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Governor
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State Fire Marshal

Spring 2015

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Ohio Fire Academy Announces Partnership With Owens Community College

The Ohio Fire Academy (OFA) is expanding! Recently, Chief Deputy Jeff Leaming and Dr. Mike Bower, president of Owens Community College, announced a partnership to bring OFA's classes to the school's Emergency Preparedness Center in Walbridge. Through this agreement, Owens will serve as a northwest Ohio campus for OFA.

OFA instructors will conduct classes at the college, and Ohio's fire service will benefit from the many resources the Emergency Preparedness Center has to offer. The center boasts a mock city, complete with a gas station, bank and homes, a Boeing 727 airplane, a search and rescue building collapse simulator and a training pond, among other things. In addition, several OFA trailers will be available for use during courses.

"I think this is just another way to make training accessible for firefighters," said Chief Deputy Leaming. "We'll be able to reach first responders in the northwest region of the state much easier through this partnership."

While firefighters in the northwest region may be closest to Owens, they're not the only ones who can take advantage of the training opportunities. Anyone who would like to take a course can apply and train at the center.

"Owens Community College has always been at the forefront in partnering with area first responders," said Mike Bower, Ph.D., president of Owens. "We are proud to be designated as a regional training site for the Ohio Fire Academy. This exciting partnership will bring many new training opportunities not only to Owens but to the entire northwest region of Ohio."

OFA courses will begin at Owens Community College in the coming months.



Chief Deputy Leaming is joined by local fire department and Owens Community College representatives as he announces OFA's partnership with Owens.

A Message from...State Fire Marshal Larry Flowers



As we head out of the winter months and the snowy and cold conditions into the warmer weather of the Spring, we may be tempted to slow down our efforts regarding fire safety and prevention. However, I argue that this is a great time to ramp up outreach. The State Fire Marshal's office is working on a public outreach campaign to address fire safety and prevention that we hope to make a year round commitment, rather than just targeting the winter months when fires may be more likely.

We hope to have the help of local fire departments and community groups to get two of the most important safety messages out there: having working smoke alarms and an escape plan with two ways out. It may seem like common sense, but these two factors are still missing in many fatal fires. So, I challenge firefighters and community leaders to get out into their areas and talk with residents about these two important, potentially lifesaving tips. Teach them to

have working smoke alarms on every level of their home and outside bedrooms, to test them monthly and to change the batteries when the clocks change in the Spring and Fall. Fire escape plans are also important. Encourage constituents to have at least two ways out of their homes and to practice those routes several times a year. And don't forget to let everyone know that if they do have a fire, they need to get out and stay out.

Those messages are important reactionary pieces to fire safety, but we would also like to work on the prevention side of things. People should be aware of the possible dangers of alternative heating, unattended cooking and smoking. While the space or kerosene heaters may be put away until next winter, it's still a good idea let people know to keep three feet between anything combustible and the heater, to turn off those heaters before going to bed and to never overload an electrical outlet with these devices. While you're at it, make sure they know how important it is to keep kids and pets away from heaters or anything cooking and to always keep an eye on the stove when it's on. Finally, if a member of the household smokes, ask them to commit to making sure their cigarette, cigar, etc. is out before leaving it. Ask them to never smoke when tired or in bed. These proactive measures to fire safety can eliminate the start of a fire altogether and decrease destruction.

We want to create safer communities all across Ohio. Our office hopes to assist communities in any way necessary to help with this challenge. By taking a little extra time this year to promote these messages, we can make a difference in the lives of Ohioans. We commit to fire prevention and education. Will you?

Looking for some training opportunities? Look no further than the Ohio Fire Academy!

Courses available on campus in Reynoldsburg, through Academy Close to Home or at our regional campus at Owens Community College!

Call 1-888-726-7731 or visit https://www.comapps.ohio.gov/sfm/fire_apps/fmac/



Do You Know The Changes Coming To School Safety Drills?

On December 19, 2014, Governor John R. Kasich signed House Bill 178, of the 130th General Assembly, into law. The legislation has an effective date of March 23, 2015. Among other things, this legislation addresses school safety drills and changes current requirements for such drills. The pertinent provisions of the Ohio Revised Code (“Rev. Code”) regarding school drills are found in R.C. § 3737.73. Essentially, the provisions of this code section break school evacuation drills down into two categories: “drills or rapid dismissals” and “school safety drills.”

Neither term is defined in the Rev. Code, but generally it is helpful to distinguish them as follows: **Drills or rapid dismissals** is a broader and more general category of drills that contemplates the education of students in the most effective means of evacuating from school buildings in response to a sudden emergency. General drills or rapid dismissals contemplate any emergency. **School safety drills**, on the other hand, are a subcategory within the general drills or rapid dismissals category that specifically address evacuation when a sudden emergency is caused by an act of violence – such as an act of terrorism or a person possessing a deadly weapon or dangerous ordnance. Therefore, drills must be conducted and students must be instructed in how to proceed regarding a general emergency and in addition must be instructed in how to proceed if the emergency is specifically in response to an act of violence.



In short, Ohio law requires that schools that have a smoke detector or a sprinkler system in all classroom buildings must conduct six drills or rapid dismissals (traditionally ‘emergency evacuation drills’) during each school year. Schools that do **not** have a smoke detector or a sprinkler system in all classroom buildings must conduct nine drills or rapid dismissals during each school year. In conjunction with these drills or rapid dismissals, students must also be provided instruction regarding safety precautions to be taken in response to a tornado alert or warning. The first drills or rapid dismissal of a school year must be conducted within 10 days of the beginning of classes. As long as drills are conducted within the parameters set forth in the Rev. Code and the Ohio Fire Code, the principal or person in charge may set the exact date and time of such drills.

In addition to the required drills or rapid dismissals, schools must also conduct three schools safety drills and one theoretical school safety drill during the year. These drills must be conducted in conjunction with appropriate law enforcement officials and law enforcement must be given 72 hours advanced written notice of such drills. If a school is required to conduct nine drills or rapid dismissals during the school year, the drills or rapid dismissals may be combined with the school safety drills. There is no such provision allowing a school to combine the drills if the school is only required to conduct six drills or rapid dismissals.

Regardless of the number of drills required, all schools are required to conduct either one drill or rapid dismissal or one school safety drill during each month of the school year.

Complete analysis of all provisions of the new legislation regarding school drills will be available at www.com.state.oh.us/fire.

Don't Forget To Be Safe This Spring And Summer!

We may have questioned if we'd ever see temperatures above freezing during this past winter, but spring is upon us with summer not too far behind. All of us are probably anxious to get outside and enjoy the great outdoors, but it's also important to remember fire safety. Being prepared can make a world of difference when it comes to summer safety.

Here are some tips as you and your loved ones enjoy all that summer has to offer:

Grilling Safety:

- All propane and charcoal barbecue grills must be used outdoors to avoid fire hazards and toxic gases such as carbon monoxide.
- Before using a grill, check the connection between the propane tank and the fuel line.
- Be careful when using lighter fluid. Do not add fluid to an already lit fire - the flame can flashback into the container and explode.
- Keep grills clear from overhanging branches, house siding and deck edges and railings. Also, position the grill far from foot traffic.
- Wear well-fitted clothing when barbecuing. Loose articles and flammable material, such as nylon, should be avoided.
- Supervise children around outdoor grills. Announcing a three-foot 'safety zone' around the grill is an effective way to keep both children and pets at a distance.
- Keep all matches and lighters away from children. Teach your children to report any loose matches or lighters to an adult immediately.
- Dispose of hot coals properly - douse all of them, not just the red ones, with plenty of water and stir them to ensure that the fire is out. Never place them in plastic, paper or wooden containers.

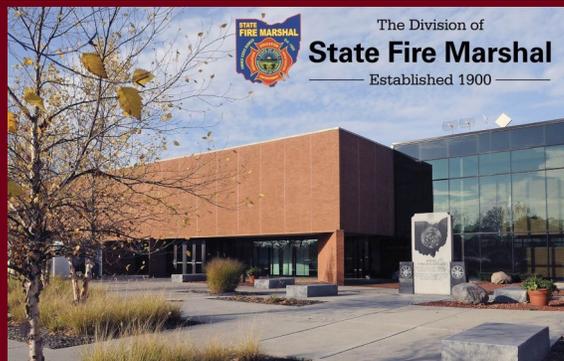


Campfire Safety:

- Build campfires where they will not spread, away from dry grass and leaves and never under overhanging trees.
- Keep campfires small, and don't let them get out of hand.
- Keep plenty of water and a shovel around to douse the fire when you're done. Stir it and douse it again with water.
- Never leave campfires unattended.
- It is important to follow the park's rules for the use and extinguishing of campfires.

Need help from the State Fire Marshal's office? We're only a call away!

Main Line- (614) 752-8200
BUSTR- (614) 752-7938
Code Enforcement- (614) 728-5460
FEIB- (614) 752-7106
Fire Prevention- (614) 752-7115
Forensics Lab- (614) 752-7150
Ohio Fire Academy- (614) 752-7196
Testing & Registration- (614) 752-7126



Spring Cleaning– For a Different Reason

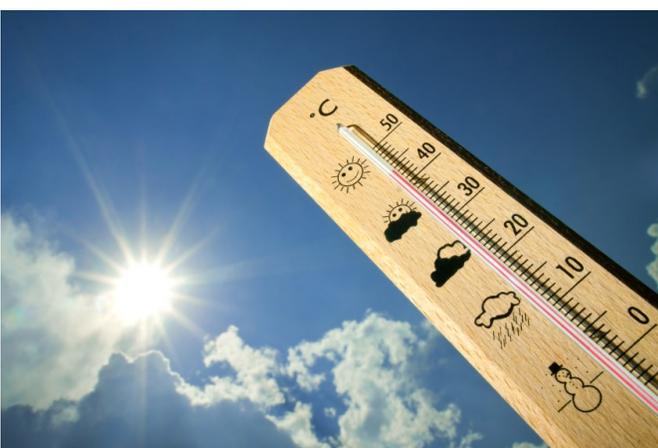
By Chief Frank Conway, Fire Prevention Bureau

Who doesn't love spring cleaning? Oh, you don't? Well, what if you could make your home more 'fire safe' by taking some time to do that cleaning as the weather gets nicer?

Some may say spring cleaning is a ritual that can only be truly appreciated after the work is done. If you search the web, you'll find that even Martha Stewart has a spring cleaning checklist that includes dusting your smoke alarms to ensure they are clean. That's not all you should do. You should also verify the age of your smoke alarm. Units that are 10 years old or more need to be replaced immediately. Simply pushing the button and sounding the alarm is a test of the battery, not the unit, so stick to the 10 year rule. Also, check your carbon monoxide unit. Units eight years old or more need to be replaced. If your smoke and carbon monoxide alarms aren't past their expiration, you should still test the batteries to make sure they're working properly.

Checking your alarms is a good start, but there's still more around your home that can be done. You can prevent a clothes dryer fire by cleaning your dryer vent pipe to remove buildup of lint. This should be done quarterly or more often if you notice that it is taking longer than usual for your clothes to dry. In addition, check the outside vent flap to ensure it will open while the dryer is operating. Gas dryers should be inspected by a professional to ensure the gas line and connections are intact and free of leaks.

Open the windows and let the fresh spring air in while you tackle the oven. Spills from homemade pies or lasagna can leave burned, caked on food welded to the inside of your oven giving off odors and smoke. Follow your stove's manufacturer's recommendations on the proper method to clean your oven. Using the



self-clean option on some units may take up to three hours.

Have you cleaned or replaced the filter in your range exhaust fan unit and removed any grease that may have built up over time on the unit itself? Spring cleaning is the perfect time to do so!

Also while you are in the 'dusting off' mode, pull out your family's fire drill plan and review. Update the plan if necessary and practice the plan. Review with family members to follow the 'get out, stay out' rule, remind

them to call the fire department from a neighbor's home and also establish a meeting place so you know if everyone is out of the house.

Fire is Everyone's Fight- do your part to prevent a fire in your home!

At a Glance

Use Spring Cleaning as a way to "fire proof" your home!

Clean smoke alarms, dryers and your ovens!

Spend some time practicing your fire escape plan in the warmer weather!

It's Just Video, Right?

*By Terry Marabito, Criminalist
The Ohio Division of State Fire Marshal's Forensics Lab*

With our relatively new section of the laboratory, Forensic Video (and Audio), I often try and let fire investigators and law enforcement know that we offer these new services termed “Forensic Video Analysis” (FVA). I usually get back: It's just video, I really don't need help with this. Unfortunately, what they don't know is that the video could come back to hurt them if a case goes to court.

The majority of surveillance camera systems are made by very small companies, sometimes even a hobbyist in his/her own garage. At the other end of the scale there are a smaller number of manufacturers that would be considered electronic giants such as Samsung, Panasonic, etc. In general, **each one** creates its own *proprietary* file system (video format). This means that the recording is made in a format that no one else can play without their proprietary player program. In these cases, the player program may also be able to export the video out in a compressed format, such as an AVI file (the most common). While this compressed version usually plays back better than the original, it is bad for forensic analysis and for law enforcement purposes. Why? By definition, the compression process “throws out” information (this is done to make the file smaller and also easier to play back). This could be a gold mine for a sharp defense attorney at trial. They might say that, by discarding information, **you** have decided what was important and that **you** have deliberately discriminated or biased the video against their client. In all likelihood, the video could be tossed out and not useful in a trial. In general, forensic video analysts and technicians are trained to use the best available recovery techniques (“Best Evidence”) and the overall, most forensically sound procedures. By the way, what you really want to collect is called the “Native File” and it is the original recording that the DVR (Digital Video Recorder) made and saved to the hard drive or video tape. It should have the best picture quality which is especially important for showing details like clothing, scars, tattoos, license plates, etc. It's extremely important if the FVA does any type of comparison charting of photographs to the video images.

Other “technical” details such as aspect ratio, the ratio of the image's width to height, and frame rate can have serious effects as well. For example, the wrong aspect ratio can make a suspect short and wide, or tall and thin. An improper frame rate can make a person walking look like they are running. In this case, seeing someone running away, we would think that the suspect is guilty of something simply because they appear to be fleeing the fire/crime scene (causing bias against the defendant).

As a real world example of one of these “technical” details and how it can have a major influence on a court trial, let me give an example. There is a court case, well-known in the FVA community, that of *Florida V. Muro* (2003). Claudia Muro, a Peruvian immigrant working as a nanny in Florida, was seen on a hidden “nanny-cam” apparently violently shaking a 5-month-old child in her care. The parents pressed charges and the case went to court. After the time-lapse recording was reviewed by the defense's FVA experts, it was established that the video was not an accurate representation of what had occurred and was thrown out. The apparent shaking of the baby was in fact, a combination of the time-lapse recording and a motion artifact from the type of compression used. The entire case was, at that point, dismissed. Ms. Muro, who maintained her innocence throughout, spent over two years in jail.

Forensic Video evidence is also unlike normal digital evidence from a computer or a cell phone. Many investigators will simply send a DVR to a computer forensic examiner to recover the video of interest.

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While highly trained technical experts in computers, they are trained to simply recover the data as an exact bit for bit copy of the original data. In their specialty, the “output” does not change, it’s static in nature. They look at files such as one would an Excel spreadsheet, Word document, or photographs and it’s always the same. Video on the other hand is dynamic, time and resource dependent, and may be different when played on different computers or using different player programs to view the video. To view a video file properly, it must be timed and displayed and understood properly. If it is not, then the wrong conclusions may be drawn as seen in *Florida V Muro* mentioned above. The forensic video analyst or technician has been trained and understands these details, such as file formats, CODECs, compression schemes, resolution, frame rate and the aspect ratio. Most computer forensic technicians have not been taught about this since it is not part of their standard training.

In addition to the data files, the playback is also affected by the computer hardware and software used. The player software and computer hardware such as RAM, graphics cards, storage media, and sound-cards can all affect the playback and whether it’s playing back properly. It is a complex mixture and an expert in this area can help.

While this is not an attempt to scare you (ok, maybe a little), I am suggesting that you think about these things the next time video comes up in your case and consider using or at least talking to a forensic video or audio analyst as a part of your resources. We are here for you. Use us! We can help collect the video evidence as well as in processing the evidence. Please feel free to contact your State Fire Marshal Investigator, the Forensic Laboratory (614-752-7150) or me directly via email at terry.marabito@com.state.oh.us.

Terry Marabito is a Criminalist with over 15 years with the Ohio Division of State Fire Marshal Forensic Laboratory. He is currently performing DVR recovery, photographic and video enhancement and the forensic analysis of video and audio evidence. He holds LEVA Forensic Video certification and the laboratory at the Ohio Division of State Fire Marshal is ASCLD accredited.

Safe Kids Greater Toledo Making a Difference in Communities

Thanks to a FEMA grant, Safe Kids Greater Toledo, led by the Toledo Children’s Hospital, is installing 3,500 smoke alarms in neighborhoods in northwest Ohio to make homes safer in the area. Many of the fire departments in the region are members of Safe Kids and have teamed up to make this program widespread. Through the grant, local fire departments are installing smoke alarms and sitting down with families to talk with them about fire safety. They’re taking a moment to educate residents about the smoke alarms they’re installing, fire escape plans, and cooking and alternative heating safety.

“We’ve been able to partner with several local fire departments to reach a lot of communities,” said Melissa Hallenbeck with Safe Kids Greater Toledo. “We think installing the smoke alarms and offering some education and fire safety tips will make a big difference in our region.”

And this program is already working to save lives. A month and a half after smoke alarms were installed in Nina Whittington’s home in January, a fire started in her bedroom where she was sleeping. Two alarms sounded and Whittington used the escape tips she was taught to alert her sister and safely get out of the home.

“The program is awesome. I had some ‘old school’ smoke alarms that I had forgotten about changing,” said Whittington. “I don’t think my old alarms would have woken me up when the fire started.”



First Responders May Be Eligible For Assistance Through Ohio Housing Finance Agency

The Ohio Housing Finance Agency (OHFA) makes buying a home easier than you may have thought possible. OHFA, a self-supporting agency of the state of Ohio, offers several affordable loan options to first-time homebuyers, with special mortgage interest rate discounts for firefighters.

OHFA works with lenders, credit unions and mortgage companies across the state to offer 30-year fixed-rate FHA, VA, USDA-RD and conventional mortgage loans. Their loans are designed especially for homebuyers with low- and moderate-incomes and require minimal out-of-pocket costs, typically 1 percent of the purchase price.



**OHIO HOUSING
FINANCE AGENCY**

Eligibility Requirements

You may qualify for an Ohio Heroes OHFA loan if you have not owned or had an ownership interest in your primary residence in the last three years; you meet income and purchase price limits (limits may vary by county and community. Visit www.myohiohome.org for a complete list in your area.); your credit score is 640 or higher, and you are a firefighter, emergency medical technician or paramedic.

You can choose to include down payment and closing cost assistance in your Ohio Heroes loan for a slightly higher mortgage interest rate. Current mortgage interest rates are available at www.myohiohome.org. Down payment assistance is forgiven after five years if you remain in your home.

In addition, you can add one or more of the following options with your Ohio Heroes loan:

Mortgage Tax Credit – OHFA provides eligible first-time homebuyers with a tax credit to help with home ownership expenses. First-time buyers get a tax credit of up to 40 percent (up to \$2,000) of their annual mortgage interest. Tax credits provide a dollar-for-dollar reduction of your federal tax liability, and you can still claim the remaining percentage of your mortgage interest tax deduction.

FHA Home Rehabilitation and Repair 203(k)s – The FHA 203(k)s loan helps borrowers purchase properties that need repairs. You must occupy the home as your primary residence after repairs are complete. The amount of the repairs, up to \$35,000, will be added to your primary mortgage.

FHA Energy Efficient Mortgage – FHA's EEM saves you money on utility bills by adding energy-efficient features to your home. Up to \$2,000 in energy-efficient improvements can be added to your primary mortgage.



Qualified buyers are required to complete free homebuyer education. Information on OHFA's streamlined education program is available at www.myohiohome.org. Or, you may complete a course offered by any U.S. Department of Housing and Urban Development (HUD) approved counseling agency in Ohio.

OHFA appreciates the service you provide to communities, and works to make home buying easy for you. Visit www.myohiohome.org to find an OHFA-approved lender in your area, along with tips to help you with the application process. Or, call OHFA toll-free at 888-362-6432.

Hall of Fame Nominations Open

It's that time of the year again! Nominations are being accepted for the 35th year of the Ohio Fire Service Hall of Fame and Awards. You can nominate someone for the Ohio Fire Service Citizen Award, the Ohio Fire Service Distinguished Service Award, William L. Howard Public Service Award or the Ohio Fire Service Valor Award.

To qualify for the Ohio Fire Service Valor Award, a nominee must be a fire service member, who at great personal risk to themselves, are credited with directly saving or attempting to save a life or lives during an emergency situation above and beyond the normal line of duty. The nominee must also have been a member of a career or volunteer fire service in the state of Ohio at the time of the heroic act. The incident shall have occurred between January 1, 2014 and May 31, 2015.

For the Ohio Fire Service Citizen Award, a member of the general public qualifies for nomination if he or she, at great personal risk to themselves, is credited with directly saving or attempting to save a life or lives during an extreme fire or other emergency rescue situation. This award can be given to a resident of any state for an event that occurred in the state of Ohio or to any resident of the state of Ohio for incidents occurring in any state. The nominee must not have been a member of the same household as the victims, or in which the incident occurred. In addition, the nominee must not have been a member of the career or volunteer fire services in Ohio at the time of the incident. The incident shall have occurred between January 1, 2014 and May 31, 2015.

The Ohio Fire Service Distinguished Service Award is for outstanding individuals, whose contributions to and leadership of the fire service within the state of Ohio, has been a milestone in the development of those services; whose actions have served not just their community, but have contributed significantly to the fire service on a regional, statewide, and/or national basis; and, whose leadership and accomplishments in these areas are widely recognized and respected in the Ohio fire service.

The William L. Howard Award is for citizens of Ohio, who are not members of the fire service, but who have during the course of their career or their lives, made significant contributions toward the furtherance of the fire service on a regional, statewide, and/or national basis; and, whose leadership and accomplishments in these areas are widely recognized and respected in the Ohio fire service.

Nomination forms can be found at <http://www.com.ohio.gov/fire>. If you have any questions about the nominations, you can call Tonia Smith at (614)-752-7161. The deadline for nominations is June 22, 2015.



Valor award recipient Eric Wood poses for a picture with Marshal Flowers and Division of EMS representatives.

The 2015 Fire Expo and Muster Is Just Around The Corner!



Mark your calendars! The annual Fire Expo and Muster is set for June 27th! As always, the Fire Expo and Muster will be jam packed with exciting events from the Fire Safety Expo to a parade showing off the hand and horse drawn apparatus. There will be several displays set up throughout our campus, including a residential kitchen fire demonstration, grain bin rescue demonstrations, and much more. A flea market and fire muster will also be highlights during the day.



The Fire Expo and Muster is a great way to bring together fire service members and families in the community. It serves as a way to educate the public and have fun at the same time. Those in attendance have several opportunities to learn about the apparatus, both new and old, and fire safety.

The free event will be held Saturday, June 27, 2015, rain or shine at the Division of State Fire Marshal, 8895 East Main Street, Reynoldsburg, Ohio. It will run from 10:00 a.m. to 3:00 p.m. Anyone interested in attending is encouraged to come out.



Department of Commerce

Division of State Fire Marshal

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We're on Twitter and Facebook!

@OhioFire

@OhioFireAcademy

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