	760	(4%)	730	(4%)	690	(3%)	720	(4%)	640	(3%)
10 – 14	910	(5%)	990	(5%)	1,000	(5%)	1,020	(5%)	920	(5%)
15 – 19	1,880	(9%)	1,760	(9%)	1,850	(9%)	1,860	(9%)	1,480	(8%)
20 – 34	7,290	(37%)	6,830	(35%)	6,990	(35%)	6,980	(34%)	6,600	(36%)
35 – 49	3,280	(16%)	3,140	(16%)	3,630	(18%)	3,620	(18%)	3,380	(18%)
50 – 64	2,330	(12%)	2,490	(13%)	2,470	(12%)	2,570	(12%)	2,190	(12%)
65 – 74	1,140	(6%)	1,220	(6%)	1,200	(6%)	1,250	(6%)	1,080	(6%)
75 – 84	1,030	(5%)	1,090	(5%)	1,030	(5%)	1,130	(6%)	990	(5%)
Total	20,020	(100%)	19,440	(100%)	20,170	(100%)	20,580	(100%)	18,610	(100%)
14 & under	3,080	(15%)	2,930	(15%)	3,000	(15%)	3,160	(15%)	2,890	(16%)
65 & over	2,160	(11%)	2,310	(12%)	2,230	(11%)	2,380	(12%)	2,070	(11%)

Age	1985		1986		1987		1988		1989	
Under 5	1,420	(7%)	1,400	(8%)	1,450	(7%)	1,740	(8%)	1,550	(8%)
5 – 9	680	(4%)	780	(4%)	750	(4%)	880	(4%)	890	(4%)
10 – 14	880	(5%)	870	(5%)	860	(4%)	980	(4%)	960	(5%)
15 – 19	1,410	(7%)	1,430	(8%)	1,640	(8%)	1,680	(8%)	1,390	(7%)
20 – 34	6,820	(35%)	6,030	(33%)	6,590	(33%)	7,360	(34%)	6,770	(34%)
35 – 49	3,490	(18%)	3,410	(19%)	3,730	(19%)	4,350	(20%)	3,890	(19%)
50 – 64	2,250	(12%)	2,120	(12%)	2,230	(11%)	2,260	(10%)	2,190	(11%)
65 – 74	1,190	(6%)	1,150	(6%)	1,260	(6%)	1,330	(6%)	1,140	(6%)
75 & over	1,090	(6%)	1,140	(6%)	1,270	(7%)	1,350	(6%)	1,260	(6%)
Total	19,200	(100%)	18,320	(100%)	19,770	(100%)	21,910	(100%)	20,040	(100%)
14 & under	2,970	(15%)	3,040	(17%)	3,060	(15%)	3,590	(16%)	3,390	(17%)
65 & over	2,280	(12%)	2,290	(13%)	2,530	(13%)	2,690	(12%)	2,400	(12%)

Table 3.
U.S. Civilian Fire Deaths and Injuries in Homes
by Age Group, 1980-2007 Structure Fires, by Year
(Continued)

B. Injuries

Age	1990		1991		1992		1993		1994	
Under 5	1,540	(8%)	1,630	(8%)	1,800	(9%)	1,850	(8%)	1,530	(8%)
5 – 9	810	(4%)	1,000	(5%)	850	(4%)	850	(4%)	860	(4%)
10 – 14	900	(5%)	1,040	(5%)	1,030	(5%)	1,130	(5%)	1,010	(5%)
15 – 17	730	(4%)	830	(4%)	800	(4%)	860	(4%)	880	(5%)
18 – 19	680	(3%)	660	(3%)	680	(3%)	630	(3%)	610	(3%)
20 – 34	6,760	(34%)	6,980	(33%)	6,690	(32%)	6,860	(31%)	5,660	(29%)
35 – 49	4,040	(20%)	4,280	(20%)	4,350	(21%)	4,830	(22%)	4,290	(22%)
50 – 64	2,090	(11%)	2,160	(10%)	2,150	(10%)	2,310	(11%)	2,020	(10%)
65 – 74	1,130	(6%)	1,320	(6%)	1,180	(6%)	1,200	(6%)	1,180	(6%)
75 – 84	930	(5%)	870	(4%)	890	(4%)	930	(4%)	930	(5%)
85 & over	370	(2%)	480	(2%)	420	(2%)	450	(2%)	490	(3%)
Total	19,980	(100%)	21,250	(100%)	20,830	(100%)	21,910	(100%)	19,450	(100%)
14 & under	3,250	(16%)	3,670	(17%)	3,680	(18%)	3,830	(17%)	3,400	(17%)
65 & over	2,430	(12%)	2,670	(13%)	2,490	(12%)	2,580	(12%)	2,600	(13%)
Age	1995		1996		1997		1998		1999	
Under 5	1,320	(7%)	1,160	(6%)	1,080	(6%)	1,000	(6%)	1,220	(8%)
5 – 9	770	(4%)	780	(4%)	710	(4%)	710	(4%)	290	(2%)
10 – 14	930	(5%)	1,000	(5%)	960	(6%)	820	(5%)	830	(5%)
15 – 17	790	(4%)	810	(4%)	720	(4%)	700	(4%)	390	(3%)
18 – 19	540	(3%)	560	(3%)	510	(3%)	500	(3%)	730	(5%)
20 – 34	5,400	(29%)	5,390	(29%)	4,890	(28%)	4,530	(27%)	3,990	(26%)
35 – 49	4,180	(22%)	4,460	(24%)	4,240	(25%)	4,260	(26%)	4,570	(29%)
50 – 64	2,080	(11%)	2,060	(11%)	1,860	(11%)	2,040	(12%)	1,410	(9%)
65 – 74	1,190	(7%)	1,070	(6%)	990	(6%)	970	(6%)	730	(5%)
75 – 84	840	(5%)	900	(5%)	860	(5%)	750	(5%)	830	(5%)
85 & over	550	(3%)	590	(3%)	430	(3%)	390	(2%)	540	(3%)
Total	18,580	(100%)	18,770	(100%)	17,250	(100%)	16,650	(100%)	15,520	(100%)
14 & under	3,010	(16%)	2,940	(16%)	2,750	(16%)	2,520	(15%)	2,340	(15%)
65 & over	2,580	(14%)	2,560	(14%)	2,290	(13%)	2,110	(13%)	2,090	(13%)

Table 3
U.S. Civilian Fire Deaths and Injuries in Homes, by Age Group
1980-2007 Structure Fires, by Year
(Continued)

B. Injuries

Age	2000		2001		2002		2003		2004	
Under 5	1,090	(7%)	980	(6%)	780	(6%)	690	(5%)	650	(5%)
5 – 9	460	(3%)	500	(3%)	410	(3%)	370	(3%)	390	(3%)
10 – 14	610	(4%)	630	(4%)	620	(5%)	630	(5%)	570	(4%)
15 – 17	700	(4%)	520	(3%)	520	(4%)	520	(4%)	490	(4%)
18 – 19	570	(3%)	520	(3%)	430	(3%)	370	(3%)	420	(3%)
20 – 34	4,780	(29%)	4,240	(28%)	3,770	(28%)	3,630	(27%)	3,580	(26%)
35 – 49	4,090	(25%)	3,910	(26%)	3,510	(26%)	3,640	(27%)	3,610	(27%)
50 – 64	2,340	(14%)	2,020	(13%)	1,860	(14%)	1,960	(15%)	2,090	(15%)
65 – 74	810	(5%)	710	(5%)	650	(5%)	830	(6%)	840	(6%)
75 – 84	810	(5%)	710	(5%)	650	(5%)	580	(4%)	620	(5%)
85 & over	280	(2%)	300	(2%)	210	(2%)	210	(2%)	260	(2%)
	0		0		0		0		0	
Total	16,540	(100%)	15,020	(100%)	13,430	(100%)	13,430	(100%)	13,500	(100%)
14 & under	2,160	(13%)	2,110	(14%)	1,810	(13%)	1,690	(13%)	1,610	(12%)
65 & over	1,900	(11%)	1,710	(11%)	1,520	(11%)	1,620	(12%)	1,710	(13%)

Age	2005		2006		2007	
Under 5	490	(4%)	530	(4%)	590	(4%)
5 – 9	370	(3%)	360	(3%)	380	(3%)
10 – 14	520	(4%)	450	(4%)	460	(3%)
15 – 17	510	(4%)	490	(4%)	470	(4%)
18 – 19	430	(3%)	390	(3%)	420	(3%)
20 – 34	3,620	(28%)	3,080	(25%)	3,540	(26%)
35 – 49	3,420	(26%)	3,180	(26%)	3,370	(25%)
50 – 64	2,120	(16%)	2,160	(18%)	2,460	(18%)
65 – 74	780	(6%)	790	(6%)	840	(6%)
75 – 84	650	(5%)	630	(5%)	640	(5%)
85 & over	240	(2%)	240	(2%)	250	(2%)
Total	13,140	(100%)	12,300	(100%)	13,420	(100%)
14 & under	1,380	(10%)	1,340	(11%)	1,430	(11%)
65 & over	1,670	(13%)	1,660	(14%)	1,730	(13%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or individual fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths and injuries are rounded to the nearest ten. Totals may not equal sums because of rounding.

Source: NFIRS and NFPA survey

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year

A. Deaths

Age	1980		1981		1982		1983		1984	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	58.4	2.52	49.3	2.12	46.4	2.22	41.2	2.05	39.6	2.28
5 – 9	26.3	1.14	21.7	0.94	24.3	1.17	18.9	0.94	19.1	1.10
10 – 14	14.9	0.64	14.8	0.64	12.8	0.61	13.2	0.66	10.6	0.61
15 – 19	10.3	0.44	8.4	0.36	10.3	0.49	9.4	0.47	7.9	0.45
20 – 34	18.3	0.79	15.3	0.66	14.0	0.67	14.6	0.73	11.5	0.66
35 – 49	16.8	0.73	13.7	0.59	13.4	0.64	13.2	0.66	12.5	0.72
50 – 64	20.9	0.91	26.2	1.13	22.6	1.09	18.8	0.94	16.8	0.97
65 – 74	27.3	1.18	37.3	1.61	27.6	1.32	31.0	1.54	24.4	1.41
75 & over	55.4	2.40	76.9	3.31	59.1	2.83	60.8	3.03	48.2	2.77
Total	23.1	1.00	23.2	1.00	20.9	1.00	20.1	1.00	17.4	1.00
14 & under	32.4	1.40	28.4	1.22	27.7	1.33	24.5	1.22	23.3	1.34
65 & over	38.2	1.65	52.9	2.28	40.1	1.92	42.9	2.14	34.0	1.96

Age	1985		1986		1987		1988		1989	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	45.9	2.24	49.2	2.55	51.1	2.76	49.3	2.43	45.2	2.57
5 – 9	24.4	1.19	20.3	1.05	20.7	1.12	20.7	1.02	19.7	1.12
10 – 14	10.3	0.50	10.1	0.52	9.7	0.52	10.7	0.53	10.8	0.62
15 – 19	8.7	0.43	8.8	0.45	8.3	0.45	8.9	0.44	6.3	0.36
20 – 34	13.4	0.65	13.3	0.69	10.4	0.56	12.6	0.62	12.0	0.69
35 – 49	12.9	0.63	12.7	0.66	11.7	0.63	13.7	0.68	10.5	0.60
50 – 64	19.4	0.95	16.2	0.84	16.9	0.91	21.6	1.06	16.3	0.93
65 – 74	31.2	1.52	25.4	1.32	25.7	1.39	29.6	1.46	23.4	1.33
75 & over	63.1	3.09	57.7	3.00	57.0	3.07	53.8	2.66	48.3	2.75
Total	20.5	1.00	19.3	1.00	18.5	1.00	20.3	1.00	17.5	1.00
14 & under	27.2	1.33	27.1	1.41	27.8	1.50	27.5	1.36	25.7	1.47
65 & over	44.1	2.16	38.5	3.00	38.4	2.07	39.5	1.95	33.7	1.92

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year
(Continued)

A. Deaths

Age	1990		1991		1992		1993		1994	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	35.8	2.22	36.0	2.58	39.7	2.74	38.2	2.65	33.7	2.56
5 – 9	13.5	0.84	16.8	1.20	11.7	0.81	14.1	0.98	14.7	1.12
10 – 14	6.7	0.42	7.6	0.54	7.5	0.52	6.3	0.44	5.0	0.38
15 – 17	5.7	0.36	6.2	0.44	5.2	0.36	5.1	0.35	3.9	0.30
18 – 19	10.0	0.62	5.5	0.40	8.2	0.56	6.5	0.45	7.4	0.56
20 – 34	11.1	0.69	9.1	0.65	9.3	0.64	8.6	0.60	8.6	0.65
35 – 49	11.2	0.70	9.5	0.68	9.7	0.67	10.0	0.69	9.5	0.72
50 – 64	16.8	1.05	11.2	0.81	13.3	0.92	12.2	0.84	11.6	0.89
65 – 74	24.4	1.52	19.5	1.40	21.2	1.47	20.2	1.40	19.2	1.47
75 – 84	38.8	2.41	31.4	2.25	30.6	2.12	35.9	2.49	26.4	2.01
85 & over	64.5	4.01	51.9	3.72	61.4	4.25	66.2	4.60	50.6	3.85
Total	16.1	1.00	13.9	1.00	14.5	1.00	14.4	1.00	13.1	1.00
14 & under	19.1	1.19	20.5	1.47	20.1	1.39	19.9	1.38	18.1	1.38
65 & over	33.2	2.06	26.6	1.91	28.3	1.96	30.1	2.09	24.9	1.90

Age	1995		1996		1997		1998		1999	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	29.2	2.12	30.3	2.00	25.7	2.07	17.7	1.51	23.0	2.23
5 – 9	13.7	0.99	12.0	0.80	13.5	1.08	10.4	0.89	10.7	1.04
10 – 14	6.4	0.46	6.4	0.42	7.0	0.56	7.3	0.63	6.8	0.66
15 – 17	5.4	0.40	5.8	0.39	4.6	0.37	2.8	0.24	13.8	1.34
18 – 19	4.8	0.35	5.3	0.35	4.3	0.34	5.4	0.46	13.8	1.34
20 – 34	7.8	0.57	10.0	0.66	6.6	0.53	6.6	0.57	6.2	0.60
35 – 49	11.5	0.84	11.6	0.77	8.7	0.70	10.2	0.88	7.7	0.75
50 – 64	13.1	0.95	14.5	0.96	13.1	1.05	12.6	1.07	8.1	0.79
65 – 74	19.2	1.39	23.8	1.57	16.9	1.36	18.4	1.57	13.5	1.31
75 – 84	31.7	2.30	36.7	2.43	35.5	2.85	31.2	2.67	20.3	1.97
85 & over	67.0	4.86	75.2	4.98	56.6	4.54	51.1	4.36	26.6	2.58
Total	13.8	1.00	15.1	1.00	12.5	1.00	11.7	1.00	10.3	1.00
14 & under	16.6	1.20	16.3	1.08	15.4	1.24	11.7	1.00	16.0	1.55
65 & over	28.5	2.07	33.8	2.24	27.8	2.23	26.7	2.28	17.4	1.69

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year
(Continued)

A. Deaths

Age	2000		2001		2002		2003	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	19.9	1.73	18.3	1.73	13.7	1.57	16.3	1.58
5 – 9	12.2	1.06	11.4	1.08	6.6	0.75	7.8	0.75
10 – 14	4.9	0.42	5.1	0.48	4.7	0.54	3.9	0.38
15 – 17	2.8	0.24	5.8	0.55	2.0	0.22	4.4	0.43
18 – 19	6.1	0.53	5.1	0.48	2.9	0.34	4.3	0.42
20 – 34	5.1	0.44	4.9	0.46	5.5	0.63	5.2	0.51
35 – 49	11.2	0.97	9.4	0.89	7.6	0.87	8.7	0.84
50 – 64	12.6	1.10	12.0	1.14	10.6	1.21	13.5	1.31
65 – 74	20.0	1.73	18.4	1.74	13.1	1.50	17.6	1.70
75 – 84	30.9	2.68	22.1	2.09	20.7	2.36	25.6	2.47
85 & over	27.2	2.36	36.0	3.41	34.3	3.92	38.0	3.67
All ages	11.5	1.00	10.6	1.00	8.8	1.00	10.3	1.00
14 & Under	12.2	1.06	11.4	1.08	8.2	0.94	9.2	0.89
65 & over	24.7	2.14	21.9	2.07	18.5	2.12	23.1	2.24
Age	2004		2005		2006		2007	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	17.2	1.65	12.2	1.26	9.7	1.17	11.5	1.24
5 – 9	9.6	0.92	7.8	0.81	6.5	0.79	6.4	0.69
10 – 14	3.8	0.37	3.8	0.40	2.9	0.35	4.2	0.46
15 – 17	3.7	0.35	3.5	0.36	1.8	0.22	3.3	0.36
18 – 19	3.9	0.37	3.0	0.31	4.3	0.51	5.8	0.63
20 – 34	6.5	0.62	5.0	0.52	4.8	0.58	5.1	0.55
35 – 49	8.2	0.78	9.6	0.99	7.1	0.85	7.7	0.83
50 – 64	12.3	1.18	11.5	1.19	10.0	1.20	11.7	1.26
65 – 74	17.8	1.71	16.4	1.70	16.5	1.99	16.4	1.77
75 – 84	24.7	2.37	23.4	2.42	21.5	2.59	22.5	2.43
85 & over	39.0	3.73	35.6	3.68	30.7	3.70	35.2	3.79
All ages	10.4	1.00	9.7	1.00	8.3	1.00	9.3	1.00
14 & Under	10.1	0.97	7.9	0.82	6.3	0.76	7.4	0.80
65 & over	23.1	2.21	21.6	2.23	20.3	2.44	21.2	2.29

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year
(Continued)

B. Injuries

Age	1980		1981		1982		1983		1984	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	86.3	0.98	71.0	0.84	76.1	0.88	80.7	0.92	74.9	0.95
5 – 9	45.6	0.52	45.5	0.54	42.8	0.49	44.3	0.50	38.8	0.49
10 – 14	49.9	0.56	54.3	0.64	55.1	0.63	57.2	0.65	52.6	0.67
15 – 19	88.8	1.00	85.6	1.01	92.9	1.07	96.7	1.10	79.0	1.00
20 – 34	124.8	1.41	112.7	1.33	114.3	1.32	112.8	1.28	105.5	1.34
35 – 49	89.2	1.01	84.1	0.99	92.9	1.07	89.3	1.02	80.3	1.02
50 – 64	69.8	0.79	74.0	0.87	73.5	0.85	76.9	0.88	65.8	0.84
65 – 74	73.1	0.83	76.6	0.90	74.0	0.85	75.6	0.86	64.6	0.82
75 & over	102.8	1.16	105.3	1.24	97.3	1.12	103.3	1.18	87.9	1.12
All ages	88.4	1.00	84.6	1.00	86.9	1.00	87.8	1.00	78.7	1.00
14 & under	60.1	0.68	57.1	0.67	58.3	0.67	61.2	0.70	55.9	0.71
65 & over	84.7	0.96	87.9	1.04	83.2	0.96	86.7	0.99	74.0	0.94
Age	1985		1986		1987		1988		1989	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	78.8	0.98	77.0	1.01	79.3	0.98	94.1	1.06	82.6	1.03
5 – 9	40.1	0.50	44.9	0.59	42.2	0.52	48.5	0.55	48.8	0.61
10 – 14	51.2	0.64	52.6	0.69	52.2	0.64	58.9	0.66	56.4	0.70
15 – 19	75.9	0.94	76.7	1.01	88.6	1.09	92.2	1.04	78.1	0.97
20 – 34	108.1	1.34	95.4	1.26	103.7	1.28	116.4	1.31	107.6	1.34
35 – 49	80.3	1.00	75.7	1.00	79.7	0.98	89.9	1.01	77.6	0.96
50 – 64	67.5	0.84	64.1	0.84	67.6	0.83	68.4	0.77	66.5	0.82
65 – 74	69.7	0.87	66.6	0.88	71.4	0.88	74.5	0.84	62.7	0.78
75 & over	94.9	1.18	96.2	1.27	104.4	1.29	108.4	1.22	98.7	1.23
All ages	80.4	1.00	76.0	1.00	81.0	1.00	88.9	1.00	80.6	1.00
14 & under	57.2	0.71	58.6	0.77	58.3	0.72	67.6	0.76	63.0	0.78
65 & over	79.9	0.99	78.6	1.03	84.8	1.05	88.4	0.99	77.6	0.96

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year
(Continued)

B. Injuries

Age	1990		1991		1992		1993		1994	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	82.2	1.02	85.0	1.01	92.2	1.13	94.0	1.11	77.7	1.04
5 – 9	44.7	0.56	54.9	0.65	46.4	0.57	46.0	0.54	45.8	0.61
10 – 14	52.9	0.66	58.8	0.70	56.8	0.70	61.1	0.72	53.7	0.72
15 – 17	70.5	0.88	83.0	0.99	78.4	0.96	82.9	0.98	82.2	1.10
18 – 19	90.1	1.12	90.6	1.08	98.3	1.20	90.9	1.07	87.4	1.17
20 – 34	108.6	1.35	111.7	1.33	108.8	1.33	113.1	1.33	94.9	1.27
35 – 49	79.0	0.98	80.1	0.95	78.7	0.96	85.2	1.00	73.5	0.98
50 – 64	64.4	0.80	66.1	0.79	65.2	0.80	68.8	0.81	59.0	0.79
65 – 74	62.5	0.78	72.2	0.86	64.0	0.78	64.5	0.76	63.1	0.84
75 – 84	95.9	1.19	84.3	1.00	84.1	1.03	86.5	1.02	85.2	1.14
85 & over	112.3	1.40	151.3	1.80	130.1	1.59	131.3	1.54	138.0	1.85
All ages	80.4	1.00	84.1	1.00	81.7	1.00	85.0	1.00	74.7	1.00
14 & under	60.4	0.75	66.6	0.79	65.7	0.80	67.6	0.79	59.4	0.79
65 & over	78.2	0.97	84.0	1.00	77.2	0.95	78.7	0.93	78.3	1.05
Age	1995		1996		1997		1998		1999	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	49.6	0.87	60.4	0.85	56.2	0.87	52.5	0.85	63.6	1.14
5 – 9	35.5	0.62	39.9	0.56	36.1	0.56	35.5	0.58	14.2	0.25
10 – 14	38.7	0.68	52.5	0.74	50.6	0.79	42.4	0.69	40.9	0.73
15 – 17	56.4	0.99	71.5	1.01	61.6	0.96	59.9	0.97	32.5	0.58
18 – 19	66.5	1.16	76.3	1.08	67.9	1.05	64.6	1.05	91.3	1.63
20 – 34	74.0	1.29	93.1	1.32	85.6	1.33	80.3	1.30	68.8	1.23
35 – 49	59.9	1.05	72.1	1.02	67.8	1.05	67.1	1.09	71.0	1.27
50 – 64	46.2	0.81	58.3	0.82	50.2	0.78	53.2	0.86	34.7	0.62
65 – 74	47.4	0.83	57.3	0.81	53.7	0.83	52.5	0.85	39.6	0.71
75 – 84	68.4	1.20	78.7	1.11	73.6	1.14	63.0	1.02	67.7	1.21
85 & over	115.3	2.02	157.7	2.23	111.3	1.73	95.7	1.55	129.1	2.31
All ages	57.2	1.00	70.8	1.00	64.4	1.00	61.6	1.00	55.9	1.00
14 & under	41.1	0.72	50.9	0.72	47.5	0.74	43.3	0.70	46.8	0.84
65 & over	62.9	1.10	75.7	1.07	67.1	1.04	61.2	0.99	60.1	1.08

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year
(Continued)

B. Injuries	2000		2001		2002		2003	
	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	56.9	0.97	50.4	0.96	39.8	0.86	34.9	0.75
5 – 9	22.4	0.38	24.9	0.47	20.3	0.44	18.7	0.41
10 – 14	29.7	0.51	30.0	0.57	29.6	0.63	29.9	0.65
15 – 17	58.0	0.99	42.5	0.81	42.7	0.92	42.3	0.92
18 – 19	69.6	1.19	63.3	1.20	52.3	1.12	44.9	0.97
20 – 34	81.1	1.38	71.2	1.35	62.8	1.35	60.0	1.30
35 – 49	62.5	1.07	59.4	1.13	53.2	1.14	55.0	1.19
50 – 64	55.3	0.94	46.2	0.88	41.1	0.88	41.9	0.91
65 – 74	44.0	0.75	38.6	0.73	35.8	0.77	45.0	0.97
75 – 84	65.1	1.11	56.3	1.07	51.0	1.09	45.2	0.98
85 & over	66.1	1.13	67.3	1.28	47.2	1.01	45.0	0.97
All ages	58.6	1.00	52.7	1.00	46.6	1.00	46.2	1.00
14 & under	35.9	0.61	34.8	0.66	29.8	0.64	27.9	0.60
65 & over	54.2	0.92	48.5	0.92	42.7	0.92	45.1	0.98
	2004		2005		2006		2007	
Age	Rate	Index	Rate	Index	Rate	Index	Rate	Index
Under 5	32.3	0.70	24.2	0.55	26.2	0.64	28.7	0.64
5 – 9	20.1	0.44	18.7	0.42	18.3	0.44	19.1	0.43
10 – 14	26.9	0.59	24.8	0.56	21.7	0.53	22.5	0.50
15 – 17	39.2	0.85	39.8	0.90	37.4	0.91	36.1	0.81
18 – 19	50.4	1.09	51.7	1.17	46.5	1.13	49.2	1.11
20 – 34	58.6	1.28	59.1	1.33	50.1	1.22	57.5	1.29
35 – 49	54.5	1.18	51.5	1.16	47.8	1.16	51.1	1.15
50 – 64	43.1	0.94	42.2	0.95	41.4	1.01	45.8	1.03
65 – 74	45.6	0.99	41.8	0.94	41.8	1.02	43.2	0.97
75 – 84	47.4	1.03	49.7	1.12	48.6	1.18	48.9	1.10
85 & over	52.6	1.14	47.0	1.06	45.6	1.11	46.8	1.05
All ages	46.0	1.00	44.3	1.00	41.1	1.00	44.5	1.00
14 & under	26.5	0.58	22.6	0.51	22.1	0.54	23.5	0.53
65 & over	47.2	1.03	45.3	1.02	44.7	1.09	45.7	1.03

Table 4.
U.S. Civilian Home Fire Death and Injury Rates* (per Million Population)
and Risk Indexes, by Age Group, 1980-2005 Structure Fires, by Year
(Continued)

* Rates (1st column in each year's pair) are ratios of fire deaths and injuries divided by population. Rates cannot be meaningfully summed across age groups. The risk index (2nd column for an age group is the ratio of that age group's civilian fire deaths per million population (3rd column) to the civilian fire death or injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau. (See Appendix Table B.)

Table 5.
U.S. Civilian Fire Deaths in Homes, by Age and Sex
Annual Average of 2003-2007 Structure Fires

A. MALE				B. FEMALE					
Age	Civilian Fire Deaths		Population (in Millions)		Age	Civilian Fire Deaths		Population (in Millions)	
Under 5	150	(10%)	10.4	(7%)	Under 5	120	(9%)	10.0	(7%)
5-9	80	(5%)	10.1	(7%)	5-9	70	(6%)	9.6	(6%)
10-14	40	(2%)	10.6	(7%)	10-14	40	(3%)	10.1	(7%)
15-19	50	(3%)	10.9	(7%)	15-19	30	(3%)	10.4	(7%)
20-34	200	(13%)	31.5	(21%)	20-34	130	(10%)	30.1	(20%)
35-49	320	(20%)	31.5	(21%)	35-49	220	(18%)	33.4	(22%)
50-64	370	(23%)	33.1	(22%)	50-64	230	(18%)	26.8	(18%)
65-74	170	(11%)	25.3	(17%)	65-74	150	(12%)	10.2	(7%)
75-84	140	(9%)	8.7	(6%)	75-84	170	(13%)	7.7	(5%)
85 and over	70	(4%)	5.3	(4%)	85 and over	110	(9%)	3.6	(2%)
All ages	1,580	(100%)	147.5	(100%)	All ages	1,260	(100%)	151.9	(100%)
14 and under	270	(17%)	31.1	(21%)	14 and under	230	(18%)	29.7	(20%)
65 and over	380	(24%)	15.7	(11%)	65 and over	420	(34%)	21.6	(14%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths are rounded to the nearest ten. Totals in the "All ages" may not equal sums because of rounding.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 6.
Civilian Fire Death Rates (per Million Population) in Homes, by Age and Sex
Annual Average of 2003-2007 Structure Fires

A. MALE	Civilian Fire Deaths per Million Population*	Risk Index*		Male Rate vs. Female Rate
		vs. Male	vs. Total	
Age				
Under 5	14.5	1.4	1.5	+21%
5-9	7.9	0.7	0.8	+9%
10-14	3.6	0.3	0.4	-10%
15-19	4.2	0.4	0.4	+45%
20-34	6.4	0.6	0.7	+47%
35-49	10.2	1.0	1.1	+55%
50-64	11.1	1.0	1.2	+29%
65-74	6.7	0.6	0.7	-54%
75-84	16.3	1.5	1.7	-26%
85 and over	13.2	1.2	1.4	-57%
All ages	10.7	1.0	1.1	+29%
14 and under	8.7	0.8	0.9	+12%
65 and over	24.3	2.3	2.5	+25%

B. FEMALE	Civilian Fire Deaths per Million Population*	Risk Index*		Female Rate vs. Male Rate
		vs. Female	vs. Total	
Age				
Under 5	12.0	1.4	1.2	-18%
5-9	7.3	0.9	0.8	-7%
10-14	4.0	0.5	0.4	+11%
15-19	3.1	0.4	0.3	-27%
20-34	4.2	0.5	0.4	-34%
35-49	6.7	0.8	0.7	-34%
50-64	8.4	1.0	0.9	-24%
65-74	14.4	1.7	1.5	+115%
75-84	21.3	2.6	2.2	+31%
85 and over	30.4	3.7	3.2	+130%
All ages	8.3	1.0	0.9	-23%
14 and under	7.7	0.9	0.8	-11%
65 and over	19.6	2.4	2.0	-20%

* Rates are ratios of fire deaths divided by population. Rates cannot be meaningfully summed across age or sex groups. Risk indexes are ratios of death rates. The risk index vs. male (or female) is the death rate per million population for an age group of males (or females) divided by the death rate for all males (or females). The risk index vs. total is a death rate for an age and sex group divided by the death rate for all ages and both sexes combined.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 7.
U.S. Civilian Fire Injuries in Homes, by Age and Sex
Annual Average of 2003-2007 Structure Fires

A. MALE	Civilian Fire Injuries		Population (in Millions)		B. FEMALE	Civilian Fire Injuries		Population (in Millions)	
Under 5	300	(5%)	10.4	(7%)	Under 5	200	(4%)	10.0	(7%)
5-9	200	(3%)	10.1	(7%)	5-9	200	(3%)	9.6	(6%)
10-14	300	(4%)	10.6	(7%)	10-14	200	(4%)	10.1	(7%)
15-19	500	(7%)	10.9	(7%)	15-17	400	(6%)	10.4	(7%)
20-34	1,900	(28%)	31.5	(21%)	20-34	1,500	(25%)	30.1	(20%)
35-49	1,900	(27%)	33.1	(22%)	35-49	1,500	(25%)	33.4	(22%)
50-64	1,100	(16%)	25.3	(17%)	50-64	1,100	(17%)	26.8	(18%)
65-74	400	(5%)	8.7	(6%)	65-74	500	(7%)	10.2	(7%)
75-84	200	(4%)	5.3	(4%)	75-84	400	(6%)	7.7	(5%)
85 and over	100	(1%)	1.7	(1%)	85 and over	200	(3%)	3.6	(2%)
All ages	7,000	(100%)	147.5	(100%)	All ages	6,200	(100%)	151.9	(100%)
14 and under	800	(12%)	31.1	(21%)	14 and under	700	(11%)	29.7	(20%)
65 and over	700	(10%)	15.7	(11%)	65 and over	1,000	(16%)	21.6	(14%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or State agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian injuries are rounded to the nearest hundred. Totals in the "All ages" row may not equal sums because of rounding.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 8.
U.S. Civilian Fire Injury Rates (per Million Population) and Risks in Homes, by Age and Sex
Annual Average of 2003-2007 Structure Fires

A. MALE	Civilian Fire Injuries per Million Population*	Risk Index*		Male Rate vs. Female Rate
		vs. Male	vs. Total	
Age				
Under 5	33.0	0.7	0.7	+65%
5-9	21.2	0.4	0.5	+2%
10-14	26.5	0.6	0.6	+33%
15-19	46.1	1.0	1.0	+20%
20-34	61.7	1.3	1.4	+24%
35-49	57.3	1.2	1.3	+27%
50-64	43.8	0.9	1.0	+7%
65-74	42.0	0.9	0.9	-14%
75-84	46.9	1.0	1.1	-9%
85 and over	48.1	1.0	1.1	-13%
All ages	47.3	1.0	1.1	+16%
14 and under	27.0	0.6	0.6	+14%
65 and over	44.3	0.9	1.0	-4%
B. FEMALE				
	Civilian Fire Injuries per Million Population*	Risk Index*		Female Rate vs. Male Rate
		vs. Female	vs. Total	
Age				
Under 5	24.7	0.6	0.6	-25%
5-9	16.7	0.4	0.4	-21%
10-14	24.3	0.6	0.5	-8%
15-19	37.9	0.9	0.9	-18%
20-34	51.5	1.3	1.2	-17%
35-49	46.3	1.1	1.0	-19%
50-64	39.3	1.0	0.9	-10%
65-74	44.1	1.1	1.0	+5%
75-84	48.4	1.2	1.1	+3%
85 and over	43.9	1.1	1.0	-9%
All ages	40.7	1.0	0.9	-14%
14 and under	22.0	0.5	0.5	-19%
65 and over	45.6	1.1	1.0	+3%

* Rates are ratios of fire injuries divided by population. Rates cannot be meaningfully summed across age or sex groups. Risk indexes are ratios of injury rates. The risk index vs. male (or female) is the injury rate per million population for an age group of males (or females) divided by the injury rate for all males (or females). The risk index vs. total is an injury rate for an age and sex group divided by the injury rate for all ages and both sexes combined.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 9.
Home Structure Fire Civilian Deaths and Injuries, by Race
2003-2007 Annual Averages

Race	Civilian Deaths		Risk	Civilian Injuries		Risk
White	2,030	(71%)	0.9	9,060	(69%)	0.9
Black	660	(23%)	1.8	3,050	(23%)	1.8
American Indian, Eskimo or Aleut	40	(2%)	1.5	80	(1%)	0.6
Asian	30	(1%)	0.3	200	(2%)	0.3
Native Hawaiian or Pacific Islander	0	(0%)	0.5	10	(0%)	0.5
Unclassified race, includes multi-racial	80	(3%)	1.7	760	(6%)	3.5
Total	2,850	(100%)	1.0	13,160	(100%)	1.0

Table 10.
Risk of Dying or Being Injured in a Home Structure Fire, by Race
2003-2007 Annual Averages

A. Civilian Deaths

Age	White			Black			Race not White or Black		
	Civilian Deaths	Risk of Death		Civilian Deaths	Risk of Death		Civilian Deaths	Risk of Death	
Under 5	150	(7%)	1.13	90	(14%)	1.69	30	(20%)	2.31
5-9	80	(4%)	0.62	60	(9%)	1.12	20	(13%)	1.61
10 to 14	40	(2%)	0.30	30	(4%)	0.45	10	(6%)	0.76
15-17	30	(1%)	0.31	10	(1%)	0.25	0	(2%)	0.38
18-19	20	(1%)	0.43	10	(1%)	0.38	0	(1%)	0.41
20-34	220	(11%)	0.55	70	(10%)	0.45	30	(21%)	0.86
35-49	400	(20%)	0.72	120	(18%)	0.81	30	(19%)	0.87
50-64	460	(23%)	1.24	110	(17%)	1.21	10	(8%)	0.58
65-74	230	(11%)	1.67	70	(11%)	2.33	10	(4%)	0.87
75-84	250	(12%)	2.56	60	(9%)	3.57	10	(4%)	1.47
85 and over	150	(7%)	3.77	40	(6%)	5.97	10	(3%)	3.89
All ages	2,030	(100%)	1.00	660	(100%)	1.00	160	(100%)	1.00
Selected Age Groups									
14 and under	270	(13%)	0.68	170	(26%)	1.07	60	(38%)	1.58
Under 18	290	(14%)	0.62	190	(29%)	5.29	60	(40%)	1.39
18-64	1,110	(55%)	0.87	310	(46%)	0.75	80	(49%)	0.78
65 and over	630	(31%)	2.29	170	(26%)	3.16	20	(11%)	1.38
75 and over	400	(20%)	2.91	100	(15%)	4.23	10	(7%)	2.07

Table 10.
Risk of Dying or Being Injured in a Home Structure Fire, by Race
2003-2007 Annual Averages
(Continued)

B. Civilian Injuries

Age	White			Black			Race not White or Black		
	Civilian Injuries		Risk of Death	Civilian Injuries		Risk of Death	Civilian Injuries		Risk of Death
Under 5	300	(3%)	0.48	130	(4%)	0.55	100	(8%)	0.97
5-9	200	(2%)	0.33	120	(4%)	0.49	0	(4%)	0.53
10 to 14	300	(3%)	0.52	180	(6%)	0.70	100	(5%)	0.61
15-17	300	(3%)	0.79	160	(5%)	0.95	0	(4%)	0.98
18-19	300	(3%)	1.06	100	(3%)	0.98	0	(4%)	1.29
20-34	2,400	(26%)	1.31	750	(25%)	1.10	300	(33%)	1.35
35-49	2,500	(27%)	0.99	790	(26%)	1.18	300	(24%)	1.08
50-64	1,600	(17%)	0.95	510	(17%)	1.17	100	(10%)	0.74
65-74	600	(7%)	1.04	160	(5%)	1.10	0	(4%)	0.92
75-84	500	(5%)	1.12	120	(4%)	1.44	0	(3%)	1.04
85 and over	200	(2%)	1.05	40	(1%)	1.23	0	(1%)	1.07
All ages	9,100	(100%)	1.00	3,050	(100%)	1.00	1,100	(100%)	1.00
Selected Age Groups									
14 and under	800	(9%)	0.45	430	(14%)	0.59	200	(17%)	0.71
Under 18	1,100	(12%)	0.51	690	(23%)	4.17	200	(22%)	0.75
18-64	6,700	(74%)	1.17	2,150	(71%)	1.14	700	(71%)	1.12
65 and over	1,300	(14%)	1.07	310	(10%)	1.22	100	(8%)	0.97
75 and over	700	(7%)	1.09	150	(5%)	1.38	0	(3%)	1.05

Rates are ratios of fire injuries divided by population. Rates cannot be meaningfully summed across age or sex groups. Risk indexes are ratios of injury rates. The risk index is the death or injury rate per million population for an age group of divided by the injury rate for all.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 11.
Home Structure Fire Civilian Deaths, Injuries, and Risk of Each, Involving Hispanics
2003-2007 Annual Averages

Age	Civilian Deaths		Civilian Injuries		Risk of Death	Risk of Injury
Under 5	70	(23%)	130	(7%)	2.15	0.64
5-9	30	(9%)	90	(4%)	0.94	0.47
10 to 14	20	(6%)	70	(4%)	0.72	0.42
15-19	10	(2%)	170	(9%)	0.37	1.06
20-34	80	(25%)	670	(34%)	0.95	1.27
35-49	50	(17%)	490	(25%)	0.84	1.18
50-64	20	(8%)	220	(11%)	0.75	1.07
65-74	10	(3%)	80	(4%)	1.06	1.25
75-84	10	(2%)	50	(2%)	1.12	1.36
85 and over	10	(3%)	20	(1%)	5.81	1.68
All ages	300	(100%)	1,980	(100%)	1.00	1.00
Selected Age Groups						
14 and under	110	(38%)	290	(15%)	1.32	0.51
65 and over	30	(9%)	140	(7%)	1.58	1.33

Rates are ratios of fire injuries divided by population. Rates cannot be meaningfully summed across age or sex groups. Risk indexes are ratios of injury rates. The risk index is the death or injury rate per million population for an age group of divided by the injury rate for all.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 12.
Home Structure Fire Civilian Deaths and Injuries, by Region
2003-2007

A. Civilian Deaths

Age	Northeast		Midwest		South		West	
Under 5	20	(7%)	90	(10%)	130	(10%)	30	(8%)
5-9	20	(6%)	50	(6%)	70	(5%)	10	(3%)
10-14	10	(4%)	30	(3%)	30	(3%)	10	(2%)
5-17	0	(1%)	10	(1%)	20	(2%)	0	(1%)
18-19	0	(1%)	10	(1%)	20	(1%)	10	(2%)
20-34	40	(12%)	90	(11%)	150	(12%)	40	(12%)
35-49	70	(19%)	160	(19%)	250	(20%)	60	(19%)
50-64	80	(22%)	180	(21%)	270	(21%)	70	(20%)
65-74	40	(11%)	90	(10%)	140	(11%)	50	(14%)
75-84	40	(12%)	100	(11%)	120	(10%)	40	(12%)
85 and over	20	(6%)	50	(6%)	80	(6%)	30	(8%)
All ages	370	(100%)	850	(100%)	1,290	(100%)	330	(100%)
Selected Age Groups								
14 and under	60	(16%)	170	(19%)	230	(18%)	40	(13%)
65 and over	110	(30%)	240	(28%)	350	(27%)	110	(34%)

B. Civilian Injuries

Age	Northeast		Midwest		South		West	
Under 5	110	(5%)	230	(5%)	200	(4%)	60	(3%)
5-9	60	(3%)	130	(3%)	130	(3%)	40	(2%)
10 to 14	90	(4%)	180	(4%)	190	(4%)	70	(4%)
5-17	90	(4%)	170	(4%)	180	(4%)	60	(3%)
18-19	60	(3%)	150	(3%)	140	(3%)	60	(3%)
20-34	520	(23%)	1,170	(27%)	1,280	(27%)	510	(28%)
35-49	630	(27%)	1,090	(25%)	1,240	(26%)	490	(26%)
50-64	400	(17%)	670	(15%)	760	(16%)	330	(18%)
65-74	160	(7%)	250	(6%)	290	(6%)	120	(6%)
75-84	130	(6%)	210	(5%)	200	(4%)	90	(5%)
85 and over	60	(3%)	70	(2%)	80	(2%)	30	(2%)
All ages	2,310	(100%)	4,310	(100%)	4,690	(100%)	1,850	(100%)
Selected Age Groups								
14 and under	250	(11%)	540	(13%)	520	(11%)	170	(9%)
65 and over	350	(15%)	520	(12%)	570	(12%)	230	(13%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

Table 13.
Risk of Civilian Death and Injury in Home Structure Fires
by Region and Age of Victim
2003-2007 Annual Averages

A. Northeast

Age	Civilian Deaths		Civilian Injuries		Risk of Death	Risk of Injury
Under 5	20	(7%)	110	(5%)	1.1	0.8
5-17	40	(10%)	240	(10%)	0.6	0.6
18-24	20	(6%)	250	(11%)	0.6	1.1
25-34	20	(6%)	340	(15%)	0.5	1.2
35-44	40	(12%)	420	(18%)	0.8	1.2
45-54	60	(16%)	380	(16%)	1.1	1.1
55-64	50	(13%)	230	(10%)	1.2	0.9
65-74	40	(11%)	160	(7%)	1.7	1.1
75-84	40	(12%)	130	(6%)	2.4	1.1
85 years and over	20	(6%)	60	(3%)	3.1	1.3
All ages	370	(100%)	2,310	(100%)	1.0	1.0

B. Midwest

Age	Civilian Deaths		Civilian Injuries		Risk of Death	Risk of Injury
Under 5	90	(10%)	230	(5%)	1.5	0.8
5-17	90	(10%)	480	(11%)	0.6	0.6
18-24	40	(5%)	580	(13%)	0.5	1.4
25-34	60	(7%)	740	(17%)	0.6	1.3
35-44	90	(11%)	750	(17%)	0.8	1.2
45-54	140	(16%)	640	(15%)	1.1	1.0
55-64	110	(13%)	370	(9%)	1.2	0.8
65-74	90	(10%)	250	(6%)	1.6	0.9
75-84	100	(11%)	210	(5%)	2.5	1.1
85 years and over	50	(6%)	70	(2%)	3.2	0.8
All ages	850	(100%)	4,310	(100%)	1.0	1.0

Table 13.
Risk of Civilian Death and Injury in Home Structure Fires
by Region and Age of Victim
2003-2007 Annual Averages
(Continued)

C. South

Age	Civilian Deaths		Civilian Injuries		Risk of Death	Risk of Injury
Under 5	130	(10%)	200	(4%)	1.5	0.6
5-17	120	(10%)	500	(11%)	0.5	0.6
18-24	60	(5%)	570	(12%)	0.5	1.3
25-34	100	(8%)	850	(18%)	0.6	1.3
35-44	150	(12%)	860	(18%)	0.8	1.3
45-54	200	(16%)	710	(15%)	1.1	1.1
55-64	170	(13%)	430	(9%)	1.2	0.9
65-74	140	(11%)	290	(6%)	1.7	0.9
75-84	120	(10%)	200	(4%)	2.3	1.0
85 years and over	80	(6%)	80	(2%)	3.6	1.0
All ages	1290	(100%)	4,690	(100%)	1.0	1.0

D. West

Age	Civilian Deaths		Civilian Injuries		Risk of Death	Risk of Injury
Under 5	30	(8%)	60	(3%)	1.1	0.4
5-17	20	(6%)	170	(9%)	0.3	0.5
18-24	20	(6%)	230	(12%)	0.6	1.2
25-34	30	(8%)	340	(19%)	0.5	1.3
35-44	40	(13%)	330	(18%)	0.9	1.2
45-54	50	(14%)	300	(16%)	1.0	1.2
55-64	40	(13%)	180	(10%)	1.3	1.0
65-74	50	(14%)	120	(6%)	2.4	1.1
75-84	40	(12%)	90	(5%)	3.1	1.2
85 years and over	30	(8%)	30	(2%)	5.1	1.1
All ages	330	(100%)	1,850	(100%)	1.0	1.0

Rates are ratios of fire injuries divided by population. Rates cannot be meaningfully summed across age or sex groups. Risk indexes are ratios of injury rates. The risk index is the death or injury rate per million population for an age group of divided by the injury rate for all.

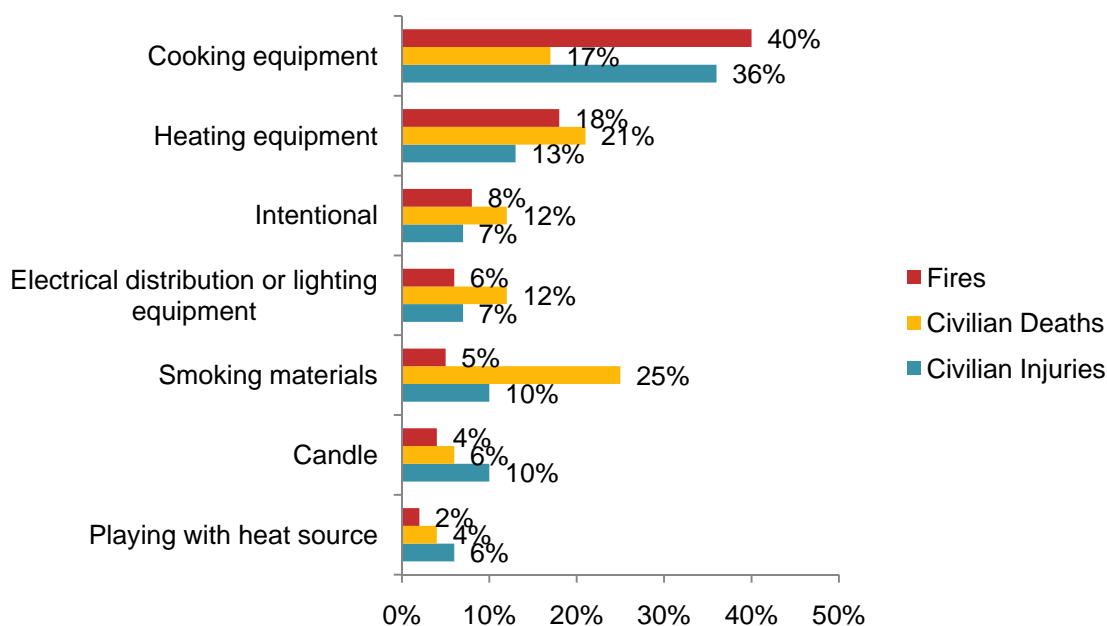
Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire.

Source: NFIRS and NFPA survey, population figures from U.S. Census Bureau.

LEADING CAUSES OF FIRE

Smoking materials have historically caused the largest number of fire deaths, even though they account for 5% of the home structure fires. Cooking equipment continues to be the leading cause of civilian fire injuries in home structure fires.

Figure 6. Major Causes of Home Structure Fires, Civilian Deaths and Injuries 2003-2007



Source: NFIRS 5.0 and NFPA survey.

Figure 6 shows the major causes of home structure fire deaths and injuries. The shown causes are not mutually exclusive when they have been pulled from different fields. Causal factors that lack detail (such as unintentional or failure of equipment or heat source in the cause field, or heat from operating or powered equipment or arcing in the heat source field) were not included in this summary table. The causes shown are those that have clear prevention strategies or have historically been of interest.⁴

On average, different age groups have a different level of risk depending on the cause of the fire.

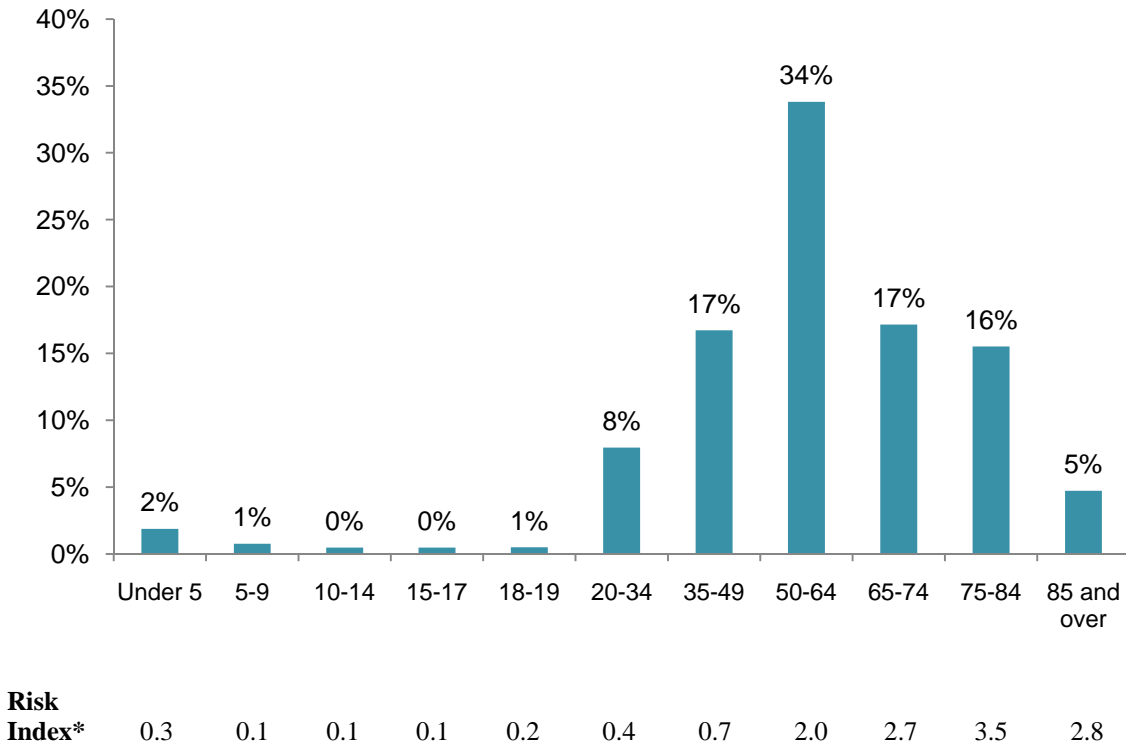
A breakdown of victims by major cause and age group shows that risk of death during certain fires is more pronounced for some age groups than others. Smoking materials ranked first among causes of civilian fire deaths in homes in 2003-2007.

In home fires caused by smoking materials, the average fatal victim was over the age of 35. Adults over the age of 50 are at greater risk of fire death, compared to victims of all ages, when smoking materials are the cause of the fire.

⁴ Marty Ahrens, *Home Structure Fires*, National Fire Protection Association, Fire Analysis and Research Division, 2010.

(See Figure 7 and Table 14 A.) One out of four fatal victims of smoking material fires is not the smoker whose cigarette started the fire.⁵

**Figure 7. Home Structure Fire Civilian Deaths in Fires Involving Smoking Materials by Age of Victim
2003-2007 Annual Averages**



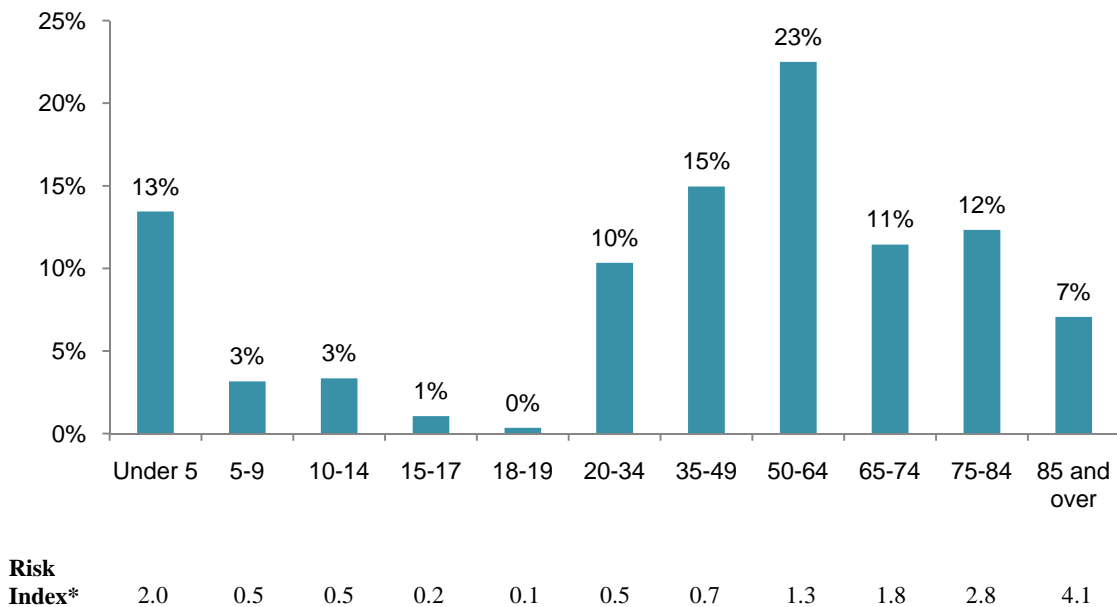
Source: NFIRS 5.0 and NFPA Annual Survey

*The risk index for an age group is the ratio of that age group’s civilian fire deaths per million population to the civilian fire injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00. A risk index higher than 1.00 for a specific age group means that age group is at higher risk of death than the general public.

In fires home fires caused by heating equipment, children under the age of 5 and adults over the age of 75 have twice the risk of dying in a fire as the general public. Adults between the ages of 50 and 64 also have a higher risk of civilian fire death in fires caused by heating equipment. (See Figure 8 and Table 14 B.)

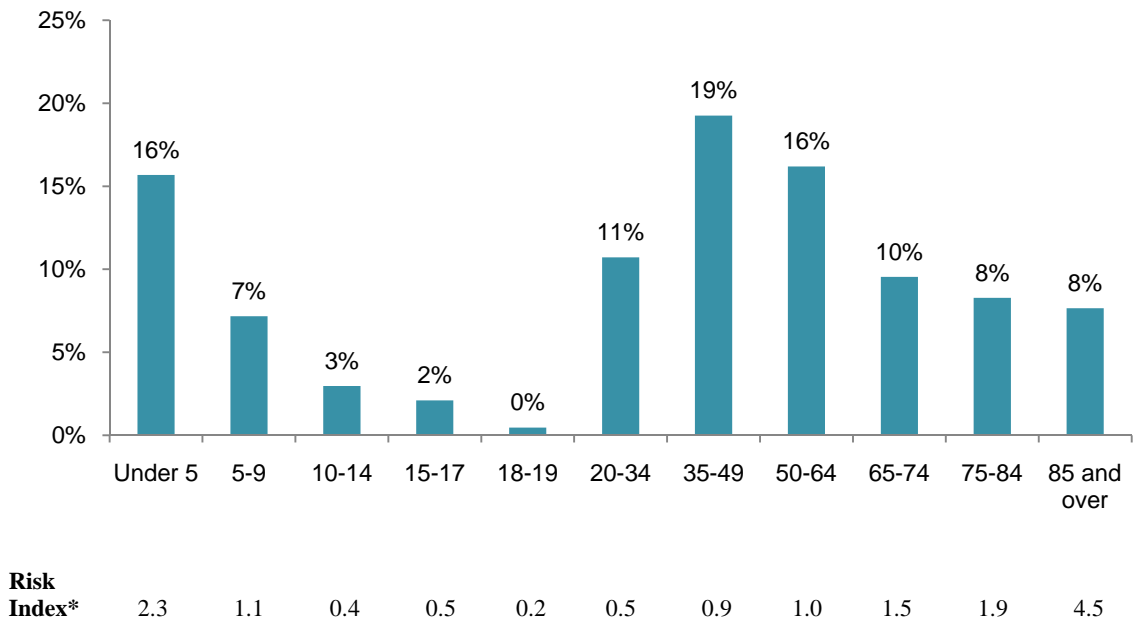
⁵ John R. Hall, Jr., *The Smoking-Material Fire Problem*, NFPA Fire Analysis and Research, 2010

Figure 8. Home Structure Fire Civilian Deaths in Fires Involving Heating Equipment by Age Group, 2003-2007 Annual Averages



In home fires caused by cooking equipment, adults 85 and older are at highest risk of death in fires caused by cooking equipment, with a risk rating 4.5 times that of the general public. Children under the age of 5 and adults 65-84 are also at a higher risk of fire death in cooking equipment fires. (See Figure 9 and Table 14 C.)

Figure 9. Home Structure Fire Civilian Deaths in Fires Involving Cooking Equipment by Age Group, 2003-2007 Annual Averages

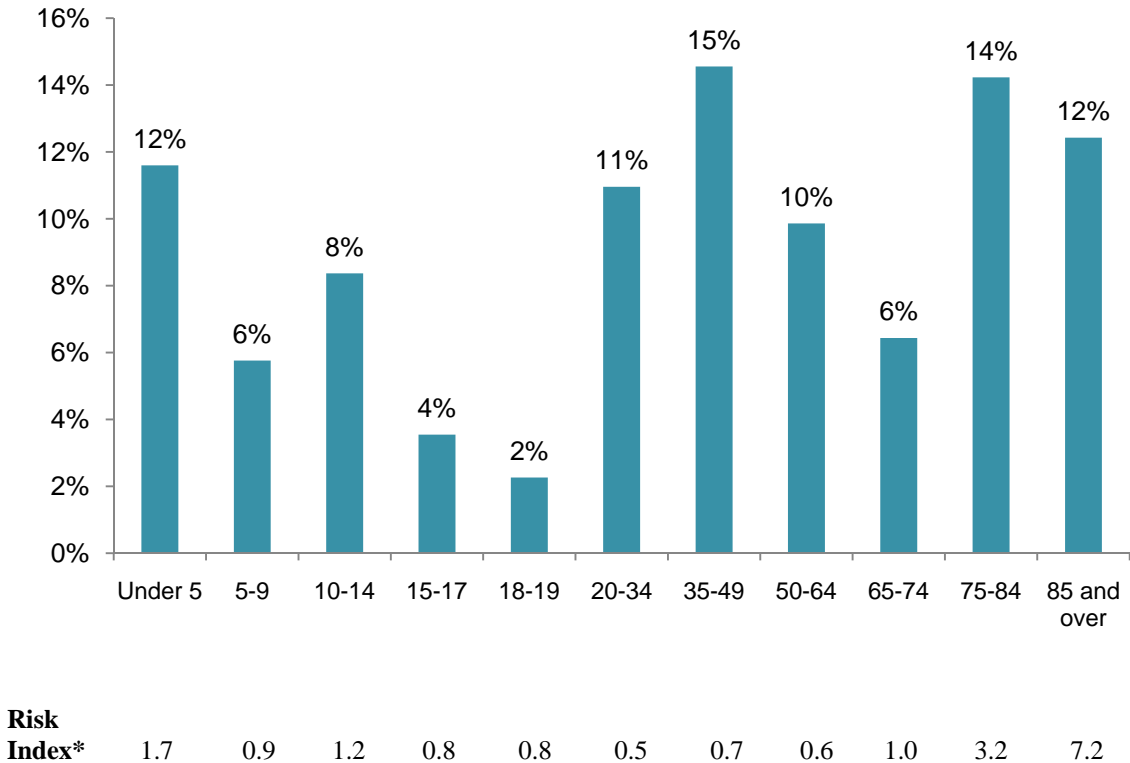


Source: NFIRS 5.0 and NFPA Annual Survey

*The risk index for an age group is the ratio of that age group's civilian fire deaths per million population to the civilian fire injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00. A risk index higher than 1.00 for a specific age group means that age group is at higher risk of death than the general public.

In home fires caused by electrical distribution and lighting equipment, 26% of fatal victims were over the age of 75. Adults over the age of 75 have a higher risk of dying in fires caused by electrical distribution and lighting equipment than the general public. (See Figure 10 and Table 14 D.) It is possible that older adults have remained in the same home for an extended period of time, which might suggest that wiring within the home is older and may be at fault.

Figure 10. Home Structure Fire Civilian Deaths in Fires Involving Electrical Distribution and Lighting Equipment, by Age Group 2003-2007 Annual Averages

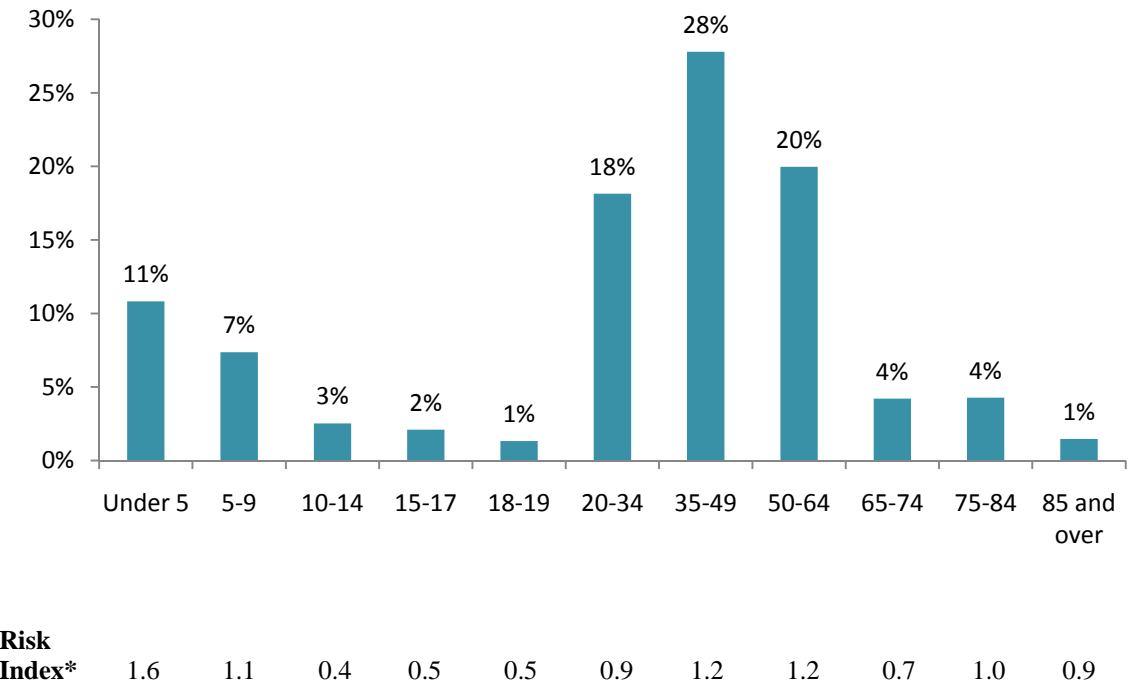


Source: NFIRS 5.0, NFPA Annual Survey, and U.S. Census Data

*The risk index for an age group is the ratio of that age group’s civilian fire deaths per million population to the civilian fire injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00. A risk index higher than 1.00 for a specific age group means that age group is at higher risk of death than the general public.

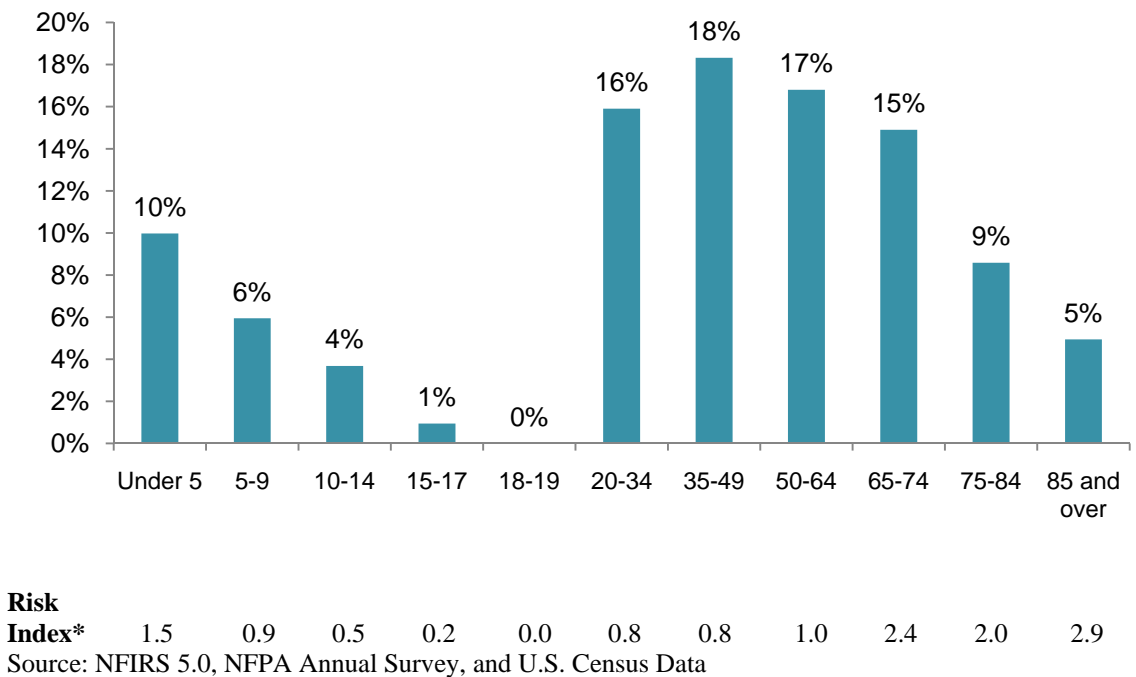
In home fires that were intentionally set, twenty-eight percent of fatal victims were between the ages of 35 and 49. The risk of dying in these fires varies across age groups. Children under the age of 9 and adults between the ages of 35-64 all have a slightly greater risk of dying in a home structure fire that was intentionally set than does the general public. (See Figure 11 and Table 14 E.)

Figure 11. Home Structure Fire Civilian Deaths Caused by Intentional Fires, by Age Group 2003-2007 Annual Averages



In home fires caused by candles, adults 65 and over are at highest risk of fire death. Children under 5 also had a slightly higher fire death risk from candle fires compared to the general public. (See Figure 12 and Table 14 F.)

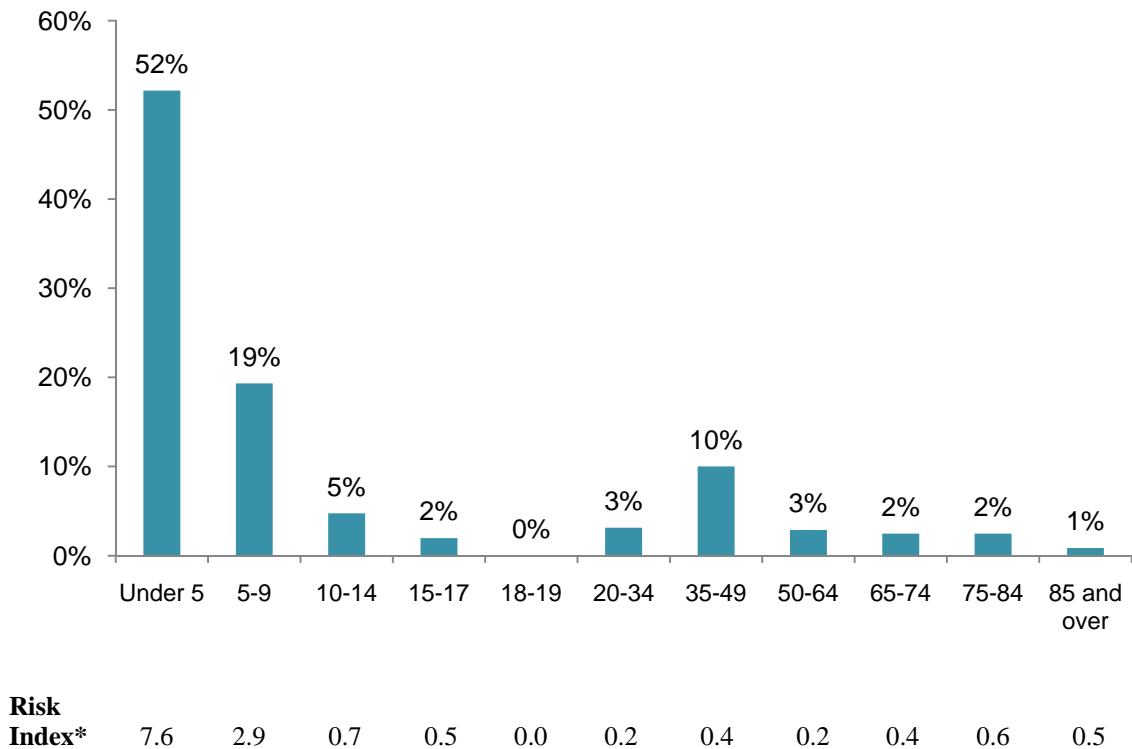
Figure 12. Home Structure Fire Civilian Deaths in Fires Involving Candles, by Age Group 2003-2007 Annual Averages



*The risk index for an age group is the ratio of that age group’s civilian fire deaths per million population to the civilian fire injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00. A risk index higher than 1.00 for a specific age group means that age group is at higher risk of death than the general public.

In fatal home structure fires caused by playing with a heat source, roughly half of the fatal victims (52%) were children under the age of five. These victims have a risk of fire death that is nearly eight times greater than risk to the general public. Children between the ages of 5 and 9 also have a higher risk of fire death (nearly three times the general public). (See Figure 13 and Table 14 G.)

Figure 13. Home Structure Fire Civilian Deaths in Fires Involving Playing with Heat Source, by Age of Victim, 2003-2007 Annual Averages



Source: NFIRS 5.0, NFPA Annual Survey, and U.S. Census Data

*The risk index for an age group is the ratio of that age group’s civilian fire deaths per million population to the civilian fire injury rate per million population for all age groups combined. The risk index for all age groups combined is 1.00. A risk index higher than 1.00 for a specific age group means that age group is at higher risk of death than the general public.

Table 14.
U.S. Civilian Fire Deaths and Injuries in Homes
by Leading Causes and Age of Victim
2003-2007 Annual Averages

A. Smoking Material Fires								
Age	Civilian Deaths		Rate per Million	Risk	Civilian Injuries		Rate per Million	Risk
Under 5	10	(2%)	0.6	0.3	30	(2%)	1.4	0.3
5-9	10	(1%)	0.3	0.1	10	(1%)	0.6	0.1
10-14	0	(0%)	0.2	0.1	20	(1%)	0.9	0.2
15-17	0	(0%)	0.3	0.1	30	(2%)	2.1	0.5
18-19	0	(1%)	0.4	0.2	30	(2%)	3.5	0.8
20-34	60	(8%)	0.9	0.4	240	(19%)	3.9	0.9
35-49	120	(17%)	1.8	0.7	330	(26%)	5.0	1.2
50-64	240	(34%)	4.7	2.0	310	(24%)	6.1	1.4
65-74	120	(17%)	6.4	2.7	170	(13%)	8.8	2.0
75-84	110	(16%)	8.3	3.5	110	(8%)	8.1	1.9
85 and over	30	(5%)	6.5	2.8	20	(2%)	4.0	0.9
All ages	700	(100%)	2.4	1.0	1,280	(100%)	4.3	1.0
14 and under	20	(3%)	0.4	0.2	60	(4%)	0.9	0.2
65 and over	260	(37%)	7.1	3.0	290	(23%)	7.9	1.8
B. Heating Equipment Fires								
Age	Civilian Deaths		Rate per Million	Risk	Civilian Injuries		Rate per Million	Risk
Under 5	80	(13%)	4.1	2.0	80	(8%)	4.0	0.7
5-9	20	(3%)	1.0	0.5	50	(5%)	2.7	0.5
10-14	20	(3%)	1.0	0.5	60	(5%)	2.7	0.5
15-17	10	(1%)	0.5	0.2	40	(6%)	3.4	0.6
18-19	0	(0%)	0.3	0.1	40	(6%)	5.1	0.9
20-34	60	(10%)	1.0	0.5	430	(48%)	7.1	1.3
35-49	90	(15%)	1.4	0.7	430	(55%)	6.5	1.2
50-64	140	(23%)	2.7	1.3	290	(38%)	5.8	1.0
65-74	70	(11%)	3.7	1.8	110	(13%)	5.6	1.0
75-84	80	(12%)	5.8	2.8	90	(11%)	6.9	1.2
85 and over	40	(7%)	8.5	4.1	40	(6%)	7.1	1.3
All ages	610	(100%)	2.1	1.0	1,660	(200%)	5.6	1.0
14 and under	120	(20%)	2.0	1.0	190	(18%)	3.1	0.6
65 and over	190	(31%)	5.1	2.5	230	(29%)	6.3	1.1

Table 14.
U.S. Civilian Fire Deaths and Injuries in Homes by Leading Causes and Age of Victim
2003-2007 Annual Averages
(Continued)

C. Cooking Equipment Fires

Age	Civilian Deaths		Rate per Million	Risk	Civilian Injuries		Rate per Million	Risk
Under 5	80	(16%)	3.8	2.3	110	(2%)	5.3	0.3
5-9	40	(7%)	1.8	1.1	70	(1%)	3.6	0.2
10-14	10	(3%)	0.7	0.4	160	(3%)	7.6	0.5
15-17	10	(2%)	0.8	0.5	200	(4%)	15.6	1.0
18-19	0	(0%)	0.3	0.2	170	(4%)	20.7	1.3
20-34	50	(11%)	0.9	0.5	1,430	(31%)	23.5	1.5
35-49	90	(19%)	1.4	0.9	1,260	(27%)	19.1	1.2
50-64	80	(16%)	1.6	1.0	690	(15%)	13.8	0.9
65-74	50	(10%)	2.5	1.5	260	(6%)	13.8	0.9
75-84	40	(8%)	3.1	1.9	230	(5%)	17.8	1.1
85 and over	40	(8%)	7.4	4.5	100	(2%)	20.0	1.3
All ages	490	(100%)	1.7	1.0	4,690	(100%)	15.8	1.0
14 and under	130	(26%)	2.1	1.3	340	(7%)	5.5	0.3
65 and over	120	(25%)	3.4	2.0	590	(13%)	16.1	1.0

D. Electrical Distribution and Lighting Fires

Age	Civilian Deaths		Rate per Million	Risk	Civilian Injuries		Rate per Million	Risk
Under 5	40	(12%)	2.0	1.7	40	(4%)	2.0	0.7
5-9	20	(6%)	1.0	0.9	10	(2%)	0.7	0.2
10-14	30	(8%)	1.4	1.2	40	(5%)	1.9	0.7
15-17	10	(4%)	1.0	0.8	30	(4%)	2.7	0.9
18-19	10	(2%)	1.0	0.8	20	(2%)	2.6	0.9
20-34	40	(11%)	0.6	0.5	200	(22%)	3.2	1.1
35-49	50	(15%)	0.8	0.7	240	(27%)	3.6	1.2
50-64	30	(10%)	0.7	0.6	160	(18%)	3.2	1.1
65-74	20	(6%)	1.2	1.0	60	(7%)	3.4	1.2
75-84	50	(14%)	3.8	3.2	60	(6%)	4.4	1.5
85 and over	40	(12%)	8.6	7.2	10	(2%)	2.8	0.9
All ages	350	(100%)	1.2	1.0	880	(100%)	3.0	1.0
14 and under	90	(26%)	1.5	1.3	90	(11%)	1.5	0.5
65 and over	120	(33%)	3.1	2.7	140	(15%)	3.7	1.2

Table 14.
U.S. Civilian Fire Deaths and Injuries in Homes by Leading Causes and Age of Victim
2003-2007 Annual Averages
(Continued)

E. Intentional Fires

Age	Civilian Deaths	Rate per Million	Risk	Civilian Injuries	Rate per Million	Risk
Under 5	40 (11%)	1.8	1.6	80 (9%)	4.1	1.3
5-9	20 (7%)	1.2	1.1	70 (7%)	3.4	1.1
10-14	10 (3%)	0.4	0.4	50 (5%)	2.4	0.7
15-17	10 (2%)	0.5	0.5	40 (4%)	2.8	0.9
18-19	0 (1%)	0.5	0.5	20 (2%)	2.5	0.8
20-34	60 (18%)	1.0	0.9	250 (27%)	4.1	1.3
35-49	90 (28%)	1.4	1.2	250 (26%)	3.8	1.2
50-64	70 (20%)	1.3	1.2	130 (14%)	2.6	0.8
65-74	10 (4%)	0.7	0.7	30 (3%)	1.7	0.5
75-84	10 (4%)	1.1	1.0	20 (2%)	1.4	0.5
85 and over	0 (1%)	0.9	0.9	10 (1%)	1.5	0.5
All ages	330 (100%)	1.1	1.0	940 (100%)	3.2	1.0
14 and under	70 (21%)	1.1	1.0	200 (21%)	3.3	1.0
65 and over	30 (10%)	0.9	0.8	60 (6%)	1.6	0.5

F. Candle Fires

Age	Civilian Deaths	Rate per Million	Risk	Civilian Injuries	Rate per Million	Risk
Under 5	20 (10%)	0.8	1.5	50 (4%)	2.6	0.6
5-9	10 (6%)	0.5	0.9	40 (3%)	2.1	0.5
10-14	10 (4%)	0.3	0.5	70 (5%)	3.3	0.8
15-17	0 (1%)	0.1	0.2	70 (5%)	5.2	1.2
18-19	0 (0%)	0.0	0.0	60 (4%)	7.0	1.6
20-34	30 (16%)	0.4	0.8	370 (28%)	6.0	1.4
35-49	30 (18%)	0.5	0.8	330 (26%)	5.0	1.2
50-64	30 (17%)	0.6	1.0	190 (15%)	3.7	0.9
65-74	30 (15%)	1.4	2.4	50 (4%)	2.9	0.7
75-84	10 (9%)	1.1	2.0	50 (4%)	3.7	0.9
85 and over	10 (5%)	1.7	2.9	10 (1%)	2.8	0.7
All ages	170 (100%)	0.6	1.0	1290 (100%)	4.4	1.0
14 and under	30 (20%)	0.5	1.0	160 (13%)	2.7	0.6
65 and over	50 (28%)	1.3	2.3	120 (9%)	3.2	0.7

Table 14.
U.S. Civilian Fire Deaths and Injuries in Homes by Leading Causes and Age of Victim
2003-2007 Annual Averages
(Continued)

G. Playing with Heat Source Fires

Age	Civilian Deaths		Rate per Million	Risk	Civilian Injuries		Rate per Million	Risk
Under 5	60	(52%)	3.1	7.6	160	(20%)	7.7	2.9
5-9	20	(19%)	1.2	2.9	100	(13%)	5.1	1.9
10-14	10	(5%)	0.3	0.7	60	(8%)	3.1	1.1
15-17	0	(2%)	0.2	0.5	30	(4%)	2.3	0.9
18-19	0	(0%)	0.0	0.0	10	(1%)	1.2	0.4
20-34	0	(3%)	0.1	0.2	230	(29%)	3.8	1.4
35-49	10	(10%)	0.2	0.4	130	(16%)	2.0	0.7
50-64	0	(3%)	0.1	0.2	50	(7%)	1.0	0.4
65-74	0	(2%)	0.2	0.4	10	(1%)	0.6	0.2
75-84	0	(2%)	0.2	0.6	0	(1%)	0.4	0.1
85 and over	0	(1%)	0.2	0.5	0	(0%)	0.2	0.1
All ages	120	(100%)	0.4	1.0	790	(100%)	2.7	1.0
14 and under	90	(76%)	1.5	3.7	320	(40%)	5.3	2.0
65 and over	10	(6%)	0.2	0.5	20	(2%)	0.5	0.2

Note: These are the leading causes, obtained from the following list: intentional (from the NFIRS field “cause”); playing with fire (from factor contributing to ignition); confined heating (including confined chimney and confined fuel burner or boiler fires), confined cooking, and contained trash or rubbish) from incident type; heating and cooking equipment in non-confined fire, clothes dryer or washer, torch (including burner and soldering iron), electrical distribution and lighting equipment, medical equipment, and electronic, office or entertainment equipment (from equipment involved in ignition); smoking materials, candles, lightning, and spontaneous combustion or chemical reaction (from heat source), and mobile property involved (from mobile property involved in ignition). The statistics on smoking materials and candles include a proportional share of fires in which the heat source was heat from an unclassified open flame or smoking material. Equipment statistics include a proportional share fires coded with no equipment involved in ignition but with heat source indicating equipment involvement or unknown heat source. Exposure fires include fires with an exposure number greater than zero, as well as fires identified by heat source or factor contributing to ignition when no equipment was involved in ignition and the fires were not intentionally set. Causal information is not routinely collected for these incidents. The same fire can be listed under multiple causes, based on multiple data elements. Details on handling of unknowns, partial unknowns, and other underspecified codes may be found in the Appendix.

These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. These national estimates are projections based on the detailed information collected in Version 5.0 of NFIRS. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths are rounded to the nearest ten

Source: NFIRS and NFPA survey.

Table 15.
U.S. Civilian Fire Death and Injury Rates Per Million Population in Homes
Leading Fire Causes, by Age of Victim
Annual Average of 2003-2007 Structure Fires

A. Civilian Deaths	All Ages	Under 5	5-9	10-14	15-17	18-19	20-34	35-49	50-64	65-74	75-84	85 and over	14 and under	65 and over
Smoking materials	2.4	0.6	0.3	0.2	0.3	0.4	0.9	1.8	4.7	6.4	8.3	6.5	0.4	7.1
Heating equipment fires	2.1	4.1	1.0	1.0	0.5	0.3	1.0	1.4	2.7	3.7	5.8	8.5	2.0	5.1
<i>Non-confined heating equipment</i>	<i>2.1</i>	<i>4.1</i>	<i>1.0</i>	<i>1.0</i>	<i>0.5</i>	<i>0.3</i>	<i>1.0</i>	<i>1.4</i>	<i>2.7</i>	<i>3.7</i>	<i>5.8</i>	<i>8.5</i>	<i>2.0</i>	<i>5.1</i>
<i>Confined heating fires</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Cooking fires	1.7	3.8	1.8	0.7	0.8	0.3	0.9	1.4	1.6	2.5	3.1	7.4	2.1	3.4
<i>Non-confined cooking fire</i>	<i>1.6</i>	<i>3.8</i>	<i>1.8</i>	<i>0.7</i>	<i>0.8</i>	<i>0.3</i>	<i>0.9</i>	<i>1.4</i>	<i>1.5</i>	<i>2.5</i>	<i>2.8</i>	<i>6.9</i>	<i>2.1</i>	<i>3.2</i>
<i>Confined cooking fire</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.3</i>	<i>0.5</i>	<i>0.0</i>	<i>0.2</i>
Intentional	1.2	2.0	1.0	1.4	1.0	1.0	0.6	0.8	0.7	1.2	3.8	8.6	1.5	3.1
Electrical distribution and lighting equipment	1.0	1.2	1.0	0.7	0.9	0.9	0.5	0.8	0.9	1.3	4.9	7.4	1.0	3.4
Candle	0.6	0.8	0.5	0.3	0.1	0.0	0.4	0.6	0.6	1.4	1.1	1.7	0.5	1.3
Playing with heat source	0.4	3.1	1.2	0.3	0.2	0.0	0.1	0.2	0.1	0.2	0.2	0.2	1.5	0.2
Exposure	0.1	0.4	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0
Clothes dryer or washer	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1

Note: These are the leading causes, obtained from the following list: intentional (from the NFIRS field “cause”); playing with fire (from factor contributing to ignition); confined heating (including confined chimney and confined fuel burner or boiler fires), confined cooking, and contained trash or rubbish) from incident type; heating and cooking equipment in non-confined fire, clothes dryer or washer, torch (including burner and soldering iron), electrical distribution and lighting equipment, medical equipment, and electronic, office or entertainment equipment (from equipment involved in ignition); smoking materials, candles, lightning, and spontaneous combustion or chemical reaction (from heat source), and mobile property involved (from mobile property involved in ignition). The statistics on smoking materials and candles include a proportional share of fires in which the heat source was heat from an unclassified open flame or smoking material. Equipment statistics include a proportional share fires coded with no equipment involved in ignition but with heat source indicating equipment involvement or unknown heat source. Exposure fires include fires with an exposure number greater than zero, as well as fires identified by heat source or factor contributing to ignition when no equipment was involved in ignition and the fires were not intentionally set. Causal information is not routinely collected for these incidents. The same fire can be listed under multiple causes, based on multiple data elements. Details on handling of unknowns, partial unknowns, and other underspecified codes may be found in the Appendix.

Source: NFIRS and NFPA survey.

Table 15.
U.S. Civilian Fire Death and Injury Rates Per Million Population in Homes
Leading Fire Causes, by Age of Victim
Annual Average of 2003-2007 Structure Fires
(Continued)

B. Civilian Injuries	All Ages	Under 5	5-9	10-14	15-17	18-19	20-34	35-49	50-64	65-74	75-84	85 and over	14 and under	65 and over
Cooking fires	15.8	5.3	3.6	7.6	15.6	20.7	23.5	19.1	13.8	13.8	17.8	20.0	5.5	16.1
<i>Non-confined cooking fire</i>	10.8	3.9	2.9	4.7	11.2	13.4	15.5	13.0	9.9	9.4	12.2	12.4	3.8	10.8
<i>Confined cooking fire</i>	5.1	1.4	0.7	2.9	4.4	7.3	8.0	6.1	3.9	4.4	5.6	7.6	1.7	5.3
Heating equipment fires	5.6	4.0	2.7	2.7	3.4	5.1	7.1	6.5	5.8	5.6	6.9	7.1	3.1	6.3
<i>Non-confined heating equipment fires</i>	5.2	3.8	2.6	2.6	3.1	4.6	6.6	5.9	5.2	5.2	6.3	6.1	3.0	5.7
<i>Confined heating fires</i>	0.4	0.2	0.1	0.1	0.3	0.5	0.5	0.6	0.5	0.4	0.5	0.1	0.1	0.5
Smoking materials	4.3	1.4	0.6	0.9	2.1	3.5	3.9	5.0	6.1	8.8	8.1	4.0	0.9	7.9
Candle	4.4	2.6	2.1	3.3	5.2	7.0	6.0	5.0	3.7	2.9	3.7	2.8	2.7	3.2
Intentional	3.2	4.1	3.4	2.4	2.8	2.5	4.1	3.8	2.6	1.7	1.4	1.5	3.3	1.6
Electrical distribution and lighting equipment	3.0	2.0	0.7	1.9	2.7	2.6	3.2	3.6	3.2	3.4	4.4	2.8	1.5	3.7
Playing with heat source	2.7	7.7	5.1	3.1	2.3	1.2	3.8	2.0	1.0	0.6	0.4	0.2	5.3	0.5
Clothes dryer or washer	1.6	0.9	0.7	1.0	2.0	1.3	1.4	2.1	1.9	2.0	0.7	0.6	0.9	1.4
Exposure	0.2	0.2	0.1	0.1	0.1	0.0	0.2	0.3	0.2	0.3	0.3	0.0	0.1	0.2

Note: These are the leading causes, obtained from the following list: intentional (from the NFIRS field “cause”); playing with fire (from factor contributing to ignition); confined heating (including confined chimney and confined fuel burner or boiler fires), confined cooking, and contained trash or rubbish) from incident type; heating and cooking equipment in non-confined fire, clothes dryer or washer, torch (including burner and soldering iron), electrical distribution and lighting equipment, medical equipment, and electronic, office or entertainment equipment (from equipment involved in ignition); smoking materials, candles, lightning, and spontaneous combustion or chemical reaction (from heat source), and mobile property involved (from mobile property involved in ignition). The statistics on smoking materials and candles include a proportional share of fires in which the heat source was heat from an unclassified open flame or smoking material. Equipment statistics include a proportional share fires coded with no equipment involved in ignition but with heat source indicating equipment involvement or unknown heat source. Exposure fires include fires with an exposure number greater than zero, as well as fires identified by heat source or factor contributing to ignition when no equipment was involved in ignition and the fires were not intentionally set. Causal information is not routinely collected for these incidents. The same fire can be listed under multiple causes, based on multiple data elements. Details on handling of unknowns, partial unknowns, and other underspecified codes may be found in the Appendix.
Source: NFIRS and NFPA survey.

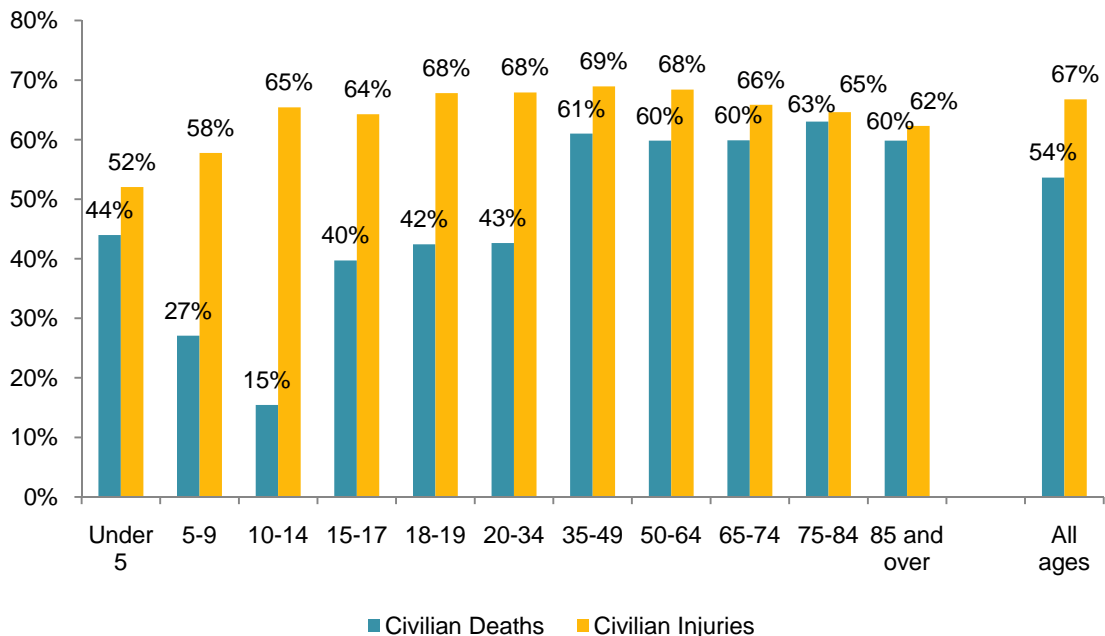
RISK FACTORS

Location at Injury

54% of the 2003-2007 home fatal fire victims and 67% of the injured victims were in the area of fire origin at time of injury.

Overall, fire injuries occurred more often when the victim was in the area of fire origin. Age breakdowns of civilian deaths by general location at time of injury show that more victims under 35 died when they were injured in the building, but not in the area of fire origin, while more victims that were 35 or older died when they were injured in the area of fire origin. (See Table 16.)

Figure 14. U.S. Civilian Fire Deaths and Injuries in Area of Fire Origin, by Age of Victim 2003-2007 Annual Averages



Source: NFIRS 5.0 and NFPA survey.

Human Factor Contributing to Injury

In 2003-2007, more than one-third (35%) of fatal home fire victims were asleep when injured in the fire.

Table 17A shows percentages of characteristics for 2003-2007 fatal victims. Since more than one factor can be recorded for each victim we cannot add percentages and we cannot use 2003-2007 data to say what combined percentage of victims had any disability, limitation or impairment. The 2003-2007 data does show that as age of victim increases, physical disabilities are cited much more frequently. The greatest percentage of fatal victims impaired by alcohol is between the ages of 18 and 64.

Table 17B shows 2003-2007 data for non-fatal injuries. Again, percentages cannot be summed for different factors. The human factor contributing to injury in home structure fire incidents was reported as none in 37% of civilian fire deaths and 68% of non-fatal injuries.

It is likely that most or all of these limitations carry some perceived stigma – such as “blaming the victims”-in some people’s eyes. This could contribute to under-reporting of limitations, most of which are also not readily observable.

Table 18 shows alcohol impairment during injury is much more common for males than for females (17% vs. 7% for deaths, 7% vs. 3% for injuries). Again, percentages cannot be summed for different factors.

In a study on possible drug or alcohol impairment as a factor contributing to injury, Marty Ahrens concludes that 71%⁶ of these fatal home structure fire victims in 2003-2006 were male. Ahrens also points out that in fire deaths in which alcohol or drug impairment was a possible factor, 45% of the deaths resulted from fires started by smoking materials (i.e., lighted tobacco products but not matches or lighters). More information is available in NFPA’s report, *Possible Impairment by Alcohol or Drugs as a Contributing Factor in Home Fire Deaths*.

Thirteen percent of all civilian fire fatalities had a physical disability. Victims with physical disabilities were quite unusual in the younger age groups, but the percentage increased steadily from 4% of the victims in the 20-34 age group throughout the later years. Thirty-two percent of victims who were 85 or older had a physical disability.

In a study on physical disability as a factor in home fire deaths, Marty Ahrens concluded that more than half of the victims with physical disabilities were involved in ignition and in the area of origin when the fire started. When physical disability contributed to the fatal injury, the victims were more likely to have been killed by a fire started by smoking materials, that originated in the bedroom, and that began with either a) mattresses or bedding, or b) clothing, than were home fire victims in general. More information is available in NFPA’s report, *Physical Disability as a Factor in Home Fire Deaths*.⁷

⁶ Ahrens, M., *Possible Impairment by Alcohol or Drugs as a Contributing Factor in Home Fire Deaths*, November 2009

⁷ Ahrens, M., *Physical Disability as a Factor in Home Fire Deaths*, August 2009

Activity When Injured

More than one of every three (36%) fatal home fire victims was sleeping when injured.

Sleeping was the leading activity being performed during injury by fatal victims of all ages. Table 19A shows that a higher percentage of fatal victims that were under the age of 19 were sleeping at time of injury than were older victims. For adults over the age of 50 that were fatally injured in home structure fires, more deaths occurred for victims that were injured while trying to escape than those that were sleeping. Still, well over half of the fatal victims over the age of 50 were either sleeping or trying to escape at time of injury.

One third of fatal victims (35% for 2003-2007) are fatally injured while trying to escape. These are the only victims where extra escape time alone clearly would have permitted some fatal victims to escape safely. Two percent of fatal victims were participating in some unclassified activity at time of injury.

- The 36% of victims who were sleeping would need to be awakened in order to have a chance at survival. In 2003-2006 non-confined home structure fires, when a smoke alarm was present but did not operate, 45% of fatal victims were sleeping. When no smoke alarm was present, 41% of fatal victims were sleeping.
- The 6% of victims who were fighting fire or attempting rescue would need some undefined form of help to succeed in their efforts or to recognize an imminent threat and abandon those efforts to save themselves. In either case, extra time alone might not have made a difference.
- The 15% of victims who were unable to act or acted irrationally would also need something other than extra time.
- The 3% of victims who were injured while returning to the vicinity of the fire before it was under control would not benefit from extra escape time as they were able to escape and chose to return to the vicinity of the fire.

More than two out of every five (43%) non-fatal home fire injury victims were trying to fight the fire or rescue someone when they were injured.

Table 19B shows the percentages of non-fatal home fire injury victims trying to fight the fire or rescue someone were lower for young children under age 10, who were more likely than older victims to have been sleeping or attempting to escape when non-fatally injured. Older adults were somewhat less likely to be injured, than people between 15 and 49, while trying to fight the fire themselves. Yet, older adults were more likely to die in fires they attempted to fight, compared to people between 15 and 49.

Males were more likely than females to be attacking the fire when injured, while females were more likely than males to be escaping the fire when injured.

Table 20 shows 48% of non-fatally injured males were fighting fire or attempting rescue, compared to 38% of injured females. Conversely, 19% of injured males were escaping compared to 28% of injured females.

In a 2004 study by Hall, it was found that roughly half of the deaths and two-thirds of the injuries could be prevented if the times to incapacitating exposures lengthened sufficiently to result in a more favorable outcome.⁸

When smoke alarms were present and operating, fatal victims were more likely to be engaged in fire control compared to fires in which no working smoke alarms were present.⁹

Table 21, taken from the NFPA report on smoke alarms, shows that victims who died even though smoke alarms operated were less likely than other victims to have died while sleeping.

Those aged over 75 years are especially at risk for sleeping through high-pitched smoke alarm signals.¹⁰

According to a study by Bruck and Thomas, the ability to wake to auditory signals changes with age. Older people are likely to awaken more easily than younger people and children are generally hardest to arouse. However, in their study, it was found that adults aged over 75 years are especially at risk for sleeping through high pitched signals.

Fatal victims of home fires who were unable to act or were acting irrationally tended to be closer to the fire at ignition than fatal victims who were injured while engaged in other activities.

Table 22 shows that in 2003-2007, 55% of victims attempting rescue or firefighting were in the area of fire origin when fire began, compared to 44% of sleeping victims, 39% of escaping victims, and 70% of victims who were unable to act or acting irrationally. For non-fatal victims, 81% of victims attempting rescue or firefighting had been in the area of origin, compared to 48% of sleeping victims, 40% of escaping victims, and 72% of victims who were unable to act or acting irrationally.

Table 23 shows activity when injured by human factor contributing to injury for 2003-2007 victims. Twenty-six percent of fatally injured victims who were unable to act or acted irrationally were physically disabled, while 10% were possibly impaired by alcohol and 8% were possibly impaired by drugs.

⁸ John R. Hall, Jr., "How Many More People Can Be Saved From Home Fires If Given More Time to Escape?" *Fire Technology*, April 2004.

⁹ Marty Ahrens, "Smoke Alarms in U.S. Home Fires ", NFPA Division of Fire Analysis and Research, September 2009.

¹⁰ Dorothy Bruck and Ian Thomas, "Comparisons of the Effectiveness of Different Fire Notification Signals in Sleeping Older Adults" *Fire Technology*, March 2008.

Factor Contributing to Injury

Fire blocking the exit was the leading factor contributing to injury for fatal victims. Table 24 covers 2003-2007 victims and groups the many factors now identified as factors contributing to injury into a dozen primary groups. Multiple factors can be reported for a single victim.

Thirty-two percent of fatal victims had some problem with an exit being blocked by fire. When there was a factor contributing to injury, the leading factor in non-fatal victims was some other or unclassified factor (32%), followed by exits blocked by fire (9%).

There was no factor contributing to injury in 24% of civilian fire deaths or 34% of civilian fire injuries. Note that problems with door locks, security bars, or problem windows are so rarely cited that they are not shown separately on later tables, like Table 25, which shows the major factor groupings by victim age.

People under the age of 18 were more likely than people 18 or older to die by exits blocked by fire in home structure fires. Clothing catching fire was a more common factor among older adults age 65 and over.

Problems with exits being blocked by fire were more common for people fatally injured while attempting to escape than for people involved in some other activity, such as fighting the fire or attempting rescue.

Table 16.
U.S. Civilian Fire Deaths and Injuries in Homes
by General Location at Injury and Age of Victim
Annual Average of 2003-2007 Structure Fires

A. Civilian Deaths

Age	In Area of Origin		In Building, but Not in Area of Origin		Outside, Not in Area of Origin		Total	
Under 5	120	(44%)	150	(56%)	0	(0%)	270	(100%)
5-9	40	(27%)	110	(73%)	0	(0%)	150	(100%)
10-14	10	(15%)	70	(85%)	0	(0%)	40	(100%)
15-17	20	(40%)	30	(60%)	0	(0%)	40	(100%)
18-19	20	(42%)	20	(58%)	0	(0%)	40	(100%)
20-34	140	(43%)	180	(56%)	0	(1%)	330	(100%)
35-49	330	(61%)	210	(38%)	0	(1%)	550	(100%)
50-64	350	(60%)	240	(40%)	0	(0%)	590	(100%)
65-74	190	(60%)	120	(39%)	0	(1%)	320	(100%)
75-84	190	(63%)	110	(36%)	0	(1%)	310	(100%)
85 and over	110	(60%)	70	(39%)	0	(1%)	180	(100%)
All ages	1,530	(54%)	1,310	(46%)	10	(1%)	2,850	(100%)
Selected Age Groups								
14 and under	170	(35%)	330	(65%)	0	(0%)	500	(100%)
65 and over	490	(61%)	310	(38%)	10	(1%)	800	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths are rounded to the nearest ten. Totals may not equal sums due to of rounding.

Source: NFIRS and NFPA survey.

Table 16.
U.S. Civilian Fire Deaths and Injuries in Homes
by General Location at Injury and Age of Victim
Annual Average of 2003-2007 Structure Fires
(Continued)

B. Civilian Injuries

Age	In Area of Origin		In Building, but Not in Area of Origin		Outside, Not in Area of Origin		Total	
Under 5	310	(52%)	270	(46%)	10	(2%)	590	(100%)
5-9	220	(58%)	150	(41%)	10	(1%)	370	(100%)
10-14	340	(65%)	160	(31%)	20	(4%)	520	(100%)
15-17	320	(64%)	150	(30%)	30	(5%)	490	(100%)
18-19	270	(68%)	110	(27%)	20	(5%)	400	(100%)
20-34	2,370	(68%)	900	(26%)	220	(6%)	3,490	(100%)
35-49	2,370	(69%)	850	(25%)	220	(6%)	3,440	(100%)
50-64	1,480	(68%)	560	(26%)	120	(6%)	2,160	(100%)
65-74	540	(66%)	250	(30%)	30	(4%)	820	(100%)
75-84	400	(65%)	190	(31%)	30	(4%)	620	(100%)
85 and over	150	(62%)	90	(36%)	0	(2%)	240	(100%)
All ages	8,790	(67%)	160	(31%)	20	(4%)	13,160	(100%)
 Selected Age Groups								
14 and under	870	(58%)	580	(39%)	40	(2%)	1,490	(100%)
65 and over	1,090	(65%)	530	(31%)	60	(4%)	1,680	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths are rounded to the nearest ten. Totals may not equal sums due to rounding.

Source: NFIRS and NFPA survey.

Table 17.
U.S. Civilian Fire Deaths and Injuries in Homes
by Human Factor Contributing to Injury and Age of Victim
2003-2007 Annual Averages

A. Civilian Deaths

Age	Asleep	Unconscious	Possibly Impaired by Alcohol	Possibly Impaired by other Drug or Chemical	Possibly Mentally Disabled	Physically Disabled
Under 5	120 (44%)	10 (2%)	0 (1%)	0 (0%)	0 (0%)	0 (1%)
5-9	80 (52%)	0 (3%)	0 (0%)	0 (0%)	0 (2%)	0 (0%)
10-14	50 (59%)	0 (2%)	0 (0%)	0 (4%)	0 (1%)	0 (0%)
15-17	20 (52%)	0 (4%)	0 (0%)	0 (0%)	0 (5%)	0 (2%)
18-19	10 (40%)	0 (9%)	10 (27%)	10 (28%)	0 (7%)	0 (0%)
20-34	150 (44%)	20 (6%)	70 (22%)	30 (10%)	20 (5%)	10 (4%)
35-49	190 (35%)	30 (5%)	120 (21%)	70 (12%)	40 (7%)	30 (6%)
50-64	170 (28%)	30 (5%)	120 (20%)	40 (6%)	40 (6%)	80 (14%)
65-74	100 (30%)	30 (5%)	20 (7%)	10 (3%)	10 (4%)	70 (23%)
75-84	80 (27%)	10 (3%)	10 (3%)	0 (1%)	10 (3%)	100 (31%)
85 and over	40 (21%)	0 (2%)	0 (1%)	0 (1%)	10 (4%)	60 (32%)
All ages	990 (35%)	110 (4%)	350 (12%)	160 (6%)	130 (4%)	370 (13%)
Selected Age Groups						
14 and under	240 (49%)	10 (2%)	0 (0%)	0 (1%)	0 (1%)	0 (1%)
65 and over	210 (27%)	20 (3%)	30 (4%)	10 (2%)	30 (4%)	230 (28%)

Table 17.
U.S. Civilian Fire Deaths and Injuries in Homes
by Human Factor Contributing to Injury and Age of Victim
2003-2007 Annual Averages
(Continued)

A. Civilian Deaths (Continued)

Age	Physically Restrained	Unattended or Unsupervised Person	No Factor	Total Factors	Total Fires
Under 5	0 (1%)	60 (24%)	90 (33%)	290 (106%)	270 (100%)
5-9	0 (0%)	20 (12%)	50 (36%)	160 (105%)	150 (100%)
10-14	0 (2%)	10 (7%)	20 (32%)	80 (106%)	80 (100%)
15-17	0 (2%)	0 (0%)	20 (41%)	40 (106%)	40 (100%)
18-19	0 (0%)	0 (0%)	10 (27%)	50 (138%)	40 (100%)
20-34	0 (0%)	0 (1%)	100 (32%)	400 (123%)	330 (100%)
35-49	0 (0%)	10 (2%)	190 (36%)	670 (123%)	550 (100%)
50-64	0 (1%)	10 (2%)	220 (38%)	710 (120%)	590 (100%)
65-74	0 (0%)	20 (5%)	130 (41%)	370 (118%)	320 (100%)
75-84	0 (1%)	20 (6%)	120 (39%)	350 (113%)	310 (100%)
85 and over	0 (0%)	10 (6%)	80 (42%)	200 (110%)	180 (100%)
All ages	10 (0%)	160 (5%)	1,050 (37%)	3,320 (117%)	2,850 (100%)
Selected Age Groups					
14 and under	0 (1%)	90 (17%)	170 (34%)	530 (106%)	500 (100%)
65 and over	0 (0%)	50 (6%)	330 (40%)	920 (114%)	800 (100%)

Table 17.
U.S. Civilian Fire Deaths and Injuries in Homes
by Human Factor Contributing to Injury and Age of Victim
2003-2007 Annual Averages
(Continued)

B. Civilian Injuries

Age	Asleep		Unconscious		Possibly Impaired by Alcohol		Possibly Impaired by other Drug or Chemical		Possibly Mentally Disabled		Physically Disabled	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Under 5	170	(28%)	0	(0%)	0	(0%)	0	(0%)	10	(1%)	0	(1%)
5-9	120	(32%)	0	(0%)	0	(0%)	0	(0%)	10	(2%)	0	(0%)
10-14	100	(20%)	0	(1%)	0	(0%)	0	(0%)	10	(1%)	10	(1%)
15-17	100	(21%)	0	(0%)	0	(1%)	10	(1%)	10	(1%)	0	(0%)
18-19	80	(21%)	0	(1%)	10	(3%)	10	(3%)	0	(1%)	0	(1%)
20-34	640	(18%)	20	(1%)	170	(5%)	90	(3%)	40	(1%)	20	(0%)
35-49	600	(17%)	30	(1%)	270	(8%)	120	(3%)	80	(2%)	50	(1%)
50-64	420	(19%)	20	(1%)	180	(8%)	50	(2%)	60	(3%)	110	(5%)
65-74	150	(18%)	10	(1%)	40	(5%)	10	(1%)	20	(3%)	80	(10%)
75-84	90	(15%)	10	(1%)	10	(2%)	10	(1%)	30	(5%)	80	(13%)
85 and over	40	(17%)	0	(1%)	0	(2%)	0	(1%)	10	(6%)	40	(16%)
All ages	2,510	(19%)	100	(1%)	700	(5%)	300	(2%)	280	(2%)	390	(3%)
Selected Age Groups												
14 and under	390	(26%)	10	(0%)	0	(0%)	0	(0%)	20	(1%)	10	(1%)
65 and over	280	(17%)	20	(1%)	60	(4%)	20	(1%)	70	(4%)	200	(12%)

Table 17.
U.S. Civilian Fire Deaths and Injuries in Homes,
by Human Factor Contributing to Injury and Age of Victim
2003-2007 Annual Averages
(Continued)

B. Civilian Injuries (Continued)

Age	Physically Restrained	Unattended or Unsupervised Person	No Factor	Total Factors	Total Fires
Under 5	0 (0%)	110 (18%)	320 (54%)	610 (103%)	590 (100%)
5-9	0 (0%)	70 (18%)	180 (49%)	380 (101%)	370 (100%)
10-14	0 (0%)	100 (19%)	310 (60%)	540 (102%)	520 (100%)
15-17	0 (0%)	30 (7%)	340 (68%)	500 (101%)	490 (100%)
18-19	0 (0%)	10 (2%)	290 (73%)	420 (104%)	400 (100%)
20-34	10 (0%)	80 (2%)	2,550 (73%)	3,610 (104%)	3,490 (100%)
35-49	0 (0%)	70 (2%)	2,450 (71%)	3,660 (106%)	3,440 (100%)
50-64	0 (0%)	40 (2%)	1,420 (66%)	2,310 (107%)	2,160 (100%)
65-74	0 (0%)	20 (2%)	540 (66%)	870 (106%)	820 (100%)
75-84	0 (1%)	30 (4%)	400 (64%)	660 (106%)	620 (100%)
85 and over	0 (0%)	20 (8%)	130 (56%)	260 (107%)	240 (100%)
All ages	20 (0%)	550 (4%)	8,950 (68%)	13,810 (105%)	13,160 (100%)
Selected Age Groups					
14 and under	0 (0%)	270 (18%)	810 (55%)	1,520 (102%)	1,490 (100%)
65 and over	10 (0%)	60 (4%)	1,070 (64%)	1,780 (106%)	1,680 (100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths are rounded to the nearest ten. Totals may not equal sums due to rounding.

Source: NFIRS and NFPA survey.

Table 18.
U.S. Civilian Fire Deaths and Injuries in Homes
by Human Factor Contributing to Injury and Sex of Victim
Percent of 2003-2007 Structure Fires

A. Civilian Deaths	Male		Female		All Victims	
Asleep	540	(34%)	440	(35%)	990	(35%)
Unconscious	70	(4%)	40	(3%)	110	(4%)
Possibly impaired by alcohol	260	(17%)	90	(7%)	350	(12%)
Possibly impaired by other drug or chemical	110	(7%)	50	(4%)	160	(6%)
Possibly mentally disabled	80	(5%)	50	(4%)	130	(4%)
Physically disabled	180	(11%)	200	(16%)	370	(13%)
Physically restrained	0	(0%)	10	(1%)	10	(0%)
Unattended or unsupervised person	80	(5%)	70	(6%)	160	(5%)
No Factor	560	(35%)	480	(38%)	1,050	(37%)
Total	1,580	(100%)	1,260	(100%)	2,850	(100%)
B. Civilian Injuries	Male		Female		All Victims	
Asleep	1,350	(19%)	1,160	(19%)	2,510	(19%)
Unconscious	50	(1%)	40	(1%)	100	(1%)
Possibly impaired by alcohol	500	(7%)	210	(3%)	700	(5%)
Possibly impaired by other drug or chemical	180	(3%)	120	(2%)	300	(2%)
Possibly mentally disabled	150	(2%)	130	(2%)	280	(2%)
Physically disabled	170	(2%)	220	(4%)	390	(3%)
Physically restrained	10	(0%)	10	(0%)	20	(0%)
Unattended or unsupervised person	300	(4%)	240	(4%)	550	(4%)
No Factor	4,660	(67%)	4,290	(69%)	8,950	(68%)
Total	6,980	(100%)	6,180	(100%)	13,160	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths are rounded to the nearest ten. Totals may not equal sums due to rounding.

Source: NFIRS and NFPA survey.

Table 19.
U.S. Civilian Fire Deaths and Injuries in Homes
by Activity at Time of Injury and Age of Victim
Annual Average of 2003-2007 Structure Fires

A. Civilian Deaths

Age	Sleeping		Escaping		Unable to Act		Irrational Act		Returning to Vicinity of Fire Before Control	
Under 5	150	(54%)	60	(22%)	50	(19%)	10	(3%)	0	(0%)
5-9	80	(54%)	50	(32%)	10	(9%)	10	(4%)	0	(1%)
10-14	40	(54%)	30	(40%)	0	(2%)	0	(2%)	0	(0%)
15-17	20	(54%)	10	(34%)	0	(0%)	0	(0%)	0	(0%)
18-19	20	(53%)	10	(26%)	0	(10%)	0	(7%)	0	(4%)
20-34	110	(34%)	120	(38%)	10	(3%)	20	(6%)	10	(3%)
35-49	210	(38%)	180	(32%)	30	(5%)	50	(10%)	30	(5%)
50-64	190	(32%)	220	(37%)	60	(11%)	30	(5%)	30	(4%)
65-74	90	(28%)	110	(35%)	40	(13%)	20	(5%)	10	(3%)
75-84	70	(21%)	130	(43%)	40	(14%)	0	(1%)	10	(4%)
85 and over	40	(22%)	70	(39%)	30	(16%)	10	(3%)	10	(3%)
All ages	1,030	(36%)	990	(35%)	290	(10%)	140	(5%)	90	(3%)
Selected Age Groups										
14 and under	270	(54%)	140	(28%)	70	(13%)	10	(3%)	0	(0%)
65 and over	190	(24%)	310	(39%)	110	(14%)	30	(3%)	30	(3%)

Table 19.
U.S. Civilian Fire Deaths and Injuries in Homes,
by Activity at Time of Injury and Age of Victim
Annual Average of 2003-2007 Structure Fires
(Continued)

A. Civilian Deaths (Continued)

Age	Fire Control		Rescue Attempt		Returning to Vicinity of Fire after Control		Unclassified Activity		Total	
Under 5	0	(0%)	0	(0%)	0	(0%)	10	(2%)	270	(100%)
5-9	0	(0%)	0	(1%)	0	(0%)	0	(0%)	150	(100%)
10-14	0	(0%)	0	(1%)	0	(0%)	0	(1%)	80	(100%)
15-17	0	(0%)	0	(2%)	0	(0%)	0	(10%)	40	(100%)
18-19	0	(0%)	0	(0%)	0	(0%)	0	(0%)	40	(100%)
20-34	10	(2%)	30	(8%)	0	(0%)	20	(5%)	330	(100%)
35-49	10	(3%)	20	(3%)	0	(0%)	30	(5%)	550	(100%)
50-64	20	(4%)	10	(2%)	0	(0%)	30	(5%)	590	(100%)
65-74	20	(6%)	10	(3%)	0	(0%)	20	(6%)	320	(100%)
75-84	20	(5%)	10	(2%)	0	(0%)	30	(9%)	310	(100%)
85 and over	10	(5%)	0	(2%)	0	(0%)	20	(9%)	180	(100%)
All ages	80	(3%)	80	(3%)	0	(0%)	10	(2%)	2,850	(100%)
Selected Age Groups										
14 and under	0	(0%)	0	(0%)	0	(0%)	10	(1%)	500	(100%)
65 and over	40	(6%)	20	(2%)	0	(0%)	60	(8%)	800	(100%)

Table 19.
U.S. Civilian Fire Deaths and Injuries in Homes
by Activity at Time of Injury and Age of Victim
Annual Average of 2003-2007 Structure Fires
(Continued)

B. Civilian Injuries

Age	Sleeping		Escaping		Unable to Act		Irrational Act		Returning to Vicinity of Fire Before Control	
Under 5	200	(33%)	220	(38%)	80	(14%)	20	(3%)	10	(2%)
5-9	110	(29%)	160	(44%)	20	(5%)	10	(4%)	10	(2%)
10-14	80	(15%)	160	(31%)	10	(2%)	20	(3%)	30	(5%)
15-17	60	(13%)	130	(27%)	10	(2%)	10	(2%)	30	(6%)
18-19	50	(12%)	100	(24%)	10	(2%)	10	(3%)	20	(5%)
20-34	360	(10%)	700	(20%)	30	(1%)	80	(2%)	190	(5%)
35-49	360	(10%)	650	(19%)	50	(1%)	110	(3%)	260	(7%)
50-64	260	(12%)	490	(23%)	60	(3%)	60	(3%)	170	(8%)
65-74	100	(12%)	240	(30%)	40	(5%)	20	(2%)	70	(9%)
75-84	70	(12%)	190	(30%)	50	(7%)	20	(4%)	30	(5%)
85 and over	30	(12%)	90	(36%)	30	(12%)	10	(3%)	10	(5%)
All ages	1,650	(13%)	3,090	(23%)	360	(3%)	370	(3%)	830	(6%)
Selected Age Groups										
14 and under	380	(25%)	540	(37%)	100	(7%)	50	(3%)	50	(3%)
65 and over	200	(12%)	510	(31%)	110	(7%)	50	(3%)	110	(7%)

Table 19.
U.S. Civilian Fire Deaths and Injuries in Home
by Activity at Time of Injury and Age of Victim
Annual Average of 2003-2007 Structure Fires
(Continued)

B. Civilian Injuries (Continued)

Age	Fire Control		Rescue Attempt		Returning to Vicinity of Fire After Control		Unclassified Activity		Total	
Under 5	20	(3%)	10	(1%)	0	(0%)	40	(7%)	590	(100%)
5-9	20	(6%)	0	(0%)	0	(0%)	40	(10%)	370	(100%)
10-14	160	(31%)	10	(3%)	0	(1%)	50	(10%)	520	(100%)
15-17	200	(40%)	20	(4%)	0	(0%)	30	(6%)	490	(100%)
18-19	170	(43%)	20	(4%)	0	(0%)	30	(7%)	400	(100%)
20-34	1,530	(44%)	310	(9%)	20	(1%)	270	(8%)	3,490	(100%)
35-49	1,470	(43%)	260	(7%)	20	(1%)	270	(8%)	3,440	(100%)
50-64	780	(36%)	110	(5%)	20	(1%)	200	(9%)	2,160	(100%)
65-74	240	(30%)	30	(3%)	10	(1%)	70	(9%)	820	(100%)
75-84	170	(27%)	20	(3%)	0	(0%)	70	(12%)	620	(100%)
85 and over	60	(24%)	0	(2%)	0	(0%)	20	(7%)	240	(100%)
All ages	4,910	(37%)	800	(6%)	70	(1%)	1,080	(8%)	13,160	(100%)
Selected Age Groups										
14 and under	220	(15%)	20	(2%)	0	(0%)	130	(9%)	1,490	(100%)
65 and over	470	(28%)	50	(3%)	10	(1%)	160	(9%)	1,680	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian injuries are rounded to the nearest ten. Totals may not equal sums due to rounding.

Source: NFIRS and NFPA survey.

Table 20.
U.S. Civilian Fire Deaths and Injuries in Homes
by Activity When Injured and Sex of Victim
Annual Average of 2003-2007 Structure Fires

A. Civilian Deaths	Male		Female		All Victims	
Sleeping	610	(39%)	520	(33%)	1,030	(36%)
Escaping	490	(31%)	610	(39%)	990	(35%)
Unable to act	140	(9%)	190	(12%)	290	(10%)
Irrational act	110	(7%)	40	(3%)	140	(5%)
Returning to vicinity of fire before control	60	(4%)	40	(2%)	90	(3%)
Rescue attempt	40	(2%)	50	(3%)	80	(3%)
Fire control	50	(3%)	40	(2%)	80	(3%)
Returning to vicinity of fire after control	0	(0%)	0	(0%)	0	(0%)
Unclassified activity	70	(5%)	90	(6%)	150	(5%)
Total	1,580	(100%)	1,260	(100%)	2,850	(100%)
B. Civilian Injuries	Male		Female		All Victims	
Sleeping	850	(12%)	900	(13%)	1,650	(13%)
Escaping	1,350	(19%)	1,980	(28%)	3,090	(23%)
Unable to act	170	(2%)	210	(3%)	360	(3%)
Irrational act	220	(3%)	170	(2%)	370	(3%)
Returning to vicinity of fire before control	440	(6%)	440	(6%)	830	(6%)
Rescue attempt	560	(8%)	270	(4%)	800	(6%)
Fire control	2,820	(40%)	2,350	(34%)	4,910	(37%)
Returning to vicinity of fire after control	20	(0%)	60	(1%)	70	(1%)
Unclassified activity	550	(8%)	600	(9%)	1,080	(8%)
Total	6,980	(100%)	6,180	(100%)	13,160	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies of industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths and injuries are rounded to the nearest ten. Totals may not equal sums because of rounding. National estimates have been adjusted to match "All Victims" tables, which means they cannot be assured to match gender totals.

Source: NFIRS and NFPA survey.

Table 21.
Activity at Time of Victim's Fatal Injury by Smoke Alarm Presence and Operation in Non-
Confined Home Structure Fire Deaths
Excluding Fires Too Small to Activate the Smoke Alarm
2003-2006 Annual Averages

Activity	Present and Operated		Present but Did Not Operate		None Present	
Escaping	310	(30%)	200	(31%)	420	(37%)
Sleeping	310	(30%)	290	(45%)	460	(41%)
Unable to act	150	(14%)	50	(8%)	90	(8%)
Unclassified activity	70	(7%)	30	(5%)	40	(4%)
Fire control	70	(6%)	20	(3%)	20	(2%)
Returning to vicinity of fire before control	50	(5%)	10	(2%)	30	(3%)
Irrational act	50	(5%)	20	(4%)	30	(2%)
Rescue attempt	20	(2%)	20	(3%)	40	(3%)
Total	1,030	(100%)	640	(100%)	1,140	(100%)

Note: Fire deaths resulting from fires too small to activate the smoke alarm are not included in these tables. Sums may not equal totals due to rounding errors.

Source: NFIRS and NFPA survey.

Marty Ahrens, *Smoke Alarms in U.S. Home Fires*, September 2009.

Table 22.
U.S. Civilian Fire Deaths and Injuries in Homes
by Activity When Injured and General Location at Injury
Annual Average of 2003-2007 Structure Fires

	Fighting Fire or Attempting Rescue		Attempting Escape		Asleep When Injured		Unable to Act or Irrational Action	
A. Civilian Deaths								
In area of origin	90	(55%)	390	(39%)	450	(44%)	310	(70%)
In building, but not in area of origin	70	(45%)	560	(57%)	560	(55%)	120	(29%)
Outside, not in area of origin	0	(0%)	10	(1%)	0	(0%)	0	(1%)
Total	160	(100%)	960	(100%)	1,020	(100%)	430	(100%)
	Fighting Fire or Attempting Rescue		Attempting Escape		Asleep When Injured		Unable to Act or Irrational Action	
B. Civilian Injuries								
In area of origin	4,650	(81%)	1,240	(40%)	790	(48%)	530	(72%)
In building, but not in area of origin	730	(13%)	1,500	(49%)	810	(49%)	190	(26%)
Outside, not in area of origin	330	(6%)	140	(4%)	0	(0%)	30	(5%)
Total	5,710	(100%)	2,880	(100%)	1,610	(100%)	750	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths and injuries are rounded to the nearest ten. Totals may not equal sums due to rounding.

Source: NFIRS and NFPA survey.

Table 23.
U.S. Civilian Fire Deaths or Injuries in Homes
by Activity When Injured and Human Factor Contributing to Injury
Percentage of 2003-2007 Structure Fires

	Fighting Fire or Attempting Rescue		Attempting Escape		Asleep When Injured		Unable to Act or Irrational Action	
A. Civilian Deaths								
Asleep	40	(24%)	390	(39%)	830	(81%)	50	(12%)
Unconscious	10	(3%)	40	(4%)	50	(5%)	20	(4%)
Possibly impaired by alcohol	20	(11%)	110	(11%)	150	(14%)	40	(10%)
Possibly impaired by other drug or chemical	10	(4%)	50	(5%)	60	(6%)	30	(8%)
Possibly mentally disabled	0	(0%)	20	(2%)	30	(3%)	50	(13%)
Physically disabled	20	(14%)	170	(17%)	80	(8%)	110	(26%)
Physically restrained	0	(2%)	0	(0%)	0	(0%)	10	(1%)
Unattended or unsupervised person	0	(1%)	30	(3%)	40	(4%)	70	(16%)
No factor	80	(49%)	340	(35%)	80	(7%)	120	(28%)
Total factors	170	(108%)	1,150	(116%)	1,310	(128%)	510	(117%)
Total fires	160	(100%)	990	(100%)	1,030	(100%)	440	(100%)
B. Civilian Injuries								
Asleep	380	(7%)	870	(28%)	1,230	(75%)	50	(6%)
Unconscious	10	(0%)	10	(0%)	40	(2%)	20	(3%)
Possibly impaired by alcohol	150	(3%)	130	(4%)	210	(13%)	110	(14%)
Possibly impaired by other drug or chemical	50	(1%)	50	(2%)	50	(3%)	60	(9%)
Possibly mentally disabled	40	(1%)	50	(2%)	30	(2%)	90	(12%)
Physically disabled	50	(1%)	130	(4%)	60	(4%)	100	(13%)
Physically restrained	10	(0%)	10	(0%)	0	(0%)	0	(0%)
Unattended or unsupervised person	240	(4%)	70	(2%)	40	(2%)	80	(11%)
No factor	4,860	(85%)	1,900	(62%)	260	(16%)	340	(46%)
Total factors	5,800	(102%)	3,220	(104%)	1,920	(117%)	840	(114%)
Total fires	5,710	(100%)	3,090	(100%)	1,650	(100%)	740	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. Since more than one factor can be recorded for each victim we cannot add percentages. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Civilian deaths and injuries are rounded to the nearest ten. Totals may not equal sums due to rounding.

Source: NFIRS and NFPA survey.

Table 24.
U.S. Civilian Fire Deaths and Injuries in Homes
by Factor Contributing to Injury Percent of Factor Entries for
2003-2007 Structure Fire Victims

Factor Contributing to Injury	Civilian Deaths		Civilian Injuries	
Exits Blocked by Fire	910	(32%)	1,210	(9%)
Blocked by flame	550	(19%)	710	(5%)
Blocked by smoke	360	(13%)	500	(4%)
Egress Problem	360	(13%)	710	(5%)
Unclassified egress problem	220	(8%)	500	(4%)
Locked exit or other problem with exit	90	(3%)	70	(1%)
Burglar or security bar, intrusion barrier	20	(1%)	10	(0%)
Mechanical obstacles to exit	20	(1%)	30	(0%)
Vision Blocked or Impaired by Smoke	290	(10%)	460	(3%)
Unclassified Fire Pattern or Escape Problem	230	(8%)	1,110	(8%)
Unclassified escape	110	(4%)	660	(5%)
Unclassified fire pattern	80	(3%)	370	(3%)
Excessive travel distance to nearest clear exit	40	(1%)	80	(1%)
Clothing Caught Fire, Initially or Later	200	(7%)	440	(3%)
Clothing burned, not while escaping	140	(5%)	280	(2%)
Clothing caught fire while escaping	60	(2%)	150	(1%)
Trapped by Fire	150	(5%)	190	(1%)
Trapped above fire	140	(5%)	170	(1%)
Exit Route Information or Choice Problem	110	(4%)	210	(2%)
Chose inappropriate exit route	100	(3%)	180	(1%)
Unfamiliar with exits	20	(1%)	30	(0%)
Roof, Wall, Floor, or Other Building Collapse	70	(3%)	40	(0%)
Roof collapse	30	(1%)	20	(0%)
Floor collapse	20	(1%)	0	(0%)
Unclassified collapse	10	(1%)	10	(0%)
Re-entered Building	70	(3%)	1,110	(8%)
Re-entered building	70	(3%)	1,110	(8%)

Table 24.
U.S. Civilian Fire Deaths and Injuries in Homes
by Factor Contributing to Injury Percent of Factor Entries for
2003-2007 Structure Fire Victims
(Continued)

Other or Unclassified Factor	Civilian Deaths		Civilian Injuries	
	610	(21%)	4,220	(32%)
Unclassified factor contributed to injury	490	(17%)	2,680	(20%)
Improper use of cooking equipment	30	(1%)	960	(7%)
Improper use of heating equipment	30	(1%)	140	(1%)
Overexertion	20	(1%)	270	(2%)
Unclassified equipment related factors	20	(1%)	130	(1%)
None	670	(24%)	4,410	(34%)
Total factor entries	3,680	(129%)	14,100	(107%)
Total fires	2,850	(100%)	13,160	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. Casualty and loss projections can be heavily influenced or exclusion of one unusually serious fire. Since more than one factor can be recorded for each victim we cannot add percentages.

Source: NFIRS and NFPA survey.

Table 25.
U.S. Civilian Fire Deaths and Injuries in Homes
by Factor Contributing to Injury and Victim Age
Percent of Factor Entries for 2003-2007 Structure Fire Victims

A. Civilian Deaths

Age	Exits Blocked by Fire		Egress Problem		Vision Blocked or Impaired by Smoke		Unclassified Fire Pattern or Escape Problem		Clothing Caught Fire, Initially or Later		Trapped by Fire	
Under 5	130	(47%)	40	(14%)	20	(9%)	20	(7%)	10	(3%)	30	(10%)
5-9	90	(57%)	20	(14%)	20	(15%)	20	(10%)	0	(0%)	20	(13%)
10-14	40	(54%)	10	(15%)	10	(15%)	10	(8%)	0	(0%)	10	(15%)
15-17	30	(60%)	10	(16%)	0	(8%)	10	(22%)	0	(3%)	10	(17%)
18-19	20	(49%)	0	(7%)	0	(10%)	10	(14%)	0	(6%)	0	(9%)
20-34	110	(34%)	40	(12%)	40	(13%)	20	(7%)	10	(4%)	20	(7%)
35-49	150	(27%)	60	(11%)	50	(9%)	30	(6%)	30	(6%)	20	(3%)
50-64	160	(27%)	80	(14%)	40	(7%)	40	(6%)	40	(7%)	20	(4%)
65-74	70	(22%)	40	(12%)	30	(9%)	20	(6%)	40	(12%)	10	(3%)
75-84	70	(22%)	30	(11%)	40	(14%)	40	(13%)	40	(12%)	10	(3%)
85 and over	50	(30%)	30	(16%)	20	(12%)	20	(12%)	30	(14%)	0	(1%)
All ages	910	(32%)	360	(13%)	290	(10%)	230	(8%)	200	(7%)	150	(5%)
Selected Age Groups												
14 and under	260	(51%)	70	(14%)	60	(12%)	40	(8%)	10	(2%)	60	(12%)
65 and over	190	(24%)	100	(12%)	90	(12%)	80	(10%)	100	(12%)	20	(2%)

Table 25.
U.S. Civilian Fire Deaths and Injuries in Homes
by Factor Contributing to Injury and Victim Age
Percent of Factor Entries for 2003-2007 Structure Fire Victims
(Continued)

A. Civilian Deaths (Continued)

Age	Exit Route Information or Choice Problem		Roof, Wall, Floor, or Other Building Collapse		Re-entered Building		Other or Unclassified Factor		None		Total Factors		Total Fires	
Under 5	10	(3%)	10	(2%)	0	(1%)	50	(20%)	50	(20%)	370	(138%)	270	(100%)
5-9	10	(6%)	0	(1%)	0	(2%)	20	(14%)	30	(18%)	220	(149%)	150	(100%)
10-14	0	(4%)	10	(7%)	0	(1%)	10	(14%)	10	(11%)	110	(145%)	80	(100%)
15-17	0	(0%)	0	(0%)	0	(0%)	0	(9%)	10	(13%)	60	(149%)	40	(100%)
18-19	0	(0%)	0	(0%)	0	(0%)	10	(25%)	0	(8%)	50	(130%)	40	(100%)
20-34	20	(6%)	10	(2%)	10	(2%)	60	(19%)	80	(24%)	430	(131%)	330	(100%)
35-49	20	(5%)	0	(1%)	20	(4%)	130	(24%)	160	(29%)	680	(124%)	550	(100%)
50-64	20	(3%)	20	(3%)	20	(3%)	130	(22%)	160	(27%)	730	(123%)	590	(100%)
65-74	10	(5%)	10	(2%)	20	(5%)	80	(27%)	70	(22%)	390	(123%)	320	(100%)
75-84	20	(5%)	20	(5%)	10	(2%)	60	(20%)	70	(21%)	390	(128%)	310	(100%)
85 and over	0	(2%)	10	(4%)	0	(0%)	40	(22%)	40	(21%)	240	(134%)	180	(100%)
All ages	110	(4%)	70	(3%)	70	(3%)	610	(21%)	670	(24%)	3,680	(129%)	2,850	(100%)
Selected Age Groups														
14 and under	20	(4%)	10	(2%)	10	(1%)	90	(18%)	90	(18%)	710	(142%)	500	(100%)
65 and over	30	(4%)	30	(3%)	20	(3%)	170	(21%)	170	(21%)	1,030	(128%)	800	(100%)

Table 25.
U.S. Civilian Fire Deaths and Injuries in Homes
by Factor Contributing to Injury and Victim Age
Percent of Factor Entries for 2003-2007 Structure Fire Victims
(Continued)

B. Civilian Injuries

Age	Exits Blocked by Fire		Egress Problem		Vision Blocked or Impaired by Smoke		Unclassified Fire Pattern or Escape Problem		Clothing Caught Fire, Initially or Later		Trapped by Fire	
Under 5	100	(17%)	50	(8%)	30	(6%)	80	(14%)	10	(2%)	30	(5%)
5-9	60	(16%)	20	(6%)	30	(9%)	60	(15%)	20	(7%)	10	(3%)
10-14	60	(12%)	30	(6%)	10	(2%)	60	(12%)	20	(3%)	20	(3%)
15-17	40	(9%)	30	(6%)	20	(4%)	50	(10%)	10	(3%)	10	(2%)
18-19	50	(11%)	20	(5%)	10	(2%)	30	(8%)	10	(3%)	10	(3%)
20-34	310	(9%)	150	(4%)	80	(2%)	270	(8%)	110	(3%)	50	(1%)
35-49	270	(8%)	160	(5%)	110	(3%)	250	(7%)	110	(3%)	30	(1%)
50-64	190	(9%)	130	(6%)	80	(4%)	180	(8%)	80	(4%)	20	(1%)
65-74	80	(9%)	50	(7%)	40	(5%)	60	(8%)	20	(3%)	10	(1%)
75-84	40	(7%)	50	(8%)	30	(4%)	60	(10%)	30	(4%)	10	(1%)
85 and over	20	(10%)	30	(11%)	20	(7%)	20	(8%)	10	(3%)	0	(0%)
All ages	1,210	(9%)	710	(5%)	460	(3%)	1,110	(8%)	440	(3%)	190	(1%)
Selected Age Groups												
14 and under	220	(15%)	100	(7%)	80	(5%)	200	(13%)	60	(4%)	60	(4%)
65 and over	140	(9%)	130	(8%)	90	(5%)	150	(9%)	60	(3%)	10	(1%)

Table 25.
U.S. Civilian Fire Deaths and Injuries in Homes
by Factor Contributing to Injury and Victim Age
Percent of Factor Entries for 2003-2007 Structure Fire Victims
(Continued)

B. Civilian Injuries (Continued)

Age	Exit Route Information or Choice Problem		Roof, Wall, Floor, or Other Building Collapse		Re-Entered Building		Other or Unclassified Factor		None		Total Factors		Total Fires	
Under 5	10	(1%)	0	(0%)	10	(1%)	120	(21%)	220	(37%)	670	(113%)	590	(100%)
5-9	0	(1%)	0	(1%)	10	(2%)	60	(15%)	140	(37%)	410	(111%)	370	(100%)
10-14	10	(1%)	10	(1%)	0	(0%)	30	(6%)	150	(29%)	570	(108%)	520	(100%)
15-17	10	(2%)	0	(0%)	30	(7%)	140	(28%)	180	(37%)	530	(107%)	490	(100%)
18-19	0	(1%)	0	(1%)	30	(8%)	140	(34%)	130	(32%)	440	(108%)	400	(100%)
20-34	60	(2%)	10	(0%)	300	(9%)	1,170	(34%)	1,190	(34%)	3,710	(106%)	3,490	(100%)
35-49	50	(1%)	10	(0%)	360	(10%)	1,210	(35%)	1,120	(32%)	3,670	(107%)	3,440	(100%)
50-64	40	(2%)	10	(0%)	210	(10%)	710	(33%)	690	(32%)	2,330	(108%)	2,160	(100%)
65-74	20	(2%)	0	(0%)	70	(8%)	250	(30%)	260	(32%)	870	(106%)	820	(100%)
75-84	10	(2%)	0	(0%)	30	(5%)	190	(30%)	220	(35%)	670	(107%)	620	(100%)
85 and over	10	(2%)	0	(0%)	10	(4%)	60	(23%)	90	(38%)	260	(107%)	240	(100%)
All ages	210	(2%)	40	(0%)	1,110	(8%)	4,220	(32%)	4,410	(34%)	14,100	(107%)	13,160	(100%)
Selected Age Groups														
14 and under	20	(1%)	10	(0%)	50	(3%)	340	(23%)	530	(36%)	1,650	(110%)	1,490	(100%)
65 and over	30	(2%)	0	(0%)	0	(0%)	490	(29%)	580	(34%)	1,790	(107%)	1,680	(100%)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Since more than one factor can be recorded for each victim we cannot add percentages.

Source: NFIRS and NFPA survey.

Table 26.
U.S. Civilian Fire Deaths or Injuries in Homes
by Activity When Injured and Factor Contributing to Injury
Percentage of Factor Entries for 2003-2007 Structure Fire Victims

A. Civilian Deaths	Fighting Fire or Attempting Rescue		Attempting Escape		Asleep When Injured		Unable to Act or Irrational Action	
Exits blocked by fire	40	(25%)	440	(45%)	360	(35%)	100	(24%)
Egress problems	20	(14%)	220	(22%)	110	(10%)	40	(9%)
Vision blocked or impaired by smoke	30	(17%)	180	(19%)	110	(10%)	20	(5%)
Unclassified fire pattern or escape problem	10	(7%)	110	(11%)	100	(10%)	20	(5%)
Clothing caught fire, initially or later	20	(10%)	40	(4%)	40	(4%)	70	(15%)
Trapped by fire	10	(5%)	70	(8%)	70	(6%)	10	(3%)
Exit route information or choice problem	10	(6%)	100	(10%)	20	(2%)	20	(4%)
Roof, wall, floor, or other building collapse	0	(0%)	20	(2%)	40	(4%)	10	(1%)
Re-entered building	30	(22%)	10	(1%)	0	(0%)	10	(2%)
Other or unclassified factor	30	(19%)	110	(11%)	220	(21%)	160	(37%)
None	20	(12%)	130	(13%)	280	(27%)	70	(17%)
Total factor entries	220	(137%)	1,430	(145%)	1,340	(130%)	530	(122%)
Total fires	160	(100%)	990	(100%)	1,030	(100%)	440	(100%)
B. Civilian Injuries	Fighting Fire or Attempting Rescue		Attempting Escape		Asleep When Injured		Unable to Act or Irrational Action	
Exits blocked by fire	170	(3%)	780	(25%)	230	(14%)	50	(7%)
Egress problems	90	(2%)	420	(14%)	130	(8%)	40	(6%)
Vision blocked or impaired by smoke	90	(2%)	200	(6%)	120	(7%)	40	(5%)
Unclassified fire pattern or escape problem	260	(5%)	630	(20%)	140	(9%)	50	(7%)
Clothing caught fire, initially or later	120	(2%)	60	(2%)	70	(4%)	60	(9%)
Trapped by fire	10	(0%)	110	(4%)	50	(3%)	20	(3%)
Exit route information or choice problem	40	(1%)	100	(3%)	30	(2%)	20	(3%)
Roof, wall, floor, or other building collapse	0	(0%)	10	(0%)	0	(0%)	10	(1%)
Re-entered building	660	(12%)	70	(2%)	20	(1%)	40	(5%)
Other or unclassified factor	2,510	(44%)	310	(10%)	370	(22%)	280	(39%)
None	1,980	(35%)	890	(29%)	650	(39%)	190	(26%)
Total factor entries	5,920	(104%)	3,570	(116%)	1,790	(109%)	810	(110%)
Total fires	5,710	(100%)	3,090	(100%)	1,650	(100%)	740	(100%)

Table 26.
U.S. Civilian Fire Deaths or Injuries in Homes
by Activity When Injured and Factor Contributing to Injury
Percentage of Factor Entries for 2003-2007 Structure Fire Victims
(Continued)

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Since more than one factor can be recorded for each victim we cannot add percentages.

Source: NFIRS and NFPA survey.

Appendix A.

How National Estimates Statistics Are Calculated

The statistics in this analysis are estimates derived from the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS) and the National Fire Protection Association's (NFPA's) annual survey of U.S. fire departments. NFIRS is a voluntary system by which participating fire departments report detailed factors about the fires to which they respond. Roughly two-thirds of U.S. fire departments participate, although not all of these departments provide data every year.

NFIRS provides the most detailed incident information of any national database not limited to large fires. NFIRS is the only database capable of addressing national patterns for fires of all sizes by specific property use and specific fire cause. NFIRS also captures information on the extent of flame spread, and automatic detection and suppression equipment. For more information about NFIRS visit <http://www.nfirs.fema.gov/>. Copies of the paper forms may be downloaded from http://www.nfirs.fema.gov/_download/nfirpaperforms2007.pdf.

Each year, NFPA conducts an annual survey of fire departments which enables us to capture a summary of fire department experience on a larger scale. Surveys are sent to all municipal departments protecting populations of 50,000 or more and a random sample, stratified by **community size**, of the smaller departments. Typically, a total of roughly 3,000 surveys are returned, representing about one of every ten U.S. municipal fire departments and about one third of the U.S. population.

The survey is stratified by size of population protected to reduce the uncertainty of the final estimate. Small rural communities have fewer people protected per department and are less likely to respond to the survey. A larger number must be surveyed to obtain an adequate sample of those departments. (NFPA also makes follow-up calls to a sample of the smaller fire departments that do not respond, to confirm that those that did respond are truly representative of fire departments their size.) On the other hand, large city departments are so few in number and protect such a large proportion of the total U.S. population that it makes sense to survey all of them. Most respond, resulting in excellent precision for their part of the final estimate.

The survey includes the following information: (1) the total number of fire incidents, civilian deaths, and civilian injuries, and the total estimated property damage (in dollars), for each of the major property use classes defined in NFIRS; (2) the number of on-duty firefighter injuries, by type of duty and nature of illness; and (3) information on the type of community protected (e.g., county versus township versus city) and the size of the population protected, which is used in the statistical formula for projecting national totals from sample results. The results of the survey are published in the annual report *Fire Loss in the United States*. To download a free copy of the report, visit <http://www.nfpa.org/assets/files/PDF/OS.fireloss.pdf>.

Projecting NFIRS to National Estimates

As noted, NFIRS is a voluntary system. Different states and jurisdictions have different reporting requirements and practices. Participation rates in NFIRS are not necessarily uniform across regions and community sizes, both factors correlated with frequency and severity of fires. This means NFIRS may be susceptible to systematic biases. No one at present can quantify the size of these deviations from the ideal, representative sample, so no one can say with confidence that they are or are not serious problems. But there is enough reason for concern so that a second database - the NFPA survey - is needed to project NFIRS to national estimates and to project different parts of NFIRS separately. This multiple calibration approach makes use of the annual NFPA survey where its statistical design advantages are strongest.

Scaling ratios are obtained by comparing NFPA's projected totals of residential structure fires, non-residential structure fires, vehicle fires, and outside and other fires, and associated civilian deaths, civilian injuries, and direct property damage with comparable totals in NFIRS. Estimates of specific fire problems and circumstances are obtained by multiplying the NFIRS data by the scaling ratios.

Analysts at the NFPA, the USFA and the Consumer Product Safety Commission have developed the specific analytical rules used for this procedure. "The National Estimates Approach to U.S. Fire Statistics," by John R. Hall, Jr. and Beatrice Harwood, provides a more detailed explanation of national estimates. A copy of the article is available online at <http://www.nfpa.org/osds> or through NFPA's One-Stop Data Shop.

Version 5.0 of NFIRS, first introduced in 1999, used a different coding structure for many data elements, added some property use codes, and dropped others.

Figure 1.
Fires Originally Collected in NFIRS 5.0 by Year

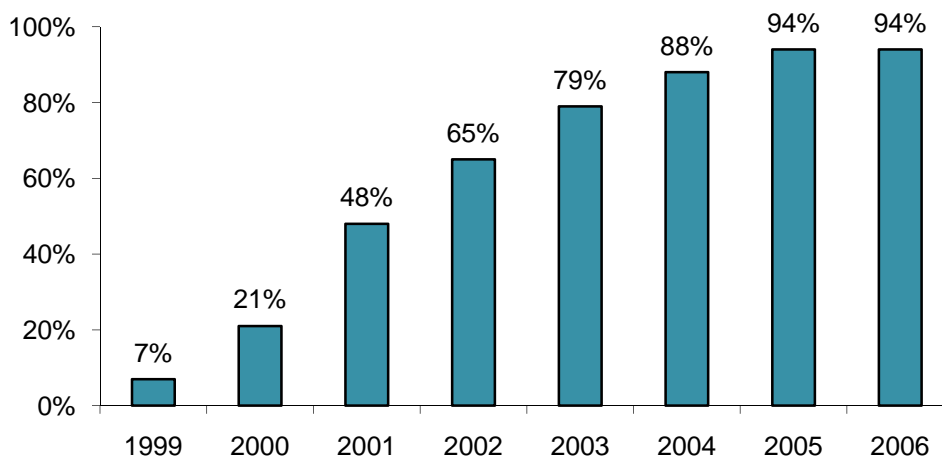


Figure 1 shows the percentage of fires originally collected in the NFIRS 5.0 system. Each year's release version of NFIRS data also includes data collected in older versions of NFIRS that were converted to NFIRS 5.0 codes.

For 2002 data on, analyses are based on scaling ratios using only data originally collected in NFIRS 5.0:

NFPA survey projections
NFIRS totals (Version 5.0)

For 1999 to 2001, the same rules may be applied, but estimates for these years in this form will be less reliable due to the smaller amount of data originally collected in NFIRS 5.0; they should be viewed with extreme caution.

A second option is to omit year estimates for 1999-2001 from year tables.

NFIRS 5.0 has six categories of confined structure fires, including:

- cooking fires confined to the cooking vessel,
- confined chimney or flue fires,
- confined incinerator fire,
- confined fuel burner or boiler fire or delayed ignition,
- confined commercial compactor fire, and
- trash or rubbish fires in a structure with no flame damage to the structure or its contents.

Although causal and other detailed information is typically not required for these incidents, it is provided in some cases. In order for that limited detail to be used to characterize the confined fires, they must be analyzed separately from non-confined fires. Otherwise, the patterns in a factor for the more numerous non-confined fires with factor known will dominate the allocation of the unknown factor fires for both non-confined and confined fires. If the pattern is different for confined fires, which is often the case, that fact will be lost unless analysis is done separately.

For most fields other than Property Use, NFPA allocates unknown data proportionally among known data. This approach assumes that if the missing data were known, it would be distributed in the same manner as the known data.

Rounding and percentages. The data shown are estimates and generally rounded. An entry of zero may be a true zero or it may mean that the value rounds to zero. Percentages are calculated from unrounded values. It is quite possible to have a percentage entry of up to 100%, even if the rounded number entry is zero. Values that appear identical may be associated with different percentages, and identical percentages may be associated with slightly different values.

Appendix B.
U.S. Population in Millions by Age Group and Year, 1980-2005

Table B displays the number of people in the U.S. population by year and age group. Population estimates come from the *Statistical Abstract of the United States*, with some interpolation of published tables and the U.S. Census Bureau website. Population estimates are used in calculating rates in this report.

Table B. U.S. Population in Millions by Age Group and Year, 1980-2005

Age	1980		1981		1982		1983		1984	
Under 5	16.348	(7%)	16.931	(7%)	17.298	(7%)	17.650	(8%)	17.830	(8%)
5 – 9	16.700	(7%)	16.093	(7%)	16.020	(7%)	16.147	(7%)	16.464	(7%)
10 – 14	18.242	(8%)	18.312	(8%)	18.172	(8%)	17.912	(8%)	17.511	(7%)
15 – 19	21.168	(9%)	20.501	(9%)	19.887	(9%)	19.274	(8%)	18.785	(8%)
20 – 34	58.401	(26%)	60.600	(26%)	61.148	(26%)	61.901	(26%)	62.558	(26%)
35 – 49	36.724	(16%)	37.392	(16%)	39.076	(17%)	40.526	(17%)	42.009	(18%)
50 – 64	33.413	(15%)	33.571	(15%)	33.568	(14%)	33.446	(14%)	33.348	(14%)
65 – 74	15.581	(7%)	15.914	(7%)	16.197	(7%)	16.494	(7%)	16.739	(7%)
75 and over	9.969	(4%)	10.323	(4%)	10.630	(5%)	10.934	(5%)	11.234	(5%)
Total	226.546	(100%)	229.637	(100%)	231.996	(100%)	234.284	(100%)	236.478	(100%)
14 and under	51.290	(23%)	51.336	(22%)	51.490	(22%)	51.709	(22%)	51.805	(22%)
65 and over	25.550	(11%)	26.237	(11%)	26.827	(12%)	27.428	(12%)	27.973	(12%)

Age	1985		1986		1987		1988		1989	
Under 5	18.017	(8%)	18.128	(8%)	18.267	(7%)	18.432	(7%)	18.752	(8%)
5 – 9	16.822	(7%)	17.291	(7%)	17.662	(7%)	18.027	(7%)	18.212	(7%)
10 – 14	17.101	(7%)	16.564	(7%)	16.485	(7%)	16.626	(7%)	16.950	(7%)
15 – 19	18.552	(8%)	18.610	(8%)	18.497	(8%)	18.249	(7%)	17.847	(7%)
20 – 34	63.027	(26%)	63.201	(26%)	63.498	(26%)	63.251	(26%)	62.934	(25%)
35 – 49	43.409	(18%)	44.996	(19%)	46.738	(19%)	48.377	(20%)	50.112	(20%)
50 – 64	33.278	(14%)	33.117	(14%)	32.954	(14%)	32.971	(13%)	32.970	(13%)
65 – 74	17.003	(7%)	17.325	(7%)	17.674	(7%)	17.906	(7%)	18.182	(7%)
75 & over	11.533	(5%)	11.847	(5%)	12.167	(5%)	12.468	(5%)	12.802	(5%)
Total	238.742	(100%)	241.079	(100%)	243.942	(100%)	246.307	(100%)	248.761	(100%)
14 & under	51.940	(22%)	51.983	(22%)	52.414	(21%)	53.085	(22%)	53.914	(22%)
65 & over	28.536	(12%)	29.172	(12%)	29.841	(12%)	30.374	(12%)	30.984	(12%)

Note: Total population 1980-1989, resident population 1990-1998, civilian population 1999-2001, census population estimates 2002-2005.

Source: *Statistical Abstract of the United States*, with some interpolation of published tables; Population Division, U.S. Census Bureau.

**Table B. U.S. Population in Millions by Age Group and Year, 1980-2005
(Continued)**

Age	1990		1991		1992		1993		1994	
Under 5	18.758	(8%)	19.221	(8%)	19.512	(8%)	19.691	(8%)	19.726	(8%)
5 – 9	18.035	(7%)	18.237	(7%)	18.350	(7%)	18.529	(7%)	18.859	(7%)
10 – 14	17.060	(7%)	17.672	(7%)	18.099	(7%)	18.521	(7%)	18.752	(7%)
15 – 17	10.301	(4%)	10.015	(4%)	10.205	(4%)	10.395	(4%)	10.679	(4%)
18 – 19	7.581	(3%)	7.227	(3%)	6.869	(3%)	6.872	(3%)	6.937	(3%)
20 – 34	62.293	(25%)	62.456	(25%)	61.513	(24%)	60.638	(24%)	59.679	(23%)
35 – 49	51.179	(21%)	53.452	(21%)	55.265	(22%)	56.715	(22%)	58.338	(22%)
50 – 64	32.425	(13%)	32.652	(13%)	32.985	(13%)	33.649	(13%)	34.209	(13%)
65 – 74	18.045	(7%)	18.280	(7%)	18.461	(7%)	18.640	(7%)	18.711	(7%)
75 – 84	9.702	(4%)	10.313	(4%)	10.565	(4%)	10.720	(4%)	10.926	(4%)
85 and over	3.331	(1%)	3.160	(1%)	3.258	(1%)	3.413	(1%)	3.521	(1%)
Total	248.710	(100%)	252.685	(100%)	255.082	(100%)	257.783	(100%)	260.337	(100%)
14 and under	53.853	(22%)	55.130	(22%)	55.961	(22%)	56.741	(22%)	57.337	(22%)
65 and over	31.078	(12%)	31.753	(13%)	32.284	(13%)	32.773	(13%)	33.158	(13%)
Age	1995		1996		1997		1998		1999	
Under 5	19.591	(7%)	19.286	(7%)	19.150	(7%)	18.966	(7%)	19.136	(7%)
5 – 9	19.220	(7%)	19.440	(7%)	19.738	(7%)	19.920	(7%)	20.606	(7%)
10 – 14	18.914	(7%)	18.981	(7%)	19.039	(7%)	19.242	(7%)	20.213	(7%)
15 – 17	11.014	(4%)	11.340	(4%)	11.600	(4%)	11.743	(4%)	11.988	(4%)
18 – 19	7.050	(3%)	7.322	(3%)	7.468	(3%)	7.796	(3%)	7.997	(3%)
20 – 34	58.755	(22%)	57.927	(22%)	57.121	(21%)	56.448	(21%)	57.970	(21%)
35 – 49	59.918	(23%)	61.831	(23%)	62.469	(23%)	63.381	(23%)	64.440	(23%)
50 – 64	34.762	(13%)	35.296	(13%)	36.975	(14%)	38.400	(14%)	40.693	(15%)
65 – 74	18.760	(7%)	18.670	(7%)	18.409	(7%)	18.395	(7%)	18.419	(7%)
75 – 84	11.145	(4%)	11.429	(4%)	11.705	(4%)	11.952	(4%)	12.225	(4%)
85 and over	3.628	(1%)	3.761	(1%)	3.872	(1%)	4.054	(1%)	4.154	(1%)
Total	262.757	(100%)	265.283	(100%)	267.635	(100%)	270.297	(100%)	277.841	(100%)
14 and under	57.725	(22%)	57.707	(22%)	57.927	(22%)	58.128	(22%)	59.955	(22%)
65 and over	33.533	(13%)	33.860	(13%)	34.075	(13%)	34.401	(13%)	34.798	(13%)

Note: Total population 1980-1989, resident population 1990-1998, civilian population 1999-2001, census population estimates 2002-2005.

Source: *Statistical Abstract of the United States*, with some interpolation of published tables; Population Division, U.S. Census Bureau.

Table B.
U.S. Population in Millions by Age Group and Year, 1980-2005
(Continued)

Age	2000		2001		2002		2003		2004	
Under 5	19.212	(7%)	19.364	(7%)	19.544	(7%)	19.783	(7%)	20.070	(7%)
5 – 9	20.481	(7%)	20.238	(7%)	19.990	(7%)	19.774	(7%)	19.624	(7%)
10 – 14	20.594	(7%)	20.882	(7%)	21.121	(7%)	21.212	(7%)	21.143	(7%)
15 – 17	12.055	(4%)	12.120	(4%)	12.250	(4%)	12.316	(4%)	12.458	(4%)
18 – 19	8.160	(3%)	8.142	(3%)	8.134	(3%)	8.180	(3%)	8.279	(3%)
20 – 34	58.979	(21%)	59.460	(21%)	60.118	(21%)	60.539	(21%)	60.964	(21%)
35 – 49	65.362	(23%)	65.829	(23%)	66.084	(23%)	66.153	(23%)	66.218	(23%)
50 – 64	42.253	(15%)	43.721	(15%)	45.290	(16%)	46.881	(16%)	48.574	(17%)
65 – 74	18.373	(7%)	18.329	(6%)	18.286	(6%)	18.355	(6%)	18.480	(6%)
75 – 84	12.413	(4%)	12.579	(4%)	12.761	(4%)	12.887	(4%)	12.981	(4%)
85 & over	4.295	(2%)	4.430	(2%)	4.547	(2%)	4.716	(2%)	4.848	(2%)
All ages	282.178	(100%)	285.094	(100%)	288.126	(100%)	290.796	(100%)	293.638	(100%)
14 & under	60.287	(21%)	60.483	(21%)	60.656	(21%)	60.769	(21%)	60.837	(21%)
65 & over	35.081	(12%)	35.338	(12%)	35.594	(12%)	35.958	(12%)	36.309	(12%)

Age	2005		2006		2007	
Under 5	20.315	(7%)	20.418	(7%)	20.724	(7%)
5 – 9	19.558	(7%)	19.710	(7%)	19.850	(7%)
10 – 14	20.879	(7%)	20.627	(7%)	20.314	(7%)
15 – 17	12.783	(4%)	12.981	(4%)	13.014	(4%)
18 – 19	8.280	(3%)	8.343	(3%)	8.460	(3%)
20 – 34	61.198	(21%)	61.526	(21%)	61.623	(20%)
35 – 49	66.352	(22%)	66.465	(22%)	66.022	(22%)
50 – 64	50.356	(17%)	52.067	(17%)	53.725	(18%)
65 – 74	18.650	(6%)	18.917	(6%)	19.352	(6%)
75 – 84	13.060	(4%)	13.047	(4%)	13.024	(4%)
85 & over	5.077	(2%)	5.223	(2%)	5.431	(2%)
All ages	296.507	(100%)	299.324	(100%)	301.539	(100%)
14 & under	60.752	(20%)	60.755	(20%)	60.888	(20%)
65 & over	36.787	(12%)	37.187	(12%)	37.807	(13%)

Note: Total population 1980-1989, resident population 1990-1998, civilian population 1999-2001, census population estimates 2002-2005.

Source: *Statistical Abstract of the United States*, with some interpolation of published tables; Population Division, U.S. Census Bureau.