



Winter 2020-21

# ICFE

The Official Magazine of the International Association of Fire Chiefs



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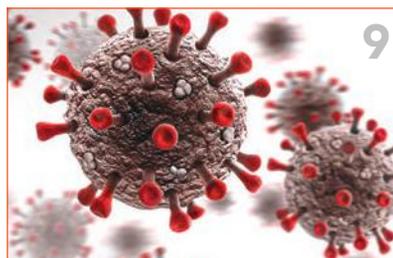
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Bill Murphy  
Grand Prairie Fire Dept.  
Assistance Chief-Operations



# America Burning



**AS A NEW** presidency year began for the International Association of Fire Chiefs (IAFC) in August, the IAFC was following a roadmap much earlier for the entire Executive Committee and Board of Directors. They had been working hard for the members as the organization changed and as financial strains continued. Our country had changed in ways that no one could have imagined; protests that had a direct impact on the first responder community, the inability sometimes to do our jobs, working and leading from home offices, the pandemic with no clear end, and the largest wildland fire season ever seen by many of us.

In September, I had the privilege of touring many of the wildland fire sites from Sacramento, Calif., to Portland, Ore. Representatives from the Western Fire Chiefs Association, along with local chief officers, state, and U.S. Forestry officials, welcomed IAFC Interim CEO Rob Brown and myself with hospitality, detailed briefings, invaluable knowledge, and information that was eye-opening.

The North Complex Fire (Oroville, Quincey, and Paradise, California) started on August 17 with an estimated containment just prior to the date of this publication. As we drove into Oroville, just about to run out of gas, the west side of town had bright sunny (hazy) skies and in the east, there were dark, dank skies that reminded you of a heavy mid-west thunderstorm. The black skies hovered over the airport, where helicopters staged due to the smoke density. This fire has claimed 15 lives to date and burned approximately 319,000 acres.

One of the incident command team members gave the perspective that each acre is about the size of a football field. Let me explain in different terms; the fire burned approximately 498 square miles. Yet, this is not the largest of the fires this season so far. The Complex fire merged with the Doe Fire, burning 1,607 square miles. The cause of both fires is lightning.

Oregon Chief Deputy State Fire Marshal, Mariana Ruiz-Temple, spent an afternoon fully briefing the team on the activities within Oregon and gave a synopsis of each of the fires, which at the time had killed 11 people. The predictions had created a much higher death toll, but due to good strategic decision-making, weather conditions, great firefighters, and maybe a little luck, this was not the case. A tour of the Beachie Creek Fire, which was 70 miles by 40 miles, provided an in-depth look at the fire travel patterns, which even destroyed one of the command posts. Since our tour, the Beachie Creek Fire has merged with the Lionshead Fire, destroying over 399,000 acres.

Throughout the United States, not just in the West, America is continuing to burn. Some of us see the news while others are out there every day fighting these wildland fires. What used to be a season now has no start or end. Others are deployed from states away to assist and provide relief.

**So, where are we going?** The U.S. Fire Administration has contracted with the IAFC to conduct a study on reducing risk and loss in the Wildland-Urban Interface (WUI) areas of the United States. One goal is to assess the progress and identify current and future critical issues within the WUI. The study will produce *America Burning – Wildland-Urban Interface: A Call to Action*. This document will include guidelines and recommendations for residents, all levels of government, and response agencies.

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*IAFC President and Chairman of the Board*

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# The Importance of Portable Radios on the Fireground

By Bill Polen, IAFC



There are approximately 1.1 million firefighters within the United States who protect our citizens' lives and property from harm's way. About 336,000 are career, while 812,000 are volunteers. Would it surprise you to learn that when on-scene, and specifically within the Immediately Dangerous to Life and Health (IDLH) environment, many of these folks do not have access to a portable radio?

As of 2016, the National Institute for Occupational Safety and Health (NIOSH) has investigated over 600 firefighter line-of-duty (LODD) deaths since the program was initiated; approximately 40 percent of the total number of firefighter fatalities. The NIOSH Fire Fighter Fatality Investigation and Prevention Program conducts independent investigations of firefighter line-of-duty-deaths to address this occupational hazard.

What they found was:

- Approximately 80 to 100 firefighters die in the line-of-duty each year.
- A firefighter fatality is considered a line-of-duty death when the fatality occurs while the firefighter is on-duty or within 24-hours after last being on-duty or responding to an emergency event.
- In 1998, Congress funded NIOSH to implement a firefighter safety initiative to address this occupational hazard.
- Historically, approximately half of all firefighter line-of-duty deaths have been caused by heart attacks and cardiovascular disease.
- Other leading causes of firefighter fatalities include motor vehicle crashes, rapid-fire progression, struck-by events, structural collapse, lost/disorientation, and falls.

There are some commonalities about firefighter serious injury and LODD investigations. One is that many firefighters do not have a portable radio assigned to them while operating within an IDLH environment. Communication is an everyday, basic human necessity. This is especially true while operating within an IDLH climate; a portable radio is as critical as personal protective equipment (PPE) and a self-contained breathing apparatus (SCBA).

A NIOSH investigation identified several radio issues, including firefighters on the wrong radio channel, low or dead batteries, a lack of proper training, the inability to transmit due to building construction type/weak signal, or the member simply did not have a radio assigned to them. The lack of portables for every member affects many departments, from very small to the largest in the United States. The following is an example of a very large urban department where not every member had their portable radio assigned. If it can occur there, then any smaller career or volunteer department can undoubtedly be affected. This report was done in 2011 yet today there are still fire department members who go into an IDLH without a portable radio.

**TWO FIRE FIGHTER DEATHS AND NINETEEN INJURED IN THE LINE OF DUTY: A SUMMARY OF A NIOSH FIREFIGHTER FATALITY INVESTIGATION: F2010-38  
DATE RELEASED: JULY 6, 2011**

### EXECUTIVE SUMMARY

On December 22, 2010, a 47-year-old male (Victim # 1) and a 34-year old male (Victim # 2), both career firefighters, died when the roof collapsed during suppression operations at a rubbish fire in an abandoned and unsecured commercial structure. The bowstring truss roof collapsed at the rear of the 84-year old structure approximately 16 minutes after the initial companies arrived on-scene, and within minutes after the Incident Commander reported that the fire was under control. The structure, the former site of a commercial laundry, had been abandoned for over five years, and city officials had previously cited the building owners for the deteriorated condition of the structure and ordered the owner to either repair or demolish the structure. The victims were members of the first alarm assignment and were working inside the structure. A total of 19 other firefighters were hurt during the collapse.

### CONTRIBUTING FACTORS

- Lack of a vacant/hazardous building marking program within the city;

- Vacant/hazardous building information not part of the automatic dispatch system;
- Dilapidated condition of the structure;
- Dispatch occurred during shift change resulting in fragmented crews;
- Weather conditions including snow accumulation on the roof and frozen hydrants; and
- Not all firefighters were equipped with radios.

### KEY RECOMMENDATIONS

- Identify and mark buildings that present hazards to firefighters and the public;
- Use risk management principles at all structure fires and mostly abandoned or vacant unsecured structures;
- Train firefighters to communicate interior conditions to the Incident Commander as soon as possible and to provide regular updates;
- Provide battalion chiefs with a staff assistant or chief's aide to help manage information and communication;
- Provide all firefighters with radios and train them on their proper use; and
- Develop, train on, and enforce the use of standard operating procedures that specifically address operations in abandoned and vacant structures.

### ABOUT THE FIRE DEPARTMENT

The career fire department involved in this incident has 98 stations with 4,314 uniformed members, which serve a population of approximately 2,851,000 within an area of about 228 square miles. Specialty units consist of swift water, ice rescue, hazardous materials, and technical rescue teams.

Department members assigned to the Operations Division work a 24-on/48-off shift schedule with three platoons or shifts. The department operates 24 battalions in six divisions. The fire department currently has 96 engine companies, 61 truck companies, four squads (heavy rescue companies which are two-piece companies), two marine boats, two helicopters, plus various support apparatus for high-rise, hazardous materials incidents, and special operations.

The city's fleet maintenance division maintains all fire department apparatus. Annual testing (e.g., pumps and ladders), as recommended by the National Fire Protection Association (NFPA) Standards, is conducted by qualified vendors. In addition to fire suppression, hazardous materials mitigation, and special operations response, the fire department operates an Emergency Medical Services (EMS) Division which consists of 12 Basic Life Support (BLS) Ambulances, 59 Advanced Life Support (ALS) Ambulances, and support staff including EMS Field Officers. The fire department also operates an aircraft rescue firefighting (ARFF) Division at two airports within the city.

### INDUSTRY BACK UP

The International Association of Fire Chiefs (IAFC) posted a position paper on May 7, 2009: *Assignment of Portable Radios/Two-Way Communication Devices to Every Fire Fighter on the Fireground*. The IAFC adopts the position that every firefighter operating on the fireground be equipped with a portable radio/two-way communications device (hereafter referred to as portable radio), preferably with an attached lapel microphone. Having a portable radio allows each firefighter to report immediately, or be notified of, hazardous conditions or emergencies such as a missing or injured firefighter or potential or impending structural collapse.

### BACKGROUND

Just as an SCBA and PPE are essential components of firefighter survival, so too are portable radios. While firefighters are encouraged to work in teams, there have been documented examples (in Prince William County, Va., for example) in which they become separated. In these situations, a firefighter without a radio leaves him/her with no ability to communicate, thereby increasing the risk of injury or death for that firefighter and/or other firefighters on the scene.

Firefighters often work with limited or no visibility and with extreme noise levels: fire apparatus, saws, and smoke ejectors. Not being able to see or hear makes fireground communications

challenging. During interior firefighting operations, firefighters use their portable radios to communicate with each other to assess the status of incident operations or to request specific firefighting tactics. Firefighters also use their radios to communicate with company officers to inform them of conditions.

Most importantly, firefighters depend on their radios to call a Mayday. Portable radios allow firefighters inside to communicate with personnel on the outside who may have a better vantage

point from which to assess conditions, including the size and location of the fire and building conditions. Information from outside can prevent crews from advancing into dangerous conditions inside. Having a radio assigned to each person is not enough. Firefighters must be trained in using the radio to request resources and, most importantly, to call a Mayday.

In September 2003, NIOSH released the document, Current Status, Knowledge Gaps, and Research Needs Pertaining to Firefighter Radio

Communication Systems. On page 13 it states, "It is critical for firefighters to communicate with one another within a structure and with units operating outside the structure, regardless of the building construction." The best way this can be done when crews are separated or in trouble is through a personal portable radio.

It is the chief officers' responsibility to assure the safety and survival of the firefighters with whom they serve. The assignment of a portable radio is as basic to this as the assignment of turnout gear and basic PPE. It is one of the tools to do the job.



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There are numerous charitable organizations, local business partnership opportunities, and state and federal grants for all sizes of fire departments located in jurisdictions across the United States to apply for assistance. Community outreach programs with local charity organizations can also provide the funds to purchase radios, etc. Partnering with local businesses can provide needed prospects as well. Please see the sidebar for information on some state and federal grant opportunities to secure radio and communications gear, and much more, etc. There are currently billions of dollars available for public safety; you simply have to apply for it! 💧

*Elton (Bill) Polen, Jr. is a subject matter expert for the International Association of Fire Chiefs (IAFC). Bill retired as Fire Captain from Fairfax County, Va. Fire and Rescue Department, after a 30-year career.*

**FIRE AND EMERGENCY SERVICES GRANTS**

The following websites have great information on available grants:

- [www.firegrantshelp.com](http://www.firegrantshelp.com)
- [www.motorolasolutions.com/en\\_us/solutions/government-grants.html](http://www.motorolasolutions.com/en_us/solutions/government-grants.html)
- [www.fema.gov/grants/preparedness/firefighters](http://www.fema.gov/grants/preparedness/firefighters)

# What Does COVID-19 Phase 2 Mean to Fire Chiefs?

By James Augustine, MD, Fire EMS Medical Director; Member of the IAFC Coronavirus Task Force

In early March 2020, former President Gary Ludwig introduced *The IAFC Coronavirus Task Force* composed of fire service leaders to address the issues the Coronavirus was having on the fire service. Fire Chief John Sinclair, IAFC President (2016-2017), was appointed as the Task Force Chair.

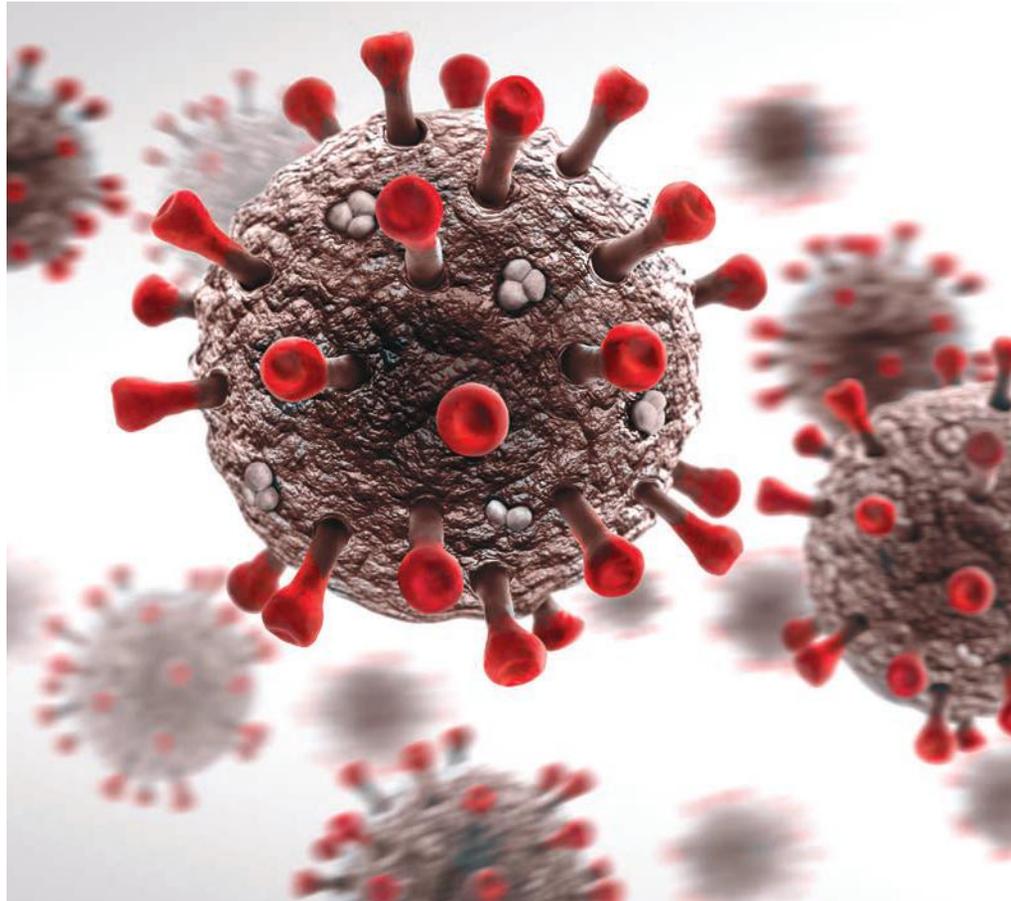
The early work of the Task Force focused at the system level, with guidance on how fire service leaders could participate in the larger public health system response. IAFC leadership and the Task Force developed early approaches to supply shortages and the impact of community shutdowns and health care disruption.

Much more importantly, the Task Force began to develop and share information that allows fire departments to protect firefighters and EMS personnel from contracting COVID-19 and deliver outstanding (but safe) emergency care to patients of all types.

As the dangers of the disease became clearer, and many fire EMS personnel were exposed or became ill with the disease, the Task Force worked collaboratively with the International Association of Fire Fighters (IAFF) members of the Task Force to craft safety plans and best practices for quarantine.

The IAFC's accomplishments in preparing the fire and emergency service for the pandemic's challenges became wrapped into the challenges of civil unrest, a vicious early wildland fire season, and a record-setting tropical storm year. Plans to protect wildland firefighters have to incorporate infection control and updated personnel monitoring systems.

Over the last few months, the Task Force has focused IAFC efforts to



monitor the impact of the pandemic on fire and EMS services and positively influence how the federal and state governments have provided funding, resources (especially personal protective equipment or PPE), and regulatory support. This also includes prioritizing COVID-19 vaccine administration when one (or more) pass their safety testing and become available.

### IAFC MEMBER VALUE

IAFC leadership and staff provide extraordinary support to members who are in the hot zones of the pandemic response. These efforts have included:

- Hosting webinars to provide weekly information as the pandemic evolved and early impacts on fire departments occurred.
- The "Coronavirus Disease 2019 (COVID-19) Factsheet for Firefighters and EMS Personnel" was published and disseminated.
- Weekly updates are provided regarding medical best practices; safe applications of PPE; updated information on the events impacting our critical supply chains; disseminating best practices on the mental health aspects of the pandemic; continually updating the best practices for personnel quarantine and isolation, and

monitoring the changing use of COVID testing.

- The Task Force has shared strategies needed to integrate the fire service with the larger public health system response and the regional efforts to keep the health system functional.
- The IAFC Government Relations Department has had a critical role in gaining federal funding to support decimated state and local budgets. A timely second task force (Economic Crisis Task Force) was convened by President Ludwig to address the economic impact to fire departments and their communities due to the pandemic.

IAFC surveys collected and reported data on the economic impact of the pandemic, the impact on personnel, and the PPE needs of agencies. The surveys were displayed using useful dashboards. The Task Force regularly updates the COVID-19 webpage, which can be found on the IAFC website.

### **HOW THE COVID-19 SECOND PHASE WILL BE MORE DIFFICULT THAN PHASE ONE**

The next few months will be challenging as seasonal respiratory illnesses appear in North America, and COVID-19 is moving rapidly through younger populations who were not impacted by the first 10 months of viral spread. Many people of all ages have delayed their routine medical care, and the effects are beginning to manifest beyond the virus's direct impact.

There is more stress on the health system, particularly emergency care personnel (like our fire/EMS members) who manage higher acuity patients while trying not to get infected themselves. While there have been some improvements in supplies, PPE, and disinfecting materials, the risk of personal exposure is still genuine. Many persons infected with COVID-19 have no symptoms, or ones that mimic seasonal allergies or the common cold, so universal precautions are necessary for virtually all patient contacts and still in the fire station's common areas.

It will be necessary for fire service leaders to understand and support

vaccination programs over the next year. The immediate vaccine need is in regard to seasonal influenza. It is appropriate for us to ask our personnel to get flu vaccines and to do that soon. The current recommendation is to allow about 30 days between vaccines, to get the maximum effect from them. If members of your team haven't done so, strongly encourage them to take this seriously.

The pandemic can only end when either enough humans have become ill and built an immunity to the disease, or a vaccine is disseminated that protects humans from the disease. The COVID-19 vaccine development process is going well. There are four vaccines in final phase testing in the United States (as of November), and non have shown significant problems. The first two require two shots, with one given more than three weeks apart, and the other given more than four weeks apart. The third vaccine requires only one injection.

All COVID-19 vaccines require cold storage and that will require special transport and short times out of their freezers. Public health will be organizing that process. Any work by the fire service would be in assistance to public health. Fire agencies should prepare their response plans for dry ice incidents and exposures, as the vaccine transportation and storage will no doubt result in incidents where storage containers are breached.

Screening and testing processes are still a work in progress. With significant improvements in manufacturing across the globe, there should be adequate availability of reliable testing for the population at large. Ideally, testing for COVID-19 will be a point of care test. The test should have a very high sensitivity, and results should be available within minutes to hours, not days.

### **THE SURVEILLANCE PROCESS FOR OUR MEMBERS**

The Centers for Disease Control and Prevention (CDC) updated its guidance several times over the last eight months on the exposure of essential workers, reducing the

quarantine burden by substituting a 14-day monitored period for the quarantine at-home process. By now, most fire departments have implemented a personal screening process. It will be needed to maintain healthy on-duty forces and have fewer personnel in quarantine. Frontline officers need to be diligent in checking fire personnel and rapidly identifying anyone who is sick.

### **THE PUBLIC WE SERVE**

The fire service must continue to provide support and education to communities. The efforts at keeping people safe include showing them good behaviors like social distancing and the use of masks in public, and the correct use of PPE.

The nation's 911 centers should have the opportunity to talk to a prepared public, to let them gather and report the information needed by fire/EMS responders to serve the public safely and without delays. The public also needs to know that their providers will show up wearing a different outfit and starting an interaction six feet away, using a single "scout" provider.

There is still a significant risk at congregate care sites, such as jails, nursing homes, senior centers, and group homes. Public Health must take the lead in assisting their containment efforts, but they may need assistance from the fire/EMS personnel who visit those facilities and can recognize situations where infections may be brewing. Some fire agencies have also assisted public health in doing on-site testing to improve infection control.

The need for a well-designed and stable communication system has never been greater. It should support new forms of telemedicine provided across the community by capable EMTs and community paramedics. Many regions are investigating elements of a plan for "non-transport" and even "no response" should volumes get that high. There are now good models to serve as a template for our communities in both of these areas. We will need to partner with our

Public Health and hospital systems in a very new way if we are to move into a “no response” mode for lower acuity calls. There are great examples of patient instructions for a non-transport interaction.

There is a 10-year shortage of basic medicines for emergency care. It is now even worse, and available medications are ever more expensive. There will continue to be shortages of epinephrine, inhalers, dextrose, cardiac meds, and some sedative medicines. EMS providers must update the medicine substitution programs for implementation at any time.

Finally, fire/EMS leaders must be building durable systems of interaction with the hospitals in their service area. Understanding and managing capacity

issues on both sides are critical, and fire/EMS leaders are much better at reaching out to hospital leaders than vice versa.

The work of management for the pandemic, plus our other hazard situations, will continue for the fire service. The IAFC leadership and the Coronavirus Task Force will lead efforts to address the next wave of the pandemic, which will likely go well into 2021. It is expected that the Task Force work will help to bring clarity to fire service planning for the path forward and the need for continued coordination across the country and the world. 🔥

*James Augustine, MD, is a Fire EMS Medical Director, and Member of the IAFC Coronavirus Task Force.*



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# To Be a Leader, Train Like a Leader



By William Hyde, MBA, EFO, CFO, CEMSO, FIFireE

**W**e have all been exposed to many concepts related to training theory and what is best. Typically, there are variations, some small and some large, between all Authorities Having Jurisdiction (AHJs). Emergency services provided in each community require customization to tailor programs and services to the individual community's needs and expectations. With training programs, it is necessary to provide the same level of customization to the programs and services to the expectations of the AHJ. This results in many solutions to a common issue.

Most of our (collective emergency response agencies) training programs provide tremendous focus on entry-level and junior officer tasks. This is where the proverbial knowledge, skills, and abilities are honed, expectations instilled, and team members are immediately put to work. As we progress through ranks and transition to accumulate more administrative responsibilities, our training programs begin to lean into postsecondary education. This is undoubtedly the solution for specific tasks, e.g., spreadsheets, formal communications, etc. It is also a great path to study concepts like management theory, economics, and many others.

Beyond college education and merely doing our job day-to-day, what is the path to continue to develop into the leader your staff needs and expects you to be and become?

Throughout our careers, this has been the expectation along the way. Each promotion garners additional responsibilities; they also bring us into fewer roles like the one we began with. This evolution necessitates us to continuously examine ourselves and our abilities to function in the capacity we currently serve. It should also prompt us to ensure we maintain relevance with our staff and continue to develop in order to serve in the role that we will be needed to do next.

There is certainly a segment of administrative roles and functions that will accompany requisite college expectations. Again, what lies beyond that? Continuous development requires a degree of self-awareness along with situational readiness — that is to say, we should have an environment where open and comfortable communication allows discussion and awareness of which role our agency may need our talents to be used. This could be through a lateral transfer; it could be through another promotion, or it could even be through leaving the agency to assume a critical role at a neighboring jurisdiction.

Regardless of the path you lay for yourself; we must ask if we have done all we can to train ourselves to be competent and excel. Beyond preparation, are we still carrying the capacity to be self-aware enough to continue to set high expectations and continue to develop?

Numerous programs are offered throughout the United States that provide opportunities to hone our leadership skills and abilities. The National Fire Academy's catalog of course offerings is something that none of us should go without. Programs like the International Association

of Fire Chief's (IAFC) Fire Service Executive Development Institute cannot be overstated in the value it brings to those fortunate enough to be selected. Its cohort environment also provides a powerfully bonded network of peers who will undoubtedly benefit any administrator when they experience challenging or unique situations. Others are offered at the Naval Post Graduate School, Texas A&M, and numerous state training academies. Although events in 2020 have brought some of these programs into a virtual environment, they are indeed intended to be delivered and enjoyed by physical attendance.

Programmatic training is not the only way to ensure our continued development, and it is not always practical to clear your schedule for them as the lengths range from one week to 18 months. However, there are alternatives that should be considered when time is relative. The International Code Council (ICC) has begun to provide many of its offerings in a virtual environment. You may or may not consider yourself a "code" person. If you do, you should already be aware of what is available. If you do not, I highly encourage you to get out of your comfort zone and choose an ICC course. Branching your awareness into the world of your code officials will be enlightening to you, and I wholeheartedly believe that by increasing your awareness, you will better understand their operations and allow you to serve them better. Additionally, the National Fire Protection Association has many resources available to you when your schedule permits.

Knowledge and skills are attainable through the options discussed to this point. What about abilities? I am an emphatic believer that this is where the old-school, old-fashioned, on-the-job-training (OTJ), i.e., doing the job, is the best teaching tool available. This is where you learn day-in and day-out how to build relationships, what is working well, what needs attention, and what is broken. This is where we can lean on coworkers' expertise to find solutions, develop and implement policies, and create a highly efficient environment and a strong culture.

Through formal education, programs, virtual courses, branching into unfamiliar topics, and traditional OTJ, you can continue to develop yourself into a tremendous leader. However, we should not merely attend classes and call it good. We must be engaged in our community. We must demonstrate the technical competencies we have gained. We must be independently evaluated by our peers. We can accomplish this through designation.

Designation, simply put, is a distinctive title. With over 2,000 emergency services professionals having attained a designation, our profession is certainly recognizing the pertinence of designation for our profession to be regarded by those we work alongside at city hall and in our community.

There is a great chance that you know a designee who could discuss the benefits of being recognized as a regarded member of emergency services. If you are a current designee, it would be tremendous to reach out to coworkers and encourage them to consider pursuing

designation. The Commission on Professional Credentialing (CPC) offers five designations. They are:

1. Chief Fire Officer (CFO)
2. Chief EMS Officer (CEMSO)
3. Chief Training Officer (CTO)
4. Fire Marshal (FM)
5. Fire Officer (FO)

To attain designation, you will need to request an application from the Center for Public Safety Excellence, complete the appropriate sections, and submit the application for a comprehensive review that will be conducted by approved reviewers. Following a favorable recommendation from the reviewer, the designation will be confirmed by the Commission. This process is transparent, and designations are available to any officer who meets each designation's requisite expectations. You may serve in a capacity where multiple designations would serve you well.

Finally, I encourage all of us to commit to ourselves that we continue to identify topics, programs, and courses to attend and that we continue to train like the leader we are expected to be.. 💧

---

*William Hyde, MBA, EFO, CFO, CEMSO, FIFireE, is the deputy chief of community risk reduction for the Rogers (Arkansas) Fire Department. He serves as vice-chair of the IAFC Executive Fire Officers Section Board. He serves as a Commissioner on the Commission on Professional Credentialing. He has been a member of the IAFC since 2009.*

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# Innovative New Program Delivers Whole Blood Transfusions On-Scene



*Micah Kiger, Deputy Chief, EMS Division; Mark Golino, Captain, EMS Supervisor; Jamie Cooper, Battalion Chief, EMS Division; and John Morgan, Operational Medical Director.*

**E**ach year, hemorrhage — or uncontrolled bleeding — accounts for nearly 1.9 million deaths worldwide. Injuries are the number one killer in those under 50 years of age and loss of blood is the leading cause of preventable death from injury.

On September 8, 2017, a large food truck (converted from a decommissioned school bus) struck a passenger vehicle at an intersection near the town of Leesburg, Virginia, that took the life of a Loudoun County mother and critically injured her four passengers. The extreme impact from the violent collision left the passenger vehicle and its occupants pinned underneath the bus.

The first responders at the incident recognized that the extrication would be lengthy and that the blood products already on-scene would be shortly exhausted. Because of this, the lifesaving decision was made to get blood brought to the accident scene from area hospitals and, as firefighters worked tirelessly to free the family, paramedics were able to reach the patients inside the wreckage and provide much needed blood to the injured.



*Team members work together to package a blood bag.*

“The tragic incident highlighted a gap in our on-scene capabilities, as well as the need for a more organized plan for similar on-scene requests in the future,” says Doctor John Morgan, the Operational Medical Director for the Loudoun County (Virginia) Combined Fire and Rescue System (LC-CFRS). “Over a year later,

in January 2019, we launched our formal Field-Available Component Transfusion Response (FACT\*R) Program, a unique on-demand request for patients with prolonged entrapment bringing a large amount of red blood cells, plasma, and platelets (five units each) to provide a balanced transfusion.”

However, the use of whole blood transfusions — rather than blood components — is considered to be simpler for EMS units and has shown to provide better results for patients suffering acute blood loss. Military research has demonstrated the clear advantage of blood, but especially whole blood, over IV fluids in the treatment of soldiers in hemorrhagic shock.

The challenge was that there was no whole blood supply available in the region at the time, and local blood banks needed to be persuaded to start keeping whole blood aside for the FACT\*R Program, as well as consider maintaining a supply for local trauma centers. The transition to whole blood for the program began in February 2020, and it switched fully over to whole blood in April. In September, FACT\*R was renamed the Field-Available Coordinated Transfusion Response Program to reflect this move to the use of whole blood from separate blood components.

"This immediately brings the blood to the patient at the point of injury and eliminates the delay for a request back to the hospital," says Morgan. "We are still keeping the on-demand program functional for any incidents that may involve multiple patients or exhausts our forward-deployed supply."

This program is a collaborative partnership between the Fairfax County Fire and Rescue Department, the Virginia Office of Emergency Medical Services, the Northern Virginia EMS Council, and the Inova Health System. The program has enabled LC-CFRS to lead the way in innovative emergency medicine, permitting

emergency medical services (EMS) units in both Loudoun and Arlington counties to carry whole blood and bring a level of injury care previously only available in the hospital. This is a first for Virginia and the Washington, D.C., Metropolitan region; they are only the second regional coalition to develop a program such as this in the nation.

"We are early adopters but are not the first EMS agency to have blood available for EMS ground units," says Morgan. "We benefitted greatly from the experiences of a group out of San Antonio, and really modeled our regional program on theirs. In addition, many helicopter EMS agencies have also been using blood over the last few years, and, of course, the military experience has benefitted us as well."

Carrying "forward-deployed" whole blood requires research, training, policy development, new equipment, and partnerships with regional hospitals and other stakeholders. All aspects of the program, including temperature-controlled storage, logistics, tracking, and on-scene delivery must adhere to strict regulations.

"Blood is seen as a precious and scarce resource, so new scenarios for using blood will face scrutiny. In addition, blood transfusion is not currently within the scope of practice for a paramedic in some states," says Morgan. "We had to build trust with stakeholders in the hospitals and blood banks. It greatly helps that we approached this as a regional program and collaborated with other

EMS physicians, both regionally and nationally. It also helped that we came into this with an excellent working relationship with our regional trauma centers."

The response to the program has been overwhelmingly positive and has resulted in an increase of blood donations to Inova Blood Donor Services, which helps to drive the overall success of a program directly impacted by the availability of blood.

"We have worked hard to increase community awareness of the importance of blood donation, hosting blood drive events at fire stations and publicizing the FACT\*R Program as a reason the public, as well as our own personnel, should consider donating blood," says Morgan.

While the program is new and the number of uses is still low to date, there has been some interest from other agencies about the program, and the FACT\*R team appreciates the opportunity to share its lessons learned. There are currently two ground EMS agencies in the D.C. metro region carrying whole blood, but, looking ahead, there is hope that FACT\*R will be expanded further to other agencies in the region.

"Loudoun will continue to work with our Northern Virginia regional EMS partners to expand this program to other jurisdictions to benefit the 2.7 million residents of Northern Virginia," said System Chief Keith H. Johnson in a press release. "Here in the National Capital Region, we are one team with one mission; to provide exceptional emergency care and treatment for our communities." 🔥



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# Legislative Update



By Ken LaSala, IAFC Director of Government Relations and Policy

By Ken LaSala, IAFC Director of Government Relations and Policy

The summer and fall of 2020 remained incredibly busy for the IAFC Government Relations and Policy department. As the negotiations over a new COVID-19 relief bill stalemated, we continued to focus on addressing issues related to the pandemic. In addition, we tried to make progress on other issues in the field of public safety communications, EMS, and taxation.

Unfortunately, Congress has not settled the Fiscal Year (FY) 2021 appropriations, and the federal government is funded by a continuing resolution through December 11. With Congress returning for a lame duck session after the election, we will have additional opportunities to address many of our issues.

## COVID-19 RESPONSE

While the nation's fire and emergency service responded to COVID-19 cases, there were some developments in Washington to address the pandemic. Most notably, the House passed an approximately \$3 trillion COVID-19 relief bill (H.R. 6800; the Heroes Act), which would have:

- Authorized \$500 million each for the Assistance to Firefighters Grant and SAFER programs for COVID-19 response operations.
- Waived many of the requirements to the AFG and SAFER programs,

including the cost shares, and allowed SAFER funds to be used to retain and re-hire firefighters.

- Permanently extended the Volunteer Responder Incentive Protection Act to allow volunteer firefighters to waive any property tax benefit and up to \$600 in other state and local benefits from federal taxation.
- Prevent the auction of the public safety spectrum in the T-Band (470 MHz-512 MHz).
- Allow firefighters and EMS personnel to deduct from their personal income taxes the value of uniforms, supplies, and/or trainings, purchased with personal money, up to \$500.

Unfortunately, the Senate did not consider H.R. 6800. Negotiations between Steven Mnuchin, the Secretary of Treasury, and Nancy Pelosi, the Speaker of the House, ended up stalemating in October. We will have to see if and when these negotiations resume.

There was more progress as the federal government prepared for the development of a vaccine to prevent COVID-19. Chief Gary Ludwig, IAFC President (2019-2020), testified in August before the federal Advisory Committee on Immunization Practices about the importance of ensuring that fire and EMS personnel are in the top priority group for access to the vaccine once it is approved. When the National Academy of Medicine (NAM) convened

a panel to set priorities for the COVID-19 vaccine, the IAFC met with their staff, and Chief Ludwig testified before an open meeting in September. We were pleased to see the NAM recommended that all firefighters and EMS personnel be included in priority tier-level 1A for access to the COVID-19 vaccine.

## COMMUNICATIONS ISSUES

We did see some progress in the field of public safety communications. In addition to including the repeal of the T-Band auction in the Heroes Act, the House passed the Don't Break Up the T-Band Act (H.R. 451) on September 23. Unfortunately, Senator Ted Cruz (R-TX) objected to Senate passage of the bill so that he could include provisions unrelated to public safety. We are working to try to address his concerns so that H.R. 451 can finally pass in the lame-duck session.

Unfortunately, the Federal Communications Commission (FCC) took actions that will limit the public safety spectrum. Nearly 20 years ago, the FCC allocated 50 MHz of spectrum in the 4.9 GHz (4940-4990 MHz) band for use by public safety. This spectrum is used for traffic camera networks, intranets, and to operate bomb disposal robots. In order to advance the deployment of commercial wireless technology, the FCC Chairman Ajit Pai and the Republican members of the FCC argued that the 4.9 GHz band was under-utilized by public safety.

In September, the FCC voted by a party-line vote to take the spectrum from public safety and license it to the states. The FCC staff say that incumbent public safety users on the 4.9 GHz band will be protected. The IAFC is looking at next steps to overturn this order and transfer stewardship of the 4.9 GHz band to the federal FirstNet authority. However, state chiefs' organizations should identify which fire and EMS agencies in their states use the 4.9 GHz band and then ask the governors and state legislatures to protect this spectrum for public safety.

**WORKFORCE ISSUES**

The IAFC also saw some accomplishments in introducing legislation before the end of the 116th Congress. The House passed the Helping Emergency Responders Overcome (HERO) Act (H.R. 1646) on September 21. This legislation, by Representative Raul Ruiz (D-CA), would establish a peer mental health program for first responders and create educational resources for mental health experts treating firefighters and EMS personnel. The bill would also create a

national registry to promote research into mitigating public safety suicides. The Senate must now act on this legislation.

On October 13, Representatives Susan Wild (D-PA) and Fred Keller (R-PA) introduced legislation (H.R. 8592) to count the total U.S. EMS workforce accurately. The bill would require the Secretary of Labor to count dual-role firefighter/EMS personnel when tabulating the total U.S. EMS workforce. This data would provide a more accurate picture of the number of EMS personnel in the nation, which is important in determining how many COVID-19 vaccines are required, as well as other related matters.

In addition, Representative George Holding (R-NC) introduced legislation (H.R. 8538) on October 6 to help volunteer fire departments. As volunteer fire departments transition to combination departments, they may hire career firefighters. In North Carolina, this category of career firefighters cannot participate in the state pension system. Representative Holding's bill would fix this problem. The IAFC is currently

looking to see if this legislation can pass the House before the end of the year.

The House and Senate will be back for a lame duck session after the election. They have some major pieces of unfinished work to complete. Most important, they will have to determine the funding for the federal government after December 11. They will also have to see if they can reach an agreement on a COVID-19 relief bill as cases surge and the economy struggles. The IAFC is working to make sure that programs like the U.S. Fire Administration, and the AFG and SAFER grant programs are funded. We will also work to secure additional aid to help fire and EMS as they respond to COVID-19. It will be a busy winter. 🔥

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*Ken LaSala, IAFC Director of Government Relations and Policy, manages IAFC's department that represents the voice of America's fire service leadership with Congress, the White House and federal agencies. He served as a Congressional staffer from 1997 to 2005.*

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# IAFC Mission at Work



**H**ere we are at the end of 2020, and it has been a busy and trying year for all of us. Just like you, the International Association of Fire Chiefs (IAFC) has faced change and challenges, but we've met them head-on.

We continue to lead, educate and serve our members and the fire and emergency service at large. Here's how we accomplished that in the second half of 2020:

- In August, Chief Richard Carrizzo became the 2020-2021 IAFC President and Chairman of the Board.
- We held three successful virtual conferences. ReIGNITE (our virtual rebrand of FRI), the Wildland-Urban Interface (WUI) Conference, and the VCOS Symposium in the Sun.

- The IAFC has been fighting to ensure all firefighters and emergency medical services personnel be placed in the highest priority tier for receiving a COVID-19 vaccine. While firefighters and EMS personnel need reliable access to personal protective equipment (PPE) and COVID-19 testing, vaccines are the ultimate form of defense for those serving on the frontlines of the pandemic.
- For the ninth year, the IAFC has received a grant from the Motorola Solutions Foundation to fund another cohort of the Fire Service Executive Development Institute (FSEDI). Developed by the IAFC, FSEDI provides new and aspiring chiefs with the tools they need to have successful and productive tenures.
- The IAFC was awarded competitive federal grants to fund the implementation of the Wildfire Resources for Fire Departments (WRFD) Program. This Advisory Group, created in partnership with the IAFF, employ national investigator experts to conduct a multi-phase study on the current joint Wellness and Fitness Initiative (WFI) for firefighters, and many other worthy efforts.
- The IAFC Terrorism and Homeland Security Committee developed a practical *Incident Command Checklist for Active Shooter Incidents*. This checklist will serve to organize the incident commanders' thought process during active shooter events and provide a template for lifesaving success.
- Created by the National Volunteer Workforce Solutions, FEMA SAFER grant, and the Council for Future Volunteer Firefighters, the IAFC released the *Guide for Creating a Diverse and Inclusive Department*. It offers ways leaders can increase the levels of diversity, inclusiveness, and equity in eight specific areas of your department or organization.
- The IAFC Wildland Fire Policy Committee (WFPC) has been working with IAFC Government Relations to provide comments in support of the U.S. Environmental Protection Agency's proposal on the use of air curtain burners as it pertains to fire department and fuel reduction projects.

I am proud of our staff as together we continue our mission.

**ROB BROWN**

IAFC Interim CEO and Executive Director

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