



U.S. Fire Administration
Working for a fire-safe America

Behavioral Health Issues in the Fire Service



FEMA

Behavioral Health Issues in the Fire Service

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Mission Statement

We support and strengthen fire and emergency medical services and stakeholders to prepare for, prevent, mitigate and respond to all hazards.



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Behavioral Health Issues in the Fire Service

Although this report focuses specifically on firefighters, many of the health and wellness challenges described are shared across other responder and high-risk occupational groups, including law enforcement, dispatch and emergency medical services (EMS). Across these professions, workers are exposed to chronic operational stress, shift work, sleep disruption, traumatic events, high physical and cognitive demands, and organizational pressures that compound over time. These shared exposures contribute to overlapping risks for cardiovascular disease, sleep disorders, mental health concerns, injury and long-term chronic disease. The decision to focus this report on firefighting reflects the rapid growth and maturation of the scientific literature in that field, which now allows for more nuanced, evidence-informed conclusions. Importantly, the patterns identified in firefighter health research are likely relevant — and transferable — to other responder populations, underscoring the opportunity to use this work as a foundation for broader, cross-disciplinary health and wellness strategies.

Introduction

Firefighters are the first responders in a wide range of critical situations, including medical emergencies, traffic accidents, hazardous material incidents, natural disasters and, of course, fires. Motivated by courage, resilience and an unwavering commitment to public safety, firefighters perform their duties under strenuous and often perilous conditions that expose them to a host of hazards. Given the dangers firefighters face and the unique aspects of their work, it is not surprising that they face several health concerns. To tackle these urgent health issues and mitigate risk, the U.S. Fire Administration's (USFA's) National Fire Data Center has developed a set of comprehensive firefighter health reports addressing cardiovascular health and disease, mental/behavioral health, and heat stress. This report focuses on behavioral health in the fire service; exploring the challenges firefighters face; the burden of mental health concerns; and the strategies needed to strengthen resilience, reduce risk and support overall well-being across a firefighter's career.

The terms “behavioral health” and “mental health” are sometimes used interchangeably in the fire service, although they have somewhat different definitions. Mental health typically refers to how a person's mind works, how they manage feelings, and how they interact with the world around them. Behavioral health generally refers not only to mental health but also encompasses a person's daily habits and behaviors that impact overall well-being, such as substance use, stress management and healthy habits. It is about emotional and mental wellness and actions that impact overall well-being. In the fire service, the term behavioral health is often used because it is both broader than just mental health and because many think it is less stigmatizing as a term than the narrower term “mental health.” In this report, the term mental health will be used when referring specifically to a mental health disorder, but behavioral health will be used more broadly.

At one time, behavioral health was not a topic commonly discussed around the firehouse kitchen table. Instead, the environment encouraged people to “suck it up” and stigmatized any discussion of mental health as a sign of weakness. In the 1980s, that culture started to shift with the introduction of critical incident stress debriefing programs that focused on providing a structured intervention after specific types of potentially traumatic events (PTEs). Once research on the initial model found some negative impacts of mandatory or forced debriefings with outside experts,³ the fire service began shifting away from that approach as the primary intervention model. At that time, the concept of peer support and of integrating behavioral health conversations into the day-to-day of the fire service began to take root. As a result, there is a more blended approach today. The more traditional critical incident stress management/debriefing model focuses on leveraging peer-to-peer relationships and engagement from professionals well integrated into the fire service culture.

In recent years, the topic of suicide has started to gain traction as a key health issue facing the fire service. Research by Stanley and colleagues¹ found that, of the 1,000 firefighters who responded to their survey, 46.8% reported suicidal ideation, 19.2% reported suicidal plans, and 15.5% reported a past suicidal attempt throughout

their careers. While the numbers likely suffer from selection bias, as the data were from a convenience sample and may not be generalizable to the overall population of firefighters, the fact that 1,000 firefighters chose to take the survey and that a high proportion reported significant distress is a grave concern. Further, they found that, based on suicides reported to the Firefighter Behavioral Health Alliance, a fire department is more likely to experience a suicide than a line-of-duty death.

The unacceptably high number of deaths due to suicide in the fire service and an appreciation for the relationship between overall well-being and effective job performance demand a focus on behavioral health issues for firefighters. Discussion on suicide has also shed light on more traditional mental health symptoms among personnel. With that, the fire service is shifting its focus to prevention and early intervention for people who are struggling.

According to a 2018 report from the Substance Abuse and Mental Health Services Administration,² it is estimated that about 30% of first responders will struggle with behavioral health issues compared with 20% in the general population. Estimating rates of specific mental health disorders among firefighters can be somewhat challenging. Rates vary significantly in the literature based on the group of personnel being studied, when they are surveyed, and how the study samples are recruited. Still, there is evidence that firefighters' exposures can affect their behavioral health and should be a focus of the national fire service, given the nature of the job.

Whether related to calls or personal stresses and crises, or a combination of both, USFA is committed to the prevention, early detection and proper management of adverse behavioral health conditions to ensure the healthiest workforce possible, from recruits through retirement. Meeting this goal demands a thorough exploration of behavioral health.

Therefore, this report will specifically:

- Provide an overview of behavioral health.
- Investigate the influence of firefighting on behavioral health.
- Explore the burden of adverse behavioral health conditions among firefighters as well as the general population.
- Present strategies to promote resilience and improve behavioral health in the fire service.

Overview of Firefighter Behavioral Health

A common saying in the fire service quoted in the 2005 documentary “Into the Fire” is that “Your worst day is our every day.”³ Not surprisingly, regular exposure to traumatic events can have a negative psychological toll on firefighters’ mental health.^{4, 5, 6} In the 21st century, firefighters do much more than fight fires. Their responsibilities have shifted from solely fire suppression to including a broad range of increasingly complex and volatile emergency response operations.⁷ Present-day firefighters are responsible for rescue operations, hazardous materials management, responding to natural disasters and domestic attacks, and providing EMS. In many areas, firefighters deliver the primary EMS services to their communities, thus providing the primary medical safety net. Medical calls typically include a range of needs from simple sprains and strains on a baseball field to a wide variety of PTEs, including a parent who is experiencing a heart attack, a child who has drowned, a car accident with a mutilated adolescent, a fire with possible trapped victims, or, most recently, response to COVID-19 patients and their families. In addition, the role of firefighters requires that someone be available to respond any time, day or night. This adds another layer of stress with interrupted sleep and the physical and mental challenges of shift work.^{8, 9, 10}

In the fire service, the term behavioral health refers to the overall well-being of personnel. It includes the integration of mental health or illness, emotional resilience, emotional well-being, work-life balance, substance use, and the ability to cope with stress and trauma. Given the job’s impact on behavioral health, it has become an increasingly important topic for prevention and intervention in fire departments. Focusing on behavioral health in the fire service is essential because it directly influences the quality of life and job satisfaction for those who face intense physical and emotional demands.^{8, 11} Unaddressed behavioral health challenges (e.g., chronic stress, trauma exposure, burnout) not only diminish well-being but also contribute to decreased job satisfaction and intent to leave the profession. In addition, they diminish the ability to consistently and effectively perform in high-stress environments, which can impact the communities they serve.

Mental and physical health are interconnected, with research explaining that each influences and amplifies the other.¹² Critical to the fire service, chronic occupational stress increases the risk of cancer and cardiovascular disease, two health concerns that receive a high degree of focus among the fire service.^{13, 14} Prolonged or chronic stress weakens the body’s immune system through high levels of cortisol, chronic inflammation and sustained sympathetic nervous system activation. Also underlying both physical and mental health challenges of the fire service is the interrupted sleep that is necessary with shift work.¹⁵

Over time, chronic stress and inadequate sleep create a feedback loop in which a person’s physical health issues make their mental health symptoms worse, and their mental health issues make their physical health symptoms worse. This feedback loop underscores the need for integrated prevention strategies that address both mind and body. Interrupted circadian rhythms impair the body’s ability to regulate hormones, recover, and maintain healthy and consistent metabolic functioning. Conversely, poor sleep is linked to increased rates of depression, anxiety and post-traumatic stress disorder (PTSD).¹⁶

Similarly, cognitive functioning is impacted as stress, depression and exposure to PTEs can lead to poor situational awareness, impaired decision-making and poor executive functioning. Untreated behavioral health issues also may affect job performance and safety. For instance, Regehr and LeBlanc¹⁷ found that first responders with PTSD exposed to simulated emergencies in a research laboratory had significantly decreased functioning on complex cognitive tasks. Complex cognitive firefighting tasks could include size-up, crew resource management and situational awareness on the fireground. Similarly, in a study of over 3,000 Greek firefighters, those who had symptoms of PTSD were found to have higher rates of work-related injuries, possibly due to the effects of lack of concentration and decreased cognitive functioning.¹⁸

Over time, mental health issues can take a toll on the fire service as a whole. Experienced personnel who quit the profession or retire early often cite a lack of organizational support for their feelings of disengagement

or psychological injury. Without long-term firefighters and organizational stability, the fire service and the communities it serves are increasingly at risk.¹⁹ These pressures extend beyond the firehouse; when personnel are struggling, the communities they protect are less safe as well.

What firefighters face

Figure 1. Types of stress and their effects on members of the fire service.



There has been a significant shift in conceptualizing behavioral health over the past few decades. The initial focus on behavioral health was explicitly the impact of and responding to PTEs.^{20, 21} The interventions focused on immediate intervention and debriefing by trained clinicians or practitioners who focused on a structured conversation after an incident. Often, these personnel were from outside the organization and were brought in solely for the debrief. With evolving science and practice, there has been a shift in how stressors and outcomes are understood and managed. Evidence suggests that it is not only extreme PTEs but also repeated exposure to trauma that occurs daily.^{4, 22} It has also been noted that not all calls affect all personnel in the same way and that what stresses one firefighter may not affect all firefighters in the same way.

In addition to the exposure to trauma, both acute and chronic, there is increasing attention paid to moral injury that occurs within the fire service. Moral injury is psychological, emotional or spiritual distress that happens when an individual must act, fails to act or witnesses an action against their personally held moral beliefs. Given the myriad risks and complicated situations personnel face, it is not surprising that firefighters struggle with moral injury. For instance, there are times when results or standard operating procedures may

be at odds with what is perceived as the right option. Sometimes, this injury occurs not only on calls or when interfacing with the public but also in organizational activities when interacting with peers or from leadership failures. There is increasing recognition of the role organizational stressors play in mental health.¹⁶

In addition to trauma exposure and experiencing moral injury, research indicates several other factors put firefighters at higher risk of mental health disorders. Similar to studies in the general population,^{23, 24} research in the fire service has found significant relationships between experiences of discrimination and harassment and adverse psychiatric outcomes.^{25, 26} In a survey of nearly 2,000 women firefighters,²⁵ it was found that those who had experienced the most significant levels of discrimination and harassment had more than double the risk of having clinically significant symptoms of PTSD (16.5% vs. 6.9%) compared to those who had experienced little or no discrimination or harassment. A similar pattern existed for depression, with high levels of discrimination/harassment being linked to higher levels of depression (43.3% vs. 15.1%) and anxiety (average score 21.1 vs. 16.4) as well as injury in the past year (56.3% vs. 36.8%) and lost workdays (4.0 vs 2.8 days). While more research is needed on other groups within the fire service, it can be inferred that any firefighter who misses the benefits of social connection in the fire service likely experiences similar negative impacts. Poor leadership and organizational dysfunction have also been found to negatively impact both mental health and morale among personnel.^{27, 28}

Also like other occupational groups in high-stress environments (particularly during and post-COVID),^{29, 30, 31} burnout is significantly related to poor mental health among firefighters.^{32, 33} Burnout is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion, increased mental distance from one's job or feelings of negativism or cynicism related to one's job, and reduced professional efficacy.³⁴ In a cross-sectional study of firefighters, Jo and colleagues³⁵ found 5.4% of their study population to be in the range of concern for PTSD. Burnout was significantly associated with reported PTSD. In a study of more than 3,000 Greek firefighters, Katsavouni et al.¹⁸ found that 13% were in the range of concern for PTSD, and 20% reported burnout. In the sample, burnout (particularly the subscale related to depersonalization) was linked to symptoms of PTSD. The current focus in the fire service has been clinically significant mental health disorders with little to no emphasis on risk factors such as burnout and experiences of discrimination and harassment, which put firefighters at high risk of developing clinically significant diagnoses.

There is a growing body of evidence demonstrating a meaningful relationship between nutrition and mental health, which has been a noted challenge within the fire service given time restrictions for healthy eating, traditions and norms around meals, and the food environment.³⁶ Nutrition affects brain function through multiple biological pathways, including inflammation, oxidative stress, neurotransmitter synthesis and regulation of the gut-brain axis. Diets high in processed foods, refined carbohydrates and saturated fats — patterns that are common in some firehouse food environments — have been associated with increased risk of depressive symptoms and poorer mental health outcomes, while dietary patterns rich in fruits, vegetables, whole grains, fish and healthy fats are associated with lower rates of depression.³⁷ Emerging research also highlights the role of the gut microbiome in mental health; diet shapes microbial composition, which in turn influences inflammatory signaling, stress reactivity, and neurochemical pathways relevant to mood and cognition.³⁸ Importantly, randomized controlled trials have demonstrated that improving diet quality can significantly reduce symptoms of major depression, suggesting that nutritional interventions may represent a practical and scalable component of mental health promotion programs in high-risk occupational groups such as firefighters.

Mental health and sleep are also deeply intertwined. For career firefighters, shift work has a significant negative impact, as most firefighters regularly report being underslept.³⁹ Volunteer firefighters face an even more complex disruption of circadian rhythms, given that they are on call every night. This interruption of the standard circadian rhythm of the body not only has an impact on the physiology of the body, but also the mental health of firefighters. No psychiatric disorders exist that are unrelated to sleep.²³ Healthy individuals

with a prolonged lack of sleep can also experience symptoms of psychiatric disorders. Sleep is significantly related to emotional experience, as limited sleep can alter brain function. The amygdala is a brain structure that regulates and triggers strong emotions. Studies of those sleep-deprived show a 60% amplification of emotional reactivity on MRI, indicating that a lack of sleep reverts the brain to a more primitive pattern of uncontrolled reactivity.²³ A lack of sleep has also been linked to an increased risk of suicide.²⁵

Mental Health Disorders and Associated Behaviors in the Fire Service

Mental health disorders among firefighters

Surveys generally report that around 30% of firefighters² have experienced symptoms related to mental health issues. Common disorders include depression, PTSD, generalized or other anxiety disorders, and alcohol use disorder (AUD)/substance use disorder (SUD). Rates of these disorders are somewhat mixed in the literature based on the period assessed (e.g., lifetime versus past 30 days) and type of assessment (e.g., clinician diagnosed versus self-report of symptoms). Despite these differences, most studies find rates of disorders to be higher in firefighters than the general population. Mental health disorders produce a wide range of symptoms and behaviors, many of which overlap with different disorders and impact quality of life and daily living. They can have an impact on how a firefighter handles the responsibilities and challenges of firefighting and their personal lives.

Mental health disorders are conditions that impact a person's thinking, mood, behavior or ability to relate to others in ways that cause significant distress or impair daily functioning. These disorders can be temporary or long-term and may range from mild to severe. In the United States, most clinicians diagnose mental health disorders using the Diagnostic and Statistical Manual of Mental Disorders (commonly referred to as the DSM),⁴⁰ published by the American Psychiatric Association. The DSM provides standardized criteria for being diagnosed with a "disorder," detailing the types of symptoms that must be present, how many symptoms are required, how long they must last, and the level of functional impairment they must cause. Diagnosis typically involves a comprehensive clinical evaluation, which may include a structured interview, standardized questionnaires, and consideration of medical history and occupational or personal context. For a diagnosis to be made, an individual's symptoms must meet the DSM's threshold for that disorder. Another medical condition, substance use, or situational stress alone cannot better explain symptoms.

One challenge with assessing diagnosis rates among firefighters is that they are often hesitant to seek treatment from clinicians, and many are wary of diagnoses due to concerns about the potential impact on their careers. Firefighters often report mental health symptoms that do not fit neatly into a single diagnostic category. Instead of showing a textbook presentation of one disorder, they frequently experience diffuse, overlapping symptoms that cross multiple categories. This means their mental health challenges can look different from standard diagnostic profiles and may not align with the way conditions are usually described in manuals like the DSM.⁴ Ultimately, firefighters and departments need to understand that seeking clinical support when symptoms interfere with their lives is essential. Regardless of the types of symptoms, several evidence-based approaches can help alleviate symptoms and improve functioning.

Table 1. Common types of mental health disorders among firefighters

Mental health disorder	Description and potential clinical outcomes
Depression	According to the DSM, a diagnosis of Major Depressive Disorder includes having five or more symptoms (<i>depressed mood, diminished interest/pleasure, unintentional weight loss or gain, insomnia or hypersomnia, changes in psychomotor functioning, fatigue or loss of energy, feelings of worthlessness, difficulty concentrating, or recurrent thoughts of death</i>) for two or more weeks that represents a change from the previous functioning. To reach the level of diagnosis, symptoms must cause significant distress or impairment in functioning (e.g. work, social context). In addition, other causes such as other disorders or substance abuse must be ruled out. The prevalence of depression or depressive symptomology has been estimated in multiple cohorts of U.S. firefighters, with most findings showing a higher rate than the general population.^{41, 42, 43} The lifetime prevalence of health care provider-diagnosed depression among U.S. males and females in the general population is 5.7% and 11.7%, respectively.⁴⁴ In contrast, the prevalence in male career and volunteer firefighters in the Missouri Valley region scoring in the range of concern for depression is as high as 20%.⁴¹ In addition, it has been found that the lifetime prevalence of diagnosed (by a health care provider) depressive disorder is approximately 6% among a national cohort of male career firefighters.⁴⁵ Among female firefighters, 25-42% screened positive for depression in the past 30 days, and up to 35% had a lifetime prevalence of health care provider diagnosis of depressive disorder.⁴³ Tak et al.⁴⁶ found that 27% of the firefighters, both male and female, screened positive for depressive symptoms three months after responding to Hurricane Katrina.

Table 1. Common types of mental health disorders among firefighters (continued)

Mental health disorder	Description and potential clinical outcomes
PTSD	For someone to be diagnosed with PTSD, the DSM requires that they have been exposed to a traumatic event, either by experiencing it directly or by hearing about it happening to someone else. After that kind of exposure, PTSD can show up in several different ways. One set of symptoms involves intrusions, memories or feelings that break in even when you do not want them to. This can mean upsetting memories that keep coming back, nightmares about the event, flashbacks that feel like you are reliving it, or strong distress and even physical reactions, like a racing heart or sweating when something reminds you of what happened. PTSD also involves avoidance, where a person tries to stay away from reminders of the event. That might mean avoiding certain people, places, conversations, or even pushing away thoughts and feelings connected to it. There are also negative changes in mood or thinking. This can look like trouble remembering parts of the event, ongoing negative beliefs about yourself or others, blaming yourself or others unfairly, or carrying heavy emotions like anger, guilt or shame. It can also include losing interest in things you used to enjoy, feeling cut off from others, or finding it hard to feel positive emotions. Finally, PTSD includes changes in arousal and reactivity. This might show up as irritability or anger outbursts, reckless or self-destructive behavior, being constantly on edge or hyper-alert, being easily startled, struggling to focus, or having sleep problems. For PTSD to be diagnosed, these symptoms must last for more than a month and must cause real distress or problems in daily life and functioning. Similar to depression, existing data on PTSD among firefighters shows a prevalence much higher^{47, 48, 49, 50} than the general population prevalence of 3.5%.⁵¹ Corneil et al. assessed PTSD symptoms among U.S. and Canadian firefighters and found an alarming prevalence of 22% among two large U.S. fire departments and 17% among a sizable Canadian department.⁴⁷ PTSD prevalence also has been examined after major disasters and crises. For instance, 13% of firefighters responding to the Oklahoma City bombing reported having PTSD symptoms.^{48, 49} A PTSD brain is constantly on alert, screening for danger.
Generalized and other anxiety disorders	There are several diagnoses related to anxiety within the DSM, and most are classified based on symptoms. Generalized anxiety disorder (GAD) is one of the most common disorders examined among firefighters. GAD is categorized by difficulty controlling worry that occurs on more days than not for six months or more. In addition, GAD is associated with three or more symptoms: <i>restlessness, fatigue, difficulty with concentration, irritability, tension in muscles, or sleep disturbances</i>. A diagnosis is made if symptoms cause impairment in functioning and are not due to another diagnosis or substance use. The National Institute of Mental Health reports that an estimated 2.7% of U.S. adults had GAD in the past year, and an estimated 5.7% of U.S. adults experience GAD at some time in their lives.⁵² An exploratory study investigated the mental health status of first responders in South Africa and found that 37.8% qualified for a diagnosis of GAD.⁵³ Another analysis showed that the prevalence for anxiety in first responders during the COVID-19 pandemic was 32%. More specifically, the prevalence of mild anxiety was 60%, moderate anxiety was 27%, and severe anxiety was 14%.⁵⁴

Table 1. Common types of mental health disorders among firefighters (continued)

Mental health disorder	Description and potential clinical outcomes
AUD/ SUD (drug addiction)	The DSM classifies AUD as a problematic pattern of consuming alcohol that leads to clinically significant impairment or distress. Two or more of the following over at least 12 months are required for diagnosis: <i>alcohol being consumed at a greater amount or more extended period than intended, ongoing attempts to limit use unsuccessfully, a great deal of time drinking and/or recovering from use, cravings or urge to drink, failing to fulfill obligations due to use, continuing use despite negative impact, reducing or giving up activities to use alcohol, building tolerance, using alcohol when it is not safe, continuing use despite knowing it is not beneficial, and withdrawal when not using.</i> In general, SUD symptoms mirror those of AUD but are related to the use of other substances that lead to dependency such as tobacco, marijuana and other prescription drugs. One common maladaptive mechanism for managing depression and PTSD is alcohol or substance (drugs) misuse. Individuals who experience emotional distress and PTSD often report the development or exacerbation of risky drinking or drug behaviors. Studies of firefighters indicate that 56% of male career firefighters, 45% of male volunteer firefighters and 40% of female career firefighters reported binge drinking in the past 30 days.^{41, 43} Similarly, Carey et al. found that 58% of firefighters in their sample reported binge drinking over the past 30 days.⁸ Using alcohol as a coping mechanism for distress may explain the substantially higher prevalence of binge drinking among firefighters compared to the general population, where the prevalence is under 20%.⁵⁵ Rates are also higher than in other similarly stressful occupations, such as the military, where approximately 30% of personnel report binge drinking.⁵⁶ Among firefighters, use of substances is often underrecognized as a coping mechanism despite their being used for that reason.⁵⁷ Alcohol use, particularly heavy alcohol use, has also become a part of the fire service culture as a way to bond or fit in with colleagues.⁵⁷ Unfortunately, the physical toll of this heavy use often goes underrecognized given its interruption of healthy sleep cycles and high caloric intake.

*Italicized words are common clinical terms/outcomes associated with different types of mental health disorders as recognized in the DSM.

Suicide and suicidal ideation

The high prevalence of depression, PTSD, anxiety disorders, and AUDs/SUDs and their associated symptoms among firefighters is particularly troubling because they may ultimately contribute to suicidal ideation and attempts. A 2017 report found that more firefighters died by suicide than by line-of-duty deaths.⁵⁸ Stanley and colleagues¹ found that, of 1,000 firefighters who responded to their survey, 46.8% reported suicidal ideation, 19.2% reported suicidal plans, and 15.5% reported a past suicidal attempt throughout their careers. Another survey of more than 7,000 respondents conducted by the International Association of Firefighters (IAFF) and NBC News found that 19% of firefighters reported having suicidal thoughts, 27% reported struggling with substance abuse, and 65% reported being haunted by memories of bad calls.⁵⁹ While determining the exact prevalence of suicidal ideation and attempts is challenging, the number of firefighters who report dealing with thoughts of suicide on existing surveys is troubling. Depression, PTSD and alcohol abuse are often precursors to suicidal ideation and attempts. Boffa et al.⁶⁰ found that, among almost 900 firefighters from across the U.S., firefighters who had more significant PTSD symptoms were more likely to report suicide ideation and suicide attempts in their lifetime. In addition, depression and PTSD symptom severity were positively associated with lifetime suicidal ideation and lifetime suicide attempts among over 3,000 firefighters from a large urban fire department.⁶¹

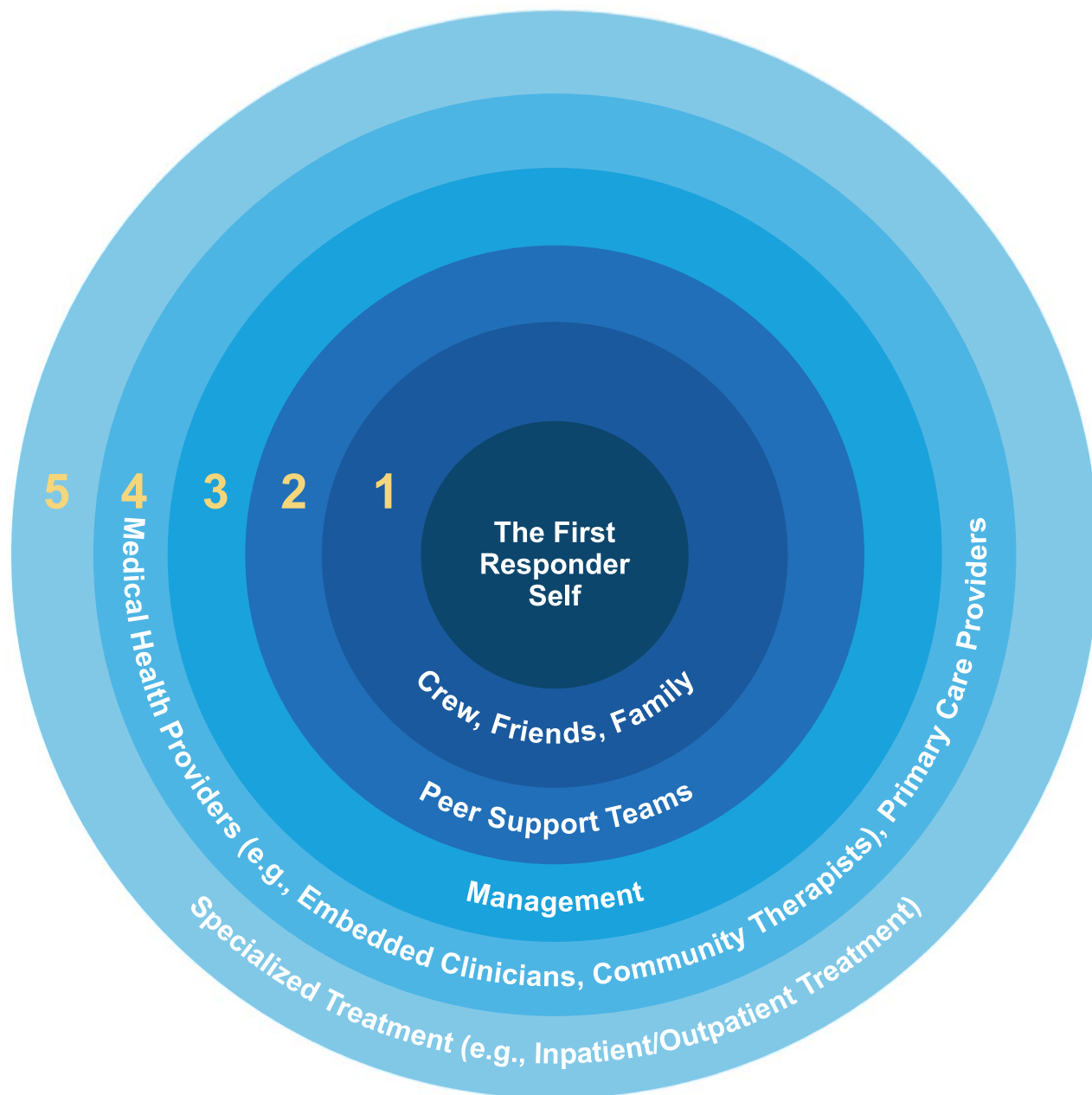
Improving Behavioral Health in the Fire Service

What is working

While the tasks and roles of firefighting logically lead to concerns related to behavioral health, the focus on the topic has resulted in significant progress related to prevention and intervention. With increased awareness of the mental health impact of both chronic and acute exposures, the fire service nationally has made a concerted effort to support the mental health of its members. Starting two decades ago, the National Fallen Firefighters Foundation (NFFF) launched the Everyone Goes Home Program,⁶² intending to reduce the number of preventable firefighter fatalities. This program champions and implements 16 firefighter life safety initiatives that include focusing on mental health support (Initiative 13⁶³) for firefighters. The work launched efforts to prevent mental health disorders through education and awareness, bolstering department peer support, and encouraging organizational support.⁶⁴ Similarly, the IAFF launched its behavioral health initiatives that include training of peer support personnel for departments, online awareness level resources, resiliency training, and the development of a cadre of disaster response personnel to support the mental health of those responding to large-scale disasters.⁶⁵ Focus has been on ensuring culturally competent peer support interventions are well orchestrated by trained peers. The National Volunteer Fire Council also developed its toolkit, which includes a helpline, department resources, a directory of behavioral health providers and department education. National efforts from these groups and others also have focused on decreasing the stigma related to mental health struggles.⁶⁶ The fire service has been recognized for its progress in addressing mental health challenges and promoting psychological health and wellness.⁶⁷

Evolving work on behavioral health focuses on layered approaches to intervention (see Figure 2). Foundational to the effort is general awareness of the importance of behavioral health in the fire service, with the aim of educating and reducing stigma. Peer support approaches are increasingly being recognized for their benefit as personnel indicate they prefer interventions delivered by trusted colleagues.^{68, 69} Self-assessments and education on self-monitoring are important program components, as they help personnel recognize when their symptoms affect their daily lives. The key to the peer support process is the ability of personnel to identify and refer those struggling to clinical support as needed. Clinicians who are culturally competent and well known to firefighters play a key role in the success of the behavioral health program. Research highlights fire service personnel's hesitation to work with clinicians from "outside" the fire service who are not aware of the unique challenges of being a firefighter.⁷⁰ While some departments are fortunate to have embedded clinicians as departmental resources, others develop trusted relationships with clinicians in the community

Figure 2. Layers of personal, occupational and social support for responders (modified from Dückers et al').



For organizations developing a behavioral health initiative, it is essential to start with a needs assessment that includes a comprehensive resource inventory. Once the needs are identified, the organization can establish cross-functional governance (labor, management, clinical advisors) to oversee a tiered behavioral health program. It is important to implement integrated components — peer support, supervisor training and confidential referral pathways to vetted, culturally competent clinicians with protocols for acute incident response and off-duty/family access. Also, central to a program’s success is codifying confidentiality, fitness-for-duty and return-to-work procedures in policy; securing sustained funding for the effort; and providing recurring training and communications. Finally, strong programs should monitor key performance indicators (e.g., utilization, time to first appointment, critical incident follow-up compliance and ongoing reviews to ensure continuous quality improvement).

Protective factors within the fire service

While responding to emergencies is inherently stressful and requires exposure to traumatic events, there is a good deal about the fire service environment that promotes mental health and provides protective buffers against stress. One of the strongest protective factors for most firefighters is the social cohesion, sense of belonging and identity that comes with being a firefighter.⁴ A common saying in the fire service is that the world's problems are solved around the kitchen table. This time-honored tradition and saying refers to the mentorship, camaraderie and informal learning that occur in the firehouse and often around the kitchen table during shared meals. Evidence from those who do not benefit from the kitchen table camaraderie underscores the importance of workplace civility and the informal support and engagement it provides for firefighters. In studies of women firefighters who have experienced discrimination or harassment while on the job, rates of depression and anxiety are two to three times higher among women who experience this incivility.²⁵ Awareness of the importance of this engagement within a crew serves a strong foundation for promoting cohesion. While the results highlight the importance of addressing workplace incivility, they are also a testament to the protective impact of the relationships built in the firehouse.

Resilience

Current efforts on behavioral health also encourage a strong focus on building resilience. Resilience is adapting, recovering and thriving in adversity, trauma, stress or significant challenges. Resilience-based programs for the fire service focus primarily on building skills and resources to develop and use social support in times of stress, finding meaning and purpose in occupational exposures, focusing on recovery and self-care, and finding ways to regulate their emotions effectively under stress. Several organizations, including the IAFF, host training on resilience-building strategies and tactics to help firefighters understand the stress of the job and how to respond effectively to it when adversity hits. Research has shown that resilience holds a significant relationship with mental health outcomes such as PTSD and suicidal thoughts and that it is a trainable characteristic for this high-stress occupation.^{71, 72, 73}

Building resilience among firefighters takes more than a single training or resource; it requires layers of support across the physical, mental, organizational and family domains. Departments can foster resilience by offering peer support and access to trusted clinicians, prioritizing annual medical exams and fitness programs, and embedding policies that support recovery after critical incidents or injuries. Providing education on sleep, nutrition⁷⁴ and stress management, along with resources for families and financial wellness, helps strengthen both the firefighter and their support system. When these elements are integrated into the firehouse culture, resilience becomes part of everyday practice rather than an add-on.

Major incident resources

The fire service's focus on behavioral health puts it at the forefront of other occupational groups, which are only now beginning to understand the role of occupational exposure, particularly when the job requires exposure to traumatic experiences. Several states, including Florida and Texas, have developed response plans to support the behavioral health of personnel during major incidents, such as natural disasters and mass casualty events. Additionally, the IAFF now deploys peer teams nationwide in response to extreme needs. While additional support is needed nationally, early efforts highlight the need for prevention, intervention and post-intervention approaches.

Central to the focus on managing the PTEs for firefighters is the interest in understanding what resources are most needed during and in the aftermath of an event. Research has found that most people exposed to trauma do not develop mental health disorders. To decrease risk, several recommendations have been made, including providing psychoeducation on what reactions are standard and how to manage or address those reactions, resources for those who do develop symptoms after the event, and tools for reaching out for support when necessary.⁷⁵ Generally, firefighters and EMS personnel are resilient individuals. A study

of firefighters' post-trauma exposure found that allowing personnel to choose their own coping approach was the best way to mitigate symptom development.⁷⁶ Study results highlight the need for the fire service to educate firefighters on self-care approaches and effective coping.

What still needs focus

Further changing firefighter culture and reducing the stigma

Great strides have been made to bring a general awareness to the behavioral health of firefighters and reduce the stigma associated with mental health disorders through education, peer support and self-assessments. A national wellness survey given to public safety personnel, however, revealed that while most professional firefighters indicated being adversely impacted by their duties, they did not want to utilize services, which is in line with prior research.⁷⁷ Thus, further focus on stigma reduction is needed. It also requires an emphasis on internal stigma: negative beliefs, feelings and attitudes that a person feels about themselves when struggling with mental health symptoms. Fortunately, a focus on directly addressing these beliefs through peer-led interventions shows promise in improving stigma.⁷⁸

Addressing toxic work environments at the fire department

While there has been much focus in recent years on how the demands of firefighting (e.g., responding to traumatic events) may impact mental health, there has been less focus on how poor leadership may have an impact on mental health. In his opening address at the Fire Department Instructors Conference in 2023, Chief David Rhodes remarked, "There has been little focus on the mental health effects of poor leadership. We do not want to talk about the root cause of the majority of the stress that causes us issues: organizational vindictiveness, discrimination, favoritism, and exclusion." Like the military and law enforcement communities, fire departments often report that the top two causes of stress are relationships and organizational stress. Organizational stressors include lack of support, interpersonal conflict, scarcity mentality, exclusion, micromanagement, burnout, bullying, affinity bias and harassment. However, the people responsible for the health and wellness of their first responders are often the same ones contributing to their poor mental health outcomes.⁷⁹

Creating more health and wellness programs internal to fire departments

Some departments have recently developed and implemented successful health and wellness programs. These interventions, while benefiting the physical health of firefighters, can also lead to improved mental health.⁸⁰ The NFFF's "Fire Service Behavioral Health Management Guide" was designed to support departments in developing their own health and wellness programs. Although not a standard, this guide describes a tiered behavioral health program with four components: leadership, firefighters, peer support and clinical support. For each element, there is a section that includes a detailed description of the component's role and a list of available resources. To assist departments of all sizes, component resources are divided into three knowledge levels: awareness, operations and technician.⁸¹

Getting better sleep quality

Sleep is one of the most important, and most overlooked, elements of mental health in the fire service. The irregular hours, long shifts and frequent nighttime disruptions that come with emergency response all contribute to chronic sleep deprivation. When firefighters consistently lose out on restorative sleep, it takes a toll not only on their physical health but also on their psychological resilience. Research shows that inadequate sleep is linked to higher rates of depression, anxiety, irritability and difficulty coping with stress.⁸² Evidence also suggests sleep disruption is related to suicidal ideation and attempts.⁸³ In research by Barger and colleagues,¹⁰ sleep disorders are linked to significantly increased rates of depression and anxiety, suggesting that screening and treating sleep disorders should be a priority for fire departments and their peer support teams. While interrupted sleep is a necessity of the job, departments and personnel should prioritize sleep through policy, environment and practices.

Responsibility for improving both sleep time and sleep consistency will take a concerted effort for both departments and personnel. Research by Billings and colleagues³⁹ indicates personnel come to work short-slept and leave work short-slept. It is possible that delaying start times may improve the opportunity for more restorative sleep both off and on duty. Structurally, designing sleep-friendly stations complete with dark, quiet, climate-controlled, and private sleep quarters provides a sleep-promoting environment. Policies around napping, particularly short naps midday, can promote cognitive functioning and offset the impact of high call volume during the night.⁸⁴ Even with department policies in place, firefighters must prioritize their sleep — both the amount of sleep they get and the consistency of their sleep — off duty as well. Sleep hygiene such as limiting late-day caffeine and alcohol use, creating consistent nighttime routines, and ensuring a sleep-promoting environment at home is key to overall mental health and wellness.

The future of firefighter behavioral health

The fire service has made genuine progress in treating behavioral health as a core operational concern, not an afterthought. A central driver of that shift has been the recognition that mental health is as critical to operational readiness as physical fitness. This shift has led to the identification of a need for national behavioral health frameworks for disaster response, ensuring that coordinated psychological support is available after large-scale incidents. Peer support programs have also expanded dramatically, with more departments investing in formal training to equip peers to provide psychological first aid and help connect their colleagues to professional resources when needed. In addition, efforts are underway to develop cadres of culturally competent clinicians within each state, ensuring that firefighters have access to providers who understand the unique stressors and culture of the fire service. Future work should focus on expanding these resources and ensuring these clinicians are accessible to personnel nationwide. Leadership development programs are also increasingly recognizing the importance of behavioral health literacy, equipping fire chiefs and officers with the tools to support their crews and create psychologically safe workplaces, as well as among themselves.

These advancements reflect a decisive cultural shift within the fire service, one that values proactive, holistic health strategies and views psychological resilience as essential to mission success. Building on this momentum, the future holds great promise for embedding behavioral health resources and consideration into every level of fire service policy, training and leadership development, creating a stronger, healthier and more resilient fire service.

Conclusion

Firefighting is one of the most challenging and demanding occupations, requiring personnel to respond to high-stakes emergencies while enduring chronic stressors that affect both body and mind. Behavioral health is inseparable from operational readiness, job satisfaction and long-term wellness. While progress has been made through peer support, national initiatives and increased awareness, much work remains. Continued efforts must focus on reducing stigma; addressing organizational stressors; promoting healthy practices such as getting good quality sleep; and embedding prevention, resilience-building and culturally competent clinical care into every department, regardless of size. By prioritizing behavioral health alongside physical health, the fire service not only protects its members but also ensures the safety and strength of the communities they serve. Supporting firefighter behavioral health is not a peripheral concern — it is central to the future of the profession.

Glossary

Alcohol use disorder — A medical diagnosis for problematic drinking that causes distress or impairs functioning.

Anxiety disorders — A group of mental health conditions characterized by excessive fear, worry, or nervousness, including GAD, panic disorder and others.

Behavioral health — A broad term that includes both mental health and the habits or behaviors that influence it, such as sleep, stress management and substance use.

Burnout — A condition caused by chronic workplace stress, leading to exhaustion, cynicism and reduced professional effectiveness.

Chronic stress — Long-term exposure to stressors that can harm both mental and physical health, contributing to burnout, cardiovascular disease and depression.

Circadian rhythm — The body's natural 24-hour cycle that regulates sleep, hormones and metabolism; often disrupted by shift work.

Critical incident stress debriefing — A structured group discussion held after a traumatic event to help responders process experiences. Originally mandatory but now used more selectively due to concerns about its effectiveness.

Critical incident stress management — A broader, multistep system for managing stress before, during and after critical incidents, often led by trained peers and mental health professionals.

Cortisol — A hormone released during stress; chronically high levels can weaken the immune system and contribute to health problems.

Culturally competent clinician — A mental health provider who understands and respects the culture, language and experiences of firefighters and other first responders.

Depression (major depressive disorder) — A mood disorder marked by persistent sadness, loss of interest, and emotional or physical symptoms that interfere with daily life.

Diagnostic and Statistical Manual of Mental Disorders, Text Revision (DSM-5-TR) — The standard reference clinicians use to diagnose mental health conditions, published by the American Psychiatric Association.

Fitness-for-duty evaluation — An assessment used to determine whether a firefighter is medically and psychologically fit to safely perform job duties.

Generalized anxiety disorder — A disorder characterized by excessive, uncontrollable worry that occurs on most days for 6 months or more and interferes with functioning.

Internal stigma (self-stigma) — Negative self-beliefs or shame that individuals feel about experiencing mental health challenges.

Kitchen table culture — A symbolic reference to the camaraderie, mentorship, and informal problem-solving that happens among firefighters, typically around the firehouse kitchen table.

On-duty death — A death that occurs while a firefighter is performing official job duties.

Mental health disorder — A condition that affects mood, thinking, behavior or relationships to a degree that causes significant distress or impairs daily functioning.

Moral injury — Emotional or spiritual distress experienced when someone acts — or feels forced to act — against their deeply held moral beliefs or witnesses such actions.

Needs assessment — A process for identifying gaps, strengths and priorities before developing or implementing a behavioral health or wellness program.

Operational readiness — The state of being mentally and physically prepared to respond effectively to emergencies.

Organizational stressors — Workplace conditions that contribute to stress and mental health challenges, such as poor leadership, discrimination, favoritism or lack of support.

Peer support — A system where trained firefighters provide emotional, social and practical support to colleagues and connect them with professional help when needed.

Post-traumatic stress disorder — A mental health condition that can occur after exposure to trauma, involving symptoms such as intrusive memories, avoidance, negative mood changes and hypervigilance.

Protective factors — Qualities or conditions that help reduce vulnerability to stress or trauma, such as strong social support, teamwork and resilience.

Psychoeducation — Education provided to help individuals understand mental health conditions, normalize reactions and learn effective coping strategies.

Resilience — The ability to adapt, recover and thrive after experiencing stress, trauma or adversity; considered a trainable skill for firefighters.

Return-to-work procedure — Department policy outlining how personnel safely resume duty after illness, injury or behavioral health treatment.

Shift work — Work schedules that include overnight or rotating shifts; common in firefighting and associated with disrupted sleep and health effects.

Sleep deprivation — A lack of sufficient restorative sleep that impairs concentration, mood and physical health.

Sleep hygiene — The set of habits and environmental conditions that promote good-quality sleep, such as maintaining consistent schedules and reducing caffeine or alcohol use before bedtime.

Stigma — Negative societal attitudes or beliefs about mental health issues that discourage people from seeking help.

Substance use disorder — A medical condition involving misuse of drugs (prescription or illicit) that leads to distress or impairment, similar to AUD.

Suicidal ideation — Thoughts, consideration or planning of suicide, whether fleeting or sustained.

Sympathetic nervous system activation — The body's automatic "fight-or-flight" response; chronic activation can contribute to anxiety, poor sleep and cardiovascular problems.

Tiered behavioral health program — A structured system of mental health care that offers varying levels of support, from awareness and education to peer support and clinical treatment.

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Acronyms

AUD	alcohol use disorder
DSM	Diagnostic and Statistical Manual of Mental Disorders
EMS	emergency medical services
GAD	generalized anxiety disorder
IAFF	International Association of Firefighters
NFFF	National Fallen Firefighters Foundation
PTE	potentially traumatic event
PTSD	post-traumatic stress disorder
SUD	substance use disorder
USFA	U.S. Fire Administration



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