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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. Many of the NVFC’s programs and initiatives apply to all members of the fire and emergency services, whether volunteer or career. Membership in the NVFC is low-cost and provides a wide array of benefits; find information at www.nvfc.org/BeYourBest. Learn more about the NVFC and access resources at www.nvfc.org.

DISCLAIMER
The information and resources presented in this document are for informational purposes only. They are not intended to offer a diagnosis or treatment of any health issue. Consult a healthcare professional if you feel you may be experiencing a health issue or for any questions you may have. This document does not provide a comprehensive listing of resources that are available.

The National Volunteer Fire Council (NVFC) launched the Serve Strong initiative to bring together all of our health and safety programs and initiatives. The campaign stresses the fact that we, as fire and emergency services personnel, are stronger when we work together, and we are strongest when we are healthy and safe. In other words, “A Better You, A Better Crew.”

So what does it mean to Serve Strong?

It’s pretty simple in theory. If you make the effort to be healthy, safe, and ready for the job, you will be at your best as a firefighter or emergency responder. The risks to you, your crew, and your community will be diminished, and you can most effectively be there for all those who depend on you.

In reality, focusing on your health and safety means a lot of things. There is your physical health, which includes taking steps to prevent heart attack, cancer, and diabetes. There is your mental and emotional health, which includes recognizing the signs and symptoms of PTSD, depression, anxiety, addiction, and more, as well as when and where to reach out for help. There is your safety, which includes injury prevention and taking measures to protect yourself and your crew on-scene, during response, and in training.

Any one of these issues can take you out of the game and put your crew and community at greater risk. Health and safety aren’t just buzz words. The health and safety choices you make have a direct impact on your crew, your family, and the community you protect. Being proactive in how you address these issues is a critical component of serving at your best.

This newsletter is designed to help all members of the fire and emergency services, from leaders to new recruits, understand the health and safety risks they face and take action to minimize these risks. It also highlights proactive ways to create a healthier, safer, and more positive environment in your department. It is up to all of us to shift our priorities so that we embrace healthy and safe actions as critical requirements of our service.

Find more resources to help you and your department Serve Strong at www.nvfc.org/ServeStrong.
It was with great pleasure that I got the opportunity to help roll out the NVFC’s position statement on diabetes in 2016. The position says that the NVFC supports and advocates for the education and prevention of diabetes and implementation of approaches to actively cope with the diagnosis for all firefighters and their families. This is a cause that is truly personal to me.

Before I get into my own battle with the disease, let me first provide a little understanding of how diabetes impacts the fire service. Diabetes mellitus is a metabolic disease characterized by the body’s inability to use glucose (sugar) effectively due to deficiencies or resistance to insulin. The disease contributes to a number of other diseases including heart disease, eye complications, kidney disease, neuropathy, foot problems, and dental disease.

According to the American Diabetes Association, almost 30 million Americans – about nine percent of the population – have diabetes and 86 million more are pre-diabetic. Odds are one out of every 10 members on your department will be afflicted with the disease at some point in their life.

Heart attacks are the leading cause of on-duty firefighter fatalities each year. The Heart to Heart paper written for the National Fallen Firefighters Foundation in 2015 reported that one out of five firefighters who suffered line-of-duty coronary heart disease (CHD) events had diabetes and that diabetes is associated with about a 10-fold increased risk of CHD-related death in firefighters.

As I noted, this is a personal issue for me. During our annual firefighter physicals at the Cherryville Fire Department in 2014, a discrepancy was found in my bloodwork relating to glucose issues. The exam provider urged me to visit my physician, who diagnosed me as pre-diabetic.

I would never have known I had an issue with my glucose without that physical. Annual medical evaluations are critical for early detection and treatment of diseases or risk factors that may exist. By catching my pre-diabetic condition early, my doctor was able to put me on a prescription and start working on management. I thought I was doing pretty good, exercising regularly, dieting, and losing more than 20 pounds in four years.

Over time, however, I started getting more lax in my routine, and I would often fall off the wagon. In late 2017 I started letting my love of sweets, bread, and pasta get the better of me. I also found a lot of excuses like traveling for work and vacations for spoiling my previous success.

It wasn’t until my next fire department physical that I discovered the consequences. The provider found another issue with my bloodwork and again urged me to see my physician. The test results were not good. I had gained back the 20 pounds, and even worse, I was now a full-fledge diabetic.

So, I slowly started to crawl my way back into health again to fight diabetes. This time I have approached it as a life change instead of just periodic dieting and exercising. I exercise five to six times a week, ranging from walking on the treadmill, to time on the elliptical machine at the station, to bike rides with my wife.

We make it a priority to plan our meals in advance for the week and to ensure we are mixing it up. Eating the same thing every day gets old pretty quick. Look through recipes online, watch a few healthy cooking shows, or buy a book on cooking for diabetes – if you can follow a recipe, then you can have some extremely flavorful meals. Also be willing to try new items. There are a lot of options out there that can replace high-sugar foods, such as carrot fries or lentil pasta. If we eat out, we review the menu online beforehand and check the nutrition level of the meal.

I haven’t needed insulin yet, but I am taking medications to ensure my sugar levels are appropriate. I am also checking my blood glucose level twice a day so that I have a better handle on where I stand. Between the medication and my positive lifestyle changes, I have been able to bring my numbers back down. I wake up feeling better every morning and ready to face another day.

It’s an ongoing battle, but it’s one I am glad to continue fighting, thanks to getting an early diagnosis from my annual physical. We only have one heart, and we have to do whatever we can to take care of it and not become another statistic.

ABOUT THE AUTHOR

Chief Jeff Cash has served as the fire chief of the Cherryville (NC) Fire Department since 1986 and is a certified firefighter, EMT, rescue technician, fire officer, arson investigator, fire code enforcement officer, and instructor. He serves as Secretary/Treasurer and North Carolina director to the National Volunteer Fire Council and represents the NVFC on the NFPA 1021 Committee and the IAFC Safety, Health, & Survival Committee.
All across the country, new volunteers are engaged in a regiment of firefighter training that will enable them to be productive members of their fire company. They are learning the right way to don and doff personal protective equipment (PPE), the best methods to control and extinguish a fire, how to conduct search and rescue in a limited visibility environment, effective methods for ventilation and overhaul, and the proper way to handle hose lines and deploy ground ladders. Every training evolution is designed to teach new firefighters how to complete the task in a safe and efficient manner. Yet whether that training is reinforced or disregarded is often up to the culture of the department.

For the past decade, firefighter safety has been at the forefront as we have worked harder than ever before to reduce line-of-duty injuries and deaths and to create a culture of safety in the fire service. This shift is largely attributed to the development of the 16 Firefighter Life Safety Initiatives, which have become widely adopted by the fire service. Life Safety Initiative #1 emphasizes the need to change our culture.

A department’s culture includes the set of values, beliefs, and attitudes that result in a standard of behavior that is adopted by each member of the organization. That culture is taught to each new member and accepted as common practice. The fire service is steeped in traditions that have shaped our culture. Unfortunately, these traditions often result in a disregard for newer, safer practices and encourage the performance of tasks in an unsafe manner that can result in injuries and deaths. Attitudes shape behaviors – if we don’t think it is important, we won’t do it. If we believe that our actions won’t harm us, we’ll keep repeating unsafe behaviors.

Achieving the goal of Life Safety Initiative #1 begins with each member accepting responsibility and being held accountable for safety. Every member must have the courage to stand up and challenge unsafe practices.

New members must be taught the safe way to perform essential tasks. Safety must be incorporated into each and every training evolution. Fire service instructors must set the example by always wearing full PPE and demonstrating safe operating practices. By doing so, the students learn how to perform tasks in a safe manner. When the instructor fails to model safe operating practices, the students will not learn how to conduct operations safely and will take the unsafe practices they see back to their departments.

Similarly, when a new member returns to the station after training, it is the responsibility of all other department members to coach the new member to refine their newly learned skills and encourage safe practices. Even when

### LIFE SAFETY INITIATIVE #1:
*Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability, and personal responsibility.*
new members are taught the safe way to conduct firefighting operations during training, they often fall into the trap of performing unsafe actions after their training is complete. New members want to be accepted in their department and will generally conform to the practices of the organization, even when they may conflict with what they were taught in formal training. When that new member gets back to the station and is permitted to respond on actual incidents, they are led by the attitudes and behaviors of other members. If they are advised to ignore what they were taught in class as “that is not the way things are done around here,” the desire to be a part of the fire service family drives them to conformity even though their actions may result in risks to their personal safety.

Department leaders must serve as role models in practicing safe behavior. It is the responsibility of each leader to promote safety and implement procedures to change the culture and attitudes towards operational safety. We must constantly review our actions (hot wash after every call) and determine what we could have done to make things safer. Standard operating procedures should emphasize the need for safety in every operation and training exercise and should be strictly enforced.

We all have a choice. Either we accept our responsibility for personal safety and adopt safe operating practices, or we continue unsafe practices that put ourselves and our brothers and sisters at risk for a line-of-duty injury or death. The choice should be a simple one. Practice safety every day so that Everyone Goes Home®.
As members of the fire service we are exposed to horrific events at a far higher rate than civilians. This exposure can lead to post-traumatic stress disorder (PTSD) or acute stress disorder (ASD), both of which have a significant impact on the individual as well as their family and department.

While there is no sure-fire way to prevent PTSD or ASD, research1 points to a set of behaviors that might help inhibit it from occurring and lessen the symptoms when it does. These behaviors come under the umbrella title of “Resilience” and can help a person adapt to and bounce back from significant sources of stress.

The goal here is not to minimize the pain we experience after bad calls or to suggest that the damage to the brain caused by PTSD is not significant and potentially long-lasting. Even the most resilient individual would be traumatized by what we see over the course of our careers as firefighters.

But that doesn’t mean we should throw up our hands and think there is nothing we can do, or that we should just “suck it up.” There is no magic pill or shot we can take to immunize ourselves against PTSD. But we can always learn small steps to help our departments cope with PTSD. This article is written in that spirit.

There are eight core practices that if learned, can lead to, if not an immunity from PTSD, maybe a fighting chance to stave off its worst symptoms.

PRACTICE #1: Understand PTSD
Understand that PTSD is not a character flaw or a sign of weakness. PTSD is an injury to the nervous system. It is vital that department officers and firefighters understand what PTSD is and how it manifests. Knowledge is power.

PRACTICE #2: Have a strategy for coping with stress
Firefighters who have coping tactics for dealing with stress are less prone to PTSD. Highly resilient folks have an active coping approach to deal with stress in their lives. They proactively practice ways to solve the problems that create stress or learn how to manage stressful emotions. In other words, after a bad call, it’s a good idea to have a plan in place for dealing with the aftermath. There are simple practices that when learned can help, from using breathing techniques, to mindfulness practice, to long walks, to yoga, to talking with another firefighter, or whatever works for you.

PRACTICE #3: A regular exercise routine
Exercise is not just about physical strength and endurance. It also helps build mental and emotional “hardiness.” Exercise is a mood elevator; it releases endorphins in the brain that make you feel better. It’s also linked to increased brain plasticity – the ability of the brain to learn and to create and strengthen new neural pathways. A routine of running, walking, or just 30 minutes in the gym on a regular basis can help build emotional resilience and some protection against PTSD.

PRACTICE #4: Optimism and humor
The fact is that optimism is a powerful tool. Optimistic people report that their problems are temporary and limited in scope. Individuals who are depressed tend to report that their problems are permanent and intractable. This can leave them more vulnerable to PTSD.

Humor has always played an important role in the fire service as a way to reduce stress. Humor can lighten the mood, and it strengthens the bonds in the department. It is also therapeutic; firefighter humor in the face of tragedy can release tension and stress.

PRACTICE #5: Be in a community
Highly resilient individuals belong to communities. This is why we call the fire service a brother and sisterhood. Social support helps us keep our perspective, we discover that others share our same experiences and emotions, and it reduces loneliness (a predictor of PTSD.)

PRACTICE #6: Purpose
Another hallmark of resilience is a sense of purpose, what researchers call a “moral compass.” It can be religious, spiritual, or secular, but the belief that we are dedicating our lives to a cause higher than ourselves is powerful.

PRACTICE #7: Re-frame your thinking
How you think about your role in the traumatic events you encounter as a firefighter is crucial to your ability to “bounce back.” The vital point is that we have choice in how we think about and remember these events.

For example, it is not unusual for memories of a bad call to hijack our thinking and thus our emotions. The “movie in our mind” just plays and plays. In those moments, we need to consciously work on
re-framing the memories. First, remember that bad things happen, and they are out of our control. Second, frame the event by remembering that when that pager does tone us out, we run towards trauma to help others. Third, frame the traumatic event (or the career of traumatic calls) by understanding that the highest possible purpose any of us can have is to be in service to others — especially in their worst moments.

Psychologists call this “cognitive flexibility,” or the ability to see and think differently about the events in our lives. It is a learned discipline, but one that can pay big dividends for us.

**PRACTICE #8: It’s not my emergency**

Psychologists throw around the term “transcendent detachment.” It is really a re-framing concept. It is the discipline in the middle of the bad call to remember, “It is not my emergency.” You can be passionate about getting the job done, about caring for the patients, and at the same time “be apart” from the intense emotions of a scene. This may take time and practice.

Unfortunately, experience doesn’t by itself give you protection. In fact, experience is a predictor of PTSD. Stress is cumulative. Stress adds up over the years. It is the discipline of how you manage those calls physically, emotionally, and mentally that are important in reducing the risk.

**Final points**

It’s important to repeat that there is no magic bullet, no absolute protection from PTSD. There will always be the call — or a career of calls — out there that will pierce the best defenses. But these eight practices can help.

In the fire service, we are only in the beginning stages of understanding PTSD and how it can “disorder” our lives. There are promising therapies and drugs that can help, but those are for after experiencing symptoms of PTSD.

Resilience is what we can work on and learn before we have the horrible crash or catastrophic fire — or ideally as we begin our careers as firefighters. Resilience is learnable; it can be a taught and practiced by the entire department.

As officers we have a responsibility to keep our firefighters and EMS folks safe. We drill and drill about safety procedures at fires and crash scenes. But our job is to also keep our departments, and the individuals who show up every week, emotionally safe. Teaching resilience, whether it is these eight principles or content based on your own research, is as valuable and important as teaching how to correctly use bunker gear. Both will save firefighters from injury and even death (firefighters have a higher risk of suicide than the general population.)

It means more work and another training concept or two every year, but it will pay off with a safer and healthier fire department. And that is something we can all get behind.

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**ABOUT THE AUTHOR**

**Hersch Wilson** is the assistant chief with Hondo Volunteer Fire and Rescue in Santa Fe County, NM. He has been with the department since 1987. In his “other life” he is a writer and a soccer coach. Visit him at Herschwilson.com or on Facebook at ‘Hersch Wilson-Firefighter.’

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When you hear the word “bullying,” what does it make you think of? I think of children picking on each other at recess or the cyber bullying that goes on in some social media platforms. Webster’s Dictionary provides the true definition of bullying as “abuse and mistreatment of someone vulnerable by someone stronger, more powerful, etc.” This term as it relates to the fire service is used so often I think it has lost its true meaning.

The treatment I experienced as a young firefighter in the volunteer fire service was dismissed as bullying but quickly progressed into sexual harassment, dangerous hostility, and sexual violence. Despite my immediate love for firefighting, my station was a place I dreaded going because I never knew if I was going to be threatened, arrive to find my gear or SCBA tampered with, or be compared to the naked pictures of women hanging in the bay. As a sixteen-year-old I was constantly propositioned for sexual favors in exchange for an “easier” firefighting environment. Firefighters would threaten me with what they would do if I ever told anyone what was going on in our station. When I brought up this issue of gender discrimination, the firefighters would say things like “you’re being too sensitive” or “if you don’t like it, leave.”

Does that sound like school-yard bullying to you?

Based on these experiences, people often ask me what we can do to make our fire stations more inclusive environments. The answer is simple but, as we know, it is very difficult to create lasting changes in the culture of the fire service. However, change can and must be made in order to protect the future of our fire service and provide the kind of environment people want to join and remain a part of.

Start by asking these questions in your department, and encourage open discussion and honest feedback from your members.

Do we have leadership whose actions consistently show a willingness to address the issue of discrimination head-on?

Leaders – you must hold your firefighters accountable for actions that detract from the honor of this profession. Stop allowing casual racism, sexism, xenophobia, transphobia, and homophobia in all their forms. Our fire departments are supposed to reflect the best of our communities, and we can only do that if any type of person who walks into our station would be given the same fair chance to do the job.

No, this is not a woman’s issue, nor is it any other minority group’s job to make their firehouse more tenable. This is everyone’s issue, especially those who have chosen to lead. Or is the real issue that some firehouses want to give the illusion of being inclusive without putting in the effort to actually be inclusive? Many firehouses are stubbornly set in having a homogenized workforce where the term “fireman” applies to everyone. If this is the case for you, ask yourself: Who are you here to serve?

Are we able to have respectful conversations about our differences?

I have often seen women or minority groups being pressured into forced assimilation in their firehouses. We are encouraged through overt and covert methods to act, think, and talk as if we are a part of the majority – straight, white males. If we have an opinion or a viewpoint that doesn’t match, we could be tormented, intimidated, or violated into suppressing those views.

We must all be willing to respect the boundaries set by other people, even if our own boundaries are different. If we really aim to reflect the communities that we serve, then every member of our community must be safe enough and feel welcome enough to step into our station and step up to the job.

What are the long-term effects of feeling unsafe in our firehouse?

In the fire service the number of women who have dealt with microaggressions, threats, harassment, and violence due to gender discrimination is staggering. Yet so many of us are made to believe that dealing with this is just another skill we have to learn if we want to call ourselves
a firefighter. Gender discrimination is so ingrained in the culture of the fire service that it can be difficult to have hope for lasting change.

However, when your safety is constantly threatened as mine was, your innate and learned coping skills become exhausted. Constantly being in that prolonged state of panic and hyperarousal can cause an injury to the part of your brain that deals with stress and fear. I learned that injury is called Post Traumatic Stress Disorder. The results can be devastating, from good firefighters quitting the service to life-altering behavioral health issues to cases of suicide. We cannot allow the type of behavior to continue in our firehouses that creates such tragic outcomes.

What sort of legacy are we leaving?

We all join the volunteer fire service to do just that – serve. We don’t do it for monetary compensation but because there is a strong desire in us to help our communities in this specific way. There will be a day when we all step away from this job – hopefully confident in the next generation we have helped teach. What legacy are we leaving them?

When you foster an environment that allows hate, intolerance, offensive behaviors, and mental and physical violence towards one another, you are hurting the profession. You are creating a place people don’t want to be part of and tarnishing the reputation of the department in the community. And you are hurting the very same people who want to serve and protect their community. This is not the kind of tradition we want to pass on to the future.

The fire service was founded on values such as doing the job with honor, courage, and bravery. We must also show compassion and respect toward those we serve – and most importantly to each other.

ABOUT THE AUTHOR

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Trends in U.S. Firefighter Injuries

The National Fire Protection Association (NFPA) has been tracking firefighter injuries in the U.S. since 1981, and since that time the total number of on-duty injuries has dropped by more than one-third. This is in spite of a three-fold increase in the number of calls that fire departments are responding to.1 The progress, however, has not been uniform across the various types of activities that firefighters engage in.

For example, firefighter injuries at fires have dropped by more than half from the early 1980s to mid-2010s, while injuries at the scene of non-fire emergencies have increased by 25 percent. Much of this can be explained by the change in call volume over that same period.2 The number of fires to which U.S. fire departments respond has dropped by almost half, so the rate of injuries has actually fallen even more than the incidence of fire calls (from 25 injuries per 1,000 fires to 21 injuries per 1,000 fires).

Although injuries at non-fire emergencies have increased, the number of EMS calls alone has almost quadrupled, while false alarms have almost doubled over that period of time. Training injuries are 15 percent higher, which could reflect the increased amount of training now required for firefighters.

Overall, then, this is a positive trend – firefighter injuries at fires have declined more than the number of fires have decreased, and injuries at other emergencies, though they have increased, have not risen nearly as quickly as the number of calls.

The types of injuries that occurred during different types of duty have changed quite a bit since the early 1980s. For example, in 1981, approximately 30 percent of the injuries on the fireground were due to burns and/or smoke inhalation.3 By 2016, that share (which now includes other respiratory distress) had dropped to approximately 17 percent of the injuries at fires.3 That represents a drop from about 20,000 injuries in 1981 to approximately 4,200 in 2016. The “wound, cut, bleeding, bruise” category of injuries fell from 27 percent to 14 percent of the much lower number of injuries at fires.

NFPA’s 1981 injury report recommended the “provision of the best available protective equipment and a mandate to use it” and “development and enforcement of a program on the use and maintenance of self-contained breathing apparatus.” The implementation of those changes into general practice is likely responsible for the improvement in injury experience. “Strains, sprains, and muscular pain,” although occurring at lower totals, now account for almost half of the injuries, compared to about one quarter back in 1981, largely as a result of the decline in other categories of injuries.

At non-fire emergencies, which mostly include EMS calls, “strains, sprains, and muscular pain” now account for 60 percent of the higher number of injuries in 2016 compared to 47 percent of the injuries in 1981. The number of these injuries increased from 4,495 in 1981 to 7,700 in 2016. But given the increased number of such calls, the rate of these injuries has dropped from about one injury per 1,000 calls to one per 3,000 calls. “Wound, cut, bleeding, bruise” accounted for approximately a quarter of the injuries in 1981, but now only about one in seven injuries.

NFPA’s most recent report on injuries to volunteer firefighters reported that they are more likely to be injured on the fireground compared to all firefighters, but less likely to be injured at non-fire emergencies.3 This finding was credited to the fact that larger departments respond to a far higher proportion of EMS and rescue calls than fires, compared to smaller volunteer departments. While operating at fires, volunteers also experienced a higher proportion of smoke inhalation injuries.

NFPA started collecting data on vehicle crashes for the 1990 firefighter injury study.4 In that year, there were 11,325 apparatus crashes during responses to emergencies, resulting in 1,300 firefighter injuries (1.3 percent of all injuries that year). That was a rate of eight crashes per 10,000 emergency calls. In addition, there were 950 crashes of firefighters’ personally-owned vehicles, resulting in 175 firefighter injuries. By 2016, the number of crashes of emergency vehicles had risen to 15,425.

ABOUT THE AUTHOR

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but that was with more than 35.3 million emergency calls that year, resulting in about four crashes per 10,000 emergency calls. Injuries in those crashes had dropped to 700. Another 850 collisions in personal vehicles resulted in 175 injuries.

Changes in equipment, training, and practices have likely led to the improvements in the firefighter injury picture. For example, the improved use of personal protective equipment, especially self-contained breathing apparatus (SCBA), has been credited with the reduction in inhalation injuries as well as traumas such as cuts and bruises. The move away from firefighters riding on the back step while responding, and now being seated, belted, and enclosed in modern apparatus, has contributed to the reduction in crash injuries and falls from apparatus.

But challenges remain. NFPA has now conducted four studies assessing the needs of the U.S. fire service. In the most recent study in 2015, fire departments indicated the need for more training in the areas of structural firefighting, hazmat, wildland firefighting, EMS, and technical rescue. The smallest departments also showed a need for training in traffic control. Only one-quarter of fire departments provide a program for basic firefighter fitness and wellness, and only one in five reported a behavioral health program.

Although improvements in protective clothing and equipment appear to have made a difference, there still is need for more progress in making these items more universally available. For example, half of all fire departments cannot equip all firefighters on a shift with SCBA. Two-thirds of departments had some SCBA that were more than 10 years old. Almost half of the departments don’t have enough reserve personal protective clothing for their firefighters, and almost three quarters report that some of their personal protective clothing is more than 10 years old. These problems are far more acute in smaller fire departments.

In all, firefighter injuries have decreased in both number and rate per call. But there remains potential for further reductions and well as continued challenges in training and equipping the nation’s firefighters.

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AGENCY RISK

It is important to periodically conduct a risk assessment in your agency to see where there may be safety gaps and determine if any practices/policies need to be updated or changed. Use this Agency Risk Assessment template to get started.

Driving - Seatbelts
1. Do you have a policy regarding seatbelt wear?
2. Is the policy accepted and followed?
3. Is the policy enforced?
4. Consider random sampling, low-profile observation, and anonymous questionnaires. Be ready to dispel seatbelt myths (such as you cannot don a SCBA while wearing a seatbelt).

Driving - Speed
1. Review past incidents to determine areas of risk.
2. Consider the actual experience of your new drivers.
3. Are there policies for POV response (if applicable)?
4. Look for pre-event indicators:
   a. Nicknames (i.e. Crash, Speedy) or reputations about driving
   b. Single vehicle collisions, multiple collisions, inexplicable collisions
5. Review your policy - is it practical? Is it practiced? Is there accountability?

Turnout Gear/SCBA
1. Is it in good condition?
2. Does every member have access to properly-fitting gear?
3. Is the right PPE available for the call type?
4. What is the PPE and SCBA culture? Are members using proper protection during medical incidents, overhaul, vehicle fires, dumpster fires, etc?
5. Do your members have access to a gear washer/extractor?
6. Is there a policy for on-scene decon and SCBA use during overhaul?

Operational Proficiency
1. Is adequate time devoted to training for high frequency tasks to develop proficiency?
2. Is time spent on less frequent but high risk tasks to ensure member proficiency?

Risk Management
1. Is the concept of risk analysis used during training and emergency operations?
2. Do chiefs and officers utilize good judgment when forming incident action plans?

Preventing Struck-By Vehicle Incidents
1. Reflective vests: Are they issued? Are they used? Is it effective? Is there a policy?
2. Do you have traffic control in place at incidents?
3. Are members aware of dangers such as walking out of traffic protection, blind curves, lighting, and weather?
4. Are members properly trained in roadway response?
Complacency
1. Objectively review incident responses (i.e. driving, patient care, tactics, and decision-making) to identify areas for improvement.
3. Regularly review safety practices, discuss incidents, and maintain an edge of awareness.

Instilling a Culture of Safety
1. Are standard practices consistent with training?
2. Is proper PPE utilized as often as possible during training?
3. Are seatbelts required when vehicles are driven in training?
4. Are personnel encouraged to share “near-miss” incidents?
5. Are department training sessions an opportunity to review the items in this risk assessment?
6. Are your training officer’s actions supporting your policies and SOPs/SOGs?

Community Familiarity
1. Have target hazards within the community or response area been identified?
2. Do personnel visit target hazards to familiarize themselves with the structure and develop pre-plans for response?
3. Allow department members to walk through target hazards with staff to identify response concerns, ask questions, and develop community relationships.

Being Proactive
1. Ask your officers and training personnel what they feel is the biggest factor or deficiency that is most likely to result in a serious injury or death in your agency.

Health/Wellness
1. Do you offer annual physicals or wellness checks?
2. Are there incentives for personal wellness?
3. Is there a system in place for peer counseling/stress management?

Adapted by David Bullard from Below 100 Agency Risk Assessment, www.below100.org.
All through my childhood, I remember the old plextron monitor going off when there was a fire or EMS call. My father was a 45-year member of the fire service when he passed away and my mother was very involved in the Ladies Auxiliary until she passed away. Growing up in a small rural town in western New York, what else was there to do but volunteer at the local firehouse where your parents, older brother, and friends belonged?

As rich as my family history is within the fire service, it is also wrought with cancer diagnoses. Even so, I never really thought cancer would strike me. Then I began a long struggle with reproductive health issues that are still difficult for me to talk about. These included several bouts with a precancerous condition as well as severe endometrial hyperplasia where cancer was not ruled out. I ended up having a hysterectomy followed by weeks of radiation therapy to kill off the remaining cells left behind.

In 2015, the Firemen’s Association of the State of New York asked me to participate in a video about cancer in the fire service. I was reluctant as my long road with reproductive health issues was a private and personal journey for me. I did the interview, but I wasn’t really convinced my issues had a direct correlation with the fire service. However, since then I have had another journey, and this is one I would like to share.

On August 24, 2012, I was in the grocery store checkout line with my two sons when my pager went off for a field fire in the Iroquois Wildlife Management area. Like many volunteer fire companies, staffing is limited during the day. I finished my checkout, drove the half mile to my house, threw my perishables in the refrigerator, and headed to the scene to assist. It was a warm and sunny day so I was wearing shorts, and I didn’t take the time to grab a pair of pants. However, I had an extra pair of socks in my gear bag for emergencies like this when I am wearing sandals or flip flops!

When we arrived on-scene I put on all my proper PPE for the field fire and went to work. My kids were so excited that they could sit safely at Incident Command and watch Mom, who was a Fire Rescue Captain, in action. It was dry marsh that was burning, containing a plethora of cat tails. We had a slight breeze that day, and that did not help us. What started as a small fire grew to burn 11 acres. We spent the rest of the day there as we wanted to make sure we completely put the fire out and didn’t get called back later.

During the call I felt a burning sensation on my right inner calf, which I suspected was from my boot rubbing on my leg and sweating with all my gear on. When we got back to the firehouse and I removed my gear, I found it was rubbed raw and oozing. I had a darn good case of “boot burn.”

Continued on page 16
Full protective equipment (PPE) must be worn throughout the entire incident, including SCBA during salvage and overhaul.

A second hood should be provided to all entry-certified personnel in the department.

Following exit from the IDLH, and while still on air, you should begin immediate gross decon of PPE using soap water and a brush, if weather conditions allow. PPE should then be placed into a sealed plastic bag and placed in an exterior compartment of the rig, or if responding in POVs, placed in a large storage tote, thus keeping the off-gassing PPE away from passengers and self.

After completion of gross decon procedures as discussed above, and while still on scene, the exposed areas of the body (neck, face, arms and hands) should be wiped off immediately using wipes, which must be carried on all apparatus. Use the wipes to remove as much soot as possible from head, neck, jaw, throat, underarms and hands immediately.

Change your clothes and wash them after exposure to products of combustion or other contaminants. Do this as soon as possible and/or isolate in a trash bag until washing is available.

Shower as soon as possible after being exposed to products of combustion or other contaminants. “Shower within the Hour”

PPE, especially turnout pants, must be prohibited in areas outside the apparatus floor (i.e. kitchen, sleeping areas, etc.) and never in the household.

Wipes, or soap and water, should also be used to decontaminate and clean apparatus seats, SCBA and interior crew area regularly, especially after incidents where personnel were exposed to products of combustion.

Get an annual physical, as early detection is the key to survival. The NVFC outlines several options at www.nvfc.org. “A Healthcare Provider’s Guide to Firefighter Physicals” can be downloaded from www.fstaresearch.org/resource/?FstarId=11591.

Tobacco products of any variety, including dip and e-cigarettes should never be used at any time on or off duty.

Fully document ALL fire or chemical exposures on incident reports and personal exposure reports.
didn't go to a doctor. Instead I washed it out when I got home and “doctored” it for a week or two with Neosporin and gauze pads. Once it scabbed over and healed I didn’t think of it again….  

UNTIL, April 18, 2016, when I went to my dermatologist’s office for my yearly skin check. The doctor found a suspicious spot and had a 3mm-round, medium-dark maculae with darker-brown pigment removed from my right calf. The cancer was in the exact same spot I had experienced the “boot burn” four years prior. 

With all the talk about cancer in the fire service, washing of all gear is a must. We throw our bunker pants, coat, and hoods in the washer or send them out for cleaning. But what about our boots and helmets? I mentioned this at my own fire station and they laughed, insisting “I wear my gear the right way, I don’t wear my boots inside out.” Well, I wear my PPE the correct way too, but dirt, debris, smoke, and particles travel. When we get back to the station and place our bunker pants with our boots in our locker, where do we hang our coats? Most stations I see they hang over top the boots. 

Did you ever look inside your boots after a fire call or after a year of wearing them to calls? Is it clean or dirty? Perhaps you wash your helmet off on the outside, but did you ever think of cleaning the inside? You wear it inside a fire one day with your hood on, and then next day you’re placing the same helmet on your head for an automobile accident. 

We have to think in advance. Do I have clean equipment, not only on the outside but inside also? Am I dressed properly under my gear, with socks, pants, and (for the guys) shirt, even in the dead of summer? The days of “Hey, look how dirty my gear is after that fire” are over. 

We have to wear all of our PPE on scenes where there is the potential of coming into contact with carcinogens. Think about how much faster and hotter house fires are now compared to 30 years ago. The materials used to make most everyday products are not simply wood, paper, and metal anymore. So much in our homes is synthetic and manmade materials. We need to wear pants, boots, jackets, hoods, helmets, gloves, and SCBA. 

SCBAs are not just for inside before the fire is knocked down. We NEED them during overhaul and for exterior operations.
as well. During overhaul, all the small particles of debris are still floating in the air and the smoke still rises from hot spots that are smoldering. What about when you open the wall up, whether interior or exterior, and smoke pours out into your face? Do you know what the insulation is made out of? What about when you’re digging through the debris during fire investigation — do you realize how many airborne particles you are stirring up and breathing in?

Getting annual checkups is critical. Early detection of cancer saves lives and can mean less invasive and intensive treatment options. Let your doctor know you are a firefighter and keep track of any exposures you may have had so you can be proactive in monitoring your health.

All these actions may seem cumbersome, but remember, we are trained professionals, and we make sacrifices to protect and serve our communities. We sign up because of loyalty to our communities, the feeling we get when giving back, the adrenaline rush it gives, and, most importantly, the brotherhood of service. Please think about your family and friends when you’re at the scene and back at the hall cleaning your equipment. It may feel daunting to take those few extra minutes to clean your gear thoroughly and wear that pack just a bit longer; however, in the long run you will save your loved ones the heartache and pain of telling them, “I have cancer.”

My cancer journey has been a rough, emotional road that I pray is over. Only time will tell, but I have learned a lot from peers and mentors in the fire service. And as Confucius said, “Real knowledge is to know the extent of one’s ignorance.”

New Resource!
The NVFC and IAFC-VCOS have released a Lavender Ribbon Report to expand on the 11 best practices for preventing firefighter cancer. The report details specific take-aways and actions you can implement in your department to help protect your members. Download it at www.nvfc.org/cancer.

ABOUT THE AUTHOR
Darlene Gurnett is a fire rescue captain and interior firefighter/EMT with the Wolcottsville (NY) Volunteer Fire Company. She has also served as president and in other leadership roles with the Niagara County Volunteer Fireman’s Association and as a fire investigator with the Niagara County Origin and Cause Team. She is a senior dispatcher in the communications division of the Niagara County Sheriff’s Office.

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Unhealthy Does Not Happen Overnight:

One gluttonous meal will not cause excessive weight gain or lead to cholesterol problems. These negative consequences are often a product of poor dietary decisions sustained over time. Due to the nature of the work, firefighters and other tactical athletes cannot afford to let unhealthy habits accumulate. It is imperative that they make changes to improve overall wellbeing and job performance before those missteps cause irreversible damage.

Intentionally building strong habits that focus on optimizing performance can lead to major, sustainable improvements. In jobs that demand a constant state of readiness, tactical athletes must be mentally and physically prepared to meet any situation. As a result, it is crucial that firefighters make an effort to foster healthy habits in order to mitigate job-related health risks and optimize performance.

Small changes
Something as routine as eating a bagel every morning and drinking a regular soda each afternoon can add up to 540 extra calories a day. This can result in gaining one pound over the course of a week, or about 50 extra pounds in a year. In order to prevent that outcome, a redirection must occur.

Change is hard. Start small. For example, replace the bagel with a cup of fruit or even an open-face sandwich using only half the bagel. Swap out the afternoon soda with seltzer. Begin with just a few days a week if doing it daily seems daunting. These little adjustments now can save you big calories later and lead to substantial changes in the future. And once you begin to see success after making a minor adjustment, you will be more encouraged and motivated to continue adding new ones.

Build a healthy habit
Once you’ve started making small changes, focus on making them stick. A first step can be to reframe your thinking regarding change. When it comes to diet, many people think about what foods they need to restrict from their daily intake. Instead, see it as an opportunity to get healthier and improve your functionality as a firefighter.

As tactical athletes, we must create habits that promote optimal mental and physical performance daily. Instead of attempting to cut habits out, replace them with new habits that align with your goals at work and in your everyday life. Improve hydration by placing a water bottle on your bedside table so it is already there for you to drink before you get out of bed. If your aim is to improve mobility, put a foam roller in front of the TV so you cannot avoid it before sitting down to watch your favorite show.
**A holistic approach**

A holistic approach targeting all pillars of performance — nutrition, conditioning, and mental performance — will lead to optimal results.

Proper nutrition creates the foundation for performance. Eating well provides the fuel necessary to maximize training efforts and sustain long days on the fireground. Start with a small change, such as trying a new vegetable with your dinner, and when this becomes habitual, add another positive change to your nutrition plan. These little changes will add up and lead to health improvements.

As a tactical athlete, there are countless job-related demands that require physical strength and endurance. However, with busy lives on and off the job, conditioning can be pushed aside. It is something small that can have major health consequences. Rebuild the habit of working out in incremental steps.

The final component of a holistic approach to habit-formation is mental performance. This includes a broad range of skills from breathing to attention control. Mental performance skills require dedicated practice to make them strong habits that you default to in times of stress. For instance, practice one minute a day of deep breathing — an inhale of five counts and exhale of seven counts — and over time work up to a 15-minute session. Once you feel the benefits, you will start to use the technique in high-stress situations to help you regain focus and improve your physiological response to stress.

**Conclusion**

As you gradually create healthy habits, you will begin to feel the positive impact on your overall health and performance. Making positive changes to your nutrition, conditioning, and mental performance will help you maximize performance, attain goals, and sustain long-term health and wellness. This can be life-saving for you and those you serve and protect daily.

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**ABOUT THE AUTHOR**

Alison Levy is the Marketing Director for O2X Human Performance. O2X Human Performance provides comprehensive, science-backed training and education so tactical athletes can finish their careers as strong as they started. The results driven O2X EAT SWEAT THRIVE curriculum encompasses all areas of human performance: nutrition, conditioning, sleep, stress management, and resilience. Learn more at www.O2X.com

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No matter where you started your fire/EMS career – whether a big city or small rural town – you always remember the first time you performed CPR on a real chest and the first time you battled a real blaze. You also remember the first time that you had to deal with death as a first responder.

Over the course of our fire service careers, we respond to many tragic and violent calls, with each incident being a snapshot in time. Some of those scenes leave a ghost in our memory bank. Through my 30-plus years in the fire service, I have had to deal with more sadness and death than I ever imagined. As firefighters/EMTs, we are exposed to scenes and situations that are beyond the comprehension and coping capabilities of the average person. And as human beings, we all have our breaking points.

You see every one of us has a bucket in our minds that gets filled with stressful moments over time, and they don’t have to be just fire department stressors. They include day-to-day stressors like work, family, or struggling to pay the bills. Each of us fills this stress bucket over time. There are many responders that have seen a lot, responded to a lot of bad calls, have done compressions on more chests than those that have survived, and yet their bucket will never spill. But for many of us, we reach a point where our stress buckets can no longer hold all that we have experienced, and it will start to overflow.

For me, that day came on December 4, 2016. While driving my fire chief’s vehicle I was involved in a tragic accident that changed my life forever. A 13-year-old boy, without looking, sprinted across the road to play with his friends on the other side. Unable to stop in time, I struck the boy. Lifesaving actions by myself, the responding firefighters, and the ambulance could not save this boy’s life.

In the following months I fell into a deep state of depression. I barely ate or slept, and when I was able to sleep the nightmares would wake me up. The incident replayed in my head, over and over for months. It wouldn’t stop, no matter the time of day or night. I had dealt with many bad situations in the past, and after a few weeks I was back to some type of a normal.

This one was different. My stress bucket had now flowed over.

For months I didn’t care about myself or those around me. I became extremely irritable and had a hard time concentrating at work. I became socially isolated, avoiding people, events, and fire department responsibilities that could lead me back to that traumatic event. My coping skills became shot, replaced with irritability and withdrawal. I had the best support system in place with my family, friends, and my fellow firefighters, but nothing was making it better.

There are many firefighters out there who have experienced an event that made their stress bucket overflow, but who didn’t know where to turn or felt helpless to change their circumstance. If left unattended, the stress overload can lead to depression, anxiety, substance abuse, and all too often, suicide. We, as the brothers and sisters of this fire service, need to pay attention to the signs that one of our own is struggling.

There are many warning signs to look for, but the obvious one is that “something has changed in the person” – they don’t talk with everyone in the kitchen after a call, they stay to themselves, they don’t seem to converse like they used too, they appear
to be in a shell. We need to reach out and help these brother/sister firefighters and EMTs before it is too late.

My turning point came on the plane ride home from FDIC in April 2017. I was very fortunate to sit with Tiger Schmittendorf, with whom I was acquainted. He was aware of the accident and, seeing I was struggling, asked me if I heard of the Share the Load™ program and the Fire/EMS Helpline. He explained that it was started by firefighters, for firefighters and EMS personnel, to help them deal with the traumatic events and the things that we see and experience.

That conversation stuck with me, and one depressed evening I called the Helpline number. Mike Healy was the one that answered this call. There I was spilling my heart to a stranger many states away, but because of his experiences and training Mike was able to help me tremendously that evening. We left that conversation with Mike doing some research for specialists in my area with EMDR capability. EMDR stands for Eye Movement Desensitization Reprocessing, a technique to help process unresolved traumatic events and transform negative beliefs with simple eye movement.

For me, the counseling and EMDR treatment helped immensely. I also appreciate the unwavering support of my family and fire department, who continued to believe in me throughout it all. I won’t lie—it takes time and work to get back close to where you were, but “getting your life back” is worth the effort.

Why do I share this story? I want those firefighters suffering in silence to know there is hope and that they should reach out for help. For those that know someone suffering from PTSD symptoms or their stress bucket is full to the rim, there is now direction and guidance.

The National Fallen Firefighters Foundation’s Life Safety Initiative #13 states that firefighters and their families must have access to counseling and psychological support. The International Association of Fire Chiefs Volunteer & Combination Officers Section recently published the report Under The Helmet: Performing An Internal Size-Up, which provides a proactive approach to firefighter mental wellness. The National Volunteer Fire Council has the Share the Load program and partners with American Addiction Centers to provide the Fire/EMS Helpline. The Firefighter Behavioral Health Alliance provides workshops to raise awareness regarding firefighter behavioral health and prevent suicide.

As leaders, our number one responsibility is to keep our members safe, which includes helping them deal with the effects of emotional trauma. It is important that we prioritize taking care of our own members and ensure their mental wellness and emotional health. We cannot let our brothers and sisters continue to suffer from cumulative stress overload that will lead to tragic consequences. We are not going to stop the trauma that we see, but we need to put avenues in place for our first responders to get the help that they need.

Mental health issues are real, and no one should feel embarrassed or ashamed to ask for help. Remember to look for the warning signs and reach out and have that conversation. And if you need help, don’t be afraid to ask. We owe it to all the people we love to be the best we can possibly be and to come home at the end of the day.

Jared Meeker is a 30+ year fire service veteran currently serving as a fire chief for the Lake Shore Fire Department, a combination fire department in upstate New York. His passion for the fire service includes teaching incident command skills to aspiring fire officers and career survival skills to all first responders. He currently offers a training program on firefighter behavioral health; learn more here: https://seeingincoloragain.wordpress.com/sizing-up-your-behavioral-health/
CRITICAL TIM Measures to Prevent Secondary Crashes & Struck-by-Vehicle Incidents

Every time you roll out the door in your emergency vehicles or respond to the fire station in your personal vehicle, you’re exposed to numerous traffic hazards from other vehicles and drivers. When you stop and park at an incident scene with your emergency or personal vehicle, you are exposed to even more dangers from other drivers and motor vehicles operating around your incident location.

The threat of a secondary crash or struck-by-vehicle incident from a distracted, drunk, drowsy, drugged, disgruntled, and/or disrespectful driver (collectively also known as a “D” drivers) is a clear and present danger. “D” drivers cause secondary incidents at emergency scenes nationwide on almost a daily basis. It is critical that you and your team prepare and respond with a defensive plan to protect your personnel, the victims you were responding to assist in the first place, and the other motorists operating around you at a roadway incident.

Here is a list of significant actions your fire department should be taking to prevent secondary crashes and line-of-duty injuries or fatalities at emergency scenes:

1. Provide roadway incident safety training to all personnel in your department. All new members should be trained on the hazards of roadway incidents, and ALL members should get annual refresher training (at a minimum!) on local and multi-discipline traffic incident management (TIM) policies and procedures. Departments should also work to meet the new TIM requirements in the latest edition of NFPA 1500.

2. TIM training can be obtained several different ways – instructor-led classroom, instructor-led multi-discipline classroom, online training, and local or regional customized classes. The Federal Highway Administration (FHWA) developed a four-hour TIM and Responder Safety program that is available nationwide for free through state-specific trainers. Make sure multi-discipline standard operating procedures have been developed – and are being followed – for protecting incident scenes, especially within the first few minutes of arrival at a roadway incident. Blocking with large fire apparatus is one way to quickly setup a safe work area for responders dealing with a vehicle fire or crash and possibly injured motorists. Temporary traffic controls using flares, cones, advance warning signs, and emergency vehicles are especially important and effective. Those controls need to be deployed correctly to warn oncoming traffic of an incident ahead and to focus their attention on TIM channelizing devices established around the incident.

3. Online training can be found from the Responder Safety Learning Network at http://learning.respondersafety.com. There are about 30 modules available for free on the network right now with more in development. A National TIM certificate can be obtained by successfully completing 10 specific online modules that are easily identified on the web site.
Make sure all of your personnel have been issued proper personal protective gear including high-visibility garments for use when exposed to moving traffic. Any new hi-viz gear purchased by your fire department should be compliant with American National Standard for High-Visibility Safety Apparel and Accessories (ANSI/ISEA 107-2015). Older ANSI-compliant high visibility gear can continue to be used as long as it stays clean and offers appropriate fluorescent and reflective features.

Make sure your driver/operators know how to properly display emergency warning lights and any traffic control arrow devices on fire apparatus at emergency scenes. Avoid any forward facing white lights while parked that might cause glare issues for oncoming motorists. Rear facing emergency lights should warn approaching motorists of your location at an incident and if possible help route them around your incident work area. Bright LED emergency lights can cause confusion and temporary vision impairment for motorists, especially in dark conditions, if not managed properly.

There were 15 firefighters and/or emergency medical personnel struck and killed by vehicles in 2017. Three of those personnel stopped to help others in trouble along highways while off-duty. The other 12 incidents were line-of-duty deaths. Firefighters and EMTs are in danger of being struck by vehicles at incident scenes on any kind of roadway, in all kinds of weather conditions, and at any time of day. That means your personnel have to be thinking about and implementing roadway incident safety procedures every time they roll out the door.

ABOUT THE AUTHOR
Jack Sullivan, CSP, CFPS, is the director of training for the Emergency Responder Safety Institute. He is nationally recognized for his work on roadway incident safety for emergency responders, is a principal member of the NFPA Technical Committee on Traffic Control Incident Management Professional Qualifications (NFPA 1091), and is an instructor for the Federal Highway, SHRP 2 Traffic Incident Management & Responder Safety Train-the-Trainer program.

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