

 VERMONT

2008

REPORT OF THE STATE FIRE MARSHAL



Vermont Department of Public Safety

DIVISION OF FIRE SAFETY

OFFICE OF THE STATE FIRE MARSHAL, STATE FIRE ACADEMY & THE STATE HAZ-MAT RESPONSE TEAM



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Administration / Classroom Building



Construction of the new building is scheduled to start in the spring of 2009. The estimated construction time is about 6 months. When finished the new building will provide administrative space and a large classroom that will also allow for large meetings.

The building will be on a slab and one story high. The architectural firm of Dore and Whittier from South Burlington is working to provide us with the best design / construction process possible. Environmentally green features will also be incorporated when possible.

DIVISION OF FIRE SAFETY

MISSION STATEMENT

To protect the public and the fire service with coordinated efforts in Code Enforcement, Fire Service Training, Public Education, Hazardous Materials and Incident Investigation, thereby reducing the loss of life and property due to fire and other emergencies in the State of Vermont.

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Director's Message



This year's report contains statistical information on fire incidents, reports on division programs and information on changes during 2008 that affected the division and fire service. This report represents the best information available, from the Division of Fire Safety, the Vermont State Police, Vermont fire departments using the National Fire Incident Reporting System (NFIRS), Insurance Companies, the Department of Health, the Department of Forest Parks and Recreation, and the Department of Labor, as well as organizations such as the National Fire Protection Association. Thanks goes out to the division staff that put this report together and also to the fire service personnel throughout the state that worked on preparing and submitting information for this report. And to the people of the division that work so hard with passion to serve and protect the citizens of Vermont.

In addition to the annual Report of the Fire Marshal, one of the key ways we communicate with the fire service is our monthly newsletter. Our newsletter is sent directly to each fire chief with thousands of copies being sent out electronically to provide communication with the fire service and the regulated community. We have also updated our website throughout the year and have seen great success with its use as a resource by the fire service, the building trades, and the general public. If you haven't checked it out already, at www.vtfiresafety.org, you should. New information is added to it often.

The administration/classroom building at the Fire Academy in Pittsford is moving forward as planned. The permits are being obtained and we expect to begin construction early this year. The 7500 square foot building will be located in Pittsford at the present training site below the fire station and burn building. There will be one classroom in the new building rather than the two that were in the original plan, but there will be room for expansion when needed.

The burn simulator that is going to be built at Vermont Technical College (VTC) is moving along as expected. Fire academy staff will manage and coordinate training programs with the burn simulator once construction is complete. We believe the application will be approved within a few weeks and we hope to have the burn simulator completed and ready for use early this summer. This will be a valuable resource for fire service training, particularly for fire departments in the northern part of the state, as well as for students in the VTC Fire Science program. The VTC program is now in its second year with 18 students in the fire science program under the direction of Peter Maloska and Tim Moore.

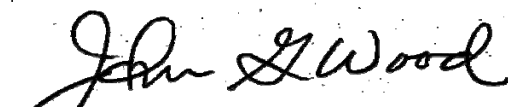
During 2008 the Vermont legislature improved public safety by requiring photoelectric smoke alarms be installed in single-family dwellings. The legislature also established a program to increase funding to the fire academy through fees paid on insurance premiums. This will allow us to increase the number of training courses available to the fire service.

In 2008 over 3,000 firefighters attended training courses and the number of firefighters certified as Fire Fighter I increased to almost 2,300. There were 17,800 code enforcement inspections, 130 hazardous material incidents, 165 administrative penalties issued and the fire investigation unit conducted 295 fire investigations.

The Division of Fire Safety is now in its 4th year with the Department of Public Safety and has developed better programs, adapted and changed to meet the needs of those whom we serve, while still maintaining the programs and services that have worked well for us in the past. We have continued throughout the year to strive to provide the best service we can to the fire service and to the general public. Just like all other private and public sector businesses and organizations we are challenged by the status of the economy and budget constraints. We will meet this challenge by keeping an eye on our mission, to protect the public and the fire service, thereby reducing the loss of life and property due to fire and other emergencies in Vermont. We will continue to strive to make Vermont a safer place to live, work, and play through proactive code enforcement, training, education, hazardous material response and incident investigation.

The significant gains we have made would not have been possible without the support of Commissioner Thomas Tremblay and Deputy Commissioner A. Marc Metayer. I would like to thank them for their commitment to public safety, their effort and leadership.




John G. Wood, Director



Fires in Vermont



Fire Department Incidents In Vermont

Fire departments in Vermont reported a total of 42,072 incidents for 2008. The number of incidents reported is more than twice the number of incidents reported in 1999. Some of this increase can be contributed to an almost 50% increase in the number of fire departments that are reporting during that same time frame. More significantly, the number of EMS/Rescue incidents is almost 2¼ times the number of incidents reported in 1999, reflecting the continued evolution in the mission of the fire service. The local fire department is called to respond to all types of hazards from fires, motor vehicle accidents, hazardous materials incidents, floods, winter storms and search and technical rescue operations.

For the last 10 years (1999-2008) thirteen percent of the fire department incidents reported have been classified as false alarms. False alarms classified as malicious accounted for only a small portion of the false alarms reported. More often the false alarm is an "unintentional" alarm given by a fire protection system that functions correctly, but detects an environmental condition similar to what might be created in a fire. For instance a smoke detector might "see" steam the same way it would see real smoke, or a heat detector might detect heat from direct sunlight the same way it would detect heat from a fire. When designed and installed correctly fire protection systems normally do not have unintentional or "false" alarms from predictable situations.

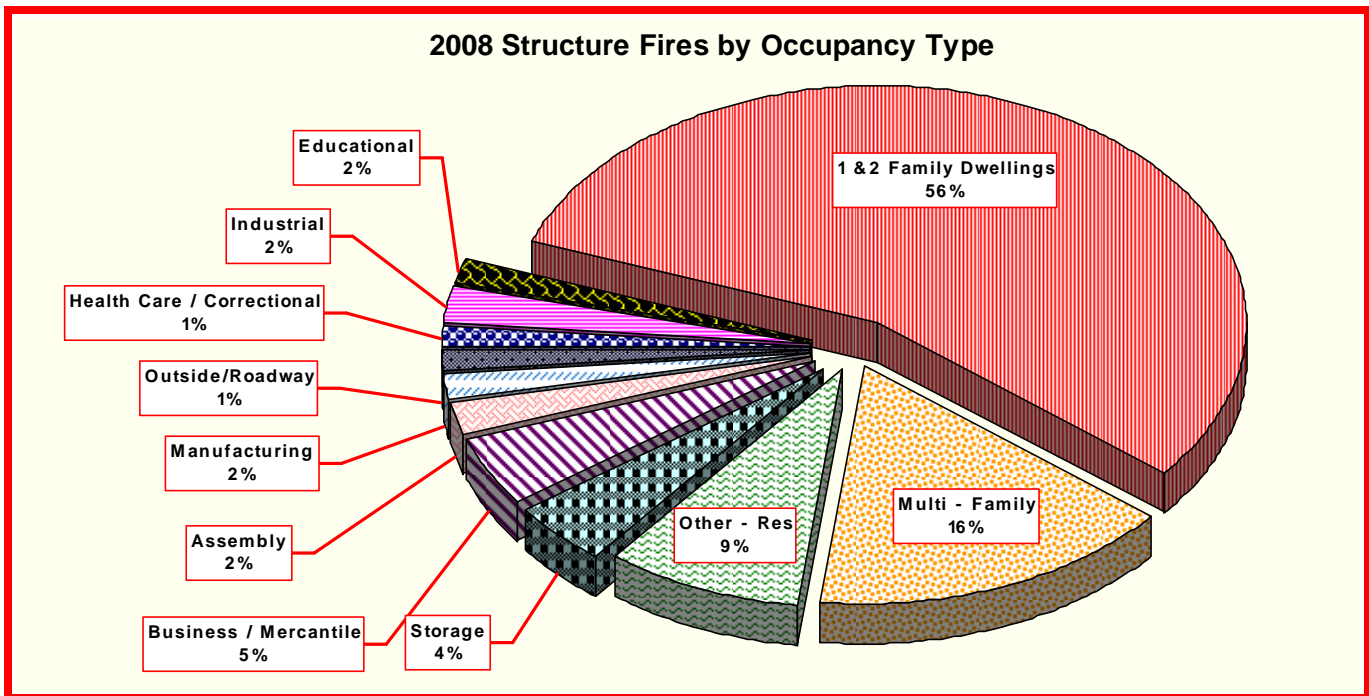
Malfunctions of fire protection system equipment also occur but far less than unintentional alarms. Included in the category of false alarms are bomb and bio-hazard scares where no device or material is found. It is important for a building owner to properly maintain a fire protection system. A fire protection system in a public building, including multi-family dwellings, is required to be inspected at least once a year by a technically qualified person. A building owner who fails to properly maintain a fire protection system may be subject to citations or penalties from the Division of Fire Safety and may be subject to fees from the responding fire department for false alarms.

Reported Emergency Incidents

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10—Year Grand Total
EMS/Rescue	9107	8880	9224	10496	11223	14662	16344	17660	19879	20517	137,992
False Alarm	2516	2712	2949	3219	3336	4194	4850	4952	5203	5333	39,464
FIRE	2667	1965	2717	2667	3062	3383	3771	3747	3528	3451	30,958
Hazardous Condition	1861	1822	2051	2563	2796	3684	4549	4442	4077	4292	32,137
Assist/ Good Intent	2011	1586	1842	1838	2060	2640	2663	2764	2842	2886	23,135
Service Call	1587	1688	1762	1660	2149	2898	3170	4115	4584	4935	28,548
Other	153	123	131	261	253	253	313	271	239	295	2,292
Unknown	160	22	62	64	41	59	74	0	0	0	482
Explosion	71	128	68	64	116	119	110	113	106	119	1,014
Weather	8	55	61	60	44	105	129	141	291	244	1,138
Grand Total	20,141	18,981	20,867	22,892	25,080	31,997	35,973	38,208	40,949	42,072	297,160

The chart showing the breakdown of structure fires by building occupancy indicates that 56% of the structure fires in Vermont during 2008 were in one-two family dwellings. This is consistent with information from previous years. After one-two family dwellings, structure fires most often occurred in multi-family dwellings with 16% of the structure fires. There were 129 structure fires in other residential occupancies such as hotels, motels, dormitories and buildings of similar use.

The National Fire Protection Association (NFPA) reports 15,000 to 20,000 structure fires each year in assembly occupancies such as theaters, nightclubs, restaurants, churches, clubs, gymnasiums, libraries and community halls. The numbers of fires in places of assembly have dropped substantially over the last two decades but a small number of extremely serious fires continue to occur, especially in nightclubs. During 1999 - 2008 there were an average of 33 structure fires a year reported in Vermont in places of assembly. After "The Station" nightclub fire in Rhode Island, fire codes in Vermont were updated in 2005 to require that all nightclubs and similar buildings, with an occupancy of 100 people or more, to install a fire sprinkler system, conduct inspections of exits each time the building is opened and to obtain permits for the indoor use of pyrotechnics.



Because the most common causes of fires for hotels and places of assembly are related to how a building operates, inspections are conducted at nightclubs, restaurants and hotels during peak occupancy times targeting hazards associated with cooking, disposal of trash, keeping exits clear, overcrowding of buildings and flammable decorations.

Buildings where the occupants may be less able to save or protect themselves from fire or other emergency such as health care, residential care and correctional facilities represent a small percentage of public buildings in Vermont but remain a high priority for code enforcement due to the potential for loss of life and injury. During 1999 – 2008 there were an average of 21 structure fires a year reported at health care, residential care and correctional facilities.

Schools also remain a high priority for code enforcement because of the large number of children and public using the buildings. In 2008 there were 24 structure fires reported at schools in Vermont, the second highest amount in the past 10 years. Effective emergency safety plans are required for schools to address intentionally set fires and other emergencies.

There were 159 structure fires reported for business, mercantile, manufacturing and storage buildings in 2008. Fires in these types of buildings present a challenge to firefighters due to their size and the contents of the building.

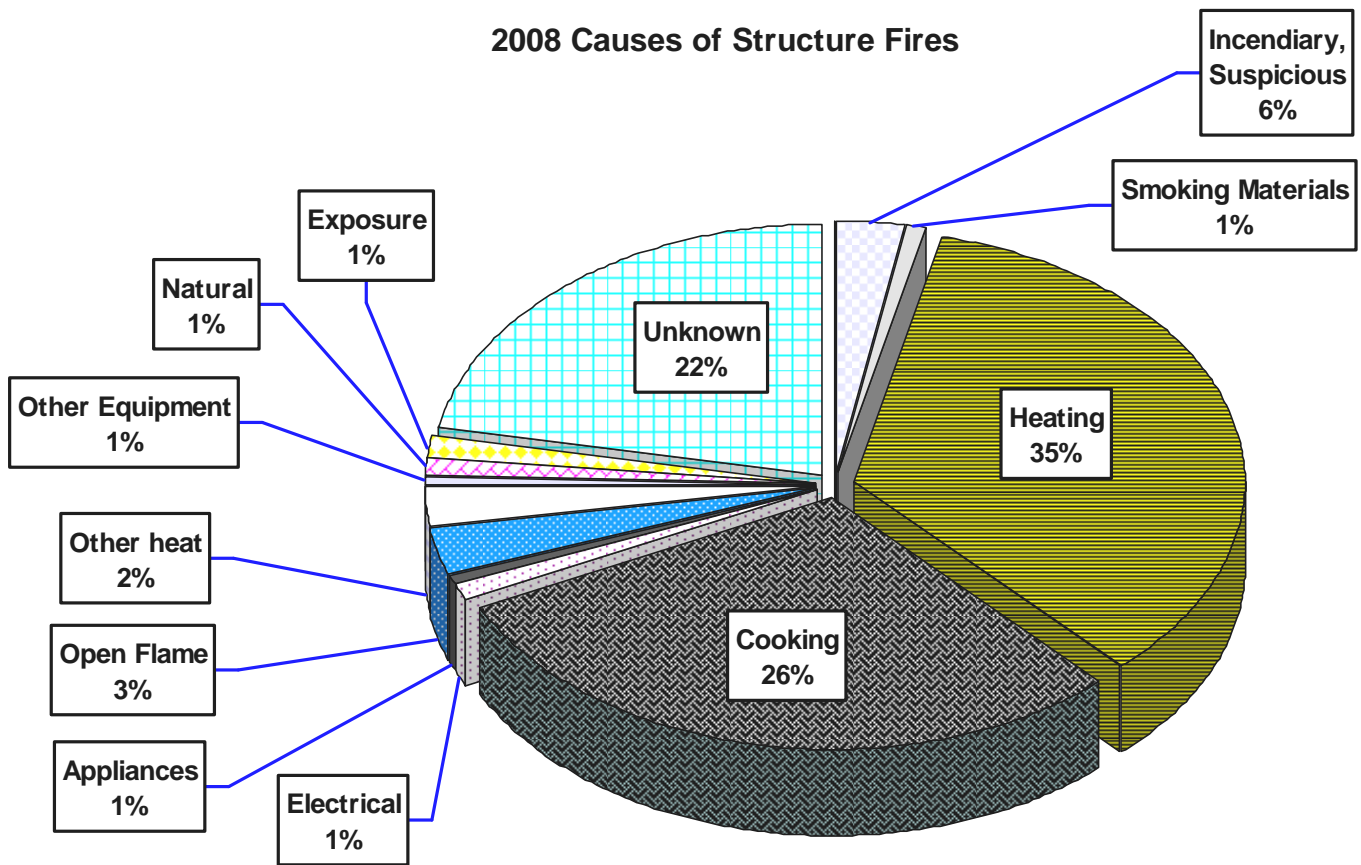
Fires Caused by Smoking Materials -

Smoking materials were the leading cause of fire deaths in Vermont 1999-2008 with 19% of the deaths. That number is now on the decline with no fire deaths in Vermont attributed to cigarettes in both 2007 and 2008. The national average for fire deaths from smoking materials (not including fires from matches or lighters) has varied between 22 and 26%, according to the National Fire Protection Association (NFPA). These fires typically started when someone abandoned or improperly disposed of smoking materials. Many fire victims had some condition that limited their ability to escape from a fire. Often the fire victims were asleep, but a significant number of victims were impaired by drugs, alcohol, disability or old age. A study from NFPA indicates that fatal fires from smoking materials were 75% higher in winter, when people are less likely to go outdoors to smoke. NFPA also indicates that smoking materials have been the leading cause of fire death for years, but not a leading cause of fires, with only 2.4% of the fires in residential structures caused by smoking materials.

To cut down on fire deaths from smoking materials, the Vermont legislature passed a landmark law, effective May 1-2006, that requires all cigarettes sold in Vermont to meet fire safety standards. Fire standard compliant cigarettes, also known as "fire-safe", or reduced ignition propensity cigarettes, are designed to self extinguish if dropped or set aside. Additional information on fire standard compliant cigarettes is available on page 22 of this report.

Fires Caused by Heating Equipment -

Heating equipment was the second leading cause of fire death in Vermont for 1999-2008 and the leading cause of structure fires in 2008, causing 35% of structure fires. According to NFPA, heating equipment was the second leading cause of fires nationwide in residential structures in 2005. During 2000-2004, heating equipment ranked second in home fire and fire deaths, and was the leading cause of property damage from fire in homes. Heating systems in multi-family dwellings tend to be centrally installed, subject to fire safety codes and maintained by qualified people. Portable and fixed space heaters pose a greater risk due to improper maintenance, installation and having household contents too close to space heaters.



Fires Caused by Open Flames - "Open Flame", including intentional and accidental fires started with matches or lighters, fires caused by candles, campfires, or similar causes, was the third leading cause of fire deaths in Vermont for 1999-2008. The number of fires investigated by the Department of Public Safety, Fire Investigation Unit, increased to 270 in 2008, with the number of arson determinations increased significantly from 69 in 2007, to 124 in 2008.

According to NFPA research, candle fires have tripled over the last decade with 7 in 10 households in the U.S. now using candles. During 2005, an estimated 15,600 home structure fires started by candles were reported resulting in 150 civilian fire deaths, 1270 injuries and property loss of \$539 million. Young children are more at risk than the general population. One-half of home candle fires occurred when some form of combustible material was too close to the candle. Candles should be kept away from anything that can burn and be extinguished when leaving a room or going to sleep.

Fires Caused by Electrical Arcing - Arcing from electrical wiring and equipment has caused 10 % of the fire fatalities during 1999-2008 and 7% of the structure fires. Fires occurring from electrical equipment in apartments were at a rate less than half that of the rate of electrical fires in one-two family dwellings, due to code requirements and installation work by qualified people, based on information from NFPA. Vermont amended the electrical code that applies to multi-family and rental dwellings in 2001 to require arc-fault circuit interrupter protection designed to shut off an electrical circuit before electrical arcing that could start a fire.

Fires Caused by Cooking - Nationally, cooking fires are the leading cause of fires in residential structures, causing 40% of the structure fires, according to NFPA. But all fires caused by cooking equipment are not serious fires. Cooking was ranked only as the 7th leading cause of fire deaths in Vermont during 1999-2008 with 3% of civilian fire deaths. Cooking equipment fires were ranked 4th or 5th as the cause of direct property damage nationwide by NFPA. Fires from cooking equipment can be reduced by maintaining the proper clearance between cooking equipment and combustible material and by installing automatic fire suppression systems for commercial cooking operations.



2008 VERMONT FIRE CLOCK

A fire department responded to a 1-2 family home for a structure fire a little more than twice per day, or every 10.7 hours.

Every 36 minutes a fire department responded to a building alarm.



A fire department responded to a vehicle fire every 25.5 hours.

The State Hazmat Team assisted a local fire department about once every 3 days or 67.2 hours.



Every 12.5 minutes a fire department responded to a call.

There was a fire fatality in Vermont every 46 days.



A suspicious fire was investigated by the department of public safety fire investigation team once every 29 hours.

- The average statewide response time of Vermont fire departments to emergency incidents is SIX (6) Minutes
- An estimated 34% of Vermont fire department personnel are involved in delivering emergency medical services (EMS)
- An estimated 41% of total fire stations in Vermont are estimated to be at least 40 years old, an estimated 44% have no backup power.
- An estimated 18% of Vermont fire engines are 15 to 19 years old, another 22% are 20 to 29 years old, and another 14% are at least 30 years old.

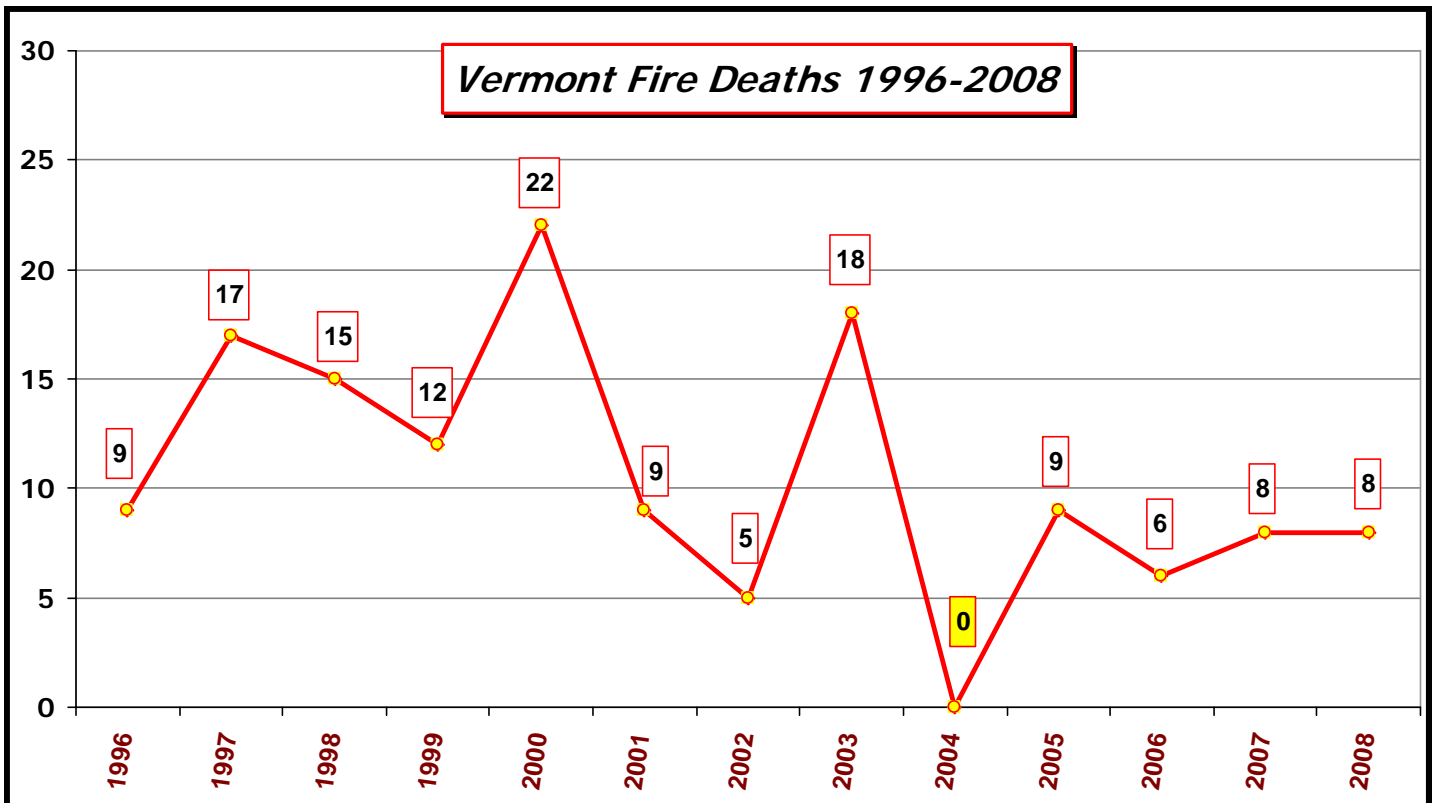
Civilian Fire Deaths & Injuries



Fire Deaths - Vermont has had a disproportionately high fire death rate based on population at different times over the past two decades. Because of the fluctuation in fire deaths that may occur from year to year, a multi-year time period is used in this report to evaluate fire data. In 1982 Vermont had a fire death rate of 48 per million of population and in 1983 a fire death rate of 57; both years the worst in the nation. During the late 1980s and early 1990s Vermont's fire death rate improved at a rate far above the national average, but again in 2000 and 2003, Vermont had one of the worst fire death rates in the nation with ratings of 37 and 30 for those two years. The long-term statistics show a trend toward a lower fire death rate, from 35 for the years 1980 – 1984 to 12, for the years 2000 – 2004. The average number of fire deaths for the most recent 5-year period (2004 – 2008) is 6, compared to the previous 5-year period (1999 – 2003) of 13. 97 civilians have died from fire in Vermont in the past 10 years.

Some potential explanatory characteristics in Vermont from the National Fire Protection Association (NFPA) have changed over the last two decades but some have remained the same. Vermont remains one of the most rural states in the nation effecting the response time for emergency rescue and fire suppression activities. Vermont has the second highest percentage of housing built before 1940 that translates into a need for codes and resources to update heating and electrical systems and ensure safe means of escape. The Consumer Product Safety Commission (CPSC) indicates there is a significant correlation between the frequency of fires from fixed electrical wiring and the age of housing. The percentage of adults without a high school education in Vermont is 12.6 (a national ranking of 31st) and the percentage of population below the poverty line is 9.7 (a national ranking of 37th). Both of those indicators indicate the potential for improved safety for Vermonters through public fire safety education. Vermont ranks at the top in the percentage of people who use alcoholic beverages, a potential explanatory characteristic that lacks statistical data.

Most civilian fire deaths in Vermont, and across the nation, occur in one-two family dwellings and multi-family dwellings. In 2005, 82% of the fire deaths nationwide occurred in one-two family dwellings and multi-family dwellings. The fire deaths in Vermont, that occurred in single-family dwellings and multi-family dwellings during 1998 - 2007, are consistent with national trends with 61% of the fire deaths occurring in single-family dwellings and 24% of the fire deaths in multi-family dwellings.



Causes of Civilian Fire Deaths 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% of total
Smoking Materials	5	5	2	1	2	0	1	2	0	0	19%
Heating Equipment	0	0	1	2	6	0	0	1	2	0	12%
Open Flame	5	1	0	0	1	0	0	0	1	3	11%
Electrical	0	4	0	0	3	0	0	1	1	1	10%
Vehicle Collision	1	0	4	0	4	0	0	0	0	0	9%
Unintentional (other)	0	1	1	0	0	0	0	0	0	2	4%
Cooking	0	0	0	1	0	0	0	1	1	0	3%
Explosion	0	0	0	0	1	0	0	0	0	0	1%
Undetermined	1	11	1	1	1	0	8	1	3	2	30%
Totals	12	22	9	5	18	0	9	6	8	8	

Fire & Burn Injuries - The Report of the Fire Marshal has included accurate data on injuries to firefighters since 1996 based on data from the Vermont Department of Labor. However, data on injuries to civilians had not been reported accurately until the 2001-2003 Report of the Fire Marshal when, for the first time, information became available from the Vermont Department of Health on Hospital Discharge Data. The information has shown that around 1,000 people have been treated at hospital emergency departments each year for fire and burn injuries. Injuries to firefighters that required emergency department treatment are also counted in these statistics.

The breakdown of Hospital Discharge Data for 2006 indicates that there were 310 people treated for fire/burn injuries. More than three times as many males (236) as females (74) were treated at emergency departments for fire/burn injuries. There were 753 people treated for fire/flame injuries. The age groups 25-34 (122) and 35-44 (125) had the highest number of injuries and people over 65 had the lowest number (46) of injuries.

The "fire/burn" category includes injuries caused by fire, combustion, burning, smoke and gases from fire, explosion, conflagration and controlled fires and contains injuries other than burns. The "fire/flame" category includes injuries caused by hot liquids and vapors, steam, hot objects, heating appliances and similar objects.

Fire Service Deaths and Injuries -

The NFPA estimates that over 80,000 firefighter injuries occurred in the line of duty in 2007, a decrease of 4% from the year before. Nearly half (47.9%) of the all firefighter injuries occurred during fireground operations. An estimated 13,665 occurring during other on duty activities, while 15,435 occurred at non-fire emergency incidents. The leading type of injury received during fireground operations was strain, sprain or muscular pain (45.1%), followed by wound, cut, bleeding, bruise (18.2%). Regionally, the Northeast had the highest fireground injury rate, more than twice the rate for the rest of the country.

There has been a more dramatic decrease in on-duty firefighter injuries in Vermont during the period of 2003-2008, decreasing from 152 injuries reported to the Dept. of Labor in 2003, to 31 injuries in 2008. Training programs, protective equipment, preventative health-care and fire ground operations are all related to firefighter safety and health.

The NFPA study indicates there were 118 on-duty firefighter deaths nationwide in 2007, 68 volunteer firefighters and 50 career firefighters. During 2004 – 2008 there were no on-duty firefighter deaths in Vermont. The NFPA study indicates sudden cardiac deaths have dropped by one-third over the past 30 years but still remain the number one cause of on-duty firefighter deaths. Vehicle crashes remain the second leading cause of on-duty firefighter deaths. Personal vehicles and tankers are the types of vehicles most frequently involved.



NATION WIDE

118 firefighters died while on duty in 2007.

68 volunteer firefighters and 50 career firefighters died while on duty.

38 firefighters died while engaging in activities at the scene of a fire.



26 firefighters died while responding to or returning from emergency incidents.

11 firefighters died while they were engaged in training activities.

15 firefighters died after the conclusion of their on-duty activity.

Heart attacks were the most frequent cause of death for 2007, with 52 firefighter deaths.

27 firefighters were killed as a result of vehicle crashes.

Source : National Fire Data Center 2007 Annual Report – Overview of Findings

Dollar Loss From Fire - Fire Department & Insurance Company Reporting

The National Fire Incident Reporting System (NFIRS) provides a large amount of information on fires and other types of incidents that fire departments respond to, what causes fires, property loss, injuries and death. NFIRS provides the big picture, but to get more specific information on the property loss for fire division also the division again conducted a separate survey to collect data from insurance companies to obtain more specific information on property loss.

The NFIRS and insurance company data compiled in the table is for 2004 through 2008. Even though the reporting is incomplete it shows the significant impact of the property loss from fire in Vermont. What the figures don't show is the additional loss in wages to employees who are out of a job after a fire, the loss in tax revenues to municipalities when a building is burned, the loss of business in a community when a business is forced to close after a fire or the cost of health care for the treatment of fire and burn injuries.

Year	Fire Departments Reporting	Structure Fires Reported	Estimated Dollar Loss by Fire Departments	Insurance Companies Reporting	Fire Claims Reported	Reported Dollar Loss by Insurance Companies	Insurance Companies Estimated Dollar Loss
2004	155	1780	24,023,358	118	2387	63,405,898	96,200,000
2005	179	1927	21,816,250	118/179	2123	56,652,195	85,900,000
2006	192	1893	23,475,563	147/247	1073	38,216,856	64,000,000
2007	178	1983	27,782,274	281 / 295	1246	55,063,943.	57,800,000
2008	166	1993	37,651,672	—	—	—	—

Program Reports



Building and Systems Plan Review

The code enforcement process begins with the review of building construction features. The Vermont Fire and Building Safety Code requirements plays an important part in fire safety. The construction features of a building provide a sound foundation for slowing or limiting a fire's destructive power, provide a safe means of escape, and ensure exit features are maintained. fire spread is limited and a premature collapse of the building is prevented. Automatic fire sprinkler, automatic fire suppression, fire alarm, and commercial kitchen hood systems are also reviewed in detail.



2008 Figures

2,460
Plan reviews were performed

In 2008 over 93% of the construction documents submitted for permit review were reviewed in less than 30 days with a median review time of 11 days.

Inspection and Code Enforcement

The fire codes and related standards enforced by the Division of Fire Safety apply for the most part to all public buildings, multi-family and rental dwellings. However most codes do not apply to owner-occupied single family dwellings, family residential day care facilities, accessory dwelling units and certain farm buildings on working farms. Separate laws require smoke detectors (alarms) and carbon monoxide detectors (alarms) in owner-occupied single family dwellings.

Enforcement is obtained through a system of construction permits, inspections during construction, inspections conducted at regular intervals, inspections due to special risks, and a system of licensing and certification for people working in the trades regulated under these codes and standards.

Inspections scheduled at regular intervals are currently conducted for health care and correctional facilities. Special inspections during peak operating times are conducted at nightclubs and similar facilities. Private sector inspectors, licensed or certified by the Division of Fire Safety, conduct inspections of fire protection systems, boilers, pressure vessels, elevators and lifts, and report the results of the inspection to the division.



2008 Figures

9,150 Fire inspections were performed
6,600 Electrical inspections were performed
1,950 Plumbing inspections were performed
12,350 Fire Protection Systems inspections were performed
4,100 Boiler / Pressure vessel inspections were performed
165 Fines were issued

The State Fire Academy



The primary mission of The Vermont Fire Academy is to provide quality education and training to the dedicated individuals of the Fire and Emergency Response Services, thereby reducing the loss of life and property due to fire and other related emergencies in the State of Vermont. Through research, development and delivery, all avenues of fire service training and education are improved.

There are now close to 2,300 firefighters in the state certified as Firefighter Level I. Around 200 firefighters each year complete the Firefighter I training program while other firefighters train in separate courses or modules. Approximately one-half of the firefighters in the state attend Fire Academy programs

In 2008, the Fire Academy began the design process for the construction of a new administration / classroom building (see inside cover). The project is scheduled to break ground in April of 2009 and be complete by October of 2009. When complete, the building, to be located in close proximity to the fire training grounds in Pittsford, will be used for firefighter training programs, meetings, seminars and also house the administrative offices of the Vermont fire academy.

Also in 2008, planning began for a new live fire training burn building in partnership with the Vermont Technical College in Randolph. Once complete, the metal building will provide an excellent venue for live fire training / technical rescue structure in central Vermont that will be used by Vermont firefighters and students in the Fire Science degree program at the Vermont Technical College.

2008 Figures	
9	Firefighter 1 Training Programs
193	Firefighters Completing Firefighter 1 in 2008
2,285	Total Certified Firefighter 1
450	Total Certified Firefighter 2
31	Total Certified Driver Operator
104	Total Certified Fire Officer 1
104	Total Certified Fire Officer 2
152	Total Certified Fire Instructor



The State Hazmat Team



The Vermont HAZMAT Response Team (VHMRT) continues to offer a high level of technical response and assistance to all fire departments dealing with hazardous materials incidents. Additionally, the hazmat response system spearheaded by VHMRT has never been better prepared to protect the residents of, and visitors, to Vermont.

The goal of the hazmat response system has always been to provide the appropriate level of response to cope with the magnitude of the incident and to do so rapidly. Previously, hazmat assets had been placed in twenty different departments strategically located to provide quick response for small to medium incidents. In cooperation with Homeland Security these assets have been improved and enhanced. Additionally, the level of training statewide has increased in large part because of the minimum standards required to utilize the equipment.

VHMRT continues to have a strong group of HAZMAT technicians located from Shaftsbury to South Hero to Brattleboro and Craftsbury. The twenty-seven members are lead by a Chief, a Deputy Chief and four Crew Chiefs. The team has a fleet of three HAZMAT Response Vehicles. These vehicles carry everything the team needs to perform including specialized protective suits, chemical sampling and identification instruments, spill and leak containment devices and communications.



Incidents of note over the past year include assisting the Hinesburg Fire Department at the Saputo Cheese factory, screening a suspicious letter sent to Governor Douglas for the FBI and responding to a large propane leak in Chelsea. These examples are just a few of the 130 incidents the VHMRT helped resolve during the past year. These other incidents range from phone consultation to large team response for chemicals such as gasoline, heating oil, sulfuric acid, cyanide and chemical bombs.

In addition to being the response asset for terrorist events involving Weapons of Mass Destruction (WMDs) the team is equipped and trained to perform plume tracking duties in the event of a radiological release at Vermont Yankee. In fact the team is trained and equipped to respond to and manage any radiological event in Vermont.

The team's authorization comes from Vermont statute, V.S.A. § 2673 for the expressed purpose of assisting any fire department in the management of hazardous materials events. The Team Chief works directly for the Director of the Division of Fire Safety. If you have any questions please contact the team Chief, Christopher Herrick at 802-479-7586.

2008 Figures

130
Hazardous Material Incidents or consultations with FD's
35
Haz- Mat Training Programs
613
Students Attending Training
3,911
Certified Haz-Mat Awareness Level
742
Certified Haz-Mat Operations Level



**To request the HAMZAT TEAM
for an emergency call**

1-800-641-5005

Fire Safety Education and Information



The Fire Safety Education and Information section of the division is responsible for the fire prevention education, information, and outreach activities of the division. The section provides technical assistance, model programs, and sample materials to local, state private and public groups to collaboratively reduce fire losses, and serves as a statewide clearinghouse for fire prevention education programs and materials.

Under the direction of Assistant State Fire Marshal Michael D. Greenia, the Division's Fire Safety Education Coordinator, specific fire problems are addressed through special designed education programs and projects. In 2008, a combination of new and established programs helped to meet the fire safety education needs of Vermonters. The division continues to be committed to assisting the emergency services statewide in delivering fire prevention lessons to their local communities, as well as creating and maintaining programs that explain how everyone young and old can prevent fires and injuries.

The divisions prevention efforts encompass several major safety educational programs each year including, the Vermont Fire Safety House program. This past year was a record year. With the support of Fire Safety Education Specialists: Chris Alger, Fran Rousseau, Derek Shepardson, and other division staff in addition to the members of the fire service, over 8,300 of Vermont's children and adults were given a hands-on fire safety experience through this program. The demonstration trailers presented an all time record of 102 programs across the state. Our trailers were also stationed at various events around the state including the Champlain Valley Fair in Essex Junction where staff provided safety information, answered questions and provided educational materials to the general public about the many aspects of fire safety and prevention.



Display at the Champlain Valley Fair 2008

For the 18th year, a Fire Safety Poster Contest was held for Vermont's 3rd graders. Children from all over the state participated, and the winners' artwork became the 2009 Fire Safety Calendar, over 20,500 of which were delivered to Vermont's School children.

The Division staff also participated in many special events like the "button up" workshops and local open houses and heating education events to discuss winter fire safety and the many safety issues with using alternative heating devices.

Another function of the Fire Safety Education and Information section is to serve as the media's point of contact with the department. The Division provides press releases and information about current fire issues, and responds to specific media requests for information helping to keep fire safety messages fresh in the minds of Vermonters, no matter what the season. We also participated in coordinating national campaigns throughout the year to further the public fire education initiatives in the state, such as Fire Prevention Week.

Throughout the year, the division also developed and presented specially designed classes, talks and demonstrations to college students, administrators, fire service organizations, building official groups, inspectors, school teachers, and several other groups.



Students from the VTC Fire Science Program at the fire safety Day at Vermont Technical Collage 2008

Have a Fire Safe Year !

2008 Figures

102
Fire Safety House Programs
20,500
Fire Safety Calendars Given Out
16
Heating Safety and Home Safety Survey Training Programs
208
Attendance at the Heating Safety Train-The-Trainer Programs
23
General Public Safety Talks
18
Fire Prevention Education Program Development for fire departments
28
Press Releases and Media Events

Fire Investigation

The Fire investigation Unit brings together the strengths of both the Division of Fire Safety and the Vermont State Police to address the issues identified in fire investigation. The Vermont State Police Detective Sergeants works with Division of Fire Safety Investigators on the fire origin and cause.

The Vermont state police members have been trained in all aspects of criminal arrests for law violations. The division of fire safety members specialize in follow-up from accidental fires and are trained to deal with all aspects of code compliance and product safety issues that cause or contribute to fire losses.

It is still the Fire Chief's responsibility by law to investigate all fires. The Fire Chief should call for assistance when he/she cannot determine what started the fire or for help determining the origin and cause. The exceptions are when there is injury or death caused by a fire, or when arson is suspected. In these cases the Fire Chief should call the Vermont State Police immediately for assistance.

The process hasn't changed for calling the fire investigators for assistance. The Fire Chief should call their local State Police Barracks when requesting assistance. The dispatchers have a call out list for the investigators.

This last year there was a significant increase in the number of fires that were determined to be arson. And the number of individual arrested for arson also increased. In 2008 two of the fatal fires were determined to be suicides.

Members of the Fire Investigation Unit	
Lt. James Cruise	Bob Patterson
Sgt. Mark Galle	Scott Adnams
Sgt. Matt Nally	Stan Baranowski
Sgt. Fred Cornell	Chris Boyd
Sgt. Tom Williams	Joe Benard



The Department of Public Safety is committed to working with and assisting the fire service in its goal of protecting life and property in Vermont. The Fire Investigation Unit is one way of making Vermont a safer place to live, work, and visit.



As usual, we want your information and not your name!!!

1-800-32-ARSON (1-800-322-7766)

2008 Figures	
8	Fire Deaths
295	Fire Investigations or Consultations with FD's
124	Fires Determined to be Arson
36	Arrested & Juvenile Arson

Licensing and Certification

People working in the trades regulated under the codes and standards are licensed or certified under the Division of Fire Safety.

People working in the trades are required to meet minimum standards to become licensed or certified and then obtain approved continuing education in order to renew their license or certification. There are currently 3,660 electricians, 1,780 plumbers, 1200 gas heat technicians, 400 oil heat technicians, 410 fire alarm technicians, 140 fire sprinkler designers and technicians, 150 elevator mechanics and inspectors, 160 boiler commissions, 100 fire suppression system technicians, 50 emergency generator technicians and 20 chimney sweeps, licensed or certified through the Division of Fire Safety. There are currently 1400 people licensed for using explosives through the Vermont State Police. Licensed and certified people in professional trades related to fire and building safety accomplish the construction work that helps keep people in Vermont safe.

The Division also provides support to the Plumbing, Elevator and Electrical Boards and works with representatives of the trade community on continuing education and licensing issues.



Access for People with Disabilities

Since May 4, 1977 Vermont law has required that new construction, additions and alterations in public buildings be accessible to people with disabilities. In 1996, the Vermont legislature passed Act 187 that was intended to eliminate portions of Vermont law that did not meet or exceed the requirements of ADA. Portions of Vermont law that already exceeded ADA were retained. Religious buildings and private clubs, exempt under ADA, are covered under these rules. In addition, there are requirements for vertical access in smaller buildings and other requirements including adaptability in multi-family dwellings that exceed ADA and the Federal Fair Housing Act requirements.

In 2000 the Vermont legislature extended certain adaptability requirements, called “visitable” [Act 88] requirements, to all new construction of dwelling units. It is the intent of these rules to incorporate the changes that have occurred at both the federal and state level.

The Division enforces the Vermont Access Rules, including the Americans with Disabilities Act Accessibility Guidelines, for new construction and alterations to existing buildings, and provides support to the Vermont Access Board.



CODE ENFORCEMENT, FIRE SERVICE TRAINING, PUBLIC EDUCATION, HAZARDOUS MATERIALS AND INCIDENT INVESTIGATION ACTIVITIES

	2004	2005	2006	2007	2008
Fire Inspections	5500	5600	6340	7750	9150
Electrical Inspections	6600	6450	6650	6500	6600
Plan Review	2700	2800	2870	2580	2460
Plumbing Inspections	-	-	-	1700	1950
Fire Protection System Inspections*	14,500	12,000	11,260	12,400	12,350
Boiler/Pressure Vessel Inspections*	-	-	-	2700	4100
Elevator Inspections*	-	-	-	800	1400
Firefighter 1 Training Programs	11	13	11	9	9
Firefighters Completing Firefighter 1	296	209	210	184	193
Certified Firefighter 1	1368	1590	1845	2092	2285
Certified Firefighter 2	26	321	378	425	450
Certified Driver Operator	0	0	16	16	31
Certified Fire Officer I	27	27	104	104	104
Certified Fire Officer II	0	0	104	104	104
Certified Fire Instructor	30	42	62	137	152
Total Firefighters Attending Training	3083	3653	3768	3431	3034
Fire Safety Trailer Programs	73	82	79	72	102
Fire Safety Calendars	14,000	20,000	25,000	25,500	20,500
Hazardous Material Incidents -state team	-	97	127	130	130
Haz Mat Training Programs	63	62	37	35	35
Haz Mat Training Students	1034	1000	729	578	613
Certified Haz Mat Awareness	2135	2473	3156	3523	3911
Certified Haz Mat Operations	287	455	526	647	742
Fire Investigations	232	228	202	231	295
Arson Determination	72	78	81	69	124
Arrested & Juvenile Arson	60	39	22	27	36

* Inspections preformed by private licensed or certified inspectors

KEY FIRE ISSUES



SMOKE & CARBON MONOXIDE ALARMS

SMOKE ALARMS

Vermont law has required smoke detectors (alarms) to be installed in single-family dwellings since 1994. Smoke alarms have been required to be installed in multi-family and rental dwellings for more than 30 years. In spite of these requirements, and the general public's awareness about the value of smoke alarms, one common factor in most fatal fires is the lack of properly installed, and working, smoke alarms. Fire is fast. More than one smoke alarm is needed in most dwelling units to make sure that people can hear the alarm and have time to escape. Smoke alarms need to be properly installed, maintained and replaced when needed, and the type of smoke alarm is also important.

The current law requires that all newly installed smoke alarms in rental and multifamily dwellings be directly wired to a non-dedicated electrical branch circuit for the building and have a battery back-up for improved reliability. Smoke alarms are required in all sleeping rooms, outside of each sleeping area and on each level of the dwelling unit, including basements. Newly installed smoke alarms are also required to be interconnected with other smoke alarms in the dwelling unit, to ensure that occupants can hear the alarm and have time to escape. The photoelectric type of smoke alarms are generally more responsive to smoldering fires that may go undetected for some time and are less subject to false alarms. Photoelectric only smoke alarms are now required for owner occupied single family dwellings and will also be required in rental and multi family dwelling units under the proposed code.



CARBON MONOXIDE DETECTORS

Requirements for carbon monoxide, or CO, detectors (alarms) went into effect in 2005 for all buildings where people sleep. Carbon monoxide is a gas that has no odor or color that is produced from the incomplete burning of fuel. Carbon monoxide poisoning can mimic flu symptoms such as headaches, dizziness, nausea and fatigue. Higher levels of exposure result in disorientation, drowsiness, unconsciousness and death. Common sources of carbon monoxide include heating appliances, water heaters, clothes dryers, emergency generators, temporary cooking appliances or space heaters and motor vehicles running in attached garages or adjacent to a building. While it may be difficult to predict where carbon monoxide may occur or travel in a building, it is not difficult to determine that what people need to protect themselves from carbon monoxide poisoning is to have carbon monoxide alarms where they sleep.

For 2008 there were 598 incidents reported by fire departments that involved elevated levels of carbon monoxide in a building and 539 incidents reported that involved a malfunctioning or unintentional carbon monoxide alarm. This is more than three times the number of the total number of incidents reported compared to 2004 before carbon monoxide alarms were first required. During 2001-2005 there were 8 unintentional carbon monoxide deaths reported in Vermont. Since carbon monoxide alarms were first required in 2005 there has been one unintentional carbon monoxide death reported in Vermont.

New Requirements for Photoelectric Alarms

Act 180 of the 2008 Legislative Session established requirements for photoelectric smoke alarms for single-family dwellings.

The law specifies that beginning Jan 1, 2009 new owner occupied single-family dwellings, and dwellings that are sold or transferred, must have a photoelectric style alarm installed in the immediate vicinity of any bedrooms. New construction must have alarms that are electrically wired in with battery back up.



Smoke Alarm Requirements

Photoelectric-only type of smoke alarms are required to be installed in the vicinity of any bedrooms and on each level of a dwelling, for all new dwellings and dwellings that are sold or transferred, beginning January 1, 2009.

The law allows the use of photoelectric and carbon monoxide combination alarms but it does not allow ionization / photoelectric combination alarms to be used for these specific locations.

The Different Types of Smoke Alarms

There are two different types of smoke alarms in general use today.

Ionization - Ionization smoke alarms respond faster to flaming fires, such as those involving paper or flammable liquids.

Photoelectric - Photoelectric smoke alarms respond faster to smoldering fires, such as those involving upholstered furniture or bedding materials.

Updating Smoke Alarms

Smoke alarms save lives, prevent injuries, and minimize property damage by alerting people to a fire when a fire is still small. Smoke alarms need to be properly installed, maintained and replaced when needed.

Many existing Vermont homes currently have old outdated ionization smoke alarms installed. These old alarms need to be replaced. The division recommends that when you are replacing alarms that you update to a photoelectric smoke alarm.

No home should be without smoke alarms, and ionization alarms should continue to be used until a home can be equipped with new photoelectric alarms.

Power Supply for Alarms

Smoke alarms installed in a dwelling constructed after January 1, 1994 and carbon monoxide alarms installed in a dwelling constructed after July 1, 2005 must be directly wired to the building electrical service and have a battery back up.

Installation Information

Alarms that are hard-wired into the home electrical system should be installed by a qualified electrician.

Choose smoke and carbon monoxide alarms that bears the label of Underwriters Laboratories or another nationally recognized testing laboratory.

Read and follow the manufacturers' instructions that are supplied with each alarm.

Install photoelectric-only smoke alarms in the vicinity of any bedrooms and on each level of a dwelling including the basement.

Install smoke alarms in each bedroom for additional protection and interconnect smoke alarms together so if one sounds an alarm, they all sound an alarm, to make sure the alarm is heard.

Mount smoke alarms on flat ceilings no closer than 4" from the adjoining wall surface. Mount smoke alarms on walls no closer than 4", and not further than 12", from the adjoining ceiling surface. Do not install a smoke alarm within 36" of a ceiling suspended fan, a supply register or the door to the bathroom or kitchen.

Alarm Maintenance

Clean alarms monthly by gently vacuuming to remove dust and cobwebs allowing proper air flow through all vents.

Install a new battery in all alarms that require changing the battery at least once a year. Immediately install a new battery if an alarm "chirps," warning the battery is low.

Smoke and CO alarms don't last forever. Replace smoke alarms when they are 10 years old and carbon monoxide alarms when indicated in the manufacturer's instructions, or when indicated by a trouble alarm on the unit.

Test alarms each month, as indicated by the manufactures instructions.

For additional information and additional fire fact sheets contact:

Vermont Department of Public Safety Division of Fire Safety

Office of the State Fire Marshal & State Fire Academy
1311 US Route 302, Suite 600, Barre, VT 05641-2351
800-640-2106 or Visit the DFS Website:

www.vtfiresafety.org

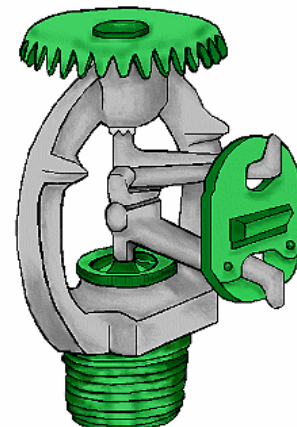


FIRE SPRINKLER PROTECTION

Time and time again in Vermont we hear about lives and property that are saved by the activation of properly installed and maintained fire sprinkler systems. Fire sprinkler systems have an incredibly strong record of property protection stretching back over 100 years. In the United States, there has never been a multiple fatality due to fire in a properly sprinklered building. The only losses of life that have occurred in sprinklered buildings were when occupants were close to the source of ignition.

In Vermont, fire sprinkler systems are required in buildings where people are especially at risk because they may not be able to exit the building in time in the event of a fire, buildings such as: nightclubs, theaters, nursing homes and hospitals. Sprinklers are also required in buildings that are especially large or tall, like high-rise buildings and shopping malls.

Because of the excellent record sprinklers have in protecting life and property (including Vermont's historic buildings), and for saving community resources and municipal services, a number of incentives for building owners or tenants to install fire sprinkler system have been established.



A recent study regarding fire loss in Vermont found that a building protected by sprinklers, on average, suffered 1/10 the loss of an unsprinklered building during a fire.

Currently, there is a Vermont tax credit incentive program for the installation of fire sprinkler systems in buildings in designated downtowns and village centers. This credit may be up to 50% of the cost of the fire sprinkler system installation (up to \$50,000) and has some flexibility on how it can be used and can be carried forward up to 9 years. In addition, the construction permit fee paid to the Department of Public Safety for the review of the of the installation of the fire sprinkler system is rebated to the building owner once the fire sprinkler system is installed and approved, up to a maximum of \$2,000. Municipal tax stabilization programs may also offer incentives to businesses to install fire sprinkler systems and building owners and tenants may pay reduced insurance premiums as an incentive to install a complete or partial fire sprinkler system.

Installing a fire sprinkler system makes good business sense. Vermont fire and building codes provide incentives for a building owner to install a fire sprinkler system permitting the expanded use or adaptive reuse of a building and allowing the use of existing building materials. Whether it is in a highly competitive market, or a specialty market, it is an incentive for a business owner to protect against the loss of business by installing a fire sprinkler system. Statistics show us that a majority of businesses that have a fire and are not protected by sprinklers do not re-open, or if they do re-open, they go out of business in a short time. Even with moderate fire damage (where the building can be repaired), the business may still not survive, as retail customers quickly change their habits and commercial clients need the services or materials being provided without interruption to keep their own businesses going. When fires occur in buildings protected by a fire sprinkler system, damage is typically confined to a small section of the building and the business is interrupted for only a short time, if at all.



NFPA FACTS ABOUT U.S. HOME STRUCTURE FIRES

U.S. fire departments responded to an estimated 399,000 home structure fires in 2007.

These fires caused:

**2,865 civilian fire deaths
13,600 civilian fire injuries
\$7.4 billion in direct damage**

Roughly 84 percent of all civilian fire deaths in 2007 resulted from home structure fires.

On average, eight people died in U.S. home fires every day.

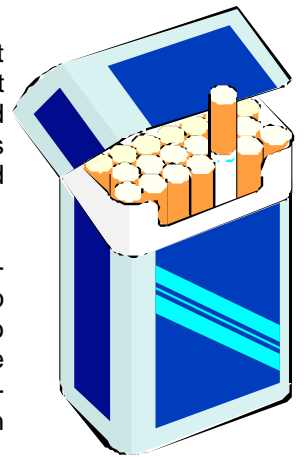
Sources:
Fire Loss in the United States during 2007 by Michael J. Karter, Jr., NFPA, Quincy, MA, August 2008
Home Structure Fires by Marty Ahrens, NFPA, Quincy, MA, September 2007

FIRE STANDARD COMPLIANT CIGARETTES

On May 1, 2006, Vermont became the second state in the country to require that all cigarettes sold or offered for sale meet the criteria for fire standard compliant cigarettes (also called fire-safe or reduced ignition propensity cigarettes). Since that time three out of four states, including those adjacent to Vermont, and Canada have passed similar laws. This new law is expected to significantly reduce the number of people killed or injured by fire in Vermont and is designed to limit the risk that a cigarette will ignite upholstered furniture, a mattress, household furnishings or other combustible material. The new cigarettes are designed to stop burning when left unattended, but otherwise have the same characteristics as other cigarettes.

Cigarettes have been the leading cause of civilian fire deaths over the last 10 years with 19% of the fire deaths in Vermont caused by cigarettes. That number is now on the decline with no fire deaths in Vermont attributed to cigarettes in both 2007 and 2008. While cigarettes have been the leading cause of civilian fire deaths, cigarettes have not been a leading cause of structure fires. In comparing structure fires for the period 2002 - 2006, there has been a 40% decrease in the number of structure fires caused by cigarettes for both 2007 and 2008.

The fire standard compliant cigarette technology is new and it is important to determine what type of cigarette was involved with a fire for research and information purposes. The Vermont Fire Incident Reporting System has been modified for fire departments to report more detailed information on a cigarette involved in a fire. If a fire investigator determines additional details about a cigarette after the fire department has filed their initial report the fire investigator should report that information directly to the Division of Fire Safety.



Cigarette manufacturers have options on how to meet the fire safety standard. With one exception the manufacturers have chosen to use a cigarette with a design that uses paper to wrap the cigarette that has bands that are less porous. These bands cause the cigarettes to self-extinguish when the cigarette is not actively smoked, but between the bands the cigarette burns normally providing a short opportunity for a fire to start. The fire standard compliant cigarette is not designed to resist ignition in trash, mulch or brush, where there is more ventilation to start a fire, or where medical oxygen is used in the home.

NFPA (National Fire Protection Association) recommends several educational messages to reduce fires caused by smoking materials:

- **If you smoke, smoke outside.**
- **Whenever you smoke use deep, wide, sturdy ashtrays.**
- **Before you throw out cigarette butts, make sure they are out.**
- **Check under furniture cushions and in other places people smoke for cigarette butts that may have fallen out of sight.**
- **Don't smoke where oxygen is being used.**
- **To prevent a deadly cigarette fire you have to be alert. You won't be alert if you are sleepy, have been drinking alcoholic beverages, or have been taking certain medicine or other drugs.**
- **If you smoke, choose fire-safe cigarettes.**

A list of fire-safe cigarettes approved for sale in Vermont and additional information on fire-safe cigarettes is available at:

<http://www.dps.state.vt.us/fire/cigarettes/index.html> .

Cigarettes on the list have markings on each package, carton and case to indicate the cigarettes meet the fire safety criteria. Most package marking feature an “FSC” in the vicinity of the UPC. Enforcement of the new law is a cooperative effort between the Department of Public Safety, the Department of Liquor Control and the Office of Attorney General.

FIREWORKS & SPARKLERS

Protecting the public from risks associated with fireworks and sparklers takes a combined program of public safety awareness and education regarding;

- **the appropriate use of products legal for use in Vermont**
- **the risks associated with illegal fireworks**
- **code enforcement regarding the storage of fireworks and sparklers**
- **the use of display fireworks**
- **the use of pyrotechnics before a proximate audience**
- **enforcement of the laws regarding permits for public fireworks displays, sales and use of fireworks**

Public awareness and education information has been integrated into existing fire safety educational programs conducted by the Division of Fire Safety and include direct mailings to fire departments, law enforcement agencies, emergency departments, ambulance services, retail grocers, television, radio and cable channels. Flyers and handouts are available through direct delivery programs and fireworks and sparkler safety is featured as part of the Vermont Fire Safety Calendar that is distributed each year to elementary school children.



It is unlawful for any person to offer for sale, sell at retail or wholesale, possess, use or explode any fireworks except as permitted for a supervised public display of fireworks.

A permit for a supervised public display of fireworks may be obtained from the Chief of the Fire Department, or in towns where there is no Fire Department from the board of selectmen, where it is determined the display would not be hazardous to property or endanger the public. Application for a permit must be made at least 15 days in advance of the public fireworks display. VSA 20 Ch 177 § 3061.— § 3136

The Division of Fire Safety regulates the safekeeping, storage, use, manufacturing, sale, handling, and other disposition of explosive material including fireworks and sparklers under the Vermont Fire and Building Safety Code. The division also regulates the construction, manufacturing, storage, handling and use of fireworks for supervised public displays and the use of pyrotechnics before a proximate audience under the code. Consumer fireworks retail sales facilities or stores where the fireworks and sparklers are in packages in accordance with the U. S. Consumer Product Safety Commission, and where the total quantity of consumer fireworks and sparklers in the building does not exceed 125 lb (net) of pyrotechnic composition, are exempt from certain code requirements. Where the Division of Fire Safety receives information regarding the storage of 125 lb or more of pyrotechnic composition the fire department providing coverage for the building is notified.

Sparklers less than 14 inches long with no more than 20 grams of pyrotechnic mixture and novelty sparkling items limited to snakes, party poppers, glow worms, smoke devices, string poppers, snappers, or drop pops with no more than 0.25 grains of explosive mixture, that are in compliance with United States Consumer Product Safety Commission regulations, are legal for sale and use in Vermont and do not require a permit.

The National Fire Protection Association (NFPA) and the U.S. Consumer Product Safety Commission (CPSC) reported 9,200 fireworks/sparkler related injuries treated in hospital emergency departments in 2006. The trend in fireworks/sparkler related injuries has been mostly up over the last 10 years from a low of 8,300 injuries in 1998. One third of the people injured by fireworks/sparklers were under the age of 15. Fireworks that are illegal in Vermont, except for public fireworks displays, caused the majority of injuries reported through this study. However, sparklers and novelty devices that would be legal for use in Vermont caused over 20% of the injuries. During 2003 to 2006 the Division of Fire Safety conducted a survey of injuries from fireworks/sparklers that were treated in hospital emergency departments in Vermont. These surveys indicated that sparklers, legal for use in Vermont, caused ½ of the injuries.

In addition to the information on injuries the NFPA/CPSC study indicated there were 1,500 structure fires in 2004 caused by fireworks/sparklers. Over the last 10 years Vermont has had an average of three structure fires a year caused by fireworks/sparklers.

The National Fire Protection Association (NFPA)/U.S. Consumer Product Safety Commission (CPSC) study rates the private use of fireworks as the riskiest consumer product.

NOVELTY LIGHTERS

For years we have been teaching our young people that lighters are tools for big people to use, not toys for children to play with. But what happens when a lighter looks like a toy? In our stores there are a large amount of novelty lighters that resemble toys.

Although children as young as 2 years old are capable of operating lighters, the majority of children who start fires by playing with lighters are ages 3 and 4. At these ages, children are curious about fire but don't understand the danger. Typically, when children start a fire, they will leave the room without telling anyone about the fire.

Many groups have called for action on novelty lighters that resemble toys. Although novelty lighters are subject to the CPSC safety standard for cigarette lighters, children cannot discriminate a toy from a fire tool that resembles a toy.



According to the Consumer Product Safety Commission (CPSC) approximately 30 million households own one or more working lighters. Lighters are frequently used for purposes other than lighting smoking materials and they are often left within a child's reach.

While this problem has several dimensions, including caregiver supervision, availability of lighters in the home and access to lighters in the community, it seems especially irresponsible to allow the sale of fire tools that are, by their very design, an attractive danger to children.

There are no good reasons that lighters should be manufactured to resemble toys. The child-resistant cigarette lighter standard has been highly effective. It's time to take the next step and protect children from lighters that encourage their curiosity, inviting unintentional misuse and placing them and their families at risk.



**Can you tell the difference?
Could a child?**

HEATING SAFETY

This last year we faced high cost of heating fuel and many feared we would see a substantial increase in home fires and fire deaths. In the middle of the summer the division designed an education program to inform Vermonters about heating safety precautions, and how to keep their families safe and warm during the heating season. The goal was to also give the resources and knowledge to firefighters and local volunteer teams that can look for home hazards and safety problems before they become a major fire. The fire safety education staff delivered free programs in every county in the state which was attended by over 200 people.



“Above all, the use of early warning devices and education is what saves people.”

The education and information section of the division also attended many special events like the button up workshops and local open houses and heating events to discuss winter fire safety and the many safety issues with using alternative heating devices.

No matter how careful people are, all Vermont families should work to prevent a fire from starting and be prepared in case a fire strikes. Keep the tips below in mind



Install photoelectric Smoke Alarms and Carbon Monoxide Alarms on every level of the home!

For additional protection install smoke alarms in each bed room. Use AC / DC and interconnect all smoke alarms throughout the home — when one sounds, they all sound. Test smoke alarms at least once a month. Replace smoke and CO alarm batteries when you change the time on your clocks

Keep 3' / 36" / 1 meter clearance between heating equipment and anything that can burn – or in accordance with the manufacturer’s instructions!

Follow the instructions on the stove label for proper location of the stove from combustible walls. Never place portable space heaters near flammable materials such as curtains or clothing.

Never leave portable space heaters and candles unattended - turn off heaters before going to bed!

Turn off space heaters before leaving a room or going to sleep. Only use candles when an adult is in the room. Blow the candle out if you leave the room or go to sleep.

Clean chimneys and vent pipes annually – put ashes in a metal container!

Have a professional chimney sweep inspect chimneys annually for cracks, blockages and leaks and have them cleaned and repaired as needed.

Install a carbon monoxide alarm in the same room with any un-vented heater!

Use vented appliances where ever possible. Make sure the venting for exhaust removal is kept clear and unobstructed for any fuel-burning equipment. This includes the removal of snow around the outlet to the outside.

Never use lighter fluid, kerosene, diesel fuel, or gasoline to start a fire!

Gasoline and other flammable liquids should never be used to start wood stove fires. Gasoline will ignite and explode.

Store gasoline and heating fuels in proper containers outside the home!

Store gasoline outside the home in a tightly closed metal or plastic container approved by an independent testing laboratory. Never store gasoline in glass containers or non-reusable plastic containers (i.e., milk jugs).

Always use the proper grade and type of fuel for the heating equipment!

For liquid-fueled equipment always use the proper grade of the proper fuel, in accordance with manufacturer’s instructions. (i.e. only the proper grade of kerosene in a kerosene heater). Never use gasoline as a fuel in a device not approved for gasoline. Refuel only in a well-ventilated area, outside the building and only when the heater is completely cool.

Plan and practice escape plans several times a year!

Make a fire escape plan. Find two exits out of every room and an outside meeting place away from the home. Practice a fire drill twice each year with all members of your family. Make sure everyone knows how to call the fire department.

Install heating equipment according to the codes and manufacturer’s instructions - It’s best to have a professional install the equipment!

Install stationary space heating equipment, water heaters, or central heating equipment following the manufacturer’s instructions. Have a professional install the equipment.

WILDLAND FIRE STATISTICS & INFORMATION

In 2008, the Department of Forests, Parks & Recreation received 117 fire reports totaling 139 acres for the 2008 fire season. Fire occurrence was minimal throughout the season following an active spring fire season. These reports are submitted by the Town Forest Fire Wardens to the Forest Resource Protection section. This year, the wardens were also able to access an on-line fire reporting system through the Department of Forests, Parks and Recreation website.



Spring is, by far, the most active time of year for wildland fire in Vermont. After the snow melts off, fine fuels like dead grass and brush dry out and become highly combustible. Spring is also the time when people are cleaning up their property and disposing of branches, leaves and grass by burning. The majority of fire reports received for the 2008 fire season occurred during this time. Debris burning was still the most common cause and all fires were relatively small in acreage.

From mid-April on, the weather became more favorable for wildland fires. This included a stretch of pleasant weather from April 15 to 28 that was dry (most of the state received less than .25" of rain) and warm (60's, 70's, and even low 80's). Fire danger ratings reached "Very High" for much of this period, especially in southern Vermont where the rating went to "Extreme" on April 24. The three largest fires of the season occurred during this period, a 10-acre fire, possibly caused by arson, burned a marsh and phragmites; a rekindle from a campfire burned 13 acres of woods; and an unpermitted brush fire escaped into the woods, burning 14 acres. Spring fire season continued into mid May following another 2-week dry spell. Greenup progressed in the valleys through this period and the mid to upper elevations locations became drier. Woods fires spread more rapidly than in previous years, and dry conditions in the woods allowed a lightning struck tree to start a slow burning ground fire over the second weekend in June. Wet weather was in place through the summer and early fall. September rainfall was below normal across northern Vermont and continued into October in the Northeast Kingdom. An escaped campfire in the West Mountain Wildlife Management Area in Brunswick burned 3 acres of timber litter and deep duff on the steep shore of Wheeler Pond. Despite the potential for more fire activity, no additional fires were reported. October was wetter than normal in western Vermont and normal to slightly below normal in eastern Vermont. Fire danger remained low to moderate through the end of fire season.

The National Weather Service issued one Red Flag Warning in 2008. These warnings are issued when a combination of weather and fuel conditions exist that could cause wildland fires to spread rapidly. Wildland fires burning on days when Red Flag Warnings have been issued generally have a higher rate of spread, flame length and intensity. The National Weather Service Offices in Burlington and Albany issued the Red Flag Warning on April 24 due to strong winds, low relative humidity, and extremely dry fuels. The warning covered all of Vermont and lasted one day. Many fire wardens stopped issuing burn permits and, consequently, no wildfires were reported on April 24.

By State law, a "Permit to Kindle Fire" (an open burning permit) from the Town Forest Fire Warden is required before you burn any natural wood or vegetation outdoors. The fire warden will issue a permit if the weather and fuel conditions are favorable for a controlled burn. Fire wardens are also responsible for wildland fire suppression in their towns, enforcing forest fire laws by issuing open burning permits and inspecting burn sites, and educating the public on proper burning practices. Vermont's 276 Town Forest Fire Wardens issue about 20,000 burning permits annually.

The Division of Fire Safety has been working with the Forest Resource Protection section of the Department of Forests, Parks and Recreation to make wildland fire reporting easier and more consistent for Fire Departments and Town Forest Fire Wardens. The plan is to eventually have one central reporting system. Until this occurs, fire departments have been directed to use the NFIRS Wildland Module for reporting wildland fire incidents to allow better analysis of data between the two systems. There were 581 wildland fire incidents reported to the Division of Fire Safety.

Fires and Acres by Cause December 17, 2008		
Cause	# of Fires	# Acres
Lightning	3	3.52
Campfire	9	22.43
Smoking	2	.75
Debris Burning (Brush)	59	69.76
Arson	1	.25
Equipment Use	5	3.38
Railroads	2	.75
Children	5	4.26
Misc.	31	35.20

Fire Statistics for 2008

# of human caused fires	114
# of lightning caused fires	3
# of acres burned caused by humans	136.765
# of acres burned caused by lightning	3.52
Total # of fires	117
Total # of acres burned	140.285
10-yr total average # of fires	120.4
10-yr total average # of acres burned	226.91



10-Year Average

Year	# Fires	# Acres	Average Size
1999	162	296.37	1.83
2000*	31	66.95	2.16
2001	189	294.79	1.56
2002	100	146.24	1.46
2003	101	95.47	0.95
2004	86	250	2.91
2005	221	547.14	2.48
2006	118	254.20	2.15
2007	81	179.79	2.22
2008	117	140.285	1.20
10-Yr Average	120.6	226.91	1.89

* Lowest number of reported fires in the past 80 years.

2008 Fire Season - Rainfall

Month	Brighton (Nulhegan)	Elmore	Essex	Danby	Marlboro
April	4.09	3.35	2.88	3.78	5.04
May	1.27	1.94	2.2	1.16	1.28
June	7.83	6.37	5.63	7.24	6.54
July	7.12	11.89	8.04	4.96	5.83
August	7.79	4.42	4.26	6.05	4.94
September	1.68	2.63	1.53	3.58	8.86
October	4.15	5.79	5.27	5.19	5.41
2008 Totals - April 1 to October 31	33.93	36.39	29.81	31.96	37.9
Avg. Annual Precip Total	40	36.5	38.64	36	43.39

Fires/Acres by County 2004 - 2008

COUNTY	2008		2007		2006		2005		2004	
	#Fire	Acres	#Fir	Acres	#Fires	Acres	#Fire	Acres	#Fire	Acres
Addison	6	10	4	4.5	2	1.20	13	214.44	6	77.75
Bennington	12	20.8	3	25.13	8	40.18	10	14.28	4	1.8
Caledonia	3	2.5	12	8.3	7	3.40	21	37.28	10	21.1
Chittenden	12	11.08	5	3.96	7	2.64	20	19.31	3	9
Essex	2	5	0	0	2	1.32	3	.31	2	0.26
Franklin	25	29.88	7	84.95	22	53.92	38	88.24	7	12.11
Grand Isle	0	0	0	0	0	0	1	.20	1	8
Lamoille	11	6.25	8	4.39	13	12.63	13	6.86	3	0.85
Orange	4	2.39	8	14.15	12	31.66	19	26.01	19	31.17
Orleans	6	2.48	5	.46	6	4.35	11	40.13	4	2.73
Rutland	9	30.93	2	.5	8	30.15	19	27.00	4	10.6
Washington	10	6.03	5	3.1	4	4.6	18	40.34	7	5.71
Windham	14	9.7	16	11.65	23	61.65	13	4.01	2	4.5
Windsor	3	3.26	6	18.7	4	6.5	22	28.74	14	64.46
TOTALS	117	140.30	81	179.79	118	254.2	221	547.14	86	250.04

SAFETY FOR OLDER ADULTS

Falls account for 20% of all injury deaths and are second only to motor vehicles as a cause of injury-related death in Vermont. Fall death rates are higher in older Vermonters. In 2005, there were 15 deaths attributed to falls in persons younger than age 65. Nearly all falls-related deaths were seniors (73 of the 88 fall deaths). Those in the oldest age group (85 and older) have twice the number of falls as those in the next youngest age group (75 to 84 year olds). Vermont has a statistically higher rate of falls deaths (11.3 per 100,000 compared to 6.3 per 100,000 in the U.S.).

During 2001 through 2005, half of all fall-related deaths occur 'on the same level' which means a person tripped, slipped or stumbled (49%). It also includes falls from scooters, skateboards, skis and snowboards. However, skiing and snowboarding account for only 1% of the falls deaths that occur on the same level. Just less than one in ten fall-related deaths occur on stairs (9%), on furniture (7%) or by falling from one level to another (5%). Few of the fall-related deaths are due to falling from a building or off a ladder (2% each). One quarter of fall-related deaths do not specify the nature of the fall (25%).

Most deaths from falls for the period 2001-2006 occurred in the home (52.6%) or in residential institutional settings (29%).

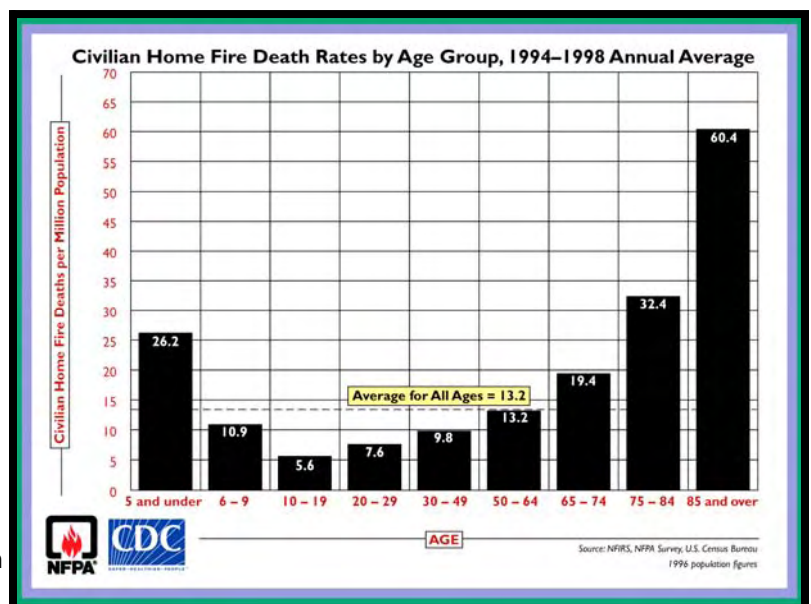
Falls are the leading cause of injury-related emergency department (ED) visits, accounting for more than one-quarter of all injury-related ED visits (29%). From 2003 to 2005, ED visits related to falling occurred one and a half times more often than the next most common cause of injury-related ED visits – being struck by something, overexertion, cut/pierce and other unspecified injury related reasons. Vermont's rate of ED visits for falls is statistically higher than the rate across the nation (3,141.5 per 100,000 in Vermont, as compared to 2,457.9 per 100,000 in the U.S.).



Between 2003 and 2005, there were a total of 58,543 fall-related ED visits in Vermont for an average of nearly 19,500 per year. Unlike the pattern for hospitalizations and deaths from falls, where the oldest age groups are the most heavily affected, emergency department visits for falls are common in all age groups. In national emergency room data, falls are consistently highest in the youngest and oldest age groups. This trend is also reflected in Vermont's data.

While the absolute number of ED visits for falls among the youngest and oldest age groups are smaller than the absolute number in the middle age groups, the rate of ED visits are higher for children under the age of five and for adults over 75. Vermont's oldest residents have the highest rates of ED visits for falls, at 10,271.0 per 100,000 persons. Children younger than five visit the ED due to a fall at about half that rate, 5,095.7 per 100,000. Vermonters between the ages of 25 and 64 have the lowest rate of ED visits for falls at 2,389.6 per 100,000.

The Vermont Fire & Building Safety Code contains standards that are designed to prevent falls from balconies, platforms or decks, and standards for handrails intended to limit falls on stairs. There are also requirements for the design of stair treads and risers.





Vermont matches the rest of country in identifying adults 65 and older, and the very young, as high-risk age groups that are likely to die from fire. Over the years Vermont has made great strides in providing fire prevention education to school age children. However, there has been less attention given to providing fire and safety education to Vermont’s senior population.

Vermont will also shortly face the effects of a significant national demographic trend. US Census Bureau figures show that the number of Vermonters 65 years or older will double by 2025, by which time these seniors will represent 20% of the State’s population. We anticipate a corresponding increase in demands placed upon the service delivery systems as well as a need to become more creative in meeting the needs of the aging population.

Knowing what to do in the event of a fire is particularly important for older adults. At age 65, people are twice as likely to be killed or injured by fires compared to the population at large. And with our numbers growing every year - in the United States and Canada, adults age 65 and older make up about 12 percent of the population - it’s essential to take the necessary steps to stay safe.

Several organizations, state agencies and fire departments make it a priority to serve the elderly, those living alone and Vermonts low-income residents. However, they lack the resources to independently deliver education to these Vermonters. The division is currently working on a project to help improve awareness about the important issues of fire safety and fall safety for older Vermonters through the NFPA “Remember When” Program .

The Remembering When program is a comprehensive program developed by the National Fire Protection Association, (NFPA), and the Centers for Disease Control and Prevention and is designed to be implemented by a coalition made up of the local fire department, service clubs, social and religious organizations, retirement communities, and others. Coalition members can decide how to best approach the local senior population: through group presentations, during home visits, and/or as part of a smoke alarm installation and fall intervention program.



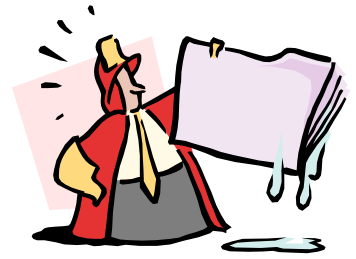
How can older adults prevent fires and falls?	
Fire	Falls
<ul style="list-style-type: none"> • Pay Attention to Your Cooking — Wear tight-fitting or rolled-up sleeves when cooking — Don’t cook if you are drowsy from alcohol or medication. • Heat Your Home Safely— give space heaters 3 feet of clear space — Unplug heaters when you shut them off, leave your home, or go to bed. • Install and Maintain Smoke & CO Alarms— Test your smoke alarms once a month by pushing the test button. • Use Smoking Materials Safely— use deep ash trays. • Plan and Practice a Home Fire Escape Plan— Plan your escape around your abilities. 	<ul style="list-style-type: none"> • Exercise regularly; exercise programs like Tai Chi that increase strength and improve balance are especially good. • Ask your doctor or pharmacist to review your medicines—both prescription and over-the-counter—to reduce side effects and interactions. • Have your eyes checked by an eye doctor at least once a year. • Improve the lighting in your home. • Reduce hazards in your home that can lead to falls. • It is easy to trip on small rugs. —Tape them to the floor or do not use them at all.

Fire Incident Reporting

To understand the fire problem in Vermont, plan for the future, and develop strategies to address these issues, it is important to have complete, reliable data for all fire incidents in Vermont.

The Division of Fire Safety maintains and manages the data collection for the Vermont portion of the National Fire Incident Reporting System (NFIRS). The Vermont data is forwarded to NFIRS to help develop a picture of the fire problem throughout the United States.

The data collected has been used to support the need for "fire safe" cigarettes and carbon monoxide detection legislation. Requests for data and information have also come from the media and general public, from other state agencies such as Forest Protection, and from local fire departments for grant request data or other local issues like response times. This report only lists general information, more specific information and analysis can be done on a local, regional or statewide basis. The importance of accurately reporting all fires is recognized by the fire service, the Division of Fire Safety and the U.S. Fire Administration. In order to be eligible for fire grants from the U.S. Fire Administration, and the Vermont Department of Public Safety, Homeland Security Unit, a fire department must report all incidents through the National Fire Incident Reporting System.



Per State Law and as a Requirement of State & Federal Grants, Fire Departments Are Required To Report

Title 20 : INTERNAL SECURITY and PUBLIC SAFETY Chapter 173: Prevention and Investigation of Fires § 2833. Reports to Fire Marshal

(a) The chief of a volunteer or paid fire department or, if there is no fire department, the first selectman of a town, shall within five days of the occurrence of a fire within his jurisdiction which causes serious injury to any person or loss or damage to property which exceeds \$200.00, forward a report of the fire to the state fire marshal on forms to be furnished by him. If the reporting officer has reason to believe that a fire is of suspicious origin, he shall report that fact to the state fire marshal immediately. No fee shall be paid or allowed any officer for rendering the report required by this subsection.

State VFIRS Program Managers

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Stanley Baranowski

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Barre, VT 05641-2351

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E-Mail: mgreenia@dps.state.vt.us

REQUESTS TO RESET AN ACCOUNT

Your VFIRS account will become inactive if you do not log in every 60 days. If this happens, please send an e-mail to

vfirs@dps.state.vt.us

The Vermont Fire Incident Reporting System (VFIRS) has been using the National Fire Incident Reporting System (NFIRS) Version 5.0, fire data reporting system since 1999. Vermont has been reporting using NFIRS for nearly 30 years. In 2006, this office stopped accepting the older 4.1 version of NFIRS. As of January 1, 2008, this office is requiring all data submittals to be in an electronic format using the USFA Bulk Import Tool when using vendor software; or using the USFA Data Entry Tool when doing direct on-line data entry. The current NFIRS version allows the Division to gather information in a variety of fields, and the data is easier to submit and manage. It provides easily retrieved data in certain specific area, such as Carbon Monoxide incidents, Smoke Alarm activations and juvenile fire setting.

2008 Figures

166	# of departments reporting statewide
42,072	# of emergency incidents reported
3,443	# of fire incidents reported
20,514	# of EMS incidents reported

Information provided in this Report include fire incident reports from fire departments that together provide coverage for 90% of the population in Vermont. The Division of Fire Safety is continually working to assist fire departments in reporting so that data is received on all fires. The data from even a small fire may contribute important information. Currently, there are over 347,627 incidents in the state database; of these over 20,185 are structure fires.

PLEASE NOTE

This report was run on JANUARY 16, 2009, any entries made after that date will not be reflected in this report .

FIRE DEPARTMENTS WHO ARE NOT LISTED IN THIS REPORT DID NOT SUBMIT VALID REPORTS BEFORE THE DEADLINE.

Those departments that have not submitted incident reports for 2008 must still do so even though the deadline for reporting has passed.

Every attempt has been made to present accurate information in this report. However, each section of this report is looking at a specific topic. The NFIRS fields used for that topic's analysis in addition to the way it is stored and queried in the database may result in different figures when comparing various sections of this report.

2008 Incident Data Reported by Fire Departments - Fire Calls

FD Name	FDID	Population	Service Good Intent	False Alarm	Hazard Cond.	Structure Fire	Canceled	Wildland	Other	Outside	Vehicle	Other Fire	Explosion	Total
ALBANY	10006	1025	2	1	2	4	1							10
ALBURG	07009	2600	15	8	18	11	4	8		6	4	6		80
ARLINGTON	02015	2449	14	19	14	11	2	7	2		3			72
ASCUTNEY	14016	1360	62	21	55	1	9	3	2		1			154
BARNARD	14030	947		4	2	3		3						12
BARRE CITY	12036	9141	237	120	100	36	7	8	10	23	8	2	9	560
BARRE TOWN	12039	11283	31	30	76	16	13	6	3	6	2			183
BEECHER FALLS	05044	1078	17	15	9	3	2		3		7	34		90
BELLOWS FALLS	13045	3054	64	63	88	30	2	7	4	1		1	1	261
BENNINGTON	02051	15473	40	107	40	38	1	2		3	4	3	1	239
BENNINGTON RURAL	02451	9421	61	63	73	16	8	10	10	3	10	4	1	259
BENSON	11054	1037	3	2		2	1	9	2		3			22
BERKSHIRE	06057	1516		3	3	13		6			2			27
BETHEL	14063	1980	1	1	1	3					1			7
BRANDON	11078	3942	19	30	31	29	5	11	1	4	3	2		135
BRATTLEBORO	13080	11944	548	295	229	75	6	10	17	2	12	5	2	1201
BRIGHTON	05090	1332		6	2	2		4			3	1		18
BRISTOL	01093	3804		2		2								4
BROOKFIELD	09096	1271	2	4	26	8					1			41
BURLINGTON	04114	38934	799	805	213	140	16	31	28	36	14	1	6	2089
CABOT	12117	1512	12	8	1	8		4			1			34
CAMBRIDGE	08123	3420	13	110	8	18	17	4			5	2		177
CASTLETON	11129	4355	14	17	28	5	3	6	2	4		3		82
CAVENDISH	14132	1449	8	1	9	8	1	4		1	1			33
CHARLOTTE	04138	3644	5	20	41	7	2	3		2	2			82
CHELSEA	09141	1259	4	11	16	11		3	2	2				49
CHESTER	14144	3122	23	17	13	22	1	10	2		6	1	2	97
CHITTENDEN	11147	1126	5	1	1	3		5			1			16
COLCHESTER	04153	17177	140	152	143	9	54	4		10	8	3	2	525
CONCORD	05156	1224	4	4	5	11		1	1	1	1			28
CORNWALL	01162	1206	1	4	3	5	1	2	1		1			18
CRAFTSBURY	10168	1155	1	2	9	4				1				17
DANBY	11171	1290	2	12	10	16		6			1		1	48
DANVILLE	03174	2289	12	7	17	6		4		1	2	1		50
DERBY	10177	6318	3	22	5	13		2		1				46
DORSET	02180	2061	15	36	8	14								73
EAST BURKE	03199	843	6	11	7	7		2	4	2	1	3		43
EAST DOVER	13191	586	2		1					1				4
EAST MONTPELIER	12195	2657	4	7	7	9	4	1	3		2		2	39
ENOSBURG FALLS	06205	1484	2	10	20	13	34	6	1	1	3	2	1	93
ESSEX	04207	19065	71	104	112	25		6	17	8	9	3		355
ESSEX JUNCTION	04208	8829	20	46	60	19	10	6	2	1	2	3		169
FAIR HAVEN	11216	2936	20	16	34	10		10		2	3	3	1	99
FAIRFAX	06210	3929	19	10	16	16	9	7			8			85
FAIRLEE	09219	1017	16	8	2	5	1	3	1	2	2			40

2008 Incident Data Reported by Fire Departments - Fire Calls

FD Name	FDID	Population	Service Good Intent	False Alarm	Hazard Cond.	Structure Fire	Canceled	Wildland	Other	Outside	Vehicle	Other Fire	Explosion	Total
FAIRLEE	09219	1017	16	8	2	5	1	3	1	2	2			40
FERRISBURG	01421	2711	10	12	20	6	3	2		1	1			55
FRANKLIN	06234	1346	2	3		9		4	2		2			22
GEORGIA	06237	4485	17	17	93	14	6	7	2	6	3	4		169
GRAFTON	13249	641	4	9	4	6		1					2	26
GRAND ISLE	07255	2276	19	12	31	6	6	5			2	4		85
GRANVILLE	01261	298		2		2		2	10			1		17
GREENSBORO	10264	793	6	3	11	6	5	1			2			34
GUILFORD	13273	2022	48	13	31	19	2	5		1	4		1	124
HALIFAX	13276	818	3	4	10	5		1						23
HARDWICK	03282	3233	8	12	3	21	2	1	4	2	5	1		59
HARTFORD	14285	10698	170	123	62	28	10	10	4	6	4			417
HARTLAND	14288	3184	20	14	47	11	9	3	1	4	5	2		116
HINESBURG	04294	4427	15	11	49	14	18	5		1	1			114
HUBBARDTON	11300	772	1	1	2	6		4		4				18
HUNTINGTON	04303	1939	1		1									2
HYDE PARK	08306	3469	11	5	8	16	8	1	1	2	3			55
IBM	04806	0	2		1	1							4	8
IRA	11309	453	2		6	1		2		1				12
JAMAICA	13324	935	6		5	4	2		1					18
JAY	10327	453		2	2	5								9
JOHNSON	08336	4702	7	20	11	10		7	4	4	3	2	1	69
KILLINGTON	11588	1098	13	47	10	15	9		1	2	4			101
LINCOLN	01354	1254		5	5	8		1	4					23
LOWELL	10360	752		2		7		2	2					13
LUDLOW	14363	3626	14	53	16	9	3	3	1	3	1		1	104
LYNDONVILLE	03371	1231	26	57	64	25	7	3			5	1	1	189
MALLETTS BAY	04808	5478	19	60	38	29	142	8	2	5	1	7	1	312
MANCHESTER	02373	7013	5	9	4	1						1		20
MARLBORO	13378	990	5	38	19	2		2	1		2			69
MARSHFIELD	12381	1863	7	8	29	8	1	2	2	2	2			61
MIDDLEBURY	01387	8172	30	46	47	8	1	6	7	1	2		1	149
MIDDLETOWN SPRINGS .	11393	821	2	2	8	4		4			2			22
MILTON	04396	10065	23	28	46	8	8	5	4	4	3		1	130
MONKTON	01399	1927	1	2	3	7	1	1		1	1			17
MONTPELIER	12405	8013	342	137	110	27	50	2	4	4	6		2	684
MT HOLLY	11470	1237	7	5	1	9		1			2		1	26
NEW HAVEN	01432	1783			3	2								5
NEWARK	03423	469	8	3	2	6		2		2				23
NEWBROOK	13429	1537	37	7	21	9	22	7		1				104
NEWBURY	09426	2518	16	8	3	12		3	2		1			45
NORTH BENNINGTON .	02443	1381	17	10	11	7			2	2	1	3		53
NORTH HYDE PARK .	08448	(blank)	4	1	11	11	1		2	3				33
NORTHFIELD	12440	5794	12	28	31	14	2	6		4				97
NORWICH	14450	3587	22	20	10	10	7	4	4	1	3	6		87

2008 Incident Data Reported by Fire Departments - Fire Calls

FD Name	FDID	Population	Service Good Intent	False Alarm	Hazard Cond.	Structure Fire	Canceled	Wildland	Other	Outside	Vehicle	Other Fire	Explosion	Total
ORLEANS	10456	850	10	6	27	16	15	3		3	2	1	7	90
PITTSFORD	11480	3196	6	7	7	10	2	2	8				1	43
PLAINFIELD	12483	1364	4	7	9	5		4			1			30
PLYMOUTH	14486	580	2	3	3	2	1				1			12
POULTNEY	11492	5156	6	45	2	2		1			2	1		59
PROCTOR	11498	1852	15	18	3	4	1	8	1	1		5		56
PUTNEY	13504	2666	10	10	10	4	4				2			40
RANDOLPH	09507	4576	7	17	26	19	1			1	2			73
RICHFORD	06516	2339	2	17	6	15	3		8	6	3	3	1	64
ROCHESTER	14525	1183		6		1				1		1		9
ROXBURY	12531	569	3	1	2	2			1					9
RUPERT	02537	718	30	2	6	2		2	1					43
RUTLAND CITY	11540	17080	1043	265	218	92	9	21	166	31	7		19	1871
RUTLAND TOWN	11543	4108	32	69	33	33	3	7	2	1	10			190
SALISBURY	01561	1111	3	2	3	6		2			2			18
SAXTONS RIVER	13567	502	4	9	10	7		3	2	1				36
SHAFTSBURY	02573	3753	18	10	7	15	1	10	5		2	1		69
SHEFFIELD / WHEELLOCK	03579	1350	2	8	17	11		2	1		1	1		43
SHELBURNE	04582	6984	32	59	61	7		1	5	3	5	1	3	177
SHELDON	06585	2185	5	1	8	5		3	2	1		3		28
SHREWSBURY	11594	1136	7	3	8	8		4	1		2	1	1	35
SOUTH BURLINGTON	04600	16460	240	321	146	50	9	13	7	9	7		21	823
SOUTH LONDONDERRY	13548	1012	10	8	3	6	1	1			1			30
SOUTH NEWFANE	13590	136	7	1	16	5	1	1		1				32
SOUTH ROYALTON	14604	2906	14	12	14	13	3	3	2	2	3			66
SPRINGFIELD	14606	8957	240	86	76	23	11	13	10	6	7	5	3	480
ST.ALBANS	06549	7548	503	152	129	20	3	2	34	10	7	1		861
ST.ALBANS TOWN	06552	5812	33	10	9	3	39	5				3		102
ST.JOHSNBURY	03608	7560	176	163	172	33	24	5	5	5	3	1	2	589
STAMFORD	02609	816	21	1	4	4		2	3	2	1			38
STARKSBORO	01615	1929	6		5	16		2			1			30
STOCKBRIDGE	14618	684	5	2	3	3				1	1			15
STOWE	08621	4702	21	131	34	10	6	4		2	2		5	215
STRAFFORD	09624	1094	7	7	9	2	3		1					29
SWANTON	06339	9000	24	29	72	18	19	5		3	1	1	2	174
THETFORD	09462	2761	32	14	15	7		1						69
TRI-VILLAGE	09730	2532	1		1	4	1				1			8
TROY	10654	1676	3	1	1	10				2	1		1	19
UNDERHILL-JERICO	04660	9544	48	21	24	22	5	2	2	1	3	3	1	132
VERGENNES	01663	2783	10	27	7	15	1	4	1	4	3			72
VERMONT HAZMAT	88888	0			16									130
VERNON	13666	2119	20	12	17	18		2	1	3		1		74
VERSHIRE	09669	640	6	2	7	8		1	1	1	1	1		28
WAITSFIELD	12675	1706	20	22	20	4	2	1	1	1	2	1		74

2008 Incident Data Reported by Fire Departments - Fire Calls

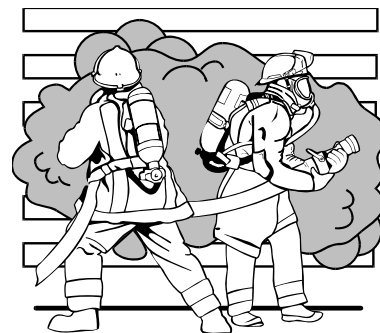
FD Name	FDID	Population	Service Good Intent	False Alarm	Hazard Cond.	Structure Fire	Canceled	Wildland	Other	Outside	Vehicle	Other Fire	Explosion	Total
WAITSFIELD	12675	1706	20	22	20	4	2	1	1	1	2	1		74
WALDEN	03678	780	8	1	15	7		5	1		2	1		40
WALLINGFORD	11681	2314	14	16	10	7		13		3	1			64
WARREN	12690	1726	2	15	7	7	1		2	2	2	1		39
WASHINGTON	09693	1086	4		7	7	1		3					22
WATERBURY CENTER	12698	3278	35	58	48	16	52	4	2	1	3	5	2	226
WATERBURY VILLAGE	12697	1687	40	55	46	14	54	4		1	3	4	1	222
WATERFORD	03699	1210	1	1	3	9		4		1	2	3	1	25
WELLS	11708	1117	1	5	8	7	3	3	2	1		1		31
WELLS RIVER	09711	338	10	13	8	19							1	51
WEST BURKE	03713	367	1	1	5	14		1	1	2	2			27
WEST DOVER	13721	824	25	71	22	5	5	2	2	4	1	1		138
WEST DUMMERSTON	13722	1901	27	9	29	19		5	3	1	1			94
WEST NEWBURY	09725	188	1		3	7		2				1		14
WEST PAWLET	11728	658	12	4	4	12		12			2			46
WEST RUTLAND	11735	2529	10	10	7	2	2	5		2	4			42
WEST WEATHERSFIELD	14705	1360	8	1	5	4		4	1		1			24
WEST WINDSOR	14738	1100	8	24	11	10		3	5				1	62
WESTON	14732	648	2	12		6	1	1	2	1		1		26
WHITING	01750	403		1	11	3			1		1			17
WHITINGHAM	13753	1255	7	7	2	2			1			2		21
WILLIAMSTOWN	09756	3291	11	6	8	11	9	4	4	5	1			59
WILLISTON	04759	8224	267	117	140	19	3	8	2	4	10	2		572
WILMINGTON	13762	2270	22	40	27	15	24		3	7	2	2		142
WINDSOR	14768	3759	106	54	50	11	42	9	7	6	3	1	1	290
WINHALL	02771	748	9	21	27	6	6	4	1	1	1	2		78
WINOOSKI	04774	6365	128	77	60	48			1	9	2			325
WOODBURY	12780	814	6	3	3	10	11				3			36
WOODSTOCK	14786	4202	4	48	8	2	1	1	2	1	1	11		79
Total			6756	5331	4287	1994	922	581	502	345	343	188	119	21368



FIGHTING FIRE



WITH FACTS



2008 Incident Data Reported by Fire Departments Statewide – EMS / Rescue calls

FD_Name	FDID	EMS Call	Medical Assist.	Motor Vehicle Accident	Extrications	Water Rescues	Other	Search	Electrical	Total
ALBANY	10006		5	2		1				8
ALBURG	07009			11	1	3				15
ARLINGTON	02015		2	19	4					25
ASCUTNEY	14016		103	21						124
BARNARD	14030				1					1
BARRE CITY	12036	2275	253	107	10					2646
BARRE TOWN	12039		3		3	1		1		8
BARTON	10042									
BEECHER FALLS	05044	165	1	23				1		190
BELLOWS FALLS	13045		248	14	16			2	1	281
BENNINGTON	02051			23	1			2		26
BENNINGTON RURAL	02451			25	8			1	1	35
BENSON	11054		2	10						12
BERKSHIRE	06057		1	10						11
BETHEL	14063		1	1						2
BRADFORD	09072									
BRANDON	11078			12						12
BRATTLEBORO	13080	689	33	166	19	6	3	8	1	925
BRIGHTON	05090	2	3	4				1		10
BRIDGEWATER	14084									
BRIDPORT	01087									
BRISTOL	01093		1	3	1					5
BROOKFIELD	09096		1			1				2
BURLINGTON	04114	3080	12	144	58	3	3		1	3301
CABOT	12117		4	20						24
CAMBRIDGE	08123		4	49		2				55
CASTLETON	11129		2	1						3
CAVENDISH	14132				5	1				6
CHARLESTON	10135									
CHARLOTTE	04138	1	3			2	1			7
CHELSEA	09141	1	4							5
CHESTER	14144	2	15	27	1		1	2		48
CHITTENDEN	11147			1	1					2
COLCHESTER	04153	2	61	3	13		1			80
CONCORD	05156	65	3	13						81
CORNWALL	01162	12	18	11				1		42
CRAFTSBURY	10168	2	21			1				24
DANBY	11171	1	7	11	2					21
DANVILLE	03174		6	14	2					22
DERBY	10177				2	1				3
DORSET	02180		2	6	2					10
EAST BURKE	03199		4							4
EAST DOVER	13191	2	4							6
EAST HAVEN	05192									
EAST MONTPELIER	12195	70		22						92

2008 Incident Data Reported by Fire Departments Statewide – EMS / Rescue calls

FD_Name	FDID	EMS Call	Medical Assist.	Motor Vehicle Accident	Extrications	Water Rescues	Other	Search	Electrical	Total
ENOSBURG FALLS	06205				3		1			4
ESSEX	04207		223	60	9					292
ESSEX JUNCTION	04208	14	37	1	13					65
FAIR HAVEN	11216		28	8	1					37
FAIRFAX	06210	1	12	38	1	1				53
FAIRFIELD	06213									
FAIRLEE	09219			19	1			1		21
FERRISBURG	01421		6		1	2				9
FRANKLIN	06234		1	7						8
GEORGIA	06237		8	1	2			1		12
GRAFTON	13249			2	1					3
GRAND ISLE	07255	1	12	5		18	1	1		38
GRANVILLE	01261	2	2		4					8
GREENSBORO	10264					1				1
GUILFORD	13273	79		34				2	1	116
HALIFAX	13276		1		1					2
HANCOCK	01179									
HARDWICK	03282		4	22	1					27
HARTFORD	14285	1072	27	131	9	2		2		1243
HARTLAND	14288	1	3	21	6		2	1		34
HIGHGATE	06291									
HINESBURG	04294	234		33			1	1		269
HUBBARDTON	11300		14	1						15
HUNTINGTON	04303									
HYDE PARK	08306		66	2	3	1		1		73
IRA	11309					1				1
JAMAICA	13324	14		2	1					17
JAY	10327		1		5		2			8
JOHNSON	08336		12	34		9		2		57
KILLINGTON	11588	103	7	25	1					136
LINCOLN	01354	27	11		1					39
LOWELL	10360	6	7							13
LUDLOW	14363	6	2	7	2		1	1		19
LUNENBURG	05366									
LYNDONVILLE	03371		10		1					11
MALLETT'S BAY	04808	14	43	14	5	2	1		1	80
MANCHESTER	02373			3						3
MARSHFIELD	12381		4		2	1	2			9
MIDDLEBURY	01387		3	1	2	1		3		8
MIDDLETON SPRINGS	11393	1		2						3
MILTON	04396		5	1	4	1				11
MONKTON	01399		9	12						21
MONTPELIER	12405	1219	9	89	9	1		1		1328
MORETOWN	12408									
MT HOLLY	11470	1	1	11	1					14

2008 Incident Data Reported by Fire Departments Statewide – EMS / Rescue calls

FD_Name	FDID	EMS Call	Medical Assist.	Motor Vehicle Accident	Extrications	Water Rescues	Other	Search	Electrical	Total
NEWARK	03423	28		2						30
NEWBROOK	13429	56	30	22				1		109
NEWBURY	09426		5	3				1		9
NEWPORT	10436									
NEWPORT CTR.	10438									
NORTH HYDE PARK	08448	7	1		8	1				17
NORTHFIELD	12440		6	6	2		1	1		16
NORWICH	14450	8	16	21						45
ORLEANS	10456		1		5	2				8
ORWELL	01459									
PITTSFORD	11480			9	1					10
PLAINFIELD	12483	1		15						16
PLYMOUTH	14486	2	1	8						11
POULTNEY	11492	17	7	20						44
PROCTOR	11498		1	2	4					7
PUTNEY	13504	45		21						66
RANDOLPH	09507		1	8	4					13
RICHFORD	06516		28	9	1					38
ROCHESTER	14525		6	3						9
ROXBURY	12531		2		1					3
RUPERT	02537		1	3						4
RUTLAND CITY	11540	4	29	26	34	1	2	1		97
RUTLAND TOWN	11543		1	39						40
SALISBURY	01561		1	4	1					6
SAXTONS RIVER	13567	1		5						6
SHAFTSBURY	02573	1	3		18					22
SHARON	14576									
SHEFFIELD / WHEEL-LOCK	03579				6					6
SHELBURNE	04582		4	2	5			1		12
SHELDON	06585	3		1	9					13
SHREWSBURY	11594	1	1							2
SOUTH BURLINGTON	04600	1443	13	175	13	1				1645
SOUTH HERO	07603									
SOUTH LONDONDERRY	13548			1		1	2			4
SOUTH NEWFANE	13590									
SOUTH ROYALTON	14604		9	30	1	1				41
SPRINGFIELD	14606	1473	46	61	8	2	2			1592
ST.ALBANS	06549	130	659	22	5		6			822
ST.ALBANS TOWN	06552		26							26
ST.JOHSNBURY	03608	421	98	33	13		3			568
STAMFORD	02609	24	7	7	1			2		41
STARKEBORO	01615		4	1	1					6
STOCKBRIDGE	14618	8	11	9						28
STOWE	08621			30	3	1		1		35
STRAFFORD	09624		1	1	1					3
SWANTON	06339		9	2		2				13
THETFORD	09462			25	1					26

2008 Incident Data Reported by Fire Departments Statewide — EMS / Rescue calls

FD_Name	FDID	EMS Call	Medical Assist.	Motor Vehicle Accident	Extrications	Water Rescues	Other	Search	Electrical	Total
TINMOUTH	11645									
TRI-VILLAGE	09730		1	1	1					3
TROY	10654		1	13	3					17
TUNBRIDGE	09657									
UNDERHILL-JERICHO	04660		43	40	10					93
VERGENNES	01663		83	2						85
VERNON	13666	31		4	1		1			37
VERSHIRE	09669	62		6						68
WAITSFIELD	12675			17		1				18
WALDEN	03678	1	2		1					4
WALLINGFORD	11681	1	2	4	1					8
WARREN	12690		2	10		2				14
WASHINGTON	09693		2	7	3		1			13
WATERBURY—CENTER	12698	3	1	79	3				1	87
WATERBURY -VILLAGE	12698		1	76	11		3			91
WATERFORD	03699	27		6						33
WELLS	11708		5	1	10					16
WELLS RIVER	09711		2	9			1			12
WEST BURKE	03713		2							2
WEST DOVER	13721	3		10						13
WEST DUMMERSTON	13722	64	1	11	1					77
WEST NEWBURY	09725		6	2						8
WEST PAWLET	11728		4	4	1					9
WEST RUTLAND	11735		1		3					4
WEST WEATHERSFIELD	14705		18	4						22
WEST WINDSOR	14738	1	4	3	1					9
WESTFORD	04720									
WESTMORE	10670									
WESTON	14732			2						2
WHITING	01750									
WHITINGHAM	13753			2						2
WILLIAMSTOWN	09756		4	37						41
WILLISTON	04759	596	10	115	6	2		1		730
WILMINGTON	13762	3	4	13	9	1		1		31
WINDSOR	14768	1000		87	1	2	3	1		1094
WINHALL	02771			17						17
WINOOSKI	04774		5	15	10					30
WOODBURY	12780	1	1	13						15
WOODSTOCK	14786	7		4	2	1	2	1		17
Total		14,637	2,628	2,601	462	81	47	50	7	20,513



This Report Was produced by



Vermont Department of Public Safety

DIVISION OF FIRE SAFETY

OFFICE OF THE STATE FIRE MARSHAL, STATE FIRE ACADEMY & THE STATE HAZ-MAT RESPONSE TEAM

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166 of Vermont's Fire Departments

The National Fire Protection Association

The US Fire Administration

The US Census Bureau

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VERMONT HAZ-MAT HOTLINE - 1-800-641-5005

To report a developing emergency situation to Vermont Emergency Management , call **1-800-347-0488**.

To schedule the VT Fire Safety House trailers or to acquire other fire safety education assistance contact the Fire Safety Education Coordinator at **(802)-479-7587**

VERMONT DEPARTMENT OF PUBLIC SAFETY

State Police

To contact a fire investigator please call your nearest state police barracks

<p>TROOP A Williston Station 2777 St. George Road Williston, VT 05495 Telephone - 802-878-7111</p>	<p>TROOP B Derby Station 35 Crawford Road, PO Box 410 Derby, VT 05829-0410 Telephone - 802-334-8881</p>
<p>TROOP C Rutland Station 124 State Place Rutland, VT 05701-9332 Telephone 802-773-9101</p>	<p>TROOP D Rockingham Station 1987 Rockingham Road Chester, VT 05143 Telephone - 802-875-2112</p>