

All Hands Herald

Massachusetts Department of Fire Services

May 2016

New Investigative Approach to Cigarette Fires

Cancer Awareness and
Prevention for Firefighters

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Safety Grant



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The *All Hands Herald* is published three times a year by the Department of Fire Services. Our title incorporates the traditional fire service meaning of all hands working to extinguish a fire. In this publication, all hands is DFS staff providing information, training and assistance with fire service issues which affect all levels of the fire service.

Let us know how you like the *All Hands Herald* and what we can do to make it even more useful to you – our dedicated fire service members and customers.

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From the Fire Marshal

Stephen Coan, who retired as State Fire Marshal this January, leaves a Department of Fire Services with a dedicated and talented staff ready to build on his legacy of strong fire training, robust fire prevention, a model HazMat Program, and so much more.

Let me start by saying how honored I am that the Fire Service Commission members, Governor Baker, and Secretary Bennett have placed their trust in my ability to lead the Department of Fire Services. It is a great responsibility and wonderful challenge.

I believe that the future of the fire service lies in our ability to use science and technology in firefighter training, the fire and building codes, fire investigation, and in how we deliver service to our customers.

Fire Training

Green building techniques including photovoltaics (solar panels) and hybrid and electric cars all present new challenges for firefighters. The Massachusetts Firefighting Academy (MFA) has developed a new course on photovoltaics to help firefighters safely maneuver on roofs during suppression. Motor vehicle crash response training is constantly updated so that firefighters are ready to safely deal with all types of motor vehicles.

Recent National Institute of Standards and Technology (NIST) and Underwriters Laboratory (UL) studies have provided good scientific data to guide the fire service in fire suppression techniques. The MFA is starting to train the Commonwealth's firefighters on transitional fire attack techniques and flow path management.

In June, the MFA will be transitioning from a 9- to a 10-week Recruit Training Program. Staff has been developing the curriculum based on the new International Fire Service Training Association (IFSTA) textbook over the past year. In addition, the Fire Prevention Officer II program (FPOII) is under re-development and is expected to be rolled out next winter.

DFS is also offering an increased number of courses online. New offerings include Chemical Suicide Safety, Photovoltaics, and Nightclub Safety. If you have suggestions for other online courses, contact the MFA.

MFA staff has also been working with a consultant to update and improve the Learning Management System for scheduling and registering for MFA classes. This is a long process and we expect the rollout will begin this summer.

Codes

One of the benefits of adopting the National Fire Protection Association 1 (NFPA1) as the backbone of the state's Comprehensive Fire Safety Code, is the three-year revision cycle that will ensure the code stays up-to-date. The Board of Fire Prevention Regulations (BFPR) is in the process of reviewing changes in the 2015 edition of NFPA 1.

Ensuring that structures built with pre-engineered lumber and lightweight truss construction are protected by fire sprinklers must be a major priority in order to protect both occupants and firefighters. These construction techniques are fine until they are exposed to fire. Studies show that the amount of time to collapse is short when compared with dimensional lumber and traditional construction techniques. DFS will be working with the Board of Building Regulations and Standards (BBRS) on key fire and life safety issues as they review and revise the State Building Code.

I believe that the future of the fire service lies in our ability to use science and technology in firefighter training, the fire and building codes, fire investigation, and in how we deliver service to our customers.

Fire Investigation

Determining the cause of a fire is useful both for understanding how it happened, and for preventing similar fires in the future. This information can lead to changes in laws, codes, public education and technology.

One recent example is the role rechargeable lithium ion batteries play in fires. They have been a factor in recent hoverboard fires and in a police cruiser fire started by the battery in a flashlight. Determining that these batteries caused fires allows the incidents to be shared with the U.S. Consumer Product Safety Commission and to inform their regulations. (Read more about hoverboard fires on page 13.)



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State Police fire investigators have been making a concerted effort to identify the type of cigarettes involved in fires, collecting additional packages in the home when possible, and determining where the cigarettes were purchased. DFS Code Compliance staff then purchase additional cigarettes from that retailer. Fire Standard Compliant Cigarette Program staff send the cigarettes to our independent testing laboratory for testing. (Read more about this effort on page 4.) This work is an example of fire investigation harnessing science and technology to further code enforcement and fire prevention.

Sprinklers buy precious time for people to escape fire – especially children, the elderly and the disabled who may need more time.

Legislation

DFS is closely watching three pieces of legislation: the local-option sprinkler bill; carbon monoxide detection in schools; and the so-called “gap” legislation on smoke alarms in homes built after 1975.

The local option sprinkler bill is modeled on many other smoke alarm and sprinkler local option laws in the Commonwealth. It would allow communities to decide for themselves how to provide fire protection in new one- and two- family homes. Communities could require fire sprinklers. Sprinklers would provide better fire protection for residents, and can save towns from the large expense of maintaining aging cisterns for new developments built outside their water districts. Sprinklers would allow fire departments to modify requirements on access roads, benefiting developers. Sprinklers buy precious time for people to escape fire – especially children, the elderly or the disabled who may need more time. Sprinklers minimize property loss and danger to firefighters by keeping fires smaller and cooler until the fire department arrives.

Children are likely to suffer symptoms from exposure to carbon monoxide (CO) at significantly lower levels than adults. After several recent CO incidents in Massachusetts schools, I think it is time to protect our children from exposure in the places where they spend most of their day.

The so-called “gap” legislation on smoke alarms would make it clear that when residential buildings with fewer than six units are sold or transferred, regardless of when they were built, they must have working smoke alarms that meet uniform requirements, and have an inspection by the fire department. Currently, the requirements are confusing and depend on whether a home was built before or after 1975. The inspection might be required by law, or

by the bank, again depending on when the home was built. The proposed legislation would also require the use of sealed, 10-year lithium ion battery (non-rechargeable) smoke alarms. I believe this technology will lead to fewer disabled smoke alarms because they are easier to maintain than alarms with traditional batteries.

Special Operations

Firefighter Rehab is a key to firefighter safety. We now have four Rehab Units stationed strategically throughout the state. West Newbury is the latest host site, providing excellent service to the northeastern part of the state. Their response times have been extremely rapid.

Fire Deaths and the Absence of Working Smoke Alarms

This winter was terrible for fire deaths. The period from December 2015 through March 2016 was above the five year average. The common factor among many of these fire deaths was the absence of working smoke alarms. The fire service must use every possible means to make sure residents have working smoke alarms, and to encourage them to take advantage of new technologies like sealed, 10-year battery smoke alarms. Another commonality among the fatal fires was how many of the victims were over age 60. The two and a half year old Senior SAFE Program has already provided new and replacement smoke alarms in thousands of seniors’ homes, yet more work remains to keep our seniors safe from fire.

School Bomb Threats

School bomb threats have emerged as a significant public safety issue that needlessly disrupts school and produces anxiety in students and staff. The State Police Bomb Squad has been training groups of local school, fire and police officials, to develop a coordinated local approach to school bomb threats, and a consistent statewide approach to assessing each individual threat. The goal is to minimize the disruption to the schools and communities across the state. The training reinforces our commitment to public safety through the so-called “363 meeting process”. School, fire and police officials are required to make an All Hazard Plan and review it together before school starts each year and this training should help local officials include response to bomb threats as part of those plans.

State Fire Marshal Coan left us a solid foundation upon which to build, but there is still much to be done. I look forward to working with the staff of DFS, fire service leaders, the Baker-Polito Administration, members of various boards and commissions, and the public we protect to meet the challenge of keeping residents safe and firefighters ready. Fire is everyone’s fight.

Cancer Awareness & Prevention Education for Firefighters

By Chief Fred LeBlanc, ret. and George Kramlinger,
Massachusetts Firefighting Academy Director

The rates for many types of cancer and cardiovascular disease among firefighters are significantly higher than for non-firefighters. The reason is simple – exposure to smoke created by the incomplete combustion of synthetics and wood associated with modern day fires and exposure to diesel exhaust. Both diesel exhaust and smoke contain toxins and carcinogens that are absorbed through the skin or inhaled through the lungs. The use of self contained breathing apparatus (SCBA) guards against inhalation hazards during active firefighting but is not often used during the very dangerous overhaul phase. Smoke particles are often so small that 97% of the time, one thinks the air is clean when it is not. Early removal of the SCBA unnecessarily exposes firefighters to harmful carcinogens and toxins. Structural firefighting protective clothing is not vapor tight, allowing the opened pores of a firefighter's permeable skin to absorb toxins and carcinogens contained in smoke. An increase of 5 degrees Fahrenheit in skin temperature increases the absorption rate by 400%. Repeated long term exposures accelerate cardiovascular mortality and atherosclerosis. Carcinogens lie deep in the body. Once fibers such as asbestos are in the lungs, they never leave. Former Boston firefighter and now Doctor Michael Hamrock states that a typical house fire exposes firefighters to more cancer-causing chemicals than a HazMat incident.

There are a number of protective measures that departments and firefighters can take immediately to help protect themselves against carcinogens and toxins, especially after every exposure to smoke:

- Use SCBA during overhaul.
- Gross DECON structural ensemble and equipment using a small hose spray.
- Use wet naps or baby wipes to remove as much soot as possible, as soon as possible, from the head, neck, jaw, throat, underarms, and hands immediately after the exposure and while still on scene. The head area is the most vulnerable place for carcinogens to enter the body.
- Wash hands and get a clean pair of gloves and hood ASAP.
- Shower after the fire and change clothes.



Photo by Rick Jollimore, Fitchburg Fire

- Chiefs – Keep mutual aid coverage or call backs until the duty shift completes this.
- Wash structural gear/PPE including hoods, gloves, and helmet liners after each fire in an approved gear extractor or using a qualified contract service. Air dry gear or use only an approved gear dryer.
- Thoroughly clean/DECON helmet (inside and out), boots, SCBA, radios, hand lights, etc.
- Thoroughly clean/DECON the inside of the cab/riding positions on the fire apparatus.
- Accomplish a vigorous athletic workout within 12 hours of the fire. Remember the 400% absorption rate. A workout will help rid the body of contaminants.
- Utilize diesel exhaust extraction systems.
- Store PPE away from apparatus floor.
- Avoid cross contamination. Never allow structural gear/PPE in living quarters.
- Transport structural gear/PPE in a personal vehicle only if contained in a vapor tight bag, and only in the trunk of a car or bed of a truck – never in the passenger compartment.
- Have an annual comprehensive firefighter physical exam with emphasis on cancer screening.

Recognizing that some of these solutions are costly, planning for the funding and procedural changes should

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A New Investigative Approach to Cigarette Fires in Massachusetts

By James DeSimone, FSC Cigarette Program Coordinator

A recent initiative by the DFS Fire Standard Compliant (FSC) Cigarette Program, the Fire Safety Division's Code Compliance Office, and the State Police Fire & Explosion Investigation Unit (F&EIU) is more robustly investigating fires caused by cigarettes.

Beginning this past January, State Police fire investigators have been making a concerted effort to not only identify, photograph, and document which specific cigarette brand style(s) are involved in these fires but also to identify the retailer(s) that sold them. This information is often found in the interview process. The Division of Fire Safety's code compliance officers then purchase the same brand style in bulk at the same retailer within two days of the fire. The rationale behind the purchase is that there may be a high probability that cigarettes found on the scene come from the same carton and/or production run as the cigarettes being sold at the retailer. This can be determined by labeling on the packages. Through the FSC Program's chain of custody process, the cigarettes are then sent to our contracted independent testing lab to determine if they meet the required ignition strength test. The results are then tracked to identify if certain brand styles of cigarettes perform better than others.

The FSC Program has sent 13 different cigarette brand styles involved in fires since January 1 to the lab for testing. Testing is not completed and it is premature to make any definitive conclusions at this time. However, one particular brand style involved in multiple fires this year, including a fatal fire, is currently being investigated further.

The Fire Standard Compliant Cigarette Program

The goal behind this new investigative process is to evaluate the effectiveness of the FSC cigarette standard and to ensure that cigarettes sold in Massachusetts, especially those that are involved in fires, are meeting this standard. The FSC Cigarette Law took effect in 2008 and it requires that all cigarettes sold in the state meet a required low ignition strength threshold (often referred to as "fire-safe"). Cigarettes are now made with special banded paper with the intent that they self-extinguish after a short period of time if left unattended. Before this law took effect, smoking was the number one cause of fatal fires in Massachusetts year after year. "While fire deaths from smoking have been greatly reduced, they have not been eliminated," said State Fire Marshal Ostroskey, "We want to learn more about why." For more information on the Fire Standard Compliant Cigarette Program, go to the Fire Standard Compliant Cigarette page on the DFS web page.

Local Fire Departments Can Help This Project

When local fire departments do not need the services of the Fire & Explosion Investigation Unit to determine that a fire was caused by cigarettes, they can assist this project by completing the revised Cigarette Fire Investigation Checklist and returning it to the Public Education & Fire Data Unit in the Division of Fire Safety. The revised checklist was sent to chiefs in the *March DFS Briefs* and may be downloaded from the Fire Prevention Forms page (FP-38) on the DFS website www.mass.gov/dfs. Please note this checklist is in addition to and not a replacement for a fire department's mandatory reporting of fires required by the Massachusetts Fire Incident Reporting System (MFIRS).

DFS Awarded Nightclub Safety Grant

By James DeSimone



Through the Federal Emergency Management Agency's (FEMA) FY14 Fire Prevention and Safety Grant, the Department of Fire Services (DFS) received \$143,000 to promote nightclub fire safety in Massachusetts college towns. The project has three components: training, inspections and education.

Training

The Massachusetts Firefighting Academy (MFA), in partnership with the Fire Safety Division (FSD), is in the process of developing a 4-hour formal classroom training for fire and building officials, bar owners and operators, and crowd managers on how to create a physically fire safe environment for patrons of nightclubs, bars, and discotheques in Massachusetts. The training will begin in the spring. With 30 deliveries expected, it is anticipated that over 900 individuals will be trained in nightclub fire safety through the grant. Topics included in the training will be the requirements of crowd managers, open egresses, proper exit lighting, working fire extinguishers, occupancy limits and overcrowding, fire alarm and sprinkler systems, commercial cooking systems, proper record keeping, and ticketing and the court process.

Joint Inspections

The second part of the grant involves hands-on training through joint inspections of nightclubs between the FSD and local fire, building and licensing officials. The focal point of the inspections is to provide local officials with both a better understanding of what type of fire violations

to look for when conducting an inspection and insight on how to reduce or eliminate fire code violations. As of March 1, DFS code compliance officers have completed over forty (40) inspections in college cities and towns. In some instances, these inspections have been completed with the assistance of the Commonwealth of Massachusetts Alcohol Beverage Control Commission (ABCC). The inspections have proven to be very valuable to both the local officials and club owners in their efforts to ensure fire safety in these establishments. Several inspections have shown that nightclubs are often overcrowded, lack crowd managers, have blocked egresses, are missing certificates of occupancy, and have non-working fire extinguishers. Inspections may include secondary quality assurance inspections. DFS expects to see higher code compliance rates than those found in earlier spot inspections.

Education

The final piece of the grant will be used to develop a short educational video for college aged students on the importance of nightclub fire safety. Anyone entering college today would have been five years old at the time of the deadly 2003 Station Nightclub fire. They have no memory of how 100 people tragically died in what was supposed to be a fun night at the club. The goal of the video is to educate a new generation of young people who attend nightclubs and bars on how to recognize and react to the first signs of fire danger. The video should be available by summer. DFS will partner with Campus Firewatch to share the video on DFS and college social media platforms.

Cancer Awareness, *continued from page 3*

start as soon as possible. DFS has convened an internal working group to investigate how we can address these measures in our programs.

The Massachusetts Firefighting Academy in partnership with the Fire Chiefs' Association of Massachusetts, the Massachusetts Call/Volunteer Firefighter Association, the Professional Fire Fighters of Massachusetts, and the Firefighter Cancer Support Network will offer a new cancer

education program that includes awareness and prevention, health and wellness initiatives, and exposure reporting. The first three offerings of the new program will occur in the spring at DFS in Stow, in Springfield, and at a South Shore/Cape Cod location.

Cancer in firefighters is not inevitable. There are protective actions that all ranks of the fire service can take right now to increase awareness and enhance protection.

Forty Years of Service

State Fire Marshal Stephen Coan Retires

By Jennifer Mieth

After 20 years as State Fire Marshal and head of the Department of Fire Services (DFS), and 20 years before that at the Massachusetts Firefighting Academy (MFA), State Fire Marshal Stephen D. Coan retired on January 31, 2016. From the day we met 30 years ago, he told me he would retire soon. Guessing the date of his actual retirement was the greatest game in the fire service. Every few years, someone would call and ask me when Coan would retire because they had just heard him talk about it. I would laugh. But when the time came for his retirement, Coan dropped off the key, slipped out the back door, and quietly handed the reins over to his deputy, Peter Ostroskey.

Milestones and Highlights

During his tenure as Fire Marshal, Coan was a leading advocate and voice for fire-related issues. He served many governors and secretaries of public safety. Coan was the first person to say that his accomplishments were always as part of a team. He maintained that without the support of the leaders in the fire service, the Legislature, the Administrations, board members, DFS staff, and sometimes the media, he would never have accomplished a thing.



Coan presented Globe Metro Asst. Editor Mike Bello with a citation thanking him for his coverage of fires that included prevention messages and of important fire policy issues such as sprinklers.

Hazardous Materials Response Program

Even before DFS was created, the fire service established the statewide Hazardous Materials Response program to respond, initially, to transportation and industrial incidents. This gave every community in the state trained personnel and resources to respond to incidents, without the burden of each community having to create and maintain a program. The program became the Hazardous Materials Emergency Response division of DFS and has served as a model for other states.

Department of Fire Services

Together with fire service leaders, Coan led the charge to create DFS. In 1996, the Office of the State Fire Marshal, the MFA, and the Hazardous Materials Emergency Response program were merged into one fire-related agency. The State Police assigned to the Office of the State Fire Marshal as fire investigators and explosive technicians remained assigned to the marshal in the new agency.

Coan worked to modernize and expand the state's fire training system and to address emerging issues through fire training. The MFA acquired mobile training units during his tenure that bring realistic training to fire departments around the state. These include the SIMS, Maze, Live Fire Training, Electrical Voltage, and Driver Simulation trailers. Under Coan, the MFA developed career-long training programs that serve all in the fire service from recruits to chief officers.

Stow and Springfield Campuses

One of Marshal Coan's first jobs at the MFA was to write a strategic plan for fire training in the Commonwealth. It included many improvements that Coan and others knew were needed to keep the fire service well-trained and current. During Coan's tenure, the Stow facility was rebuilt after an arson fire and renovated to house new divisions after DFS was created. The MFA includes a flammable gas school which is one of the few in the nation. In his final year as Marshal, Coan oversaw the completion of the Springfield DFS campus, bringing training and DFS resources closer to western Massachusetts fire departments.

Public Education

As State Fire Marshal, Coan responded to most fatal fires in the state and the heartbreak of those fatalities weighed on him. He saw mothers perish re-entering burning buildings to search for children who had escaped the fire another way when they had no meeting place. He saw homes with no working smoking alarms. As part of teams, Coan helped create the Student Awareness of Fire Education Program (S.A.F.E.) in 1996 and Senior SAFE in 2014 to address fire safety education. The average number of children who die in fires annually has dropped 70% since the creation of S.A.F.E. More families have working smoke alarms and home escape plans with meeting places because of S.A.F.E. There is nothing like a third grader to nag his or her family to test smoke alarms and make an escape plan. Families of more than 300 Young Heroes tell us that their homes are safer in the face of fire because their children brought what

they learned in S.A.F.E. home. Seniors now account for 30-40% of fire deaths in the state. The Senior SAFE Program is modeled on the success of S.A.F.E. and is starting to have an impact on senior fire safety.

Supporting Our Firefighters

During Marshal Coan's time at DFS, the Worcester Cold Storage warehouse fire made clear the need to support the emotional, as well the physical, health of firefighters. Work was already being done in Critical Incident Stress Management (CISM) but this fire led to increased support for a statewide CISM network and more training. The Massachusetts Corps of Fire Chaplains was also established after this prolonged and difficult incident.

The creation of the Special Operations Unit was underway at the time of the Worcester Cold Storage warehouse fire, but the response to the incident underscored the need for Special Operations resources. The Special Operations Unit of DFS provides incident support vehicles (command, firefighter rehab, and other vehicles) and trained staff to operate them at long-term incidents or pre-planned events. Fire service leaders have also developed a system of recommended firefighter rehab that includes medical monitoring. Training on the rehab protocol is being delivered around the state.

Honoring Our Firefighters

Coan and fire service leaders established the Governor's Firefighter of the Year Awards in 1989 and it has become an annual event. Each governor has set aside one day to honor heroic acts of bravery.

Coan also worked with the others, including Norman Knight of the 100 Club, to build the Fallen Firefighters Memorial on the State House grounds. The memorial provides a place for reflection on the service of many firefighters, not only those who have made the ultimate sacrifice.

Key Legislation

Coan helped to pass key legislation during his years of service including:

- Nicole's Law requiring carbon monoxide (CO) alarms nearly everywhere people sleep.
- The Fire Standard Compliant Cigarette law which has decreased fire deaths from smoking. Today smoking is no longer the number one cause of fire deaths in the state.
- The Fire Safety Act of 2004 which put sprinklers in nightclubs and bars that hold 100 or more people, requires trained crowd managers in entertainment venues, provided stronger tools for enforcing fire and building codes, and criminal penalties for violations.

- Local option smoke alarm laws from the 1970s and 80s became statewide laws. The loophole in the law requiring sprinklers in additions of over 7500 square feet was changed after NECN's *The Forgotten Fire* showed that every addition builders made was done to avoid requiring sprinklers.
- The so-called "Bomb Bill" (2010) strengthened existing law on possession of bombs, component parts, and hoax bombs. Previously a man who had the intent to murder but whose bomb was only partially assembled, could not be charged appropriately due to the archaic language in the statute.
- Massachusetts banned novelty lighters, following the leadership of other states. These lighters looked so much like toys that even adults could not differentiate. How could toddlers be expected to do so?

Regulatory Changes

Under Coan's leadership, every tragic or difficult fire led to the question, "What can be done to prevent another?" This often led to discussions with Division of Fire Safety technical staff and members of the Board of Fire Prevention Regulations (BFPR), and subsequent code changes.

- One of the biggest code changes in 40 years came near the end of Coan's tenure. Effective January 1, 2015, the State Fire Code transitioned from a home-grown code that began after the Coconut Grove fire of 1942, to a code based on NFPA 1. This allows the state to take advantage of an enormous amount of technical expertise and the NFPA's three-year cycle of updates to keep the code current.
- After watching several large apartment buildings that were partially sprinklered burn to the ground, the fire service persuaded the Board of Building Regulations and Standards to improve sprinkler protection in the 7th edition of the State Building Code. The fire service is working to ensure these provisions are not rolled back in the next edition of the building code.
- The Board of Fire Prevention Regulations developed chemical process safety regulations after several major fires involving chemicals. The regulations were under development at the time of the Danvers paint and ink factory explosion in 2006.



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Fire Investigation News

Murder Conviction for Christmas Eve Arsonist

In February 2016, Michelle Pfeiffer was convicted of second degree murder for setting a fire that took the life of Chrystal Lynn Blanchard. Pfeiffer was also convicted of one count of arson and two counts of causing injury to a firefighter.

On Christmas Eve, 2010, Pfeiffer fought with her boyfriend and set his clothes on fire. She left her 5-story apartment building without alerting any of the other occupants or the Chelsea Fire Department. Blanchard was trapped by smoke and flames. Her boyfriend jumped from the building, severely injuring himself.

The Fire Investigation Unit (FIU) North Team, Chelsea Fire and Police and the Suffolk County District Attorney's (DA) Office investigated the fire. They built a solid case that won the conviction.

2016 Fatal Fires

This winter has seen an abnormally high number of fatal fires that have kept the FIU extremely busy. The Division of Fire Safety's Code Compliance Unit also responds to every fatal structure fire to help determine the presence, type, age and performance of the smoke and carbon monoxide alarms. Two common threads among the fatal fires this winter were the lack of working smoke alarms and that many of the victims were over age 60. In the wake of these tragedies many fire chiefs gathered at a press conference in March to urge all residents, but especially seniors, to contact fire departments for help with smoke alarms. The chiefs also promoted the two year old Senior SAFE Program.

Suicide by Fire

A January fatal fire in Gloucester was an apparent suicide. The fire was intentionally set by the victim. In February, a Plymouth fire was also intentionally set in an apparent suicide. We are waiting for final cause and manner of death from the Medical Examiner's Office in both cases. The smoke alarms operated in both homes.

Electrical Fatal Fires

Wales Fire

An accidental February fire in Wales took the life of 91-year old June League. Ms. League called to report the fire, but was overcome by the time the fire department arrived. The fire started at an outlet where an extension cord powered a portable electric heater and an electrical fan. Investigators could not determine whether the appliances suffered electrical failure, or if the space heater ignited combustibles that were too close. There was no evidence of working smoke alarms in the home.

The fire was jointly investigated by the Wales Fire and Police Departments and State Police assigned to the West Team in the Office of the State Fire Marshal and the Office of Hampden District Attorney.

West Newbury Fire

A March electrical fire in West Newbury took the life of 82-year old John Thomas. Three firefighters were injured and transported to a local hospital.

The fire originated in the basement of the single family home. The neutral wire for the electrical service had become disconnected and is the most probable cause of the fire. Damages are estimated at \$500,000. There was no evidence of working smoke alarms in the home.

The fire was jointly investigated by the West Newbury Fire Department and the FIU North Team and the Essex District Attorney's Office.

Scituate Fire

A January electrical fire in Scituate took the life of 42-year old Sean Gorman. The fire started in the electrical system above the first floor ceiling in the kitchen. The fire was jointly investigated by the FIU South Team, Scituate Fire and the Plymouth District Attorney's Office.

The home was extremely cluttered making both emergency escape and firefighter entry very difficult.

Leominster Fire

A March electrical fire in Leominster took the life of 90-year-old Anna McCormack. The fire started at an electrical cord in the first floor living room. The fire was jointly investigated by the FIU Central Team, the Leominster Fire and Police Departments and the Worcester District Attorney's Office.

The only smoke alarm in the home was a 1970s vintage inoperable alarm. There was an excessive amount of clutter in the home which made firefighting difficult and contributed to the spread of the fire.

Hoarding is both a mental illness and a serious safety issue not only for the occupants of a building, but also for responding firefighters. Clutter can increase the risk to firefighters. There is the risk of entanglement, falling objects, and increased fire loading that can lead to collapse. There was a fatal fire in Westfield in December, where space heaters ignited the excessive clutter and took a man's life.

Smoking

North Andover Fire

A February fire in North Andover took the life of 63-year-old Elaine Donovan. The cause was improper use or

Two common threads among the fatal fires this winter were the lack of working smoke alarms and that many of the victims were over age 60. In the wake of these tragedies many fire chiefs gathered at a press conference in March to urge all residents, but especially seniors, to contact fire departments for help with smoke alarms.

disposal of smoking materials. The fire originated on the living room couch and the victim's clothing. There were no working smoke alarms in the apartment. The fire was investigated by the North Andover Fire and Police Departments, and State Police assigned to the North Team in the Office of the State Fire Marshal and to the Essex District Attorney's Office.

Fall River Fire

Improper use or handling of smoking materials caused a February fire in Fall River that took the life of Joseph Mello, 61. The victim ignited himself while smoking a cigar and using a refillable lighter.

Other occupants of the 3-family home were displaced by the fire but escaped safely. There were hard-wired interconnected smoke alarms in the common hallway but no smoke alarms were found inside the apartments. Damage is estimated to be \$100,000.

The fire was jointly investigated by the Fall River Fire and Police Departments, and State Police assigned to the South Team in the Office of the State Fire Marshal and to the Office of the Bristol District Attorney.

North Andover Fire

Improper disposal of smoking materials caused a February fire in North Andover that took the life of Carol McCarthy, 73.

The home had two smoke alarms, one without any battery, and one with a dead battery. One carbon monoxide alarm was found without a battery.

The fire was jointly investigated by the FIU Central Team, the Natick Fire and Police Departments, and the Middlesex District Attorney's Office.

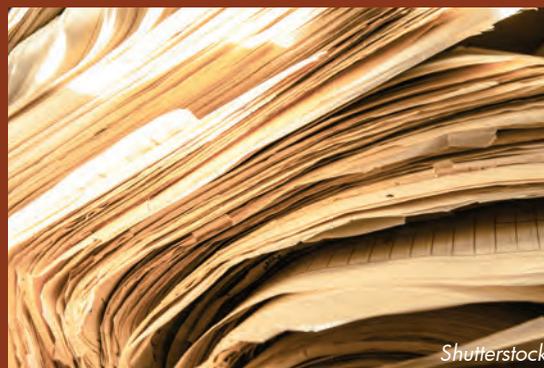
Groton Fire

A January fire in Groton took the life of Douglas Palmisano, 66, and a woman believed to be his wife. The cause of the fire is undetermined. Investigators learned from interviews that an electric space heater was located in the room

where the fire started. The residents were also known to smoke in this part of the house, and one usually slept in the room. There are no signs of an intentionally-set fire. Investigators cannot rule out a space heater fire, an electrical failure or malfunction, or the improper disposal of smoking materials as possible causes. The home had no working smoke or carbon monoxide alarms.

The fire was investigated by the Groton Fire and Police Departments, and State Police assigned to the North Team in the Office of the State Fire Marshal and to the Office of the Middlesex District Attorney.

Excessive Clutter



In some cases, excessive clutter can be a sign of compulsive hoarding that recent studies have identified as a disorder that goes beyond simply having too many possessions. Clutter can lead to serious fire, health and safety issues. Many communities in Massachusetts have formed local hoarding task forces comprised of social service agencies and fire, building and health officials. Addressing the problem effectively requires a multi-disciplinary approach. Many compulsive hoarders are elders and are at risk. Referrals can be made to elder protective services by calling the statewide Elder Abuse Hotline at 1-800-922-2275 for investigation. Anyone who is concerned about someone they know should contact the local board of health or senior center to find out what local resources are available to address this health and safety issue in an appropriate, compassionate manner.

Meet the Fire Protection Engineering Team

The Division of Fire Safety has three fire prevention engineers on staff to assist local fire departments, the State Fire Marshal and the Board of Fire Prevention Regulations. Local fire departments can make use of their expertise in interpreting the Comprehensive Fire Code, plan reviews on municipal or large projects, and the application of fire safety laws and regulations. Developers usually have large budgets for technical staff, unlike local fire departments. The expertise of DFS fire prevention engineers can help level the playing field.

Jen Hoyt

Jen was recently promoted to chief fire protection engineer for the Department of Fire Services (DFS). Before becoming chief, she was a fire protection engineer for the areas north of the Massachusetts Turnpike. She earned her Bachelor of Science degree in Mechanical Engineering and a Master of Science degree in Fire Protection Engineering from Worcester Polytechnic Institute (WPI). Jen is a registered fire protection engineer in Massachusetts and is a member of various fire engineering professional organizations. She currently serves as the secretary of the New England Chapter of the Society of Fire Protection Engineers. She is a member of the Bolton Fire Department. In her free time Jen enjoys training for and racing in triathlons and running with her dog. Prior to working at DFS, Jen worked for a Boston-area code consulting firm and also with a Metro-West-based fire protection system design firm. Jen represents the State Fire Marshal on the Board of Building Regulations and Standards (BBRS) and other regulatory boards, and also assists on projects



Chris Melite, Jen Hoyt, Jake Nunnemacher

throughout the Commonwealth. Jen supervises two fire protection engineers: Chris Melite and Jake Nunnemacher. Jen can be reached at 978-567-3372 or Jennifer.Hoyt@state.ma.us.

Frequently asked question: Where are the provisions for hazardous materials process safety?

Hazardous materials provisions are located in 527 CMR 1.00 Chapters 60-75. Chapter 60 is the “general requirements” chapter and includes provisions for hazardous materials quantities in 527 CMR 1.00: 60.4 and also process safety standards in 527 CMR 1.00: 60.8. The provisions of the process safety standard were taken from the previous 527 CMR 33.00. Since there are a wide variety of hazardous materials processes, please feel free to contact our engineering staff for assistance with site visits and process safety documentation review.

Chris Melite

Chris is a new fire protection engineer for DFS. He earned his B.S. in Fire Protection Engineering from the University of New Haven in 2013. Chris has served as a volunteer firefighter with his hometown fire department in Connecticut for the past ten years, and earned numerous firefighting certifications. In his free time Chris enjoys scuba diving, playing sports, working out, and attempting to cook. Prior to working at DFS, Chris worked for an engineering firm specializing in mechanical, plumbing, and sprinkler design. Chris provides technical services for areas north of the Massachusetts Turnpike. Chris can be reached at 978-567-3376 or Christopher.Melite@State.ma.us.

Frequently asked questions: Are wireless smoke alarms allowed to be installed in a single-family home?

If the home was constructed prior to 1975 (before the building code), wireless-powered smoke alarms are permitted to be installed. If the home was constructed after 1975, smoke alarms are required to have hard-wired power. In post-1975 construction, a household fire warning system is permitted which includes a hard-wired powered control panel and wireless (battery-powered) devices. This type of system would need to comply with NFPA 72. Wireless interconnection between devices is permitted regardless of the date of construction.

Is there a maximum number of smoke alarms that can be interconnected in a single family home?

In accordance with the 2007 NFPA 72: 11.8.2.2 (as referenced by the 780 CMR 51.00 – the Massachusetts Residential Code), the maximum number of smoke alarms or combination alarms (smoke/CO) that may be

Continued on next page

New Forcible Entry Prop



Through the Federal Assistance to Firefighter (AFG) Grant , DFS has acquired two mobile forcible entry trailers to be used for recruit and advanced firefighter follow-up training. The trailers are completely enclosed and have working platforms for breach training simulations including steel curtain roll-up, sliding slat roll-ups, security screen, residential, glass store front, and commercial steel doors, as well as scissor gates and security window bars. Students will improve their forcible entry skills, which can make the difference between life or death in the real world. The curriculum for these props is under development. As soon as it is complete, the forcible entry props will be deployed.

Fire Protection Engineering Team, *continued from previous page*

interconnected is 12 devices. Up to six additional devices, such as heat alarms or CO alarms, may be added so that the total number of alarms does not exceed 18 devices. If the home requires more than 12 smoke alarms and/or the total number of alarms exceeds 18 alarms, then a fire alarm system must be installed.

Jake Nunnemacher

Jake has been a fire protection engineer at DFS for 17 years. He has a B.A. from Assumption College and a B. S. from Worcester Polytechnic Institute (WPI). Jake is an adjunct faculty member in the Fire Science Program at Quinsigamond Community College. Jake is a captain with the Sutton Fire Department; and while at WPI, was also a firefighter with the Auburn Fire Department. Prior to working for DFS, Jake was an assistant fire protection engineer for the Dallas Fire Department. In his free time, Jake enjoys gardening, cooking, and being a dedicated family man to his wife and three girls. Jake provides technical services for

areas along, and south of, the Massachusetts Turnpike. Jake can be contacted at 978-567-3377 or Jacob.Nunnemacher@state.ma.us.

Frequently asked question: Can the fire department require sprinklers in lieu of compliance with the fire access road provisions of 527 CMR 1.00: Chapter 18?

No, the fire department cannot require any fire protection systems in 527 CMR 1.00: 18. However, if a one- or two-family dwelling is protected with a NFPA 13, 13R, or 13D sprinkler system, the fire department is able to modify fire department access road requirements per 527 CMR 1.00: 18.2.3.1.3. In addition, per 527 CMR 1.00: 18.2.3.1.4, where a fire department access road cannot be installed due to location on a property, topography, waterways, nonnegotiable grades, or other similar conditions, the fire department may accept other additional fire protection features (sprinklers, fire hydrants, cisterns) in lieu of full compliance with 527 CMR 1.00: 18.2.3.

Senior SAFE

Protecting Older Adults From Fire

In Massachusetts, adults aged 65 and older are two times more likely to die in fires than any other age group. In FY 2014, the Senior SAFE program was created to help fire departments address fire safety for older adults. The program was approved by the Massachusetts State Legislature and is funded through the Fire Standard Compliant (FSC) Cigarette program. The program provides grants to local fire departments to improve fire and life safety for older adults through education and risk assessment. Fire departments do not work alone to impact the safety of older adults and this program was designed to create partnerships between fire departments and senior support services such as councils on aging, senior centers, visiting nurses associations and others.

In its first year, 205 fire departments received Senior SAFE grants ranging from \$1,600 to \$3,600. These funds enabled public educators to give presentations at senior centers and elderly housing, purchase and install smoke and carbon monoxide alarms, affix house numbers outside homes, install heat limiting devices on stoves, in-hood stove fire extinguishers and night lights. Home visits are vital to the success of this program, where educators help older adults develop and practice home escape plans, review

safety issues, and plan escape around their abilities. These educational activities are crucial for keeping older adults safe in their homes

Year end grant reports show that in FY 2014, almost 2,500 homes were visited by public educators, over 2,000 smoke alarms were installed, nearly 1,500 carbon monoxide alarms were installed, and over 750 presentations were given for older adults. Many Massachusetts older adults are safer because of the Senior SAFE grant. We look forward to the results from the second year of the program.

Senior SAFE Statistics, 2014



Marshal Coan Retires, *continued from page 7*

- In the wake of a 2007 Chinese restaurant fire that killed two Boston Firefighters, the BFPR improved regulations on hood cleaning and inspection and DFS established a process of testing and licensing those who clean hoods. The regulations protect restaurants by allowing them to hire certified people who are accountable to performance standards in their work.
- One outcome of the Worcester Cold Storage Warehouse fire was adoption of provisions for marking vacant and abandoned buildings as to whether it was safe to conduct an interior fire attack. Both the State Fire and Building Codes adopted the same language. The requirements for boarding up vacant buildings were also strengthened in both codes.
- A Norfolk propane explosion uncovered a problem with under- and non-odorized propane coming into the state. Coan worked with Attorney General Coakley's office on this investigation that led to improved testing and documentation of odor in propane transported into the state. The provisions are part of the State Fire Code and are working their way into NFPA 1.

Fire Sprinklers: The Unfinished Business

In his good-bye letter to the fire service Marshal Coan said, "... there is more to be done. The fire service must remain vigilant and ensure that our agenda is heard. Those who do not place the same priority on fire safety as we do, need to understand that Fire is Everyone's Fight. Building codes must be strengthened, not weakened. Not every change needs to be in the wake of a tragedy. We need to be proactive and forceful."

Coan plans to continue to advocate for sprinklers in newly built one- and two-family homes in order to change the face of fire for citizens and firefighters. Every new home built today should come with fire sprinklers so that the fatality statistics of this winter become a thing of the past.

The Most Dreaded Words at DFS

I remember that until Coan sold his riding lawn mower, the most dreaded words in the agency were, "I was mowing my lawn. . ." Every DFS employee knew that the next words out of the Marshal's mouth would be a new assignment. He did his best thinking while mowing the lawn.

MFIRS Coding Tips

It is important to use consistent coding in order to be able to generate good statistics from MFIRS data. Below are some coding tips. For questions, call Derryl.Dion@state.ma.us at (978) 567-3382.

Insulation Fires

Item First Ignited Code 18 – Thermal, acoustical insulation within wall, partition or floor/ceiling space. Includes fibers, batts, boards, loose fills.

Type of Material First Ignited Code 67 – Paper. Includes cellulose, waxed paper, sensitized paper, ground-up processed paper, and newsprint used as thermal insulation.

Item Contributing Most to Flame Spread Code 18 - Thermal, acoustical insulation within wall, partition or floor/ceiling space. Includes fibers, batts, boards, loose fills.

Type of Material Contributing Most to Flame Spread Code 67 – Paper. Includes cellulose, waxed paper, sensitized paper, ground-up processed paper, and newsprint used as thermal insulation.

Grill Fires

Equipment Involved in Ignition Code 643 – Grill, hibachi, barbecue. Be sure to use correct Power and Portability codes.

Unauthorized Burning

Incident Type Code 561 – Unauthorized burning. This includes fires that are under control and not endangering any property, burning brush without a permit, burning after hours, and burning after the season has ended.

Mulch Fires

Type of Material First Ignited Code 60 – Wood or paper, processed, other.

Item Contributing Most to Flame Spread Code 72 – Light vegetation (not crop). Includes grass, leaves, needles, chaff, mulch and compost.

Hoverboard Fires

Be sure to use the remarks section for these fires and to notify the U.S. Consumer Product Safety Commission of the fire.

Mobile Property Type Code 130 – Mobile property fire, other.

Hoverboard Batteries

Heat Source Code 12 – Radiated or conducted heat from operating equipment.

Battery Charger

Equipment Involved Code 228 – Battery charger, Power Source Code 11 – Electrical line voltage.

Home Oxygen Fires

Equipment Involved in Ignition Code 416 – Oxygen Administration equipment. Be sure to use the correct Power and Portability codes.

Excessive Clutter Fires (Suspected Hoarding)

Fire Suppression Factor Codes:

- 311 – Aisles blocked or improper width;
- 313 – Significant and unusual fuel load from contents of structure;
- 315 – Significant and unusual fuel load from man-made condition.

Item Contributing Most to Flame Spread Code 96 – Rubbish, trash, waste.

Hoverboard Fires

Hoverboards, or self-balancing scooters, were a hot holiday gift for 2015 and have been involved in about 40 fires reported to the U.S. Consumer Product Safety Commission (CPSC) since the holiday season. There were two documented hoverboard fires in Massachusetts; one in late 2015 and one in early 2016. Airlines have banned hoverboards and many colleges have banned them as well. The CPSC recently established standards for self-balancing scooters. It is unclear whether any hoverboard that is currently made, imported or sold in the U.S. meets the standards. Manufacturers, importers, and retailers were put on notice in a February 18, 2016 letter (<http://www.cpsc.gov//Global/Business-and-Manufacturing/Business-Education/SelfbalancingScooterLetter.pdf>).

In addition to reporting all hoverboard fires to the CPSC (www.cpsc.gov), please also report them to Jake Nunnemacher (DFS liaison to the U.S. Consumer Product Safety Commission) in the Division of Fire Safety.



You Tube Burn Awareness Video Contest

Winners Announced

The 8th annual statewide YouTube™ Burn Awareness Video Contest award ceremony was held on March 14, 2016 at the Shriners Hospital for Children® in Boston. State Fire Marshal Peter Ostroskey was joined by contest co-sponsors Ron Meehan from the Massachusetts Property Insurance Underwriting Association (MPIUA) and Captain Rick Tustin, President of the Massachusetts Association of Safety and Fire Educators (MaSAFE).

Winning Videos

Twenty-one teams from nine schools in Ayer, Fitchburg, Lynn, Millis, New Bedford, Roxbury, Sharon, Stoughton and Westford submitted videos this year. Lt. David Evans of the West Newbury Fire Department and winner of the 2015 Fire and Life Safety Educator of the Year award was a judge for this contest. "I am so impressed with the quality of this year's submissions," said Evans, "The students have developed very original ideas to convey burn awareness." The first place winner was a team from Millis High School called *Fire Safety 1940*. Second place went to the Ayer-Shirley Regional High School team for *Lego My Grill*. The third place winner was a Sharon High School team for *The Bard*.

Honorable Mentions

Three teams from Nashoba Valley Regional High School, Millis High School and Lynn Classical (participating for the first time) received honorable mentions for their entries. State Fire Marshal Ostroskey said, "This contest continues to be a great way to engage young people to learn about the true consequences of fires and burns, without getting hurt. We thank the schools who chose to participate for helping us raise a fire safe generation."



Bemis Wins Fire Chiefs' Leadership Award

Captain Rick Tustin, president of the Massachusetts Association of Fire and Safety Educators (MaSAFE), presented the Fire Chiefs' Leadership in Fire Education Award to Oxford Fire Chief Sheri R. Bemis at the Fire Chiefs' Association of Massachusetts (FCAM) annual professional development conference on February 10 in Worcester.

Tustin said, "Chief Bemis recognizes that the success of the department lies not only with emergency responses, but with how involved they are in community risk reduction programs." Beginning in 2009, through the Student Awareness of Fire Education (S.A.F.E.) program and the Senior SAFE program, public education became a main focus for this department. Oxford currently has three trained public fire and life safety educators and all personnel are encouraged to train in public education to better themselves and to learn how to educate citizens about fire safety at every opportunity.

MaSAFE created the Fire Chiefs' Leadership in Fire Education Award to honor fire chiefs who lead and support excellent community fire education efforts. No fire educator can be successful without the support of their chief. This

award gives chiefs recognition for the encouragement, resources and the goals they set to provide the community with effective public education. Captain Tustin said, "Fire chiefs recognize that they have a responsibility to their communities, to not only respond and suppress fires, but also to prevent fires from happening in the first place. There is no better way to accomplish this than with prevention through education."



Captain Rick Tustin, Chief Sheri Bemis, Cynthia Ouellette.

DFS Rehab Unit

Now Located in Essex County



In recent years, the Department of Fire Services (DFS) has worked with fire service leaders in the state to develop a plan to deliver firefighter rehab statewide. The plan called for placing one mobile rehab unit in each of the four regions of Massachusetts: north, south, central and west. In collaboration with the Essex County Chiefs, the plan was completed in January with the placement of a rehab unit at the West Newbury Fire Department.

This truck will enable us to better serve the rehab needs of the communities of the North Shore and Merrimac Valley. It complements the other regional rehab trucks located in Stow, Springfield, and Middleboro and completes our plan to strategically deploy one in four regions of the state: north, south, central and west.

Rehab units are delivered to fire scenes and staffed by trained members of the Special Operations Unit who work with local EMS and canteen services. To activate a rehab unit or other Special Operations Resource, 24 hours a day, seven days a week: call (508) 820-2000 (MEMA). Visit www.mass.gov/dfs and search for activation of resources to learn more.

Rehab units are equipped for firefighter and rescuer rehabilitation. They provide heat, air conditioning, fluids, rehab supplies, and medical monitoring equipment to

Rehab units provide heat, air conditioning, fluids, rehab supplies, and medical monitoring equipment to assist local rehab resources on scene.

assist local rehab resources on scene. The trucks also have coffee makers, fluids to rehydrate firefighters, and dry socks, t-shirts and towels. A local incident commander can request a rehab unit to support operations. There is no cost to a community for the use of DFS Rehab services.

Cardiac arrest is one of the leading killers of firefighters. It can happen at emergency scenes, or more commonly shortly after returning to the station or home at the end of a shift. Proper rehab allows firefighters to return safely to work and in rare cases, to refer firefighters for medical treatment when needed. Last fall, the MFA created a training program about voluntary rehab protocols and guidelines to standardize the approach across the state. The training program includes a suggested standard operating guideline (SOG) that each community can tailor to their own needs. The course will be available online through MFA in the near future.

For more information about Special Operations or the Rehab Units, contact Timothy Howe at 978-567-3171.

Fire & Explosion Investigation Unit

Response Protocol

The current response protocol for the Fire & Explosion Investigation Unit (F&EIU) assigned to the State Fire Marshal's office has been in effect since 2003. DFS is reissuing it now, because there have been many personnel changes in recent years.

The Protocol

Pursuant to Massachusetts law, the local fire chief is legally responsible for conducting an examination to determine the origin and cause of each fire or explosion in his/her community. (M. G. L. c.148, s.2). The State Fire Marshal is mandated to investigate fires and explosions where local fire authorities are unable to determine the cause, where a violation of law exists, or when the fire or explosion is, or may be, incendiary in nature (M.G.L. c.148, s.3).

By statute, the State Fire Marshal also investigates cases including, but not limited to, explosive devices, blast explosions, houses of worship, fires causing fatal or serious injuries or which damage state property or any public records.

State Police fire investigators and bomb technicians are available 24 hours a day, 365 days a year. Please notify the Fire & Explosion Investigation Unit immediately of:

- Fatal fires or explosions;
- Fires resulting in personal injury;
- Fires resulting in firefighter injuries;
- Large commercial loss fires;
- Arson fires that damage occupied buildings or any residential property;
- Fires involving properties owned by the Commonwealth or municipalities;
- Fires that involve the destruction of public records;
- Fires or explosions involving facts which indicate that such fire or explosion is the result of a hate

crime (a crime based on the race, ethnicity, religion or sexual orientation of the victim);

- Fires or explosions involving churches or houses of worship; and
- Any other fire or explosion situation where the fire department would like assistance or consultation.

Requesting Services

Normal Business Hours

Direct requests for response during business hours to the Fire & Explosion Investigation Section Desk Officer at (978) 567-3310.

After Hours

Direct after hour requests to the State Police Troop Headquarters in your jurisdiction. Go to <http://www.mass.gov/eopss/law-enforce-and-cj/law-enforce/msp-troops/> for details.

Special Circumstances

If a fire chief or incident commander has a special set of circumstances that might influence a response, consider providing a cell phone number for a call back so that the investigator can speak with the chief or commander directly.

Response Protocol

Do not hesitate to call and request a response at the time of any incident. If the on-call investigator cannot justify an immediate response, arrangements will be made for a response during the next business hours.

For questions about this response protocol, contact Detective Lieutenant Paul Zipper, Commanding Officer, Massachusetts State Police, Fire & Explosion Investigation Section at (978) 567-3312.

May Spike in 2015 Brush Fires

Immense Snowfall Delayed Season



When the last snowflake of 2015 fell in Boston on March 28, the city had been blanketed in a record-breaking 110 inches of snow. Worcester also experienced a record year, 119.7 inches of snow fell in the area.

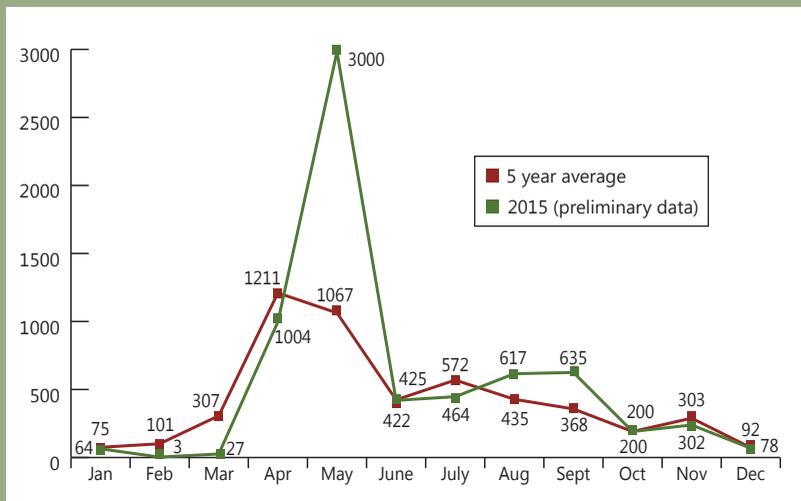
Historically, April is the busiest month for brush fires in Massachusetts. On average, the Commonwealth has 33% more brush fires in April than it does in its next busiest month, May. But in 2015, the spike in brush fires came in May which had 200% more brush fires than April. Delayed snow melt, below average precipitation, and unusually warm May temperatures contributed to fewer than average brush fires in April and a dramatic increase in May. Open burning is usually a contributing factor to the April spike in brush fires, but the season ends on May 1. Unauthorized burning after the season ended may have contributed to the spike as well.

Springtime usually means brush fires for the Massachusetts fire service. Weather conditions elevate the hazards of brush fires. Once the snow melts, it reveals dried grass, leaves, and fallen branches. Days of high winds, low humidity and bright sunshine combined with the tinder provides the fuel for brush and woods fires.

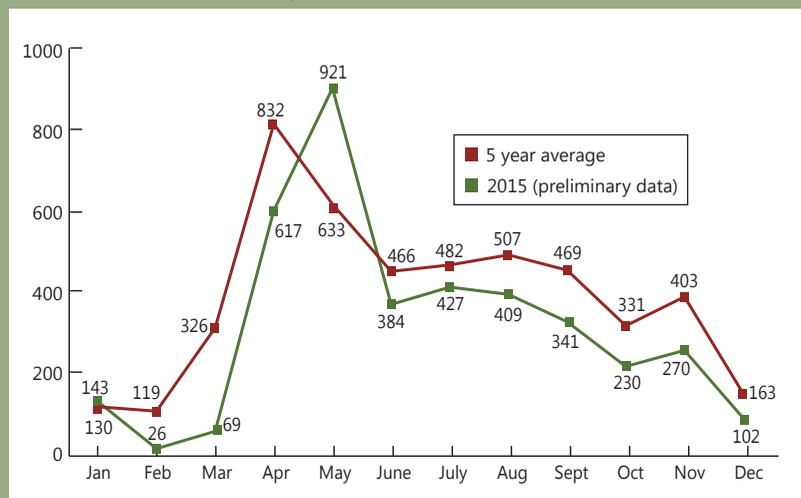
Unauthorized Burning

Unauthorized burning includes fires that are under control and not endangering any property but that violate the law. Open burning season in Massachusetts is January 15 through May 1. Burning is allowed only between 10 a.m. and 4 p.m. The number of unauthorized burning incidents peak at the end of, and directly after, this season. If someone is burning brush without a permit, after hours, or after the season has ended, or is burning illegal items and the fire is under control and not endangering any property, it is considered unauthorized burning.

Brush Fires in Massachusetts, 2011 - 2015



Unauthorized Burning in Massachusetts, 2011 - 2015



Massachusetts Firefighting Academy *Graduations*

Chief Fire Officer Program



Chief Fire Officer Program

On Monday, January 25, 2016, 32 fire officers graduated from the 22nd offering of the Massachusetts Firefighting Academy's Chief Fire Officer Management Training Program. The 13-week program was developed in accordance with National Fire Protection Association Standards for chief fire officers, and is delivered jointly by the Edward J. Collins, Jr. Center for Public Management at the University of Massachusetts and the Massachusetts Firefighting Academy. It is a comprehensive course providing training in the non-fire suppression aspects of managing fire departments. The fire service leaders who complete this program are committed to continually developing their management and leadership skills in order to provide the highest level of service for their communities.

The graduates serve the following fire departments: Acton, Agawam, Arlington, Ashland, Attleboro, Boxford, Brewster, Cambridge, Charlton, Concord, Devens, Eastham, Everett, Groton, Hingham, Holden, Holyoke, Kingston, Millis, Northampton, Orange, Orleans, Peabody, Randolph, Revere, Saugus, Sharon, Shrewsbury, Taunton, Wareham, Westminster, and Wrentham.

Class #S01



Career Recruit Firefighter Training

The Career Recruit Firefighter Training program is 45 days long. Upon successful completion of the Recruit Program all students have met national standards of National Fire Protection Association 1001 and are certified to the level of Firefighter I and II, and Hazardous Materials First Responder Operational Level by the Massachusetts Fire Training Council, which is accredited by the National Board on Fire Service Professional Qualifications.

Class #238



First Firefighter Recruit Class Graduates from New Springfield Campus

State Fire Marshal Peter J. Ostroskey and Massachusetts Firefighting Academy Director George D. Kramlinger announced the graduation of the first class to complete the Massachusetts Firefighting Academy's forty-five-day Career Recruit Firefighting Training Program at the new Springfield campus on February 2, 2016. "Today is an exciting day to see the first recruits complete their training at this new facility," said State Fire Marshal Ostroskey. "This rigorous professional training provides our newest firefighters with the basic skills to perform their jobs effectively and safely," said Ostroskey. "Being able to provide training closer to where western Massachusetts firefighters live and work has long been

Class #239



a goal of the Department of Fire Services and the fire service leadership,” he added.

This is the first recruit training program to be held at the Department of Fire Services’ Springfield campus. The state bought the former Springfield Fire Training Center from the city and recently completed a \$13.4 million renovation and construction project on the 6-acre complex.

Class #S01

On February 2, 2016, members of Class #S01 of the Career Recruit Firefighter Training program in Springfield graduated. The 16 graduates, 15 men and one woman, represent the seven fire departments of: East Longmeadow, Easthampton, Holyoke, Longmeadow, Springfield, West Springfield, and Westfield. The graduation speaker was Springfield Mayor Domenic J. Sarno.

Class #238

On January 15, 2016, members of Class #238 of the Career Recruit Firefighter Training program graduated. The 24 graduates, all men, represent the 12 fire departments of: Auburn, Bedford, Bridgewater, Fairhaven, Maynard, Peabody, Revere, Scituate, Somerville, Tewksbury, Walpole, and Watertown. Auburn Fire Chief Stephen M. Coleman Jr. was the guest speaker.

Class #239

On February 5, 2016, members of Class #239 of the Career Recruit Firefighter Training program graduated. The 21 graduates, all men, represent the 14 fire departments of: Cohasset, Dighton, Falmouth, Fitchburg, Haverhill, Hopedale, Methuen, North Andover, Stoneham, West Bridgewater, Westminster, Weston, Winchester, and Winthrop.

Class #240

On February 26, 2016, members of Class #240 of the Career Recruit Firefighter Training program graduated. The 23 graduates, three women and 20 men, represent the 11 fire departments of: Canton, Hanson, Lakeville, Malden, Middleborough, Middleton, Rockland, Saugus, Watertown, Wellfleet, and Weymouth.

Class #241

On March 18, 2016, members of Class #241 of the Career Recruit Firefighter Training program graduated. The 23 graduates, one woman and 22 men, represent the nine fire departments of: Billerica, Bridgewater, Hanover, Lexington, Newton, Norton, Sandwich, West Boylston, and Wilmington.

Continued on page 20

Class #240



Class #241



Class #242



Class #56



Class #242

On April 8, 2016, members of Class #241 of the Career Recruit Firefighting Training program graduated. The 25 graduates, all men, represent the ten fire departments of: Chelmsford, Fitchburg, Framingham, Lawrence, Lowell, Nantucket, Plymouth, Raynham, Springfield and Walpole.

Call/Volunteer Recruit Firefighter Training

The Call/Volunteer Firefighter Recruit Training program is unique in that it delivers a standard recruit training curriculum, meeting national standards, on nights and weekends to accommodate the schedule of firefighters in suburban and rural areas. Graduates complete 320 hours of training. Bringing the training closer to the firefighters often means more firefighters can participate. In 2014, an online eBlended format was implemented that has students doing more work outside of class and taking quizzes online. This allows students more time to practice training skills with instructors and to better control their own workloads and time commitments. Upon successful completion of this program, all students have met the standards of National Fire Protection Association 1001.

Class #56

On March 2, 2016, in Stow, Massachusetts, members of Class #56 of the Call/Volunteer Recruit Firefighter

Class #57



Training program graduated having completed 320 hours of training on nights and weekends. The 34 graduates, 29 men and five women, represent the 20 fire departments of: Blackstone, Charlton, Douglas, Dudley, Grafton, Hubbardston, Leicester, Lunenburg, Marion, Millville, Paxton, Pepperell, Spencer, Sturbridge, Sutton, Templeton, Webster, West Boylston, West Brookfield, and Westminster.

Class #57

On March 3, 2016 in West Newbury, Massachusetts, members of Class #57 of the Call/Volunteer Recruit Firefighter Training program graduated. The 32 graduates, 31 men and one woman, represent the 14 fire departments of: Boxford, Georgetown, Groveland, Ipswich, Lynnfield, Merrimac, Middleton, Newbury, Newburyport, Rockport, Rowley, Wenham, West Newbury, and Westford.

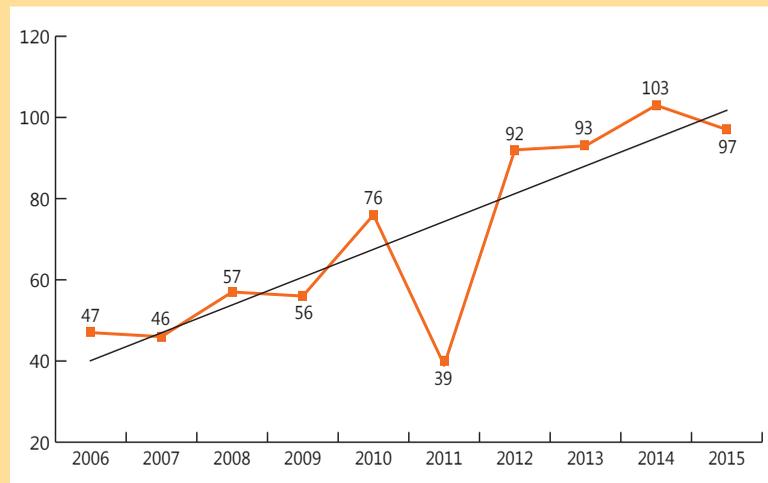
Grill Fire Safety

People begin grilling outdoors around Memorial Day. Eighty-one percent (81%) of all grill fires in Massachusetts occur between May and September. Over the past 10 years (2006 – 2015) there were 706 fires involving grills, hibachis and barbecues. These fires caused one civilian death, 38 civilian injuries, seven fire service injuries and \$6 million in estimated damages.

DFS has information on safe grill use at www.mass.gov/dfs. Click on Public Education, then Fire Safety Topics and Flyers. Search for grilling safety.

The Board of Fire Prevention Regulations is updating the code on grills on porches and balconies, but the changes are not likely to take effect until July. Public education materials will be updated at that time.

Grill Fires in Massachusetts, 2006 - 2015



2016 License Examination Schedule

The Department of Fire Services' Fire Safety Division issues licenses, permits and certificates of competency ("licenses") to people and companies engaged in fireworks, blasting, explosives, special effects, cannon and mortar firing, commercial cooking exhaust system cleaning and inspection, special hazard systems, portable fire extinguishers, marine fueling facilities and above ground tanks.

To see the licensing status of an individual or company, visit the *DFS License Look Up* at http://elicense.chs.state.ma.us/DFS_Verification/Search.aspx or go to www.mass.gov/dfs and click on *Licensing* and *DFS License Look-Up*.

The schedule of testing dates below is subject to change because testing procedures are being updated.

For information about licensing issues, contact the Licensing Desk by phone at 978-567-3700 or by email at dfs.licensing@dfs.state.ma.us.

License Exam Schedule

- Applicants must be pre-registered to sit for exams. Completed applications must be received by 5:00 p.m. on the deadline date listed below. Application forms are available at www.mass.gov/dfs then click on *Licensing*. If your application is received after the deadline, you will not be allowed to take the exam.
- All exams start promptly at 10:00 a.m. unless otherwise noted.
- License exams are given at DFS in Stow at 1 State Road, and at DFS in Springfield at 100 Grochmal Avenue. In Stow, please park in the remote lot at the top of the hill. Directions: www.mass.gov/dfs.

Licensing News

DFS is in the process of converting its paper-based testing system for licensing exams into a computer-based system. When the system is complete, we plan to offer licensing exams on a more regular basis to enhance opportunities for our customers to schedule, test, and receive test feedback instantaneously. More information will be forthcoming as the project progresses.

Examinations	Examination Dates All exams start at 10:00 a.m. unless noted	Deadlines for Applications
Fire Suppression, 10:00 a.m., Commercial Hood Cleaning, 2:00 p.m.	May 25, 2016 (Wednesday)	May 6, 2016 (Friday)
Cannon/Mortar, Fireworks, Special Effects, Blasting, Blasting R & D	June 22, 2016 (Wednesday)	June 3, 2016 (Friday)

May is Electrical Safety Month

From 2011 to 2015, Massachusetts fire departments responded to 2,730 home fires caused by electrical problems. The fires caused 41 civilian deaths, 111 civilian injuries, 275 fire service injuries and one fire service death. Electrical fires were either the number one or the number two cause of fire deaths from 2011 to 2014. Electrical fire safety is a critical area for public education, especially for older adults. In 2014, electrical fires were the leading cause of fire deaths for people over age 65. The Department of Fire Services has resources for fire educators and the public on electrical fire safety at www.mass.gov/dfs. The U.S. Fire Administration (<http://www.usfa.fema.gov/prevention/outreach/electrical.html>) and the National Fire Protection Association (<http://www.nfpa.org>) also have excellent public education materials and videos on electrical safety on their websites.





Department of Fire Services
Commonwealth of Massachusetts
978-567-3100

www.mass.gov/dfs



DFS Springfield Campus

Transition Complete



The western Massachusetts office of the Department of Fire Services (DFS) has relocated from Northampton to our new facility in Springfield.

Mailing Address

Department of Fire Services
P.O. Box 51025
Springfield, MA 01151

Physical Address

Department of Fire Services
100 Grochmal Avenue
Springfield, MA 01151

DFS Main telephone number: 978-567-3100
Springfield fax number: 978-567-3819

Special Operations Units have also been relocated from Northampton and Easthampton to the Springfield Campus.