



Marshalltown Fire / Rescue

2006 ANNUAL REPORT



“Expect the Unexpected”



Marshalltown Fire Department
Larry T. Squiers, Fire Chief
107 South First Avenue
Marshalltown, IA 50158
Tel - (641) 754-5751
Fax - (641) 754-5722

Email = lsquiers@ci.marshalltown.ia.us

March 10, 2007

Honorable Gene Beach
Mayor, City of Marshalltown
24 N. Center Street
Marshalltown, IA 50158

Dear Sir:

Submitted herein for your review is the annual report of the Marshalltown Fire Department. 2006 brought an increase in the number of structure fires over 2005 with a total of 21. We added a new vehicle to the our fleet this year, we purchased a new ¾ ton 4 wheel drive pickup which will be used for fighting grass and wildland fires. This vehicle replaces an old military truck that was performing this function.

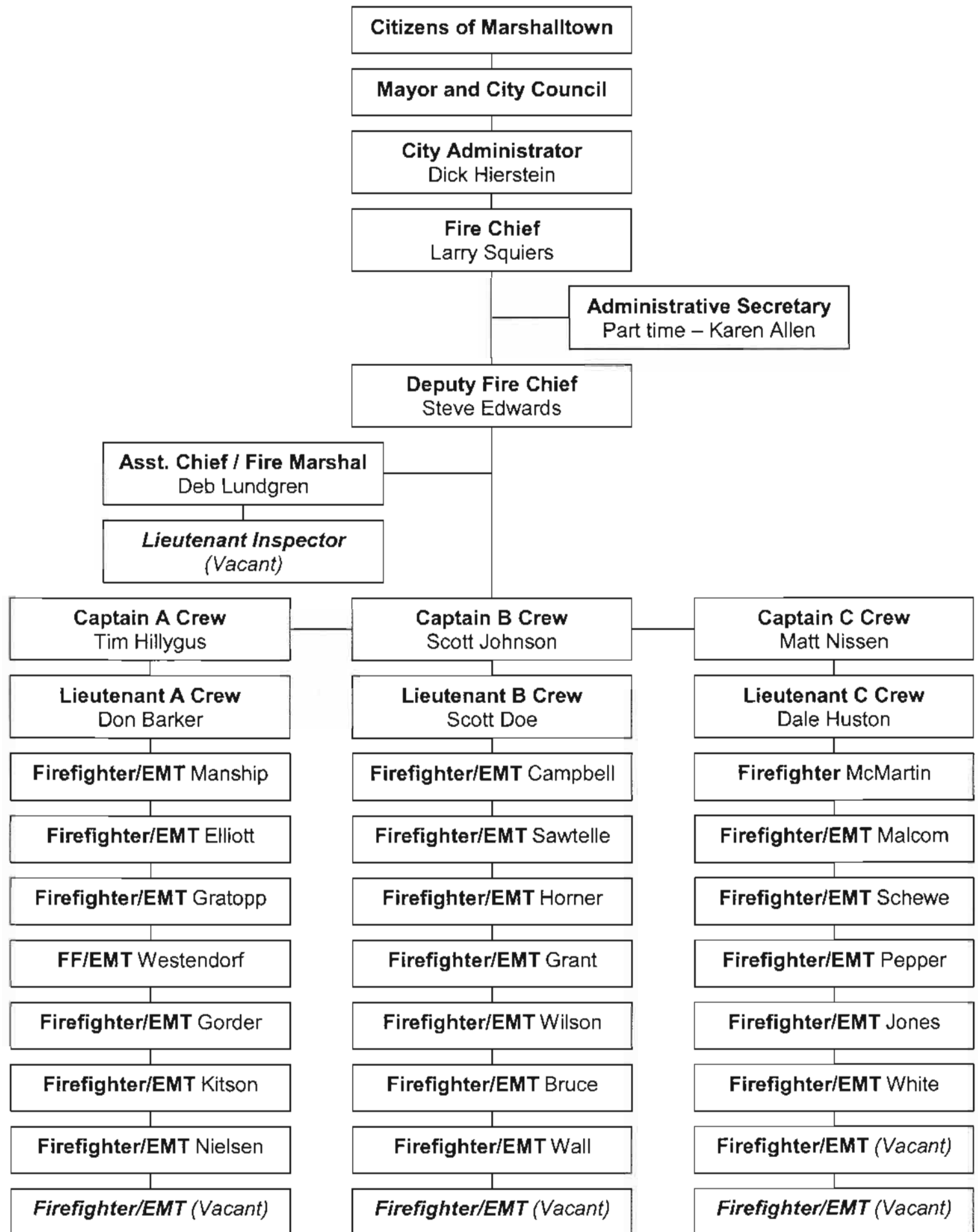
It has been several years since the City has suffered a fire death, unfortunately this year we had one(1) fire death in the City. All the members were saddened by this fact. It is our intent, and part of our mission statement to continue with our fire prevention efforts to insure we give our very best efforts in 2007, and hopefully avoid this tragic circumstance. We were pleased to add 4 new members to the Department in 2006, and look forward to seeing these individuals grow and learn in their roles as Marshalltown Firefighters. As with any Department we are in a transition phase in our history, that of the replacement of retiring firefighters, and we will continue to see this trend over the next couple of years with anticipated retirements.

I want to thank the members of the Department for all their efforts over the past year and their continuing dedication to the Department and the citizens of Marshalltown. Their contributions are greatly appreciated.

Sincerely,

Larry T. Squiers, Chief
Chief, Marshalltown Fire Dept.

**Marshalltown Fire Department
Organizational Chart 2006**





Marshalltown Fire Department

Steven D. Edwards, Deputy Chief

107 South First Avenue

Marshalltown, IA 50158

Tel - (641) 754-5751

Fax - (641) 754-5722

Email - sedwards@ci.marshalltown.ia.us

Mr. Larry T. Squiers, Fire Chief
Marshalltown Fire Department
107 South First Avenue
Marshalltown, IA 50158

January 23, 2007

Dear Sir,

I herewith submit the Marshalltown Fire Department's annual training report for the year 2006 for your consideration and approval.

The fire department was very busy this past year refining our skills as firefighters as well as the many other disciplines that have come to be expected of us by the public we serve. We had a challenging year with the hiring of new replacement firefighters. In addition to numerous hours spent training on basic firefighting skills such as pump practices, ladders, ropes, hose handling, forcible entry, search and rescue, ventilation, fire behavior, building construction, and preplanning area businesses, we conducted four 200 hour recruit training academies for 5 new recruits.

In addition to this initial training we conducted the following focused training:

- All personnel were fit tested for self-contained breathing apparatus use.
- Performed ice rescue training through the ice at the retention ponds.
- For the first time ever we conducted live school bus extrication training on busses donated by Hogland Bus Company and training area provided by Action Auto and Mr. Ken Hesmer.

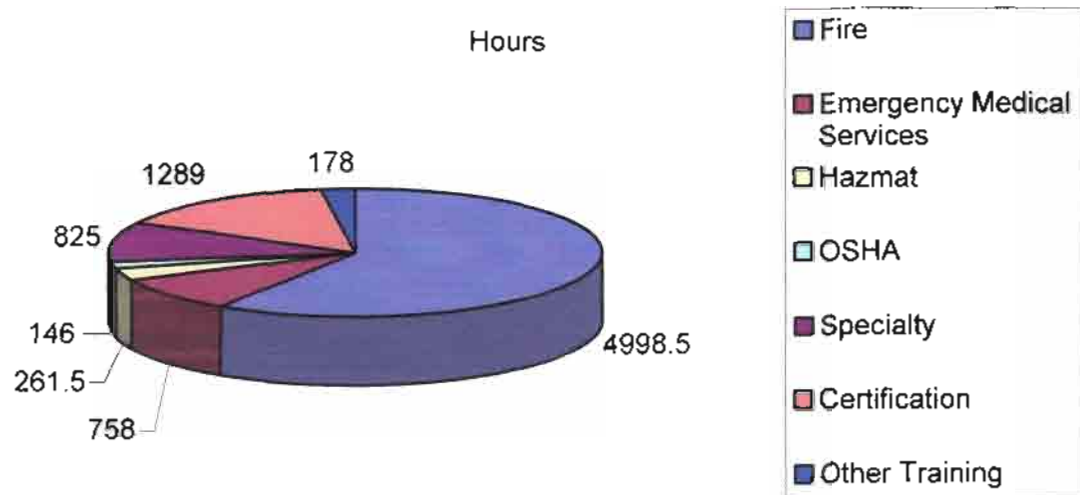


- Conducted Radiological Monitoring refresher training and participated in the Duane Arnold Energy Center practice setup and evaluation at the Marshall County fairgrounds.
- Reviewed all department General Operating Guidelines.
- Participated in drivers training.
- Conducted water rescue training in the Iowa River and at Sand Lake.
- Acquired donated structures to use for hands-on training with several live room and contents burns.



- Completed annual seven hour mandatory OSHA safety training.
- Completed annual testing of our entire inventory of hose in the spring and early summer. All current hose passed this test.
- Tested our fire pumps and all passed annual certification standards.
- Conducted live fire training for vehicle fires with a vehicle provided by Larry's Towing.
- Had two cars donated for use at our training center by Larry's towing for use in practicing patient removal and packaging.
- Conducted preplanning of several target hazards with our jurisdiction.
- Conducted business inspections assisting Fire Marshal Lundgren.
- Participated in on site facility tours for confined spaces identified at IVH, Alliant Energy's Sutherland Plant, Fisher's, and Swifts.
- Completed mandatory reporter training for all personnel not currently trained for Child Abuse and Dependant Adult Abuse.
- All personnel were taught a review of CPR and recertified.
- Conducted trench rescue review training while working in a trench.
- Participated in quarterly recertification on our defibrillator and combitube. Paramedic Dennis Bachman of Marshalltown Medical and Surgical Center conducted this training.
- Conducted in-house biannual recertification training for maintaining EMT licensing throughout the year.

Recorded training hours for our department were as follows:



- Fire 59.11% (4998.5 Hours)
- Emergency Medical Services 8.96% (758 Hours)
- Hazmat 3.09% (261.5 Hours)
- OSHA 1.73% (146 Hours)
- Specialty 9.76% (825 Hours)
- Other Training 2.11% (178 Hours)
- Certification 15.24% (1289 Hours)

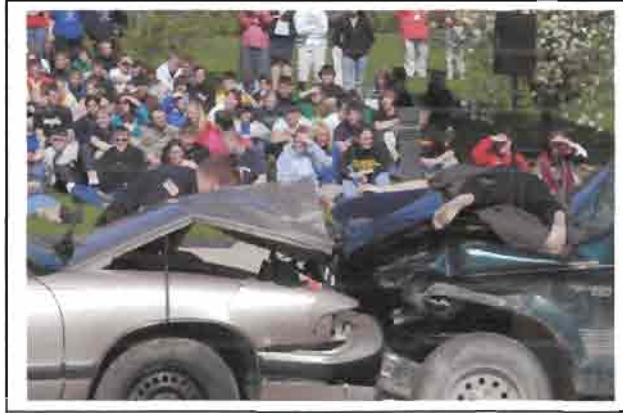
Total recorded training hours = 8456 Hours

Licenses, certifications, and education for 29 personnel

Certified Fire Fighter I	29
Licensed EMT-B	23
Licensed EMT-I	2
Licensed EMT-P	1
Certified Firefighter II	29
Certified Instructor I	8
Certified Instructor II	3
Certified Officer I	2
Certified Fire/Expl. Investigator	1
Hazmat Operations Trained	29
Fire Science Certificate	4
Associate College Degree	3
Bachelors College Degree	4

Our department also participated in many volunteer activities for the department and community. Some of those activities were:

- Continued, in cooperation with the Times-Republican and Ken Black, and the Marshall County Sun, a monthly fire safety column in the paper.
- Participated in the Safety Camp at the Y.
- Participated in Safety Week at Wal-Mart.
- Participated with Marshalltown Police Department's "Every Fifteen Minute" program at Marshalltown High School.



I would like to make the following recommendations for your consideration, prioritized as follows:

1. Increase the training budget to allow for support of educational reimbursement for college classes for students working towards their fire science or other college degree.
2. Run a water line with fire hydrant into the training area to use for water supply during training.
3. Acquire or build a live fire building or prop
4. Pavement for the training area.
5. Build a concrete lined pit to flow water into at training area.
6. Increase training budget to pay for personal development classes in service.

I would like to thank the local media, Times Republican, Marshall County Sun, KFJB, and KDAO, for their coverage of our department's activities. Their presentation to the public of what services we provide and the training we participate in to become proficient at those services, is an invaluable tool to keep those we serve informed about what they can expect from their fire department.

To Fire Chief Squiers, the Officers, and Firefighters of the department for the many contributions they have made toward improving our skills through training, my sincere thanks for your ideas, assistance, and support. Without input, recommendations, and follow up training we could not meet the expectations of the public we serve.

I submit this report for 2006 for your consideration and approval.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steven D. Edwards".

Steven D. Edwards, Deputy Chief, Training
Marshalltown Fire Department



Marshalltown Fire Department
Deb Lundgren- Fire Marshal
107 South First Avenue
Marshalltown IA 50158
Tel - (515) 754-5751
Fax - (515) 754-5722
Email - dlundgren@ci.marshalltown.ia.us

Mr. Larry T. Squiers, Chief
Marshalltown Fire Department
107 South First Avenue
Marshalltown, Iowa 50158

Dear Sir:

I hereby submit the annual report of the Marshalltown Fire Prevention Bureau for the year 2006 for your approval.

The Fire Prevention Bureau is presently enforcing the 1997 Uniform Fire Code Code, State of Iowa Rules and Regulations of the State Fire Marshal's Office and assisting with enforcement of the City of Marshalltown Housing Code.

Fire Prevention Education includes classes of instruction and demonstration concerning fire safety for businesses, industries and the general public. Fire Safety Education is presented in all elementary schools, with additional classes on a request basis for many other organizations. Fire department personnel present these programs and those involved should be commended; without their assistance these programs would not be successful.

Office services include research, correspondence, plan review and report preparation, as well as other office duties, which include data collection and processing. The Fire Prevention Bureau keeps regular office hours to provide consultation services pertaining to fire prevention and safety and various code requirements to all citizens, contractors and businesses.

This office conducts investigations to determine origin and cause of fires including investigations pertaining to criminal matters.

Fire inspections are conducted in occupancies that require a permit under the International Fire Code. Other inspections conducted by this office include state licensed occupancies, complaint inspections, and inspections by request. All crews assist with permit inspections. The fire inspector's position remains vacant at this time.

Respectfully submitted,

Deb Lundgren, Fire Marshal
Marshalltown Fire Department

January 1, 2006 – December 31, 2006

Total Calls 2005 - 1,996

Fire Related Deaths	1
Fire Related Calls	154
<hr/>	
Overpressure Rupture, Explosion, Overheat – No Fire	2
Rescue & Emergency Medical Services	1509
Hazardous Conditions – No Fire	54
Service Calls	43
Good Intent Calls	95
False Alarm & False Calls	135
Special Incident	3

Fire Loss Data

Incident Type	Count	Total Values	Total Loss	Total Saved	%Lost	%Saved
Fire, Other	1	290,000	1,000	289,000	0.34%	99.66%
Building Fire	21	62,224,100	257,600	61,987,500	0.41%	99.59%
Cooking Fire	1	302,000	1,500	300,500	0.50%	99.50%
Passenger Vehicle Fire	7	30,000	13,000	17,000	43.33%	56.67%
Dumpster Fire	1	2,500	200	2,300	0.34%	99.66%
Outside Rubbish	1	200,000	5,000	195,000	2.50%	97.50%
Grand Totals	32	\$63,069,600	\$ 278,300	\$ 62,791,300	%0.44	%99.56

2006 – Total Percent Lost: 0.44%
 2005 – Total Percent Lost: 22.9%
 2004 – Total Percent Lost: 14.5%

2006 - Total Percent Saved: 99.56%
 2005 – Total Percent Saved: 77.1%
 2004 – Total Percent Saved: 85.53%

Fire Department Emergency Calls by Year

2006– 1,996	2005 – 1,879	2004 – 1,862	2003 – 1,887	2002 – 1,966
2001 – 2,072	2000 – 1,952	1999 – 1,885	1998 – 2,007	1997 – 1,900
1996 – 1,839	1995 – 1,846	1994 – 1,674		

Number of Calls by Day of Week

Sunday – 277	Monday – 290	Tuesday – 287	Wednesday – 280
Thursday – 282	Friday – 282	Saturday – 297	

Property Use Summary

Assembly – 4% Business – 5% Educational – 3% Industrial/Storage – 1%
 Manufacturing – 3% Other/Health Care – 7% Outside – 16%
 Residential – 59% Not Reported – 2%

Average Response Time Per Structure Fire

3 minutes and 44 seconds

Area of Fire Origin	Number	% of All Fires	Total Est. Loss	% of All Loss
Other	3	5.4%	0	0%
Egress/Exit	1	1.8%	0	0%
Office	1	1.8%	80,000	29.6%
Closet	1	1.8%	5,000	1.9%
Function Area, Other	1	1.8%	30,000	11.1%
Bedroom < 5 persons	2	3.6%	32,000	11.8%
Cooking Area	1	1.8%	15,000	5.5%
Laundry Area	1	1.8%	12,000	4.4%
Container – trash, rubbish, waste	1	1.8%	11,000	4.1%
Storage Area	2	3.6%	3,500	1.3%
Vehicle storage, garage, carport	4	7.2%	19,000	7.0%
Conduit, pipe, utility, or ventilation	1	1.8%	20,000	7.4%
Structural Area	1	1.8%	16,000	5.9%
Attic, Wall Assembly	4	7.2%	13,000	4.8%
Vehicle Area	4	7.2%	0	0%
Cargo/Trunk Area – All Vehicles	2	3.6%	2,000	0.7%
Engine Area	8	14.6%	11,000	4.1%
Railroad right of way	2	3.6%	0	0%
Outside Area	8	14.6%	0	0%
Hiway, Parking Lot, Street	1	3.6%	0	0%
Courtyard, Patio	1	1.8%	1,100	0.4%
Open area, Wildland, Woods	3	5.4%	0	0%
Vacant Structural Area	1	1.8%	0	0%
Undetermined	1	1.8%	0	0%
Total Incident Count – 55			Total Estimated Loss - \$270,600	

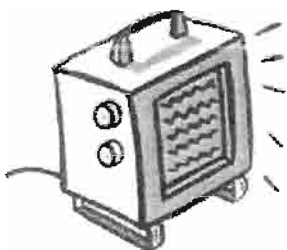
2006 INSPECTION TOTALS

TYPE	TOTAL
Assembly	113
Assisted Living/Nursing Home	3
Business/Industrial/Lumber	38
Consult	92
Complaint	18
Educational/Daycare	27
Flammable/Combustible Liquids	20
Liquefied Petroleum	8
Municipal	11
Repair Garage	42
Reinspections	89
TOTAL	461
Compliant	96

FAST FACTS

Fire deaths

- In 2004, there were 395,500 reported home fires in the United States, resulting in 3,190 deaths, 13,700 injuries and \$5.8 billion in direct property damage.
- In the U.S., a home structure fire is reported every 79 seconds, and someone dies from a home fire every 135 minutes.
- Cooking fires are the #1 cause of home fires and home fire injuries.
- Roughly half of all home fire deaths in the U.S. resulted from fires that were reported between the hours of 11:00 p.m. and 7:00 a.m. But only one-fifth (21%) of home fires occur between those hours.
- Although children five and under make up about 7% of the U.S. population, they accounted for 12% of the home fire deaths, giving them a risk almost twice the national average.
- Older adults are also at greater risk of dying in a home fire than the population at large. Adults 65 and older face a risk twice the average, while people 85 and older have a risk that is three-and-a-half times more than average.
- Twenty-nine percent of the home fire deaths in 1999-2002 resulted from fires started by smoking materials, 19% of the deaths were caused by intentionally set fires.



Heating

- Heating equipment was involved in 11% of the home fire deaths in 1999-2002. Fifty-seven percent of home heating fire deaths resulted from fires in December, January or February.
- Heating equipment is the second most common cause of home fires after cooking equipment. Between 1999 and 2002, heating equipment caused an average of 59,000 home fires each year, resulting in 360 deaths and 1,290 injuries annually.

- Fireplaces or chimneys rank first in the number of fires among types of heating equipment. Most of these were caused by creosote build-up.
- Portable and fixed space heaters, including wood stoves, caused a disproportionate share of the home heating fire deaths. Space heaters were involved in 25% of the home heating fires but 74% of the deaths.

Candles

- Candle fires account for an estimated 5% of all reported home fires and home fire deaths.
- During 2002, an estimated 18,000 home fires started by candles were reported to public fire departments. These fires resulted in an estimated 130 civilian deaths, 1,350 civilian injuries and an estimated direct property loss of \$333 million.
- Forty percent of U.S. home candle fires begin in the bedroom, causing 30% of the deaths resulting from these fires.
- Children between five and nine are twice as likely to die in a home candle fire as the general population.
- December had almost twice the number of home candle fires of an average month.
- Seven out of 10 households in the U.S. now use candles, with younger adults more likely to use them than older adults.
- Falling asleep was a factor in 12% of home candle fires and 25% of the home candle fire deaths.

Smoke alarms

- A 2004 U.S. telephone survey found that 96% of the households surveyed had at least one smoke alarm.
- Roughly half of home fire deaths result from fires in the small percentage of homes with no smoke alarms.
- Roughly 70% of home fire deaths result from fires in homes with no smoke alarms or no working smoke alarms.
- Homes with smoke alarms (whether or not they are operational) typically have a death rate that is 40-50% less than the rate for homes without alarms.
- In one-quarter of the reported fires in homes equipped with smoke alarms, the devices did not work. Households with non-working smoke alarms now outnumber those with no smoke alarms.
- When smoke alarms fail, it is most often because of missing, disconnected or dead batteries.

Home escape planning

- According to a 2004 NFPA survey, only one in four Americans has devised and practiced a plan to escape from the home during a fire.
- While 66% of Americans have an escape plan in case of a fire. Only 34% of those with a plan have practiced it.
- Eighteen to 24-year-olds are the least likely to have even developed an escape plan.
- Develop and practice a home fire escape plan.

Smoking materials

- Smoking materials (i.e., cigarettes, cigars, pipes, etc.) are the leading cause of fire deaths and the third leading cause of fire injuries in the U.S.
- Roughly one of every four U.S. structure fire deaths in 2002, was attributed to smoking materials.
- The most common material first ignited in home smoking material-related fires was trash or waste, followed by mattresses and bedding, and upholstered furniture.

Electrical

- Electrical distribution equipment (including wiring, switches, outlets, cords and plugs, fuse and circuit breaker boxes, lighting fixtures and lamps) was the fifth leading cause of home fires and the sixth leading cause of fire deaths in the United States between 1999 and 2002.
 - The most common types of electrical distribution equipment involved in home fires are 1) fixed wiring, 2) lamps or lighting, and 3) cords or plugs.
-

Home fire sprinklers

- Properly installed and maintained, automatic fire sprinkler systems help save lives.
- When sprinklers are present, the chances of dying in a fire and the average property loss per fire are both cut by one-half to two-thirds, compared to where sprinklers are not present.
- Automatic fire sprinklers and smoke alarms together cut your risk of dying in a home fire by 82% when compared to having neither. (Reprinted from NFPA)