National Volunteer Fire Council

Firefighter Strong

News for a Better You and a Stronger Crew

In This Issue:

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ABOUT THE

National Volunteer Fire Council

The NVFC is the leading nonprofit membership association representing the interests of the volunteer fire, EMS, and rescue services. The NVFC serves as the voice of the volunteer in the national arena and provides resources, programs, education, and advocacy for first responders across the nation. Membership in the NVFC is just $21 and comes with an array of benefits, including free training in the Virtual Classroom, access to the Volunteer Voices online community, an AD&D policy, and much more. Find information and join at www.nvfc.org/join. Learn more about the NVFC and access resources at www.nvfc.org.

SUCCESS Starts with You

The National Volunteer Fire Council is pleased to provide this annual publication to volunteer and combination fire departments. We hope you will find the information contained in *Firefighter Strong* to be beneficial in making your department healthier, safer, and better prepared to respond.

As we all know, our people are the greatest tool a department has. A department that puts its members first is a successful department. Member wellbeing affects every facet of department operations, from reducing risks of death and injuries, to improving recruitment and retention rates, to best serving the community in their times of need.

It is a team effort to make sure that every firefighter and emergency medical provider has what they need to thrive. It is the responsibility of leaders to do everything in their power to keep their crews safe from the hazards of the job through proper training, SOPs/SOGs, and fostering a department culture rooted in putting health and safety first. It is the responsibility of each individual to follow SOPs/SOGs, educate themselves on the hazards they face as a responder, and take steps to improve their personal health and safety so they are ready to do the job effectively and efficiently. It is the responsibility of family members to support their loved ones when they need help and encourage them to make choices that prioritize health and safety.

The NVFC is proud to be your partner in these efforts. We have programs, resources, and initiatives to help leaders, responders, and family members do their part. From the Lavender Ribbon Report cancer risk reduction initiative to the Psychologically Healthy Fire Department resources to the Heart-Healthy Firefighter Program to online training that addresses critical health and safety issues, we provide tools and resources to make it easy to take the next steps.

Be the advocate for health and safety in your department. Use this publication to find ideas and resources to help your department thrive. Then visit **www.nvfc.org** to access all of our programs, resources, and training. When you make health and safety a priority, we all win.

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Safety Considerations at Hazmat Incidents:

Learning to Think More Rationally Before Reacting

By Chris Scott

Hazardous materials (hazmat) incidents are complex and present unique and often hidden or less obvious threats that responders may not be prepared for. When it comes to managing incidents involving hazardous materials safely, we often need to draw upon specialist advice and guidance to support our incident commanders and their crews. Most crucially, the best safety advice one can give initially is to 'do nothing' until you have all the information. Establish a command post at a position which gives you good oversight of the scene at a safe distance, uphill and upwind of the incident, until you have established the amount and quality of information you will need to tackle the incident safely. It is also a good idea to have a secondary command post position available should the nature of the incident dictate its use.

Waiting to act can be difficult for first responders, particularly when, as humans, our hearts often overrule our heads. They need to be trained that speed and quick action without the proper understanding of the incident can have a detrimental impact during hazmat response. Having the self-discipline to gather sufficient facts first when hazardous materials are involved is a skill that emergency responders and scene commanders have to master. One of the most important aspects of dealing with hazmat incidents is not rushing in without establishing true knowledge and sufficient situational awareness prior to making decisions.

Situational awareness is a key skill in any incident, but it is particularly critical during hazmat incidents. Other "non-technical skillsets" that are needed during hazmat response include decision making, effective communication, leadership, teamwork, and the ability to cope with stress or mental fatigue.

The element of stress also comes into play when it comes to that heart versus head inclination to rush in without knowing all of the facts. Stress forces us to think much more intuitively and provides us with an overwhelming desire to just do something. However, when it comes to hazmat incidents, we must be far more rational in our thought processes. Being rational is a longer thought process and can feel somewhat unnatural when responding to an incident. This is a skill difficult to learn but is a key trait to master as a responder.

To safely respond to a hazmat incident, you must at a minimum do the following before developing an action plan:

- Identify the hazards that the material(s) presents, be it during a fire, release, or spill. Don't forget to draw on specialist advice from the shipper, carrier, or the product's manufacturer emergency line.
- Look for anything to give clues, guidance, or answers regarding the commodity in order to evaluate the physical, health, and environmental issues that may arise. One key source of information is the placarding on the container or package; this is sometimes easier said than done and should only be obtained if you can identify the information at a safe distance. Information can also be found by using the Emergency Response Guidebook (ERG) or a Safety Data Sheet, which can be sourced from the product's manufacturer emergency line.

Once you have ascertained what you are dealing with and its corresponding risks, you can implement an appropriate and safe operational plan. This plan will often include involving hazmat technicians and support from the carrier or shipper along with making sure the correct personal protective equipment, resources, and equipment are on scene and being used properly.

There is significant capability for both onsite and remote scientific and specialist support for hazmat incidents, particularly chemical, biological, radiological, nuclear, and high yield explosives (CBRNE) incidents. One of these resources is CHEMTREC, a 24/7 call center for hazmat emergency response coordination. Learn more at **chemtrec.com**.

During a hazmat incident, remember that the safety of your responders and of the people you protect rely on you making good decisions. Utilize those non-technical skillsets to gain a clear understanding of the incident and set your incident objectives so that your crew can respond safely and efficiently.

ABOUT THE AUTHOR

Chris Scott is the crisis management services manager for CHEMTREC. He has been working in the field of crisis and emergency response planning, training, and exercising for over 33 years and is a pioneer in the field. Chris has a bachelor's degree in leadership and management, a master's degree in emergency planning and disaster management, and has worked around the globe for a range of wide range of organizations, well-known companies, and global emergency services.

Health and Safety from a Leadership Perspective

By Chief Jeff Cash

Have you ever been in church when the pastor is speaking, in a lecture hall when the keynote is communicating, or even in class when an instructor is teaching, and you get your toes stepped on? I may actually do some stepping on toes here, but, as you will see, it is an area that is critical to the national fire and emergency services community. I do not need to expound on the subject of just how dangerous our roles are in protecting our communities; however, please allow me to remind you of the nature of our responsibilities, whether you are career or volunteer. It can and will have a long-term impact on your health and safety, including your family!

Recently there has been a lot out there about the cancer risks involving the fire and emergency services. Occupational cancer is becoming a major disaster for every emergency services worker, their organization, the communities they protect, and especially their families. The issue is looming as the most serious threat to the health and safety of America's first responders. The Firefighter Cancer Support Network published a landmark white paper in 2013 titled *Taking Action Against Cancer in the Fire Service*. Two of the key points in the paper were 1) a firefighter is 2.02 times more likely to develop testicular cancer compared to the general population, and 2) there is 400% increase in dermal absorption for every 5 degrees increase in temperature.

We also know that heart attacks kill firefighters as they have consistently been the leading cause of on-duty deaths for many years. According to an April 2017 article in *Medical News Today* by Tim Newman, new research adds another danger to the already long list of hazards associated with firefighting: extreme heat has been linked to an increased risk of heart attacks in firefighters. He cited lead author Nicholas Mills, Ph.D., who explained in the study report that: "The firefighters wore heart monitors that continuously assessed their heart rate, heart rhythm, and the strength and timing of electrical impulses passing through each part of the heart. We analyzed these to look for evidence of heart strain that might signify a lack of blood being delivered to the heart muscle." Dr. Mills concluded: "These harsh conditions can cause injury to the heart muscle in healthy firefighters and may explain the link between fire suppression and risk of heart attacks." The research also found that the risk of blood clotting increased with extreme exertion and temperatures. In addition, pre-existing conditions, lack of exercise, poor diet, and family history can be contributing factors when it comes to cardiovascular disease risk.

These are just two health and safety issues affecting the fire and emergency services. I don't have the space here to discuss all of the studies and findings that demonstrate increased health risks among firefighters, but others to keep in mind include diabetes, sleep deprivation, overall stress, and psychological health (this area is also a huge/critical factor for the fire and emergency services).

So, what are we doing to address these issues and who is responsible to set the example for your engine or truck company? Who is responsible for the overall health and safety of the organization? Let me remind each of you of a quote from our 33rd President of the United States, Harry S. Truman. He had a sign on his desk with "The buck stops here" inscribed on it. This was meant to indicate that he didn't "pass the buck" to anyone else but accepted personal responsibility for the way the country was governed. As an officer and leader of your organization, we should adopt the same mindset. We should be doing everything we can to learn ways to improve the lives of our troops and make it a departmental number one goal with obtainable objectives to make a difference. I challenge you to "allow the buck to stop with you." Sometimes you will face barriers, but that is what the fire and emergency services do best – tear down barriers.

Are you staying up-to-date on the latest information, data, and research which is available through federal agencies, national fire and emergency service organizations, and state and local outlets who serve firefighters? Some examples of resources include the U.S. Fire Administration (**usfa.fema.gov**), the Lavender Ribbon Report (**nvfc.org/lrr**), the information on the National Volunteer Fire Council's web site (**nvfc.org**), the International Association of Fire Chiefs' web site (**iafc.org**), and data collected by the International Association of Fire Fighters (**iaff.org**). Many federal grants have been awarded to enable agencies and organizations to produce the much-needed information and research. It is up to the officers and leaders to seek out and implement the findings and best practices at their levels and to influence their troops, other organizations, and state fire service.

Department physicals are a critical, recommended area of research and implementation. Monies need to be earmarked in every department budget to ensure our troops are getting screened and are physically ready for duty. Your members are the most important resource you have within your department! Thanks to a physical in my own department, it was discovered that I was pre-diabetic. Armed with this information, I was able to take specific action to take care of myself, and my wife was my driving force. Are your firefighters doing gross decontamination after a call? Do you prohibit PPE in the living and business quarters of your station? Do you have health and safety standard operating guidelines? More important, do you provide the equipment and training in this area? Are you promoting proper diets, exercise, and stress reduction options? All have long term effects!

The question remains – what are you, my officers/leaders, doing for your organization? Are you setting the example? Leadership is all about influence. How are you utilizing your leadership? Where does the "buck stop" in your organization?

ABOUT THE AUTHOR

Chief Jeff Cash has been in the fire service for over 40 years in both the volunteer and career sectors. He served as the fire chief of the Cherryville (NC) Fire Department from 1986 to 2021 and is a North Carolina certified firefighter, EMT, rescue technician, fire officer, arson investigator, fire code enforcement officer, and instructor. He is a past president of the North Carolina State Firefighters' Association, serves as the North Carolina director to the National Volunteer Fire Council (NVFC), and represents the NVFC on the NFPA 1021 Committee and the IAFC Safety, Health, & Survival Section.

6 Keys to Fostering Member Wellbeing and Increasing Department Productivity

By Brandon Fletcher

The concept of psychological health within a volunteer fire department may be new for many. The fire service is very familiar with the push to improve the physical health and safety of our members, but how do we apply the same resolve to the psychological side?

According to the National Volunteer Fire Council (NVFC), a psychologically healthy fire department (PHFD) fosters member wellbeing while enhancing department performance. It asks leaders to create a positive environment that supports and promotes good health and optimal functioning, which benefits both the members and the department. The NVFC's *PHFD: Implementation Toolkit* lists six categories of practices to best support department members: member involvement, health and safety, member growth and development, work-life balance, member recognition, and effective communication.

These focus areas all have one thing in common. For there to be successful implementation, there must be effective leadership in place to allow for these practices to become part of the department culture. In a world where leadership is drowning in knowledge yet starving for wisdom, we can still trace the success or failure of an organization back to its leaders. Leadership sets the tone for the organization in all areas of department operations. You cannot expect the members of the organization to buy into a department's training program or fire prevention program if the department's leadership does not fully support those programs. It shouldn't surprise you that the same is true here. You cannot simply pay lip service to psychological health and wellbeing. Leaders must back it up with actions.

1 Member Involvement

Team members want to feel valued and involved in the decision-making process of the organization. Decentralizing the traditional paramilitary/autocratic management styles and empowering members to make decisions and take ownership of the organization goes a long way towards improving morale and team productivity. While not every idea and suggestion can be implemented, creating a culture where members' voices are not just heard but listened to and fostering an environment where members feel comfortable speaking up without fear of ridicule or retribution goes a long way in enhancing the organization's psychological wellbeing.

2 Health and Safety

We ask our team members to do a lot and, in some instances, to risk a lot with little or no compensation. When members know that leadership truly has their safety and health at the forefront of the organization's mission, they are able to commit to that mission and invest their time and energy to mission success. In my organization, operational safety centers around training, equipment, and trust. We train our members extensively, equip them properly, and then allow them to perform the mission we have trained and equipped them for.

What about psychological health and safety? Has your organization created a culture where members feel safe to be themselves? Does your organization promote and value diversity, equity, and inclusion both internally among the members and externally within the community? Do you have ways to get members assistance after a rough call? Have you created a culture where members are comfortable asking for help?

3 Member Growth and Development

Member growth and development is critical in any organization. Leaders that invest in their members not only see better short-term performance, but long-term succession planning is achieved as well. I like to think of the volunteer fire department as an opportunity to not only enhance a member's growth and development within the organization but to grow and develop as a person, which often translates to success in both work and home life.

Develop position descriptions for every role within the organization that includes job performance requirements. Then develop a training program within the organization and identify professional development opportunities outside the organization that can be used to prepare members for these different roles. Consider mentoring programs to help new members learn the ropes of the organization and even programs to help newly promoted officers make the transition.

4 Work-Life Balance

Work-life balance is something that leaders must pay attention to and lead by example. This is an area that requires a delicate balance that can be hard for some. We often preach family first within our departments, but do we truly live it? This is especially true of organizational leaders that have more responsibility than the rank and file. Leaders will often work themselves to the verge of or past burnout, then expect the same from the rest of the team. On the flipside, there are leaders that expect the members to drop work or leave family when tones go off or to come to training but are often absent themselves due to "work and family conflicts."

At the same time, are we accurately communicating the department expectations, time commitment, and requirements? We all have the members that only show up when it's "convenient" for them to do so and who will use family as the excuse or crutch because no one will dare question it. After all, the organization preaches family first! In high performing teams, these problems usually

work themselves out, but what about when this becomes the norm? What about when the phrase "we're just volunteers" begins to creep in? This is one reason that I try to be as upfront a possible with new members when it comes to organizational expectations and finding the happy medium when it comes to work-life balance and department obligations.

5 Member Recognition

Member recognition is something so simple, often costs nothing, and can pay dividends. Just as members want to feel valued as part of the organization's decision-making process, they also want to have their contributions acknowledged. This acknowledgment can be as simple as saying "good job" after a strong performance, a social media recognition of an achievement or milestone, or recognizing good work at a monthly meeting. These examples cost nothing yet cause members to feel appreciated.

6 Effective Communication

It is fitting to close with communication as it is the glue that holds the other five practices together. Communication both up and down the chain of command is a necessity to avoid misunderstandings and poor performance. As a leader, you cannot hold anyone to a standard that you haven't communicated. Likewise, you cannot ensure that expectations are clearly communicated if you do not allow for feedback and other forms of two-way communication. While the fireground is likely to not be the place for asking why or explaining why, there is rarely a time in the firehouse where leaders shouldn't go the extra mile in communicating the why with the what, and then allow for a safe environment ask questions.

ABOUT THE AUTHOR

Brandon Fletcher is the chief of the Gilt Edge (TN) Fire Department and a 21-year student of the fire service. He is a second-generation firefighter with a background as both a volunteer and career firefighter. Chief Fletcher holds a bachelor of science from the University of Tennessee Martin, is a graduate of the Texas A&M Fire Service Chief Executive Officer program, and is a designated Chief Fire Officer and Chief Training Officer through the Center for Public Safety Excellence. He is also a member of the Institution of Fire Engineers, serves on the Fire Service Occupational Safety and Fire Officer Professional Qualifications NFPA technical committees, and is a commissioner for the Center for Public Safety Excellence Commission on Professional Credentialing.

By Dr. Richard B. Gasaway

Building Resilient Problem Solvers

Perhaps you're going to think I've been out in the sun too long when you read this proclamation: You should make more mistakes! What? It's true. But before you stop reading this article out of distain for such an absurd statement, please gift me just five minutes of your time to understand, from the perspective of neuroscience, why I think you should fail more in order to improve your preparedness as a responder.

You've heard it. Maybe you've even said it: "I've learned more from the mistakes I've made in life than the things I've done right." Is that coincidence? Or can it be validated with science? The answer is: It can be validated with science. To understand how this happens, let's dive into the learning brain.

You have many kinds of memory, and you learn things in many ways. The process of learning is, in fact, so complex, that I won't take it on in this article. Stated simply, when you learn your brain makes connections between nerves – pathways from one piece of information to another. Think of it as driving your car to the grocery store. The pathway to the store is memorized in the brain so you can get there, almost automatically because you have traveled the pathway so frequently.

But what happens when the road you always travel on the way to the store is closed? If you have traveled alternate routes before, you know ways to get around the closure and you will likely be able to easily navigate a new route. But what if you are in a strange town and you have to find your way around streets you never traveled before? It would take you a lot longer and you may end up getting lost. In fact, you might not make it to your destination before the store closes.

Finding Alternate Routes

When your normal road of travel is closed, you wander around until you find a new road. Now, for all future trips to the store you have two, maybe even three ways to get there. If the first road is closed, or even congested, you can quickly and flawlessly take an alternate route.

Now let's put this in the context of a firefighter or EMS provider. Think of practicing some skills over and over again as the equivalent of traveling the same road over and over again to the grocery store. So long as the road is open and passable, no worries. So long as the cognitive or muscle memory skill you are performing works, no worries. But what about when it doesn't work? What are you to do then? Wander aimlessly, trying new ways of doing your task on the fly? This could be risky if you are at an emergency scene where time is critical and the safety of you, your crew, and the person having the emergency is on the line. The better solution might be to have alternate ways to accomplishing the task (i.e., alternate roadways) already memorized. Just in case.

The alternate roadways in the brain provide you with solutions to problems when the regular solution doesn't work. When you have alternates, you can become a resilient problem solver and find quick solutions to novel problems. The brain actually rewires itself (i.e., builds new roadways) as it learns from mistakes.

Building Failure into Training

You can help members become resilient problem solvers by building failure into training. However, I want to issue you two big warnings. First, always ensure you are

using safety best practices when building failure into evolutions. It is never the goal to teach someone a lesson by allowing him or her to get hurt or be put into harm's way unnecessarily. That is negligent behavior on behalf of the instructor or supervisor.

Equally important, building failure into training should only occur after the students have learned, practiced, memorized, and perfected the RIGHT way to do things. Building their skills and confidence is very important.

Once they get good at the skills, then it's time to build failure in. But don't do it with malice. Tell them, in advance, that the evolution is going to fail and you want them to think of and implement novel solutions to the problem. Some novel solutions may work, some may not. Out of failure the brain rewires and builds new roadways and your responders become resilient problems solvers – quickly able to detour around roadblocks that arise at emergency scenes.

Not every emergency scene will go the expected way, and your responders need to be prepared for that. Train responders for success based on best practices first. Once they get really good at what they do and their confidence is high, tell them they need to learn novel solutions to unexpected situations and change the scenarios so that what they do will not work. Debrief the failures and discuss what worked and what did not and why. Challenge with questions like: What worked well? What didn't work well? Why did things not work as you thought? What did you learn from this?

The purpose of scripted failures is not to embarrass. It's to build alternate solutions into the collection of mental options. Make sure everyone knows this up front. Enthusiastic students who understand the motive of failure is to learn should welcome the opportunity to fail for the sake of learning and will be far less likely to resent an instructor who might otherwise seem to be taking joy in the sadistic act of creating failure among students.

ABOUT THE AUTHOR

Dr. Richard B. Gasaway is the founder of Situational Awareness Matters, a teaching and consulting organization based in Saint Paul, MN. He is widely trusted as an authority on situational awareness and the human factors that complicate first responder decision making under stress. The Situational Awareness Matters team has delivered programs to more than 90,000 attendees in the fire service, EMS, hazardous materials, law enforcement, private security, corrections, and information technology domains. Learn more at **SAMatters.com**.

Safety and Health Considerations for Wildland Fire Response

By Paul Acosta

As a resident of Colorado, I'm often asked, how's the skiing where you live? It must be an assumption that ALL Coloradans ski, but I can assure you that where I live, there is a lot of flat land and no skiing. Eastern Colorado's topography is much like Oklahoma, Texas, the Dakotas, Nebraska, and Kansas – flat and very grassy. Sometimes I wonder why our portion of Colorado hasn't been sucked into their states because we have so many similar conditions and fire tactics.

There are many considerations firefighters need to take into account when living in an environment prone to wildland fires. As a prerequisite, be sure to understand the 18 watchout situations that the National Wildfire Coordinating Group put out to provide scenarios to be mindful of when responding to wildland fire. This article, however, will focus on your safety by understanding weather conditions, apparatus riders, and personal health.

Weather Conditions

Safety is everything, so you need to consider weather as the main factor when preparing for fire attack. Watch your smoke and get updates from your weather service as they can give you a spot forecast in your area. In Colorado, the humidity can drop as low as 5-10%. This means there is less moisture in the air and when it gets really hot, it dries out quickly. Fire spread in this part of the country is very quick and dangerous. One fire scene that comes to mind was the small town of Last Chance, CO. Within 24 hours, this fire grew to 48,000 acres and had speeds up to 50 mph.

Additionally, lightning is a major hazard because you become a target for its next strike. Where I live, storms have a tendency to produce little to no moisture and then dry lightning doubles our risk. Fires can pop up immediately after the strike, which is slightly different from mountain areas where fire may smolder for a while and then grow. Living in farm country, haystack fires are often started by lightning and can burn for days. If you are caught in a lightning storm, remember to keep yourself close to the ground. This makes you smaller and provides a better chance to survive. Normally, lightning can strike up to 60 miles away, but in 2020, there was a lightning strike that stretched 477 miles and was labeled a megastrike. Every year the National Weather Service offers free education on storms, and I'd recommend this class to help you understand volatile weather conditions.

Apparatus Riders

Which brings us to the elephant in the room regarding wildfire response – to ride on trucks or NOT ride on trucks. I have to be honest and say that we do both here. I have witnessed fire move well over 50 miles per hour and there is no way that walking a fire line will help you. Many have asked why we don't cut a fire line and do backburns to stop the fire; trust me it has been used, but the speed and intensity of the fires are insane! Spot fires can jump far ahead of the head of the fire. When riding the trucks, make sure your driver is going your speed because you are the one extinguishing the flames. Additionally, please wear some type of restraining device to ensure your safety. It is a risky maneuver and communication with your driver is key. We have wireless headsets for the riders and our drivers are plugged into the console to maintain great communication.

Health Considerations

Hydration is a factor at any fire event, and with the help of the Anheuser-Busch Emergency Drinking Water for Wildland Firefighters program (**nvfc.org/water**), there is no reason why we shouldn't be pushing water. Water is not the full solution though, because we need to have plenty of electrolytes to keep our body at homeostasis. DripDrop, another NVFC partner, annually provides members with free samples of its oral rehydration solution, and using those types of resources makes it easier for us to continue to stay on the front lines. The sun is usually beaming down on us, and the risk of heat exhaustion increases. Yet unlike structure fires, how many of us have rehab stations at ground cover fire scenes? When you are

filling up your unit, fill yourself with water and electrolytes and avoid the sugary drinks. Monitoring your urine color can help you determine whether or not you are fully hydrated.

Smoke exposure is a factor at every fire, including those in grass and wildlands. Even if the smoke isn't blowing your way, be ready for wind shifts that can change its direction. In addition, fires with toxic items can pose a threat to your health, such as fence poles, old cars, trash, animal carcasses, farming solvents, and tires. Wearing your full PPE along with the shroud and filter decreases your chance of exposure. You need to have two shrouds so that when you need to wash one, the next one is ready to rotate in.

Some departments cannot afford lightweight gear, so it is key to know when to take a break because structural gear will make you even hotter. Switch up roles and take over driving while the other firefighter battles the blaze.

Visibility also poses a threat, so be wary of other trucks on the fireground. Incident command is vital to help deploy crews to correct locations and prevent rogue trucks going anywhere they want. If you're on an interstate, get off the road as much as possible, wear a traffic vest, and stage your trucks according to traffic incident management guidelines.

Final Thoughts

These are just a few of the considerations for wildland fire response. I'd recommend purchasing the book *Ground Cover Firefighting for Structural Firefighters* by Tom Richter. Remember, your safety is the most important thing, and we want everyone to go home. After the call, take care of yourself both physically and mentally because you need to be ready for the next event when it strikes.

ABOUT THE AUTHOR

Paul Acosta is a 28-year veteran and past chief of the Brush (CO) Volunteer Fire Department. He is serving his second term as president of the Colorado State Fire Fighters Association and has been on the National Volunteer Fire Council Board of Directors since 2014. He serves on several NFPA Technical Committees, and in 2019 he was approved by the governor to serve on the Colorado Fire Commission. He has held certifications as Firefighter I, Swift Water Operations, Ice Rescue Operations, HazMat Ops, Storm Spotter for the National Weather Service and Skywarn, EMT, Extrication Specialist, and is currently an instructor for the Colorado Division of Fire Prevention and Control in the Driver's Simulator.

Improving Safety through State Pipeline Emergency Responders Initiatives

By Arthur Buff

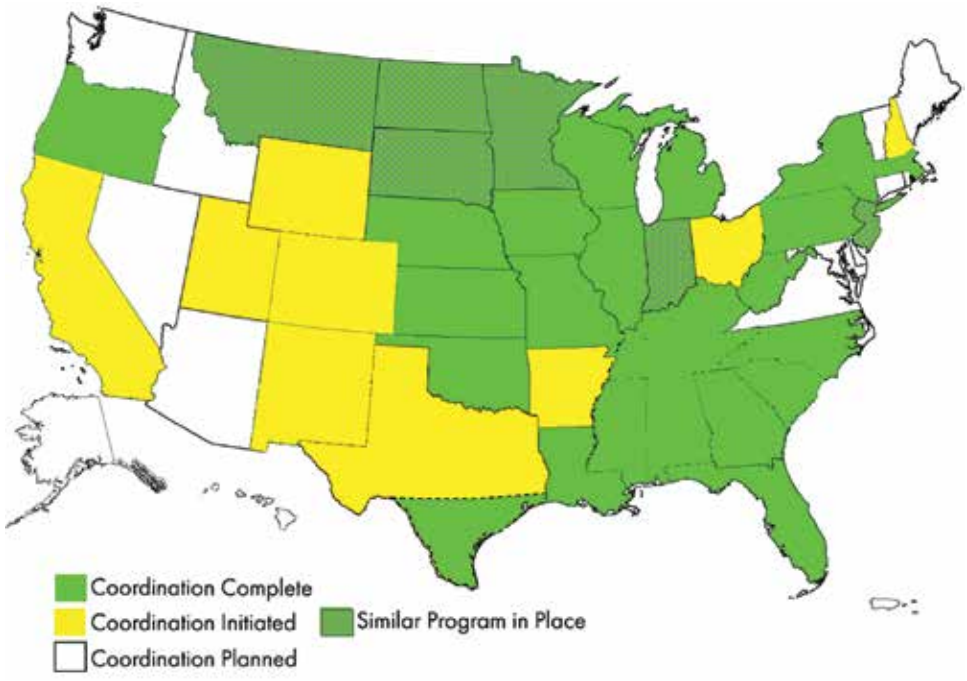
In the early evening hours of September 9, 2010, a loud explosion and subsequent fire reverberated through a residential neighborhood in San Bruno, CA. A 30-inch-high pressure natural gas transmission pipeline ruptured, resulting in eight fatalities, 58 injuries, 38 homes destroyed, and 70 homes damaged. In total, 600 firefighters (including emergency medical service personnel) and 325 law enforcement personnel responded to this catastrophic incident.

The fire department officials that responded were not aware that the pipeline — which was built in 1948 — even existed and that the fire was a result of a gas pipeline rupture. This tragedy, as well as other incidents involving a lack of information sharing between pipeline operators and emergency responders, exposed areas of concern. This led the Pipeline and Hazardous Materials Safety Administration (PHMSA) to conclude that improving communication and the sharing of information between pipeline operators and the emergency response community was critically needed. PHMSA is a federal regulatory agency responsible for the safe transportation of hazardous liquid and natural gas through approximately 2.8 million miles of pipelines across the U.S.

Following the San Bruno incident, the concept, which later became known as the Pipeline Emergency Responders Initiative (PERI), began to take shape. At that time, a diverse group of pipeline operators, emergency responders, and state and federal regulators came together in Georgia to discuss more effective ways of working together. The result was the establishment of the Georgia PERI, a voluntary public-private partnership that provided opportunities for emergency response organizations and pipeline operators to improve emergency response to pipeline events throughout the state. The Georgia PERI was a success and became the model for other state PERI programs across the nation (see map).

Emergency responders are trained to protect the public from dangers that may arise. Operators are responsible for safely operating their pipeline facilities and complying with the pipeline safety regulations. We learned that through collaboration, operators and emergency responders can improve communication, build relationships, and identify opportunities to better understand their respective roles during a pipeline emergency. Further, recognizing that first responders may not receive adequate pipeline emergency training, collaborative programs like PERI help fill this gap by providing training opportunities designed to optimize response to pipeline emergencies.

Improving communication between emergency responders and pipeline operators across the U.S. is an important component of pipeline safety. In this vein, PERI was conceived to strengthen relationships among the various stakeholders involved with pipeline safety and emergency response, as well as to spur the development and implementation of enhanced pipeline emergency response training. PERI program contributions to safety include sustainable pipeline



emergency training for first responders, improved responder awareness of the need for this training, and emphasis on reducing pipeline emergencies by increasing responder roles in excavation damage prevention. Communication and cooperation between pipeline operators and emergency responders are paramount. More importantly, establishing positive working relationships — specifically with the volunteer fire service before emergencies occur — is critical to advancing pipeline safety.

The National Volunteer Fire Council (NVFC) plays an important role in the PERI program as the only national organization exclusively representing the interests of the volunteer fire and emergency services. In coordination with the PERI program led by PHMSA, the NVFC focuses its outreach in several states with targeted damage prevention initiatives in place. A noteworthy product of this joint venture is the *Fire Department Pipeline Response, Emergency Planning, and Preparedness (FD PREPP) Toolkit*. This toolkit and corresponding training, available at **nvfc.org/pipelines**, is being used to elevate the message of pipeline response readiness within the volunteer fire and emergency response communities.

The PERI program plays an important role in closing the gap on communication and collaboration during pipeline emergencies. It helps prevent the miscommunication that emergency response personnel experienced during the San Bruno incident. Pipeline operators, emergency response personnel, law enforcement, 911 dispatchers, 811 call centers and other stakeholders across the nation are actively working together to develop and implement local PERI programs. With a seat at the table and "ownership" of the program, these stakeholders have a prevention/action mindset that will help mitigate potential damages from a future pipeline emergency incident. Working together, these stakeholders are committed to developing the relationships necessary for an effective and safe response to pipeline emergencies.

Find further information on PERI at **https://bit.ly/about-peri**.

ABOUT THE AUTHOR

Arthur Buff, P.E., serves as a community liaison manager for the Pipeline and Hazardous Materials Safety Administration's Office of Pipeline Safety. He advances the Administration's pipeline safety mission by proactively engaging with pipeline stakeholders, providing technical expertise, and leveraging technology, data, and information to reduce pipeline risks and influence change through program and policy development. He earned a bachelor of science in civil engineering from Northeastern University, a master of science in sanitary engineering from Georgia Tech, and is a Georgia registered professional engineer.

The Stress of the Job: What Fire Service Families Should Know

By Ali W. Rothrock

Since joining the volunteer fire service almost 16 years ago, I've stood comfortably in buildings as they burned, hung 300 feet in the air and crawled far below ground doing technical rescues, and witnessed many deaths and other tragedies. I have certainly felt stress doing the job, but nothing compares to the stress I have felt as the wife of a first responder.

After being a volunteer for years, my husband got his first career firefighting job right after we were married. He joined the Air Force six years later, where he is currently in training for a job that's even more dangerous. In 2018 I got the call every family member dreads – the call saying he'd been burned in a fire and to meet him in the emergency room. Thankfully he recovered completely, but I will never forget the way my stomach sank when I heard those words.

Those who love a first responder are already incredibly strong. You must be in order to hold the stress we feel when our loved one goes out the door. They went through extensive training to do the job that they do. But you didn't. No one told you how to navigate the unknown, how to deal with the way the job affects your relationship and your children, or how to find endless patience when they are not able to be present when and where you want them to be.

I want you to know more about the types of stressors your loved one is facing. That way when they come back from the station and tell you even a bit about a call they just ran, you will have idea of what sort of stress response you might expect and how long it might last. This information will help you better support them and yourself.

Three Types of Stressors

I've organized the types of stressors first responders face into three categories: day-to-day, infrequent, and unique. Day-to-day stressors happen, as you might guess, very often, and can lead to cumulative stress, or stress that builds up over time. Those can include shift work, adrenaline spikes, frequent sleep disruption, and the COVID-19 pandemic. Next we have infrequent stressors, which are less common but can cause significant stress. These are the more serious calls like fatal car accidents, calls involving children, or a call that feels extra personal to the responder. And finally we have unique stressors, which are (thankfully) the least common but can cause extreme stress. These are the once-in-a-career events like a mass casualty incident, close calls where a first responder is almost killed or seriously injured, or in the worst-case scenario, a line-of-duty death.

It's important to remember that there is no one-size fits all response to a stressor, even in the most uniquely stressful cases. All stress reactions are deeply personal and can be different from incident to incident, even from the same person. Many factors influence the severity of someone's reaction, including existing positive and negative coping skills, current healthy or unhealthy lifestyle habits, and current support systems. If your loved one comes home after time at the station and seems shut down, I know it's hard not to wonder if it's because of something you said or did. However, often they are just trying to decompress from a myriad of stressors that could be affecting them in many different ways.

The Post-Traumatic Stress Continuum

Understanding what I call the post-traumatic stress continuum will enable you to gauge your loved one's response to an upsetting incident based on how much time has passed since it occurred. This will help you determine if what they are experiencing is considered normal and something that should pass versus a response that they might need some extra support to navigate.

In the first few days after a significant call, they might find themselves reliving the call or dreaming about it. They might have difficulty sleeping, eating, or trouble keeping their normal routine. These are called post-traumatic stress symptoms (NOT post-traumatic stress disorder/PTSD) and they are normal. Most of the time, these symptoms lessen after a few days. But if there is a call that the responder doesn't process adequately, the symptoms of post-traumatic stress might get worse. If two or three weeks pass and their response is not lessening, they could be experiencing what's called acute stress.

If more than 31 days have passed since the event, a PTSD diagnosis could be appropriate. It's important that this only be diagnosed by a licensed trauma-trained clinician, who can also provide treatment to help them mitigate the symptoms. And finally, if you suspect a call that happened months or even years ago continues to affect your loved one in a detrimental way, it is time to get them that extra help.

Remember You Are a Team

If you believe that your loved one needs support beyond what you can give them, please don't feel like you failed. You are not responsible for knowing how to solve something like this. What your loved one needs from you is support, love, and a unified front. Saying things like "we will get through this" and "you are not alone" will help them feel less isolated. Assure them that they are not broken and that struggling after a traumatic call doesn't mean they aren't capable of doing their job in the long run.

For the first responders reading this, go easy on your loved ones. They see the news when the worst-case scenario happens, and they can't help but worry. Loving you can be scary because they are constantly faced with the prospect of losing you. They see first responder funerals and they picture themselves in the family's seats. Let them in. Forgive them for not always having the perfect words to say. Tell them about your tough calls, even if it's just that you had one. I understand not wanting to share gory details, but you can still let them know when you need some extra space, love, or support.

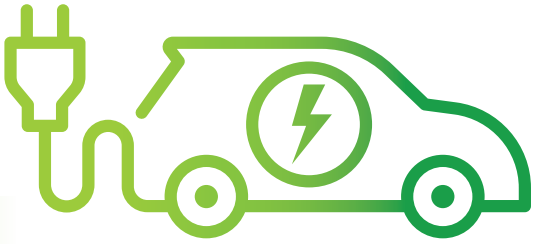
Always remember that you are on the same team and both of your roles are equally important.

ABOUT THE AUTHOR

Ali Rothrock is an author, speaker, and educator who has delivered over 500 presentations nationwide about resilience after trauma and advocating for first responder mental health. She is a volunteer firefighter and EMT, member of the Cumberland County (PA) Critical Incident Stress Management Team, a certified trauma responder through the Association of Traumatic Stress Specialists, and a behavioral health specialist with the Medical Reserve Corps. Ali is the author of *Where Hope Lives* and *After Trauma: Lessons on Overcoming from a First Responder Turned Crisis Counselor*. She has an associate degree in fire science and a bachelor's degree in psychology with an emphasis in crisis counseling.

As More Electric Vehicles Are on the Roads, Responders Need to Be Prepared

By Trina Wafle



As pure battery electric vehicles (BEVs) rise in popularity, first responders can increasingly expect to be called to a scene involving this trending technology. Even though Kelly Blue Book notes that less than 3% of total auto sales today are BEVS, market data firm Statista predicts that by 2030, 32% of new car sales will be BEVs.

Tesla is the most widely known purveyor of the new BEV technology, but they're not alone. According to *Car and Driver* (citing *Automotive News* data), in addition to Tesla's Model Y, Model 3, and Model S (ranked first, second, and ninth), top selling BEVs in 2021 included the Ford Mustang Mach-E, Chevy Bolt EV and EUV, Volkswagen ID.4, Nissan Leaf, Audi e-tron and e-tron Sportback, Porsche Taycan, and Hyundai's Kona and Ioniq Electric.

Legacy manufacturers are catching up. Some are making plans to go all electric within 10 years. Jaguar, Alfa Romeo, Cadillac, Mercedes, and Lexus (the second and third leading luxury brands in the U.S.), and BMW's Mini brand will be all-electric by 2030. Ford is investing $11.8 billion in two massive, state-of-the-art manufacturing facilities in Tennessee and Kentucky that will produce electric F-series trucks and batteries for future Fords and Lincolns. And General Motors (GM) announced its plans to invest $35 billion by 2025 to produce 30 new electric vehicles (EVs) of their own.

While sales of BEVs are coming on strong, sales of hybrid electric vehicles (HEVs) outpaced BEV sales by about two-to-one in 2021, the strongest year ever for HEVs. Consumers purchased more than 800,000 of the vehicles powered by gasoline engines coupled with motors powered by lithium-ion batteries. HEV sales represented 5% of light vehicle sales according to market data firm Wards Intelligence, nearly twice the number of BEVs sold.

That's why it is not too early for firefighters and other first responders to become aware of what these new transportation technologies mean for incident response.

Thanks to a grant from GM, the National Volunteer Fire Council (NVFC) partnered with West Virginia University's Fire Service Extension (WVU FSE) and National Alternative Fuels Training Consortium (NAFTC) to develop an online awareness training to introduce first responders to EVs. The self-paced, approximately one-hour video is narrated by Tom Miller, NVFC's director from West Virginia and an adjunct instructor with WVU FSE.

Miller explained that GM takes their commitment to safety seriously and partnered with the NVFC to make this training available to all first responders. The NVFC then reached out to the NAFTC, a national leader in this technology, to build a strong, quality based training program.

"The training drives home the mission critical points to identify, immobilize, and disable the involved vehicles. The safest bet is to assume that every vehicle is an electric vehicle of some sort and has a lithium-ion battery until proven otherwise. And always approach the vehicles uphill and upwind," said Miller.

The well-sourced training notes that while BEV fires are rare, they require far more resources to extinguish. Autoinsuranceez.com reported that there were 1,529.9 fires per 100,000 gasoline vehicles sold and only 25.1 fires per 100,000 BEVs sold. "Plan on needing 3,000 to 8,000 gallons of water for each passenger EV. Thermal runaway can be a big problem with lithium-ion batteries. It takes thousands of gallons of water aimed directly at the batteries to manage the heat and prevent thermal runaway that leads to fires," said Miller.

While BEV fires are rare, HEV fires are just the opposite. There were 3,474.5 fires per every 100,000 HEVs sold, more than double the number of fires for gasoline-powered vehicles.

And it's not just fire. While automakers have introduced a plethora of safety devices to avoid the threat of shock, firefighters must assume that shock from an EV's high or medium voltage system is a risk, nonetheless. There is no standard for indicating the presence of high voltage, although common practice has been to add warning labels and use bright orange cables for high-voltage systems and bright neon blue cables for medium voltage systems. Bright yellow cables have also been used.

"NEVER ever cut any of these brightly colored cables!" warns Miller.

ABOUT THE AUTHOR

Trina K. Wafle is an assistant director at the West Virginia University (WVU) Energy Institute, home of the National Alternative Fuels Training Consortium. In addition to helping launch the educational consortium of community and technical colleges in the early 1990s, she has helped develop research programs at WVU related to advances in battery and solid oxide fuel cell technologies as well as other research programs that promote cleaner, domestic energy options.

Besides shock, there is also the possibility of the release of toxic gases such as hydrogen fluoride and phosphoryl fluoride. "That's why it is important to don full PPE including SCBA when dealing with an EV incident and, again, approach from uphill and upwind," advises Miller. "Responder safety is always our highest priority."

NAFTC was among the first to recognize the transportation electrification revolution when the consortium developed and rolled out first responder training about EVs in 2012 with funding from the U.S. Department of Energy. This latest effort with the NVFC updates that training and uses the NVFC's online technologies to expand the overall education effort. In addition to the video, the training also includes supplemental, easy-to-use print materials for first responders.

The training is free for all emergency responders. Learn more at **www.nvfc.org/vehicle-response**.

Know the Terminology

Here are a few terms you may encounter when it comes to electric vehicles.

Electric vehicle (EV): Any vehicle that uses an electric motor and batteries for propulsion alone or in combination with an internal combustion engine (ICE) powered by gasoline. Batteries are typically lithium-ion (Li-on) but may also be nickel metal hydride (NiMH).

Battery electric vehicle (BEV): Uses only Li-on batteries and electric motors to propel the vehicle.

Hybrid electric vehicle (HEV): Uses both electric motors powered by batteries (either Li-on or NiMH) and engines powered by gasoline for propulsion.

Regenerative braking: A way to use the electric motor as a generator to slow the vehicle and generate electricity to charge the battery. All EVs employ regenerative braking to extend the driving range of the batteries.

Plug-in electric vehicle: Any BEV or HEV that can be plugged into an electric outlet to recharge the batteries. BEVs are always plug-in electric vehicles. However, some HEVs also include a plug to allow the batteries to be recharged from an outlet. This type of HEV is called a plug-in hybrid electric vehicle, or PHEV.

Hydrogen fuel cell vehicle (FVC): While mainly experimental, this type of vehicle is, in fact, an electric vehicle. A fuel cell and hydrogen replace the battery. The fuel cell chemically reacts with hydrogen to generate electricity that powers the vehicle's motor.

ICEd out: A term used to describe when an internal combustion engine vehicle blocks access to a recharging facility.

Tips for Becoming an Advocate for Health & Wellness

By Chief John M. Buckman III

You have been on the job for a few years and completed your Firefighter I training and certification. You are an emergency medical responder as well. During your training you learned about occupational cancer and the mental wellness aspects of the job.

You have begun to observe that immediate decon is not performed regularly and that dirty PPE is worn in the apparatus riding back to the station. You are not an officer. You hold no rank. You know these firefighters are creating additional exposures risks for themselves, other firefighters, and their families at home.

You may ask yourself, "What can I do?"

YOU can become an advocate to help ensure that policies are followed, but more importantly that common sense becomes the order of the day.

What is Advocacy?

Advocacy can be defined as actions taken by an individual or a group that supports or recommends actions on a specific issue that benefits all.

You might not think of yourself as an advocate, but in many ways you already are. Every time you speak up for yourself or others, you are an advocate. It may be as simple as saying, "Let's decon our gear before we get back on the apparatus."

Much of your advocacy may revolve around your safety, health, and welfare. To get the best out of others it is important to speak up for and support yourself and others.

Nine Tips for Advocating for Health and Wellness

So what can you do to become an advocate in your fire department to increase health and safety measures to better protect everyone? For instance, how can you communicate the need to reduce exposures to carcinogens? Here are a few tips to help you get your message across.

1. Be respectful of the traditions and beliefs of others.
2. Make sure you are current on the issue you are advocating for. Read, listen, and do your research. Don't depend on the internet to keep you current; look for validated research on issues.
3. Determine who the person or people are that you need to deal with to get action on this matter.
4. Build alliances with those who think similarly. You can't always influence change alone – find out who thinks about your issues in the same way you do.
5. Understand why the opposition is against your issue and formulate a well-informed and researched case to address the opposing concerns.
6. Don't make your advocacy against other persons, but rather for enhanced health and safety.
7. Set the example. You have to walk the walk and talk the talk. If others see you not following your standard of performance, you will not be effective.
8. Communicate your desires in a positive way. Don't use criticism to try and change others. Ask instead of telling the experienced member what to do. Ask them why they do what they do. Words are very powerful and there are some words you should not use. For instance, instead of should, use could; instead of never, use sometimes; instead of but, use may.
9. Be brief and stick to the point. Don't allow yourself to be diverted or to ramble on with unimportant details. State your concern and why you believe things should be changed.

It can be a wonderful thing to advocate for issues you truly believe in. It can also be very empowering to work together with a group of people; when more than one person speaks up about an issue, the message can be even stronger.

Believe in yourself and your issue. The effort you make will pay dividends into the future. You can do it. Be proud of your stance.

ABOUT THE AUTHOR

John M. Buckman III served as a German Township (IN) fire chief managing volunteers for 35 years. He currently serves as education coordinator for the International Association of Fire Chiefs' (IAFC) Volunteer and Combination Officers Section and is the director of government and regional outreach for IamResponding. He received the National Volunteer Fire Council's Lifetime Achievement Award in 2013 and the James P. Seavey Sr. Health & Wellness Leadership Award in 2022. He served as the Indiana Fire Academy Director for 15 years, is a past president of the IAFC, and has authored over 150 articles and several books.

Providing a Safe Journey through a Junior Firefighter Program

By Jerry Presta

Junior firefighter programs are intended to train and capture youths' interest in the fire and emergency services. It is the hope that these kids move into the actual fire service when they are old enough, making these programs a vital tool in recruitment and fostering our next generation.

While most members may be on board to have a junior firefighter program in their fire station, there are often some that remain hesitant. The biggest reason is liability, but in some cases, it's used as an excuse. Safety does not start on the fireground. There are many steps to promote a safe environment for these kids.

Proper leadership is key to any safe program. When selecting advisors or mentors to mold these kids into safe leaders of the future, they should be people of skill, levelheadedness, and moral integrity. Putting a person with these kids who is constantly getting reprimanded for not following the department SOPs or someone just out of probie school would not be a valid choice. Instead, put a seasoned firefighter with a proven track record and a commitment to safety and health in charge. A few probies can assist and support them, with the seasoned firefighter(s) monitoring everything that happens during each training session. Also, consider involving a member who is a parent or even has kids in the program, as parents know what lines not to cross to keep kids out of harm's way.

Structure must also be a big part of the program. When kids show up for any event, they must feel there is structure to their program. Have a plan, not only for trainings but for meetings and other activities. With a lack of structure minds start to wander, and that's where problems begin. The meetings and activities become a free for all. Roughhousing or horseplay should not be tolerated at any time. There is a respect and decorum that should be applied to all program activities. To further encourage a more formal and structured environment, when the junior firefighters are in the firehouse, they should address all officers and chiefs by their title instead of their name. It is easy to get complacent, especially in the firehouse setting where everyone knows each other's families.

It is very important that the junior firefighters learn how to act in a meeting setting. *Robert's Rules of Order* should always be followed. It's a great tool for any of them to use in everyday life. Knowing how and when to bring up something at a meeting is vital in any organization, as is knowing how to address the president of the organization and how and when to make a motion. This comes back to structure. Once they graduate into the fire service, they will feel comfortable when at their company meetings. A lot of organizations are so focused on trainings for their junior firefighters that they forget we are also trying to set them on a path of leadership. They should leave the program not only with firefighting skills, but with skills for everyday life.

It's no secret that trainings are why most youths come into a junior firefighter program. We all know trainings must be done in a safe manner, but what is that? It goes back to having the right person or people train them. Don't just throw gear at them and tell them they must wear it; explain the importance of PPE and what the consequences are of not wearing it the proper way. The biggest question most departments grapple with is what juniors can and can't do. Stay away from any "live" smoke/fire, hydraulic rescue tools, power tools, or cutting torches. There are an array of different safe trainings they can go through to keep their interest, such as donning and doffing gear, thermal imaging cameras, search, and much more.

In closing, safety doesn't just start with hands-on training – it must be integral to the program from the very beginning. The biggest part is communication between the department leadership and the advisors, and between the advisors and the junior firefighters. Make sure the juniors are comfortable in the skills you are teaching them. If someone is afraid of heights, don't put them on a ladder. Our obligation is to train these junior firefighters to be safe, educated, and efficient first responders. As their mentors, we need to ask ourselves if we're doing everything to ready these future firefighters to safely and effectively help the citizen that just dialed 911.

ABOUT THE AUTHOR

Jerry Presta is a 24-year member of the East Norwich (NY) Volunteer Fire Company and advisor for his department's junior firefighters for 23 years. He has served as chair of the board for the Nassau County Junior Firefighters Association for the past 14 years. His main focus is to promote junior firefighter programs and training not only in Nassau County but across NY state and the country. He is the co-chair of the Firefighters Association of the State of New York's Youth in the Fire Service Committee and sits on the National Volunteer Fire Council's National Junior Firefighter Program Advisory Board.

Making Wellness Work for Volunteer Fire Departments

By Dr. Anna Fitch Courie

The health and wellness of first responders is critically important to public safety leadership. With anxiety, depression, post-traumatic stress, and other health issues exceeding rates of the general population, leadership is rightfully concerned. More and more organizations are supporting establishing and embedding wellness programs into their departments.

For many career organizations, the emphasis on the needs of public safety is a welcome change. But for volunteer fire departments struggling with limited budgets, dedicating resources, time, and capital to address these needs can be a challenge. However, this doesn't mean health and wellness can't be a part of your volunteer culture. There are many cost-effective and practical solutions volunteer fire departments can consider.

Create Infrastructure for Wellnes

The best thing you can do to establish a wellness program is to ask your peers and leadership about their interest in a wellness program. Get their support and thoughts about what wellness means to them. Ask them what they would participate in, what times would work, if they want their families involved, and the topics that interest them most. You can do this at the firehouse kitchen table, with a bulletin board, with an emailed survey, or small group meetings with your teammates.

The most important thing is to simply engage those you want involved in a wellness program. Without their input and buy-in, it's a lot less likely they will participate, and you'll feel like you've wasted your time.

Create a Vision and Determine Priorities

One you have an idea of what your volunteer fire department wants to focus on, create a vision statement. A statement that is simple, to the point, and captures that idea of what you want to create will help you communicate your goals to your department. For example, the vision of the FirstNet® Health and Wellness Program is: "To Be There for First Responders in their Health and Wellness Needs."

Now that you've gotten feedback from your team, organize it into priorities. The most effective leadership skill I've learned is from Gary Keller's book *The One Thing*. If you focus on getting really good at one thing at a time, it will create a foundation for other great things to follow.

Your team may tell you their wellness priorities are finances, fitness, mental health, spirituality, family time, stress management, post-traumatic stress, anxiety, or weight management. But you can't focus on all of these at the start. Choose one thing that will get the most traction with your department and build out your program around that one thing.

SMART Objectives

I've also found that programs that establish SMART objectives for their priorities are far more likely to implement effective programs. SMART objectives are those that are Specific-Measurable-Achievable-Realistic-Time Sensitive. Writing SMART objectives is boring. But taking the time to write out a plan for your wellness program is a key differentiator between programs that succeed and those that fail.

An example of a well written SMART objective aligned with a key priority (physical fitness) would be: For the next six weeks, the volunteer department will offer a total body exercise program on Tuesdays and Fridays at 0600 and 1800 with a goal of at least 80% of the department attending at least 80% of the classes.

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ABOUT THE AUTHOR

Dr. Anna Fitch Courie, director of responder wellness, FirstNet Program at AT&T, is a nurse, Army wife, former university faculty, and author. Dr. Courie has worked for over 20 years in the health care profession including bone marrow transplant, intensive care, public health, and health promotion practice. She holds a bachelor's in nursing from Clemson University, a master's in nursing education from the University of Wyoming, and a doctor of nursing practice degree from Ohio State University. Dr. Courie's area of expertise is integration of public health strategy across disparate organizations to achieve health improvement goals.

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You can also use objectives and written plans to communicate what you are trying to achieve to the team and leadership. The more clearly you communicate your plans, the higher probability you will increase your participation. Write an objective(s) for each of the priorities you tackle. Objectives can include things like:

- Programs
- Communicating information and resources on the priority
- Getting family to attend/participate
- Connecting community resources to meet your department needs
- Identifying a nonprofit that can help your department meet its goals, even with limited resources.

Communicate and Evaluate

Remember how your SMART objective has that measurable component? That's how you will evaluate the success of your efforts and determine if it's worth continuing to invest in the activity or tweak your strategy to better meet your department's needs. It's also useful to communicate the results of your wellness activities back to your peers via newsletters or emails. This helps to facilitate engagement and future participation. In addition, communicate any changes you make to your plan of attack. The more you create systems for communicating wellness with your teammates, the more you will sustain your efforts in the long term.

Explore the Resources

While I have emphasized the process for HOW you create wellness programs and plans for any department, you still need resources. Many organizations will provide free or low-cost trainings for volunteer fire departments or have scholarships for your members to attend. Several of the organizations I work with to deliver high quality wellness solutions in public safety include:

- Boulder Crest Institute (bouldercrest.org) for post-traumatic growth and peer-to-peer support training
- O2X Human Performance (o2x.com) tactical athletic training and their physical conditioning application: Eat, Sweat, Thrive
- Red H.E.L.P. and First H.E.L.P. (1sthelp.org) suicide prevention resources and Mission Readiness Training
- The National Association of Emergency Medical Technicians (naemt.org) Emotional Resiliency Officer training program
- All Clear Foundation "Responder Strong" (responderstrong.org) training
- Lighthouse Health and Wellness app (lighthousehw.org), which ensures that any volunteer fire department can get a free wellness application with health and wellness resources at their fingertips

Bottom Line

You know your team best. There are solutions you can use to help support development of a wellness program for your organization. Get to know your team, strategize together on what you want to address, develop a plan, and most importantly, act. Your health matters and so do you.

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Applying for Grant Funding to Meet Health and Wellness Needs

By David Lewis

Each year, fire and EMS departments from across the U.S. acquire funding through the Assistance to Firefighters Grant (AFG) program for tools, equipment, and vehicles to meet their mission. Yet there is one area that few departments take advantage of – Wellness and Fitness, which is a category under the Operations and Safety section of the AFG program.

A review of FY 2020 applications shows that there were 5,178 applications under the Operations and Safety section. Of those, only 115 were for Wellness and Fitness programs, about 2.2% of the total. 84 of these were pre-scored as eligible and sent forward for peer panel review. This resulted in 66 awards, meaning that 78% of applications in this program area that were paneled received an award. This is a significant number of awards per applications received.

It is unfortunate that so few departments take advantage of this funding opportunity yet there is a clear need for these types of programs. The National Fire Protection Association's (NFPA) *Fifth Needs Assessment of the U.S. Fire Service*, released in December 2021, clearly identified deficiencies among fire departments in addressing the health and wellness needs of their responders. Of the departments surveyed:

- 72% do not have basic firefighter health and fitness programs.
- 61% do not provide NFPA 1582-compliant medical and physical evaluations.
- 73% do not have any type of behavioral health program.
- While nearly 51% of the departments who have implemented health and wellness programs have a cancer prevention education program, less than 10% provide cancer screenings.

Firefighters are the most important tool for a department. If 5,178 departments felt strongly that acquiring new tools and equipment was their most important need, why didn't a larger number take the initiative to protect their most important tool? Perhaps they didn't understand that this funding was available and what could be requested.

There are five categories within AFG under the Operations & Safety area: Personal Protective Equipment, Equipment, Training, Station Modifications, and Wellness and Fitness. Departments may request funding under any one or all five activity areas. Each area is scored as a separate project. Since the outcome of one funding area does not affect the others, what do you have to lose?

Departments should consult the AFG Notice of Funding Opportunity for specific guidance on what items are eligible under the Wellness and Fitness category. To be eligible for funding, applicants must offer, or plan to offer using grant funding, all five of these priority activities:

- Initial medical exams for new members
- Annual medical and fitness evaluation for all members
- Job-related immunizations
- Behavioral health programs
- Cancer screening program to meet NFPA 1582 standards

Before applying, your department should develop a program that meets the needs of its members and aligns to the AFG program priorities. Departments can review NFPA 1583 for guidance on the minimum requirements for the development, implementation, and management of a health-related fitness program.

Also, consider the data needed to make your application successful. Start with defining the need: what are the risks to your members and what is the department's history with injuries and illnesses? Next, what is the solution: what program activities will be offered, how will they be managed and developed, what is the cost of the program? And finally, what is the effect of implementing these programs: how many members will benefit, how will these programs reduce injuries/illness, how much cost savings may be realized through reduction in injuries and illnesses, what is the savings of preventing one injury/illness versus the cost of not preventing that injury/illness?

Acquiring grant funding to address the health and safety needs of your department helps the department operate more efficiently and safely. Addressing your member's needs is a leadership responsibility that should be taken seriously. Yes, it takes work to develop a health and wellness program and apply for grant funding, but is it not worth it? We promise our members that we will keep them safe. Now is the time to put our money where it counts: addressing their health and safety concerns with a complete health and wellness program.

ABOUT THE AUTHOR

David Lewis is an active member of the Odenton (MD) Volunteer Fire Company, serving as a firefighter/EMT, chief officer, and company president. He has delivered training programs and conference presentations across the U.S and is a recognized leader in promoting firefighter safety and wellness. As an emergency services educator, he is able to apply his life experiences in an environment that shares with others and builds future leadership across emergency services communities.

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