

All Hands Herald

Massachusetts Department of Fire Services September 2021

An Inside Look at Installing Home Sprinklers

**2021 Fireworks Enforcement
and Interagency Partnerships**

**Propane or Natural Gas?
The Usual Clues May Not Be Enough**

Heating Season Fire Dangers



Contents

Editor
Jake Wark

Chief Copy Editor
Art Director
Julie Weinstein

Copy Editor
Timothy Moore

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.

If you have suggestions, ideas, questions or want to make a contribution to the *All Hands Herald*, contact:

Jake Wark
Public Information Officer
Department of Fire Services
1 State Road
Stow, MA 01775
Jake.Wark@mass.gov
978-567-3189

Visit us online at
www.mass.gov/dfs and
on Facebook, Twitter
and Instagram.



Photos by DFS staff
and Shutterstock



2 An Inside Look at Installing Home Sprinklers: A Homeowner's Story

Chief fire protection engineer for the DFS Fire Safety Division and a call firefighter in her community, Jennifer Hoyt describes the process of installing home sprinklers in her 1984 ranch-style home.



4 2021 Fireworks Enforcement and Interagency Partnerships

DFS and Massachusetts State Police took an aggressive posture following the unprecedented increase in fireworks-related complaints in 2020, with repeated interdiction efforts along the state border.



6 Propane or Natural Gas? The Usual Clues May Not Be Enough

Propane-fueled heating is increasingly common. While external gas meters have historically been a sign of natural gas heating, firefighters should be aware that they can also signal propane.

- 1 From the Fire Marshal
- 7 Join the Fire Code Update Process
- 8 Heating Season Fire Dangers: Fire & Carbon Monoxide
- 10 Why Terminology is so Important
- 10 Explosive Magazine Permits and Inspections
- 11 MFIRS Coding Tips for Heating Fires
- 12 Fire Prevention Week™ is October 3-9, 2021
- 12 DFS and MassDEP Issue PFAS Advisory
- 13 Massachusetts Fires in 2020
- 15 Fire Investigation News
- 18 Pride in Performance Awards
- 19 2021 License Examination Schedule
- 20 Massachusetts Firefighting Academy Graduations

Cover: The 9/11 Memorial at the Department of Fire Services' headquarters in Stow was built using steel from the World Trade Center in New York City. It was dedicated on September 11, 2011.

Back Cover: Free Skin Cancer Screenings Resume

From the Fire Marshal

Reopening DFS

On June 15, 2021, Governor Baker lifted the state of emergency that had been in place since the earliest days of the COVID-19 pandemic, reflecting a major step forward in reopening the Commonwealth. In the weeks that followed, the Department of Fire Services began taking its own steps toward that goal based on research and planning that began in the spring, implementing a hybrid work model at all our locations as occupancy and other limits have eased. In July, many office-based staff who had been working remotely full-time returned to the office three days per week, and in September will be in the office four days per week.

Likewise, the Massachusetts Firefighting Academy continues to adapt to changes and increase on-campus time to best serve its students at all three locations. In a return to another beloved tradition, all three MFA campuses held their first public graduation ceremonies since the beginning of the pandemic – and in the case of our Bridgewater campus, the first public graduation ever. Career recruit classes are currently receiving training in-person four days per week and in the virtual classroom one day per week, a significant shift from the schedule put in place at the beginning of the pandemic, which alternated between one or more entire weeks onsite and online. In October, we anticipate a return to the traditional schedule of five days on campus per week for 10 weeks. Beginning in November, certain lectures for the Call/Volunteer Recruit Firefighter Training Program will also return to campus on weekends, allowing students to practice in the drill yard

what they've learned in the classroom on the same day. And while we are still ramping up field programs, chiefs and training officers who wish to request courses through the

DFS Learning Management System can complete the form at www.mass.gov/forms/mfa-course-request-form.

To be clear, the pandemic is not fully behind us. We will maintain the health and safety measures necessary to protect our staff, students, and visitors from COVID-19. Our high cleaning standards and hand sanitizer stations remain in place, and we continue to require face coverings within our facilities for those who are not fully vaccinated.

Reopening DFS is an ongoing process and represents a transition from our pre-pandemic model to one that will incorporate the many lessons we've learned over the past 18 months – including the value of remote access to certain classes, meetings, and events. Once again, I want to thank all our staff for their countless efforts to maintain the delivery of critical services to firefighters, fire departments, and the communities we all serve. In ways large and small, remotely and in person, our staff have confronted, risen to, and overcome a monumental challenge.

Progress at Bridgewater

It hardly seems like a year since H.4178 transferred care and control of the Bridgewater campus from the Department of Correction to the Department of Fire Services. During a recent visit, I was reminded again of the tremendous progress that our team has made there. Beyond the physical improvements to the site and its infrastructure, the campus is a hive of activity, with ongoing firefighter and investigator training utilizing a variety of props.

With the support of Governor Baker and the Legislature, the DFS Bridgewater campus is really coming into its own. It continues to fill a longstanding training need, not just by making our intensive and comprehensive curriculum more accessible to departments in southeastern Massachusetts, but also by alleviating the



Career Recruit Class #BW11 graduation at Bridgewater campus.

Continued on page 5

An Inside Look at Installing Home Fire Sprinklers

A Homeowner's Story

As chief fire protection engineer for the Department of Fire Services' Fire Safety Division and a call firefighter in her community, Jennifer Hoyt knows a thing or two about fire safety. When she and her family moved into a 1984 ranch-style home a few years ago, she had a long list of projects to undertake as she made the place her own. They included painting the walls, renovating the 1980s kitchen, finishing the basement – and installing fire sprinklers.

Why Install a Home Sprinkler System?

"I can live with an '80s kitchen," Jen said. "I can't live with fire damage to my house or my daughter getting hurt."

As a firefighter and a fire protection engineer, Jen is keenly aware of how important fire safety is and how quickly fires can grow: modern furnishing and manufacturing techniques make today's fires burn much faster than they did decades ago, and can leave occupants only three minutes to escape.

But while smoke alarms can give you an early warning of danger, Jen knows they can't contain a fire or slow it until firefighters arrive, the way fire sprinklers do.

Jen selected an NFPA 13D system that is only for one- and two-family homes. Since she does not have town water, she installed a tank and pump system. The tank contains around 400 gallons of water and will run for about 10 minutes once activated. If there's enough fire to set off a fire sprinkler, there's enough smoke to set off the smoke alarms.

"Ten minutes is enough time to wake up if we're asleep, escape using our home escape plan, and call the fire department," she said.

Moreover, since only the sprinkler head closest to the fire will activate unless the fire continues to grow, ten minutes is enough time to control the fire until the fire department arrives – and may even be enough to put it out.

Jen added that the nearest fire hydrant is nearly 1,000 feet away, so it would be some time before the fire department was able to get enough water to extinguish a fire that had already been growing for more than ten

minutes. And firefighters would use much more than the 400 gallons in the sprinkler system's tank, adding water damage to that caused by fire and smoke.

The Installation

There's no question that sprinklers are easier to install when a home is first being built. In Jen's experience, however, the retrofit was only a little more complicated.

The water tank Jen uses is plastic and collapsible, making it easy to carry into the basement while empty. It's installed inside a metal frame that holds the weight of the water. Together, the entire tank and pump are no larger than the basement oil tank.

The basement of Jen's ranch home was unfinished, which made it easy to install the tank and run the sprinklers along the beams, leaving enough room for when she decides to finish the basement. The risers went up into the closets wherever possible, and sidewall sprinkler heads were used in the bedrooms. The designer worked with Jen to make sure no usable closet space was impacted by the sprinkler pipes and ensured that any small areas of visible pipe were easily covered by a soffit. In the main living areas, the sprinkler heads are recessed with cover plates or white sidewalls that blend into the décor.



The installed sprinkler system water tank. The collapsible plastic tank has a metal frame that holds the weight of the water.

Worth the Investment

Once Jen decided to make safety one of her priorities during the renovation, she set about getting quotes from several sprinkler contractors. She had no trouble finding a contractor and the quotes came back under \$5,000.

“That was a reasonable amount of money to ensure my family’s safety, so it was easy to make this project a priority,” she said.

Sprinkler installation tends to run about \$1.35 per square foot when a home is being built, according to the Home Fire Sprinkler Coalition. Retrofits are always higher. For Jen’s retrofit, the cost was about \$1.80-\$1.82 per square foot, a reasonable cost that reflected her willingness to do some of the drywall repairs and touch up painting herself. And with a tank system, there was no need to pay for a hook-up to the municipal water system.

For a home the size of Jen’s, an average installation would take about a day. Her installation took a day and a half, but only because she was happy to have the installer take more time to teach the process to an apprentice. She was able remain at home the entire time – even working from home remotely during the pandemic, there was no interruption to her day-to-day life.

After selecting the contractor, she said, the entire project took one month, from working on the design to



Jen Hoyt and her daughter point to a sprinkler head, part of the system installed to protect their home from fire.

the final inspection by the town.

“I still plan to re-do the 1980s kitchen, finish the basement, and take care of a dozen other home projects, but I sleep better at night knowing my house is safer from fire,”

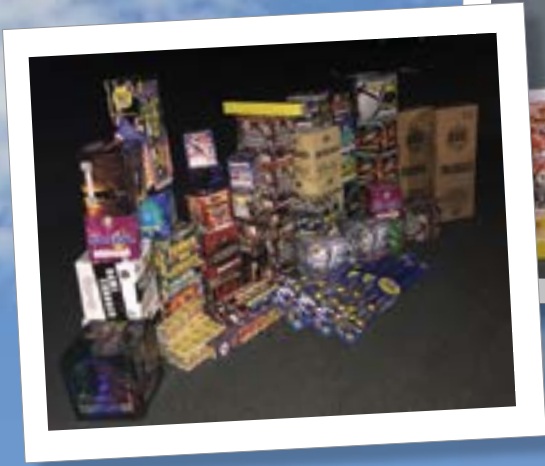
Jen said. “When people move into a home, upgrading the smoke alarm system and installing fire sprinklers should be at the top of the list. Putting safety first is nowhere near as expensive as you might think.”

Jennifer Hoyt is the Department of Fire Services’ chief fire protection engineer in the Division of Fire Safety and a registered fire protection engineer in Massachusetts. She frequently serves as the State Fire Marshal’s designee on the Board of Building Regulations and Standards and supports the development of the Comprehensive State Fire Code as staff for the Board of Fire Prevention Regulations. She is a call firefighter on her local fire department and a graduate of the Massachusetts Firefighting Academy’s Call/Volunteer Recruit Firefighter Training Program.



Sprinkler pipes run along the beams in the unfinished basement, leaving enough room for finishing the basement in the future.

2021 Fireworks Enforcement



and Interagency Partnerships

The Department of Fire Services and Massachusetts State Police had a very busy fireworks enforcement season in the weeks leading up to Independence Day 2021. Together, we took an aggressive posture following the unprecedented increase in fireworks-related complaints in 2020, with repeated interdiction efforts along the state border. Teams of MSP fire investigators and Bomb Squad techs, along with uniformed personnel, issued a total of 65 criminal summonses for violating MGL Ch. 148, s. 39, and seized more than 47,000 multi-shot cakes, mortars, roman candles, bottle rockets, and other items – all of which are illegal in Massachusetts and many of which are extremely dangerous. Lawrence Police joined in one of the operations, and we were grateful to have them aboard.

These stops, summonses, and seizures served two important purposes. First, they took these items out of the hands of unlicensed, untrained users who could have put themselves and others at grave risk of physical injury or property damage. Second, they sent a message that use or possession of fireworks without a license is against the law in Massachusetts, regardless of where those fireworks are purchased. That message went out loud and clear through traditional news media, on social media channels, and on MassDOT billboards with our core message: *leave fireworks to the professionals*.

State Police assigned to the State Fire Marshal's office were also very active retrieving and rendering safe items

Teams of MSP fire investigators and Bomb Squad techs, along with uniformed personnel, issued a total of 65 criminal summonses for violating MGL Ch. 148, s. 39, and seized more than 47,000 multi-shot cakes, mortars, roman candles, bottle rockets, and other items – all of which are illegal in Massachusetts and many of which are extremely dangerous.

seized by local fire and police departments. State Fire Marshal Peter Ostroskey thanked municipal authorities for their partnership in identifying dangerous quantities of confiscated fireworks for pick-up and disposal by the Bomb Squad.

"We received many calls around July 4 for items that had been seized in the field or were dropped off to local authorities, including large amounts and sophisticated set-ups," State Fire Marshal Ostroskey said. "I encourage our municipal partners to take advantage of the Bomb Squad's unique skills and capabilities. Whether the items come in brightly-colored packaging or the brown paper and duct tape popularly associated with a suspicious device, they're dangerous and should be treated as such."

waiting times for training at our Springfield and Stow campuses. We look forward to further development and expansion at Bridgewater in the months and years to come as it becomes a full-service support site for the fire service and the Commonwealth.

State Police Bomb Squad Merger

This past May, Massachusetts State Police (MSP) transferred command of the Troop F Bomb Squad, which is based at Logan Airport, to the Office of the State Fire Marshal, where the Statewide Bomb Squad has been assigned for many years. This move consolidated all of MSP's Explosive Ordinance Disposal (EOD) and explosive detection K9 (EK9) assets into a single squad under a unified command structure within the Fire & Explosion Investigation Unit.

Bomb squad personnel working out of Logan Airport have – and will – continue to respond to incidents there without interruption, but the command consolidation has had the broader effect of acting as a force multiplier for all existing EOD assets. The result is a better economy of scale for bomb squad training and equipment across the Commonwealth. With a total of about 30 technicians and nationally-certified EK9 teams, the State Police Bomb Squad remains ideally positioned to provide top-quality personnel anywhere in the state 24 hours per day – and the timing was perfect, coming as it did in advance of the Independence Day holiday, when the Bomb Squad responds to a significant seasonal increase in fireworks-related calls.

Remembering 9/11

This month, as we observe the 20th anniversary of the September 11 terrorist attacks, the nation and the world will mourn the 2,977 people who perished that day in New York, Virginia, and Pennsylvania. We in the fire service will do the same, with additional solemn reflection on the 343 New York City firefighters who gave their lives in the line of duty in and around the Twin Towers of the World Trade Center, as well as those claimed by cancer and other causes connected to their service at Ground Zero. We will never forget their courage, their sacrifice, or the grief of those who love and miss them most.

Even two decades later, the scale of our losses on 9/11 still resonates across the firefighting and public safety community. For many, the memories and emotions of that terrible day may come flooding back or bring other critical incidents to mind, and could be amplified by the increased media coverage relating to this year's observances. One of the turning points that 9/11 marked was an increased



9/11 Memorial at DFS.

awareness of how important critical incident stress management is for first responders, and I want to thank those among us who have advocated so passionately for Massachusetts firefighters' mental and emotional wellness in addition to the traditional concerns of physical health. The fact is that grief reactions are common on anniversary dates, and our friends at the Massachusetts State Peer Support Network, the Massachusetts Corps of Fire Chaplains, and others provide a valuable resource that remains available 24 hours a day, 7 days a week, to anyone who needs them.

For those of us who will never forget exactly where we were and what we were doing on the morning of September 11, 2001, it's hard to believe that there will one day be an entire generation of American firefighters who had not yet been born when the towers fell – and yet, as recruits and volunteers continue to enter the fire service, this will soon be the case. The Massachusetts Firefighting Academy has trained more than 8,600 firefighters in 262 graduating classes since 9/11, providing each and every one of them with the physical, mental, and technical skills necessary to do a difficult and dangerous job well. As we recall those 343 New York City firefighters who made the supreme sacrifice 20 years ago, I can think of no better way to honor them than training these brave young men and women to the very highest standards as they enter our chosen vocation, commit themselves to the preservation of human life, and follow in the footsteps of heroes.

Propane or Natural Gas?

The Usual Clues May Not Be Enough



Propane-fueled heating is growing increasingly common, especially in new residential construction sites in previously undeveloped areas. While external gas meters have historically been a sign of natural gas heating, firefighters should be aware that they can also signal propane.

For decades, it was pretty basic: gas meters on the house meant natural gas, and a propane tank out back meant propane. Today, however, those gas meters may come from a propane tank – and the tank may be underground.

Propane-fueled heating is growing increasingly common, especially in new residential construction sites in previously undeveloped areas. While external gas meters have historically been a sign of natural gas heating, firefighters should be aware that they can also signal propane.

In a newly-developed area, natural gas pipes may not be in place beneath the street to supply a growing community, and installing them can be expensive. Even in well-developed areas, it may be more cost-effective to drop a tank in the ground than to dig up the street. Propane distributors offer contractors an easy alternative: the builder buys the heating and hot water systems, the propane company provides the tank, and residents pay for propane rather than natural gas as they use it. The tanks represent a significant investment in both installation and maintenance, however, so rather than the traditional ratio of one tank supplying one residence it's becoming more common for one tank to supply multiple units, each with its own meter.

"In other words, these clusters of propane meters look exactly like the ones firefighters have seen for years and years on natural gas-heated buildings," says Jack Boland, assistant coordinator for Flammable Gas Programs at the Massachusetts Firefighting Academy. "Firefighters have to be attuned to the change."

Propane and natural gas are both flammable gases, but they're as alike as the Patriots with Tom Brady and the Patriots without Tom Brady. Propane is heavier than air and more likely to sink when it leaks, while natural gas is lighter than air and will rise. Propane has a flammable range of 2% to 10% in air, compared to 5% to 15% for natural gas. Propane is detectable by four gas and flammable gas meters, so these meters will measure it – but the reading will only be correct if it's calibrated to propane. A meter calibrated to natural gas (or any other gas) will show incorrect readings.

"You must use the correction factor supplied by your meter for propane," Jack said. "Relying on miscalibrated readings could lead you to think you're safe when in fact you're in a dangerous environment."

The same applies in reverse if you use a meter calibrated for propane in an environment with vapors such as natural gas, gasoline, or ethanol. The meter can and will see the vapor, but readings will not be correct. Very often, getting the correct readings requires only simple math, multiplying the reading by 2 or .5, but the numbers must be correct to respond to the hazard safely.

"Some companies mark their meters with a small 'UN 1075' label, or they may have their company name on them, like 'Joe's Propane Company,'" Jack says. "But I'm aware of no requirement at this time that a gas meter identify which gas it's supplying unless there are two different types of fuels being supplied to the building."

Continued on next page



In one important respect, residential propane in the northeast is safer these days than it was decades ago. After a fatal propane explosion and 5-alarm fire in 2010 at a Norfolk condominium and an ensuing investigation into unodorized or under-odorized propane in the region, the Massachusetts State Fire Marshal's office led extensive efforts to ensure that all propane transported into Massachusetts is tested for ethyl mercaptan, which gives the gas



a distinctive odor. Other New England states followed suit, and the requirement was adopted by NFPA 58, the Liquefied Petroleum Gas Code. Even if you can't immediately tell from the meters outside which gas is going into a home, your nose can often tell you whether you're facing a leak.

Thanks to Mark and Adam Leach of Gagnon & Son Inc.

Join the Fire Code Update Process

The Board of Fire Prevention Regulations (BFPR) and its code committees are reviewing NFPA 1, 2021 edition for potential adoption as the next promulgation of 527 CMR 1.00, Massachusetts Comprehensive Fire Safety Code. As the BFPR approves the recommendations of the code committees for each chapter, draft language will be posted on our website for review and comment. Once posted, these documents will be at www.mass.gov/service-details/massachusetts-fire-code-under-Proposed-Updates-to-Massachusetts

527 CMR 1.00. We expect the new code to be promulgated and available for use early in 2022. Questions or comments may be emailed to MaryAnn.E.Smith@mass.gov.

Monthly BFPR meetings, code committees and working group meetings are open to the public. Some meetings are in person, some are remote and some are hybrid. Visit www.mass.gov/service-details/board-of-fire-prevention-regulations-bfpr for information and links to agendas and meetings.

Heating Season Fire Dangers

Fire & Carbon Monoxide

Heating Fires

The Division of Fire Safety of the Department of Fire Services maintains the Massachusetts Fire Incident Reporting System (MFIRS). By law, fire departments must report any fire or explosion resulting in a dollar loss or human casualty to MFIRS. DFS uses data from fire incident reports to analyze, identify, and address fire issues.

In 2007, after an analysis of MFIRS data identified a high number of heating-related fires in Massachusetts, DFS developed the *Keep Warm, Keep Safe* public information campaign to address winter heating fires and fire fatalities. The campaign includes a toolkit fire departments can use for community education. Since the *Keep Warm, Keep Safe* campaign began, residential heating fires have dropped 62% in the state.

Prior to the *Keep Warm, Keep Safe* campaign, one in seven space heater fires caused a death. After the campaign began, the number of fire deaths from space heaters dropped, and now one in every 151 space heater fires causes a death. There hasn't been a death from a space heater fire in Massachusetts since 2015. Space heaters are still dangerous, however: one in every 12 space heater fires causes a civilian injury.

In 2020 there were 1,317 heating equipment fires that caused 20 civilian injuries, 19 fire service injuries, and \$9.5 million in estimated damages. The average dollar loss from



No fatal fires were caused by heating equipment in 2020. This was the first time since 1997 that no fatalities resulted from heating fires. 2020 also had the lowest number of reported home heating fires since 2000.

a heating fire was \$7,244. No fatal fires were caused by heating equipment in 2020. This was the first time since 1997 that no fatalities resulted from heating fires. 2020 also had the lowest number of reported home heating fires since 2000.

So far in 2021, three older adults (65 and over) have died in two heating fires. Education is key to keeping people safe during the heating season. Franklin is the only county where heating is the number one cause of residen-

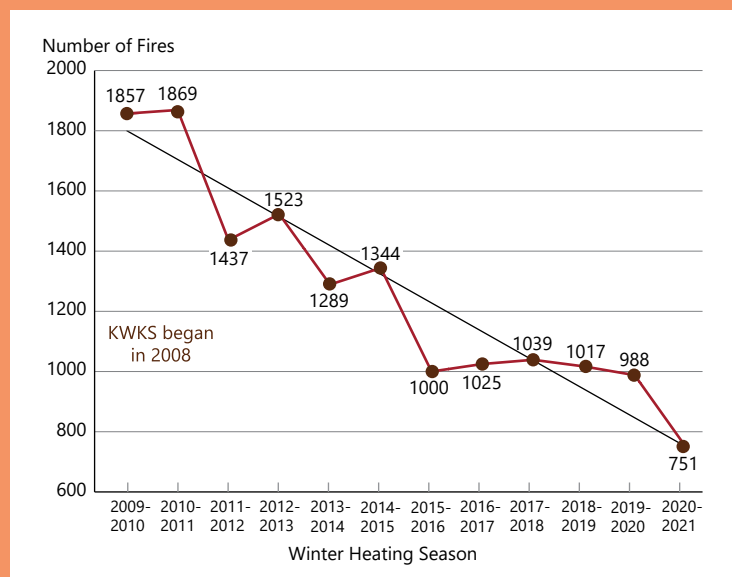
tial fires. Many winter fires are caused by the improper disposal of wood stove and fireplace ashes. These are not counted as heating fires in MFIRS but they are related to heating. The *Keep Warm, Keep Safe* campaign covers many heating safety topics departments can use in public education including:

- smoke and carbon monoxide alarms
- home escape planning
- maintaining heating equipment and chimneys
- heating safety

Carbon Monoxide Incidents

Carbon monoxide (CO), the invisible killer, is an odorless, colorless gas. CO is a significant danger during the heating season because it can injure or kill people and animals. Most CO calls occur in homes and are caused by faulty heating systems.

Residential Heating Fires by Winter



In 2020, there were 17,964 CO calls reported to MFIRS. That is a 1% decrease from the 18,179 reported in 2019. CO was found in 4,740, or 26% of the responses. This is a 5% decrease from the 4,964 calls where CO was found in 2019.

Heating fires are declining, but the fire service still needs to remind people that they can prevent fires and CO tragedies by:

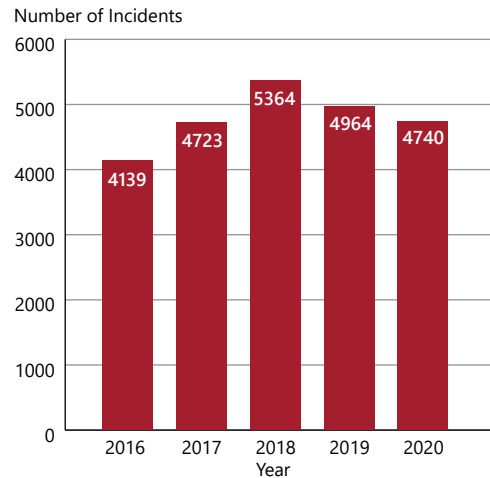
- Having heating systems serviced by a licensed professional at least once a year.
- Making sure smoke and CO alarms are working. Replace smoke alarms at 10 years and CO alarms at seven years.
- Having a practiced home escape plan.
- Learning the symptoms of CO poisoning (nausea, headaches, flu-like symptoms, shortness of breath, dizziness and fatigue). High levels of CO poisoning result in progressively more severe symptoms including vomiting, confusion, loss of coordination, and ultimately death.
- Keeping all combustibles three feet away from things that can burn.

Visit www.mass.gov/KeepWarmKeepSafe for more information about winter home heating safety and a tool kit to use in all your public education efforts.



Instagram meme.

Carbon Monoxide Incidents 2016 - 2020



Note: CO detectors became mandatory in most Massachusetts residences in 2006.



Two-page flyer in 7 languages.



Bilingual flyer.

Why Terminology is so Important

Ryan Whiting, Residential Care and Lodging Team Supervisor

Minnesota State Fire Marshal's Office

To quote a line from a popular movie, "You keep using that word. I do not think it means what you think it means."

Ask an arson investigator or prosecutor and they will be adamant that any report written must be without errors. Otherwise, an entire case could be thrown out based on that technicality. Fire inspection reports or speaking with architects, contractors and the general public are no different. You may know what you mean, but do others?

Common examples of this are the terms smoke "alarm" and smoke "detector." These two words have significantly different meanings. An alarm is a self-contained device containing the detector, processor and sounder. A detector, on the other hand, only detects the signature of a fire then sends that signal to a separate device for action.

While it may seem trivial, using the wrong term has profound repercussions. If your orders state "Replace the smoke detectors in the apartment units," you are giving a legal order to install NFPA 72 Fire Alarm System detection devices in each apartment unit. Is that what you really meant, or did you mean for them to install single-station smoke alarms?

A single word changes the context of the entire conversation: alarm/detector, smoke detector/fire detector, egress/escape, R-3/R-3 dwelling unit. Interchanging "R-3" with "R-3 dwelling unit" can have profound implications. An R-3 is built to the Minnesota Building Code, whereas an R-3 dwelling unit is built to the Minnesota Residential Code. Using the wrong term, thus using the wrong code, directly impacts construction requirements, fire system requirements and agency licensing regulations.

With all of the responsibilities and duties we attend to on a daily basis, swapping terms often seems minor in the grand scheme of things. However, switching a single term changes the entire context of the message.

Instead of the aforementioned quote – which, as you may know, is from 1987's "The Princess Bride" – we should all strive for "You keep using that word and I know exactly what you mean."

Reprinted with permission from the July 2021 Newsletter of the Minnesota State Fire Marshal and posted on their website at: <https://dps.mn.gov/divisions/sfm/for-fire-departments/sfmd-newsletter/Pages/Why-terminology-is-important.aspx>

Explosive Magazine Permits and Inspections

Storing and transporting explosive materials in Massachusetts requires permits and licenses from the Department of Fire Services. Blasting companies and others who store or use explosives must hold an explosives users certificate. Individuals must hold an explosives certificate of competency. Companies must also have explosive magazine permits for permanent and vehicle-mounted magazines. Local fire departments issue use and handling permits for specific blasting projects.

In order to store or transport explosives, you need a permit for the explosive magazines. Permits are issued for:

- Mobile magazines on trucks that transport explosives to job sites;
- Day boxes for temporary storage of explosives at job sites; and
- Permanent magazines that store explosives.

You must have a valid explosive user's certificate to apply for any explosive magazine permit.

All instructions and application forms for these permits are on the DFS *How to Apply for an Explosive Magazine Permit* webpage (www.mass.gov/how-to/)

apply-for-an-explosives-magazine-permit). There is no fee for this permit. The permit must be renewed annually.

Complete applications for permanent magazines must include a plot plan. Plot plans are required only when a magazine is initially permitted. However, if modifications are made to a permanent storage site, an updated plot plan and new inspection are required.

Upcoming Magazine Inspections

DFS code compliance officers inspect magazines in the permitting process. This fall, the staff of the Code Compliance and Enforcement Unit in the Division of Fire Safety will be conducting explosive magazine inspections.

- Permanent magazine storage permits expire annually on October 31.
- Mobile and day box magazine permits expire annually on March 31.
- Permits must be conspicuously posted or readily accessible.

Contact DFS Code Compliance at (978) 567-3375 to schedule the required inspection.

MFIRS Coding Tips for Heating Fires

Fall brings cold temperatures. Soon, people will turn on the heat and we can expect heating-related incidents to increase. Each heating season, many people use alternative heating sources like fireplaces, wood stoves, and space heaters, and these sources can increase fire risk. Accurate fire data is crucial to resource allocation, public education, and more, so it is important for MFIRS reports to be as detailed as possible. Here are some coding tips for heating fires and examples of how to code specific types of incidents.

Fuel Burner/Boiler Malfunction

Incident type = 116 – fuel burner/boiler malfunction, fire confined.

Basic module only if fire is confined, there are no injuries, and dollar loss is <\$5,000.

Chimney or Flue Fire

Incident type = 114 – chimney or flue fire, contained to chimney or flue.

Basic module only if fire is confined, there are no injuries, and dollar loss is <\$5,000.

Unconfined Heating Structure Fires

Basic module, fire module, and structure fire module.

Incident type = 111-112 structure fire, or 120-123 mobile home.

Heat source = 10-13 – heat from operating equipment or 43 – hot ember/ash.

Type of material first ignited = 11-12 – gas, 25 – oil/kerosene, 34 – creosote, 56 – coal.

Equipment Involved in Ignition = 120-152 – heating equipment.

Equipment Power Source Required.

Equipment Portability Required = 1 – portable or 2 – stationary.



Coding Examples

Portable electrical heater ignites bedding in an apartment building

Incident type = 111 - building fire.

Property use = 429 – multifamily housing.

Heat source = 12 – radiated heat from equipment.

Item first ignited = 32 – bedding.

Type of material first ignited = 71 – fabric.

Equipment involved in ignition = 141 – space heater.

Equipment power source = 12 – electric.

Equipment portability = 1 – portable.

Sparks from a wood burning stove ignite the carpeting.

Incident type = 111 – building fire.

Heat source = 43 – hot ember/ash.

Item first ignited = 14 – rug.

Type of material first ignited = 70 – fabric.

Equipment involved in ignition = 123 – stove.

Equipment power source = 41 – wood.

Equipment portability = 2 – stationary.

Kerosene heater ignites an interior wall in a mobile home (used as a fixed structure).

Incident type = 121 – mobile home.

Heat source = 12 – radiated heat from equipment.

Item first ignited = 15 – interior wall covering.

Type of material first ignited = 65 – particle board.

Equipment involved in ignition = 141 – space heater.

Equipment power source = 33 – kerosene.

Equipment portability = 1 – portable.

Chimney fire in 1-family home.

Incident type = 111 – building fire.

Heat source = 11 – flame from operating equipment (fireplace).

Item first ignited = 95 – chimney film or residue.

Type of material first ignited = 34 – creosote.

Equipment involved = 126 – brick chimney.

Equipment power source = 41 – wood.

Equipment portability = 2 – stationary.



Fire Prevention Week™ is October 3-9, 2021

Fire Prevention Week 2021 is October 3-9 and this year's theme is "Learn the Sounds of Fire Safety!"™ The theme focuses on educating everyone about the different sounds that smoke and carbon monoxide alarms make. Knowing what to do when an alarm sounds keeps everyone safe. When an alarm makes noises – a beeping sound or a chirping sound – you must take action. The campaign also teaches about devices for alerting deaf or hard of hearing people to fire and smoke.

Use the logo above and other materials for teaching fire prevention during Fire Prevention Week. Visit www.NFPA.org for information and materials.

The Department of Fire Services also has many resources for teaching about smoke and CO alarms. Our

public education toolkit on smoke alarms includes:

- A logo in print and online sizes;
- Draft text for DPW roadside message signs;
- An op-ed piece for submission to the local newspaper
- A customizable press release (2021 version coming soon);
- Links to the TV public service announcements (English and Spanish) that can be used on local cable access.
- An educational handout on smoke alarms.

Visit www.mass.gov/info-details/smoke-alarm-public-awareness-campaign-toolkit to download materials, or search for *Smoke and Carbon Monoxide Alarms* on the DFS website for more information and resources.

DFS and MassDEP Issue PFAS Advisory

Immediately Cease Using Aqueous Film Forming Foams Manufactured Prior to 2003



The Massachusetts Department of Environmental Protection (MassDEP) and Department of Fire Services (DFS) this summer issued an advisory on the use of firefighting foams that contain Poly Fluorinated Alkyl Substances, commonly known as PFAS, which can be harmful even at low concentrations to firefighters, their communities, and public health.

MassDEP and DFS are advising fire departments to immediately cease using Aqueous Film Forming Foams (AFFF) manufactured prior to 2003 and reserve the use of post-2003 AFFF only for situations in which life safety is at risk and it is absolutely tactically necessary. If PFAS foam is used under these circumstances, fire departments are

asked to make a courtesy notification to MassDEP Emergency Response 24/7 at 888-304-1133.

MassDEP and DFS are also advising fire departments to replace their current PFAS foams with Fluorine Free Foam (3F), which does not contain PFAS and may be used without restriction.

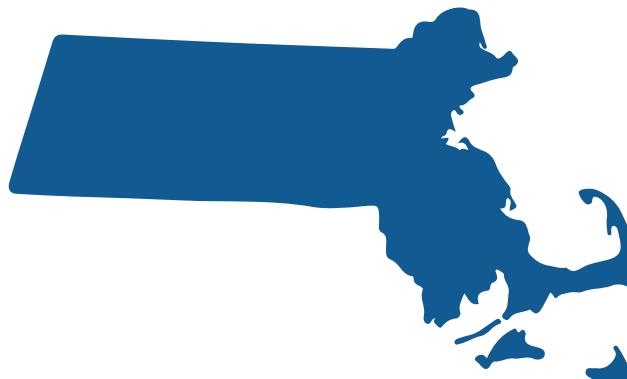
With the assistance of DFS, MassDEP has collected 206,415 pounds of pre-2003 PFAS firefighting foam from local departments to date. MassDEP will continue to fund the takeback and disposal of pre-2003 foam, and is working with DFS and the Fire Chiefs Association of Massachusetts to seek funding that would include current PFAS foam in the program. To read the full advisory, visit www.mass.gov/doc/pfas-foam-advisory/download.



Massachusetts Fires in 2020

29,461 Fires - Up 16% From 2019

44 Civilian Deaths
0 Fire Service Deaths
245 Civilian Injuries
594 Fire Service Injuries
\$266 Million in Property Damage
854 Reported Arsons



Structure Fires

15,873 Fires - Down 2%
37 Civilian Deaths
0 Fire Service Deaths
219 Civilian Injuries
528 Fire Service Injuries
\$240.6 Million in Property Damage
181 Arsons Reported



Motor Vehicle Fires

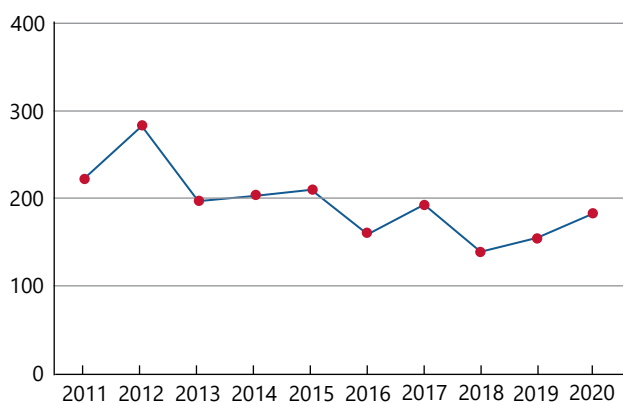
2,208 Fires - Down 7%
4 Civilian Deaths
8 Civilian Injuries
22 Fire Service Injuries
\$20.6 Million in Property Damage
64 Arsons Reported



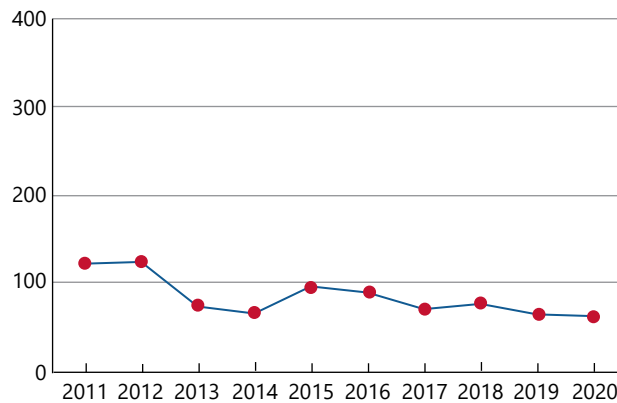
Other Fires

11,380 Fires - Up 69%
3 Civilian Deaths
18 Civilian Injuries
44 Fire Service Injuries
\$4.7 Million in Property Damage
609 Arsons Reported

Structure Arson by Year



Motor Vehicle Arson by Year



Structure arson increased by 18% and motor vehicle arson decreased 3% from 2019 to 2020. Since 1986, motor vehicle arson has fallen 98.7%. For statistical purposes, a fire is considered arson when the cause is listed as intentional and age is not a factor or the person involved was over 18. This definition excludes undetermined and youth-set fires.



Department of Fire Services

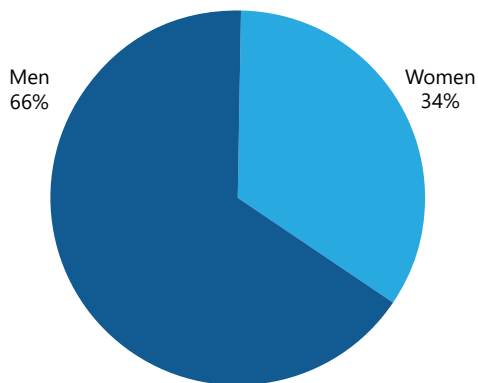
Division of Fire Safety • www.mass.gov/dfs • (978) 567-3380

7/21

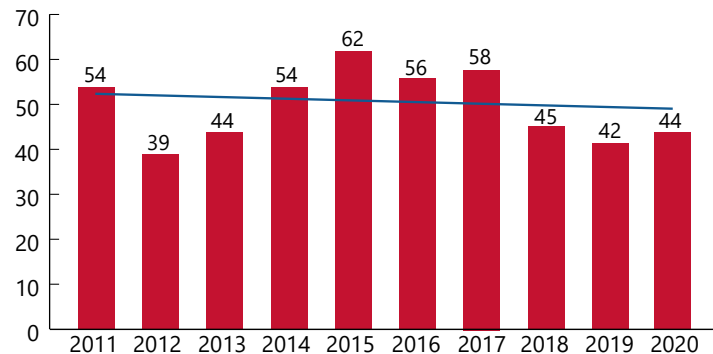
Massachusetts Fires in 2020

Civilian Fire Deaths

There were NO child fire deaths in 2020.

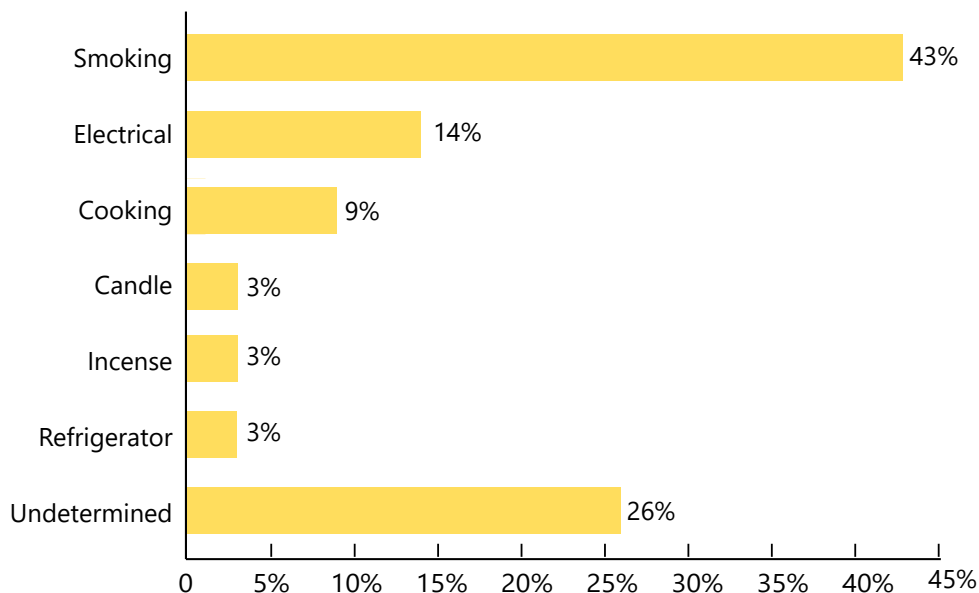


Fire Deaths by Year



- 42 fatal fires killed 44 civilians - 29 men and 15 women.
- **There were no child fire deaths in 2020.**
- No firefighters died in fire-related incidents.
- Forty-one percent (41%) of fatal fire victims were older adults (over 65).
- Fire deaths increased by 5% from the 42 in 2019.
- Eighty percent (80%) of the civilian fire victims died in their homes.
- In 2020, smoking fires were the leading cause of residential fire deaths; smoking fires caused 15, or 43% of home fire deaths.
- One civilian died in an explosion.

Causes of Residential Structure Fire Deaths



Test your smoke
alarm and plan
your escape!
Fire doesn't wait!



Department of Fire Services

Division of Fire Safety • www.mass.gov/dfs • (978) 567-3380

8/20

Fire Investigation News

Arson Fires

Six Youths Charged with Lynn Arson

On April 30, 2021, six juveniles were criminally summonsed for allegedly setting fires at the former Marshall Middle School in Lynn. Fires were set in the vacant school at 19 Porter Street on October 26 and 27, 2020. The investigative team used a Snapchat video to identify and eventually interview the suspects.

Two juveniles were charged with burning a building and breaking and entering to commit a felony for the fires on October 26. One juvenile was charged with burning a building and breaking and entering to commit a felony for the fires on October 27. Three juveniles were charged with burning a building and breaking and entering to commit a felony for the fires set on both days.

There were several points of origin on multiple stories of the school, with the most severe damage in the old gym. Large piles of combustibles strewn throughout the building were ignited by open flames.

The fires were jointly investigated by the Lynn Fire Department and State Police assigned to the Fire & Explosion Investigation Unit.

Arsonist Cut Off GPS Bracelet After Setting Fire

Less than a week after pleading guilty to assault and kidnapping charges, a Brockton man allegedly violated a restraining order and set fire to the same victim's dwelling according to Plymouth County District Attorney Timothy J. Cruz.

Laroy Cox, 48, of Brockton, was arrested on June 9, 2021 on three counts of attempted murder, and one count each of arson of a dwelling, malicious destruction of property under \$1,200, and violation of a restraining order for setting fire to the Brockton apartment of the victim on May 21, 2021. There was an active restraining order against him at the time.

Cox pleaded guilty to assault and battery, assault and battery by means of a dangerous weapon (habitual offender), larceny under \$1,200, kidnapping (habitual offender), and witness intimidation on May 17, 2021 in Plymouth Superior Court. He served seven months in the House of Correction and was sentenced to three years of probation with the conditions that he stay away from the victim, remain drug-free and submit to random testing, attend a batterer's program, and wear a GPS monitoring bracelet.

Probation officials tracked Cox to the site and time of the fire because he was wearing a GPS monitoring bracelet. It is believed that Cox cut off the bracelet AFTER setting the fire. The fire was jointly investigated by Brockton

Police, Brockton Fire and Massachusetts State Police assigned to the Office of the State Fire Marshal.

Domestic Violence Arson in Peabody

Saulo Santa, age 21, of Peabody, was charged with burning a dwelling in the July 13, 2021 fire at 3 Highland Park in Peabody. He allegedly lit a sneaker and clothing on a coat rack on fire in the hallway of the 2-family home after a domestic dispute. He also burned a wall outside the doorway to an apartment. The fire was jointly investigated by the Peabody Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal. Peabody police located and arrested Santa later the same day.

Smoking Fires

Smoking was the cause or suspected cause in five of the six fatal fires in May 2021.

Discarded Smoking Material Caused Fatal Bondsville Fire - Working Smoke Alarms Alerted Neighbors

The cause of the May 24, 2021 fatal fire at 3010-12 Maple Street in Bondsville was the improper disposal of smoking materials. The fire took the life of 59-year-old Laurie Partlow, the sole resident of the 3010 side of the duplex. One person on the 3012 side of the duplex escaped without injury.

The fire was reported by a resident of the 3012 side who heard the smoke alarms sounding next door. The fire started on the outside front stairs where the victim frequently smoked. There were leaves, dry mulch, and dry potting soil in the area along with evidence of smoking materials.

The fire was jointly investigated by the Bondsville Fire Department, Palmer Police Department, and State Police assigned to both the Office of the State Fire Marshal and the Office of the Hampden District Attorney.

Smoking Materials Discarded in Mulch

The June 22, 2021 3-alarm fire on Bond Street in Somerville was caused by smoking materials discarded into mulch near the front porch. The fire was jointly investigated by Somerville fire investigators and State Police detectives assigned to the State Fire Marshal's Office.

Busy Spring in Williamstown/North Adams Area

The northwest corner of the state had several major fires this spring. The East Mountain fire started in Williamstown on May 14, 2021 and spread throughout the State Forest. Nearly 1000 acres burned in what is reported to be the largest forest fire in the state since the 1999 Tekoa Mountain fire that claimed the life of Russell Fire Deputy John E. Murphy. The East Mountain fire took 14 days to bring under control during the very dry month of May.

Continued on next page

Forest fires take a lot of manpower to contain and the work happens in difficult, rugged terrain. The State Fire Warden at the Department of Conservation and Recreation's (DCR) Bureau of Forest Fire Control led the efforts.

Gas Vapors Caused Accidental Junkyard Fire

North Adams abuts the East Mountain State Forest. On May 25, 2021, just as the East Mountain fire was winding down, there was a large junk yard fire at 80 State Street in North Adams. The DFS Hazardous Materials Team provided fireground air monitoring of toxic items burning in the fire. There was a thick black plume of smoke that could be seen for miles. Residents and occupants of businesses including the Massachusetts College of Art were told to shelter in place. Many businesses closed for the day. The fire took several days to extinguish completely. There were no injuries.

The cause of the fire was heavy equipment being used on a car that had gasoline in the tank. The gasoline vapors ignited. The operation that caused the fire was a daily routine at the junk yard.

The fire was jointly investigated by the North Adams Fire and Police Departments and State Police assigned to the Office of the State Fire Marshal.

Electrical Fires

Electrical Fire Underscores Numerous Safety Points

The cause of the April 13, 2021 fire at 123 Weatherbee Drive in Westwood was multiple overloaded outlets. The owner was using an RV camper in her driveway to run a pet grooming business.

The scene exam revealed several hundred feet of extension cords (various gauges) plugged into multiple power strips, plugged into other power strips, running various grooming devices, portable lights, and heaters. Many of the extension cords had been cut and sliced together. Others were powered and coiled together. One extension cord ran from the interior of the RV into a window on the lower level of the residence. This is where the fire started.

When the heater in the RV abruptly shut off, the owner entered the house and saw smoke in the lower level of the split-level home.

One dog was rescued, one dog died, and the owner was taken to the hospital for minor injuries.

Fatal Saugus Fire Was Electrical

The July 10, 2021 fatal fire at 16 Richard Street in Saugus was accidental. The fire was electrical, but investigators could

not identify the specific cause given the damage. The fire claimed the lives of Rosemary Naples, 80, and Louis Gallo, 78. They were brother and sister, and lived in the home.

The fire began in an interior attached porch at the front of the building, where numerous electrical and extension cords were observed in the debris. There were no smoke or CO alarms found in the home.

The fire was jointly investigated by the Saugus Fire Department, the State Police Fire & Explosion Investigation Unit assigned to the Office of the State Fire Marshal, and State Police assigned to the Essex District Attorney's office.

Chemical Processing Fire

The June 11, 2021 fire at 9 Opportunity Way in Newburyport was accidental. The building houses SEQENS/PCI Synthesis, a chemical processing facility. Fortunately, no one was injured. The fire started on the floor under a centrifuge. A spark ignited toluene, a solvent used in chemical processing. The Newburyport Fire and Police departments and State Police assigned to the Office of the State Fire Marshal jointly investigated the fire. A state Hazardous Materials (HazMat) Response Team assisted. Fire investigators and a state HazMat team also responded to a February 13, 2020 fire and explosion at this facility.

So Many Electrical Hazards

The Westwood fire underscores many electrical safety issues:

- Extension cords are for temporary use only. They should never be connected (daisy-chained) to additional cords or power strips.
- Heat-generating (heaters and dryers) and heavy-duty appliances (air conditioners and refrigerators) should be plugged directly into a wall outlet.
- Use only one appliance at a time with extension cords.
- Overloading extension cords, power strips or outlets has caused many fires.
- Coiling cords can create additional heat instead of allowing the heat to dissipate.
- Cutting and splicing cords is dangerous.

Visit www.mass.gov/dfs and search for electrical fire safety for more information and resources to use in public education efforts.

Since the terrible Danversport explosion of 2006, the State Fire Code has adopted the provisions of the NFPA 1 for chemical processing. The Danversport explosion involved heating solvents, including toluene, in an ink manufacturing plant. The explosion damaged 90 homes in a dense residential neighborhood. Many people were shaken off their beds when the 2:45 a.m. explosion shattered glass in windows throughout the area. There were minor injuries in the explosion, but fortunately no serious injuries or fatalities.

There have been other significant explosions at chemical processing plants in Massachusetts including the 2011 Bostix explosion in Middleton and the fatal 2017 Dow Chemical plant explosion in North Andover.

Fatal Explosion Caused by Oxygen Canister

The Office of the State Fire Marshal has been tracking fires involving home oxygen for nearly two decades. Most of them start when a person who uses medical oxygen at home smokes or uses a candle or wood stove. This Springfield explosion happened differently.

On June 22, 2021, an explosion around Foster and Knox Streets in Springfield is believed to have been caused by a man attempting to remove the valve from a home oxygen bottle. The investigation by members of the Springfield Fire Department, Springfield Police Department, and State Police assigned to the State Fire Marshal's office suggests that the deceased was manipulating the bottle's valve in an attempt to remove it. When those efforts were unsuccessful, he began to hit the bottle against the ground. The pressurized contents exploded, causing fatal injuries. The victim may have been collecting scrap metal for sale.

Grill Fires

A gas grill on the back deck caused the July 4, 2021 fire on Chestnut Hill Road in Millville. Three people were displaced. Residents were alerted by working smoke alarms, called 9-1-1, and made efforts to put out the fire.

The Millville Fire Department responded and extinguished the fire, which had climbed the side of the house and spread to the attic interior. The grill, positioned against the house, had been used earlier in the evening. The Millville Fire Department and State Police from the Fire & Explosion Investigation Unit assigned to the State Fire Marshal's office jointly investigated the fire.

This is just one of the many gas grill fires that happened over the summer. In the past five years,

In the past five years, Massachusetts fire departments responded to more than 425 fires involving grills, hibachis, and barbecues which caused 15 civilian injuries, six firefighter injuries, and \$4 million in property damage.

Massachusetts fire departments responded to more than 425 fires involving grills, hibachis, and barbecues which caused 15 civilian injuries, six firefighter injuries, and \$4 million in property damage.

Hot Tub Fire Accidental

The cause of the June 7, 2021 fire at 33 West Street in Northampton (East Haven Hot Tub and Spa Company) was accidental. Firefighters returning from another call spotted the fire. Damage was estimated at \$500,000. There were no injuries.

The fire started in a closet, where mechanical equipment connected to the rooftop hot tubs malfunctioned. Northampton detectives and State Police assigned to the Office of the State Fire Marshal jointly investigated the fire.

7-alarm Revere Fire Affects 3 Buildings

The June 29, 2021 7-alarm fire at 25 Hyde Street in Revere was likely accidental. The fire spread to two adjacent multi-family homes at 27 and 29 Hyde Street. At least 15 people were displaced.

"We are extremely fortunate that no residents were injured in this fast-moving fire," Revere Fire Chief Christopher Bright said. "The day's severe heat conditions and heavy smoke created a challenging situation and resulted in five firefighters being transported to area hospitals for dehydration and other heat related injuries, but things could have been much worse if the fire developed while people were sleeping."

Building occupants heard smoke alarms, smelled smoke, and reported the fire quickly. This allowed a rapid response by Revere firefighters that was bolstered by mutual aid from surrounding communities. The assistance made a big difference in Tuesday's sweltering heat."

The fire is being jointly investigated by the Revere Fire Department and State troopers assigned to the Office of the State Fire Marshal. It is currently considered accidental with a possible electrical cause, and the investigation is ongoing.

Pride in Performance Awards

Employee Recognition Ceremonies Virtual in 2020

The COVID-19 pandemic required many ceremonies to be postponed or reimagined, including the annual Department of Fire Services Employee Recognition Ceremony. This year, instead of coming together to recognize Pride in Performance award winners and present Employee Length of Service pins, we created a virtual ceremony. You can view it on the DFS YouTube channel at: www.youtube.com/watch?v=cyfCpj1SabA.

In the ceremony, State Fire Marshal Peter Ostroskey acknowledged the many ways DFS staff stepped up to meet the challenges of the pandemic including staffing COVID-19 testing call centers, distributing personal protective equipment (PPE) to key sites, and reinventing ways of doing everyday business and teaching in order to continue to serve our customers.

Award Winners

The state honors full-time employees with the Pride in Performance Award. Recipients of this year's award were: the members of the Public Safety COVID Testing and Dedicated Call Center Group and Dennis Ball, MFA Recruit Coordinator.

DFS is unique in the number of contract employees it has, so DFS also presents an award to contractors. The DFS Citation for Outstanding Performance for Contract Employees went to two groups: the Administrative Compliance Officers (Code Compliance Desk) and MFA Recruit Coordinators.

Public Safety COVID Testing Site and Dedicated Call Center Group

Full-time DFS staff helped set up and staff two of the public safety COVID testing sites. These sites were supported with a dedicated call center that operated seven days a week. This call center was staffed by DFS employees who scheduled over 15,000 testing appointments between April and June 2020. Staff honored for this work include: Julie Bergeron, JoAnne Caruso, Kathleen Ruderman, Vicky Giguere, Barbara Callanan, Christina Rodriguez, Justine Potter, Samantha Turco, Megan Kasaras, Christine Dansereau, Heather Antell, Derryl Dion, Susan Mondy Sykes, Korina Senior, Susan Neaz, Christine Sullivan, Maribel Fournier, Kerry Weihs, Abby Baker, Loretta Anderson, Alanna Malatos, David DiGregorio, and Timothy Gallagher. DFS also honors the following staff members (who did not have two years of service at the time of the nomination): Aliceson LeMar, Jeffrey Ortiz, Michael Harris, Kyla MacKenzie, and Zachary Denny.



State Fire Marshal Ostroskey was one of several speakers honoring award winners in the virtual ceremony.

David DiGregorio and Timothy Gallagher, who lead the HazMat Division, were tapped to help set up public safety COVID testing sites around the state. Establishing protocols for the safety of those being tested, and for staff conducting the testing, drew heavily on their expertise. They were also instrumental in assisting the Department of Correction (DOC) to perform testing for staff and inmates at state facilities.

Dennis Ball – MFA Recruit Coordinator

The need to continue training new career and call/volunteer firefighters during the pandemic was critically important. Accomplishing this while keeping students, instructors, and staff safe was an enormous task. Many people participated. Scheduling classes that limited physical contact without affecting the quality of training presented a major challenge but Dennis Ball stepped up and led the creation of the complex schedule of virtual classroom training and in-person practical training. Students at all three campuses took virtual classroom training together. Practical training (with the exception of gas school) was scheduled for each campus. The schedule Dennis and his team created allowed up to six recruit classes to train simultaneously. Call/Volunteer Recruit training continued on nights and weekends. Dennis, a full-time employee, led the MFA team but the project would not have succeeded without the experience, hard work and innovative thinking of the Recruit Program assistant coordinators, who are contract employees. They include: John Gelinis, Brian Whitney, James Hagerty, Richard Goddard, Mark Cogswell, Robert Escott, Sean White, Michael Moriarty, Peter Jerusik, David Ryan, Robert Foley, and Christopher Rizza.

Continued on next page

2021 License Examination Schedule

Fire Safety Division

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, hood cleaning, special hazard systems, portable fire extinguishers, marine fueling facilities and above ground tanks. Register for exams and see detailed information at www.mass.gov/dfs. Search for *DFS Licensing*. For questions, contact the Licensing Desk at 978-567-3700 or at dfs.licensing@state.ma.us.

Boiler and Pressure Vessel Program

The Boiler and Pressure Vessel Program offers monthly license exams for oil burner technician and all classes of fireman and engineer licenses. Register for exams and see detailed information at www.mass.gov/dfs. Search for *BPV Exams*. For questions contact the Boiler & Pressure Vessel Program at (978) 567-3780 or at BPV.Exams@MassMail.State.MA.US.

Licensing Status

To see the licensing status of an individual or company, visit the DFS License Look Up at <http://elicense.chs.state.ma.us/Verification/> or go to www.mass.gov/dfs and search for *DFS licensing*.

Examination Schedule	Examination Dates	Deadlines for Applications
FSD Exams	Exams start at 10:00 a.m.	
Fire Suppression Commercial Hood Cleaning	November 10, 2021	October 15, 2021
Cannon/Mortar, Fireworks, Special Effects, Blasting, Blasting R&D	October 20, 2021 December 8, 2021	September 24, 2021 November 12, 2021
BPV Exams	Exams start at 9:00 a.m.	
Oil Burner, Fireman & Engineer (all classes)	October 27, 2021 November 24, 2021 December 29, 2021	September 24, 2021 October 29, 2021 November 26, 2021

Pride in Performance Awards, *continued from previous page*

Administrative Compliance Officers (Code Compliance Desk)

Administrative Code Compliance Officers Lawrence Hodgdon, Richard Maimone, and Patrick Ripley fielded countless phone and e-mail requests for information about the State Fire Code throughout the pandemic. Despite working exclusively from home, and without access to the hundreds of reference documents and books in the office, these officers provided exceptional customer service. Calls and e-mails were always answered promptly. Division Director Paul Vigneau received numerous compliments from fire departments, regulated industries, and residents about the prompt and professional service the officers provided. The ability of Hodgdon, Maimone, and Ripley to address the needs of callers eased the burden on field code

compliance officers, who faced a myriad of new challenges during the pandemic.

Congratulations to all DFS staff and contract employee award winners for their extraordinary efforts during these unprecedented times.

Length of Service Awards

DFS employees who achieved length of service milestones were honored in the virtual ceremony. Division directors read their names. These awards begin at 5 years and are given at each 5-year increment thereafter.

Division directors also spoke about the contributions of their longest-serving employees. Richard Goddard, an MFA assistant coordinator and Francis King, a print shop employee, were both recognized for 45 years of service.

Massachusetts Firefighting Academy Graduations



Class #292



Class #293



Class #BW11



Class #S23

Career Recruit Firefighter Training

In the 50-day Career Recruit Firefighter Training Program, students receive classroom training in all basic firefighter skills. They practice first under non-fire conditions and then during controlled fire conditions. To graduate, students must demonstrate proficiency in life safety, search and rescue, ladder operations, water supply, pump operation, and fire attack. Fire attack operations range from mailbox fires to multiple-floor or multiple-room structural fires. Upon successful completion of the Career Recruit Program, all students have met the 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. Training is held at the Stow headquarters of DFS, the Springfield campus, and the new Bridgewater campus.

Training Safely During the Pandemic

In response to the pandemic, the 10-week curriculum was reorganized to take advantage of online learning technology while ensuring plenty of practical skill experience on campus with instructors. Students alternated between the virtual classroom for two weeks, on campus for practical training (using special safeguards and social distancing) for four weeks, back to the virtual classroom for a week, returning to campus for two weeks, and finishing the final week in the virtual classroom. A new matrix started with Class 291 and Class BW10. Students were on campus Monday through Thursday for short classroom lessons but mostly practicing and mastering new hands-on skills in the drill yard. On Fridays, students studied in the virtual classroom, where new topics were covered in depth.

Class #292

On June 11, 2021, members of Career Recruit Firefighter Class #292 graduated. The 19 graduates represent the 12 fire departments of Beverly, Burlington, Danvers, Haverhill, Lynnfield, Manchester, Natick, Northborough, Orleans, Saugus, Upton, and Winchester.

Class #S23

On July 22, 2021, members of Career Recruit Firefighter Class #S23 graduated. The 21 graduates represent the 10 fire departments of Amherst, Chicopee, East Longmeadow, Gardner, Holyoke, Monson, Northampton, Ware, Westborough, and Westfield.

Class #293

On July 23, 2021, members of Career Recruit Firefighter Class #293 graduated. The 23 graduates represent the 17 fire departments of Auburn, Braintree, Charlton, Clinton, Devens, Gloucester, Hopkinton, Middleton, Nantucket, Newton, Norfolk, North Andover, Northborough, Plymouth, Reading, Tewksbury, and Weston.

Class #BW11

On July 23, 2021, members of Career Recruit Firefighter Class #BW11 graduated. The 17 graduates represent the nine fire departments of Bellingham, Centerville-Osterville-Marstons Mills, Duxbury, Mansfield, Norton, Norwell, Sandwich, Scituate, and Wellesley.

Call/Volunteer Recruit Firefighting 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 240 hours of training. Bringing the training closer to the firefighters often means more firefighters can participate. Pre-pandemic, the program used an online eBlended format that had students doing more work outside of class and taking quizzes online. During the pandemic, students did more studying in the virtual classroom and engaged in practical hands-on training in smaller groups. This allowed 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 #91

Members of Call/Volunteer Recruit Firefighter Class #91 graduated on June 29, 2021 at the Department of Fire Services' Stow campus. The 40 graduates represent the 23 fire departments of Ayer, Boxborough, Boylston, Carlisle, Dunstable, Groton, Groveland, Hopedale, Leicester, Lincoln, Lunenburg, Merrimac, Millville, Plympton, Shirley, Stow, Sutton, Templeton, Topsfield, Tyngsborough, West Brookfield, and West Newbury. One student was a civilian employee of the Massachusetts Firefighting Academy. Eleven of the 40 are women, representing more than a quarter of the graduates and reflecting the largest number in any Recruit Training Class since the MFA was created in 1971.



Class #91



Class #92

Class #92

Members of Call/Volunteer Recruit Firefighter Class #92 graduated on June 29, 2021 at the Department of Fire Services' Stow campus. The 16 graduates represent the six fire departments of Hanover, Lakeville, Marion, Mattapoisett, Swansea and Westport.

Today's firefighters do far more than fight fires. They respond to all types of hazards and emergencies. They are the first called to respond to chemical and environmental emergencies, ranging from the suspected presence of carbon monoxide to fentanyl overdoses or a gas leak. They may be called to rescue people who have fallen through ice or are trapped in vehicle crashes, and much more.



Free Skin Cancer Screenings Resume

After a 16-month hiatus due to COVID-19 precautions, July marked the return of the Massachusetts Fire-fighting Academy (MFA) skin cancer screening program. Christine Kannler, MD, and Program Coordinator Abby Baker have resumed traveling around the state to conduct screenings on firefighters and to recommend follow-ups when necessary.

Dr. Kannler is a dermatologist and Mohs micrographic surgeon specializing in skin cancer. She started the screening program after her brother, Chelsea firefighter and MFA instructor Peter Kannler, passed away from occupational cancer. She put her expertise to use for the firefighting community and has independently conducted skin cancer screenings for hundreds of firefighters. In 2018, she contacted the MFA in hopes of reaching more communities. She teamed up with Program Coordinator Abby Baker, who handles scheduling, administration, and logistics. In addition to requested screenings, Dr. Kannler screens all recruits who attend the *Taking Action Against Cancer in the Fire Service* lecture.



Dr. Kannler and Abby Baker visited the Bedford Fire Department in July as the MFA's skin cancer screening program resumed.

Dr. Kannler uses the American Academy of Dermatology's SPOTme® program in the screenings. She conducts the screenings on her own time. Together, Dr. Kannler and Abby have delivered over 70 screenings for more than 1,800 firefighters in 49 communities, with plans to continue visiting departments across the Commonwealth. Early cancer detection can be lifesaving, and in the program's first weeks back in action, more than 19% of the screening subjects were identified as needing follow-up care. Dr. Kannler and Abby Baker are grateful for the opportunity to make a difference – and to meet some great people along the way.

If your department wants to host a skin cancer screening, fill out the Course Request Form at www.mass.gov/forms/mfa-course-request-form and enter "SCA" for the requested course number. For questions about this or any of DFS's occupational cancer programs, email dfs.cancerscreening@mass.gov.