

Medical Cannabis and the Fire Service; Finding Our Way to Yes

Ken Prillaman, Fire Chief (Ret.) CFO

Collette Patricia Elosa

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## **Preface**

Over the course of the last several years, suicide now outpaces line-of-duty deaths in the US. Let's stop for a moment and let that sink in. *Firefighters taking their own life outpaces deaths from line-of-duty causes.* If you are a young man or young woman who has entered the fire service, we now might say to them, as they take their oath of office, "Welcome to the fire service, where you are more likely to die at your own hand than in the line of duty."

I haven't seen the data on all suicides, but of all the suicides I have seen, the data shows heavy alcohol use in the months and weeks preceding death. This suggests that we have firefighters (and other first responders) who are moving closer and closer to taking their lives, and in a downwardly spiraling state of depression, are taking a depressant (alcohol) as their coping method!

Is there anyone, anywhere in our service who doesn't see the irony if not the tragedy of all that?

Maybe it's time for a new way forward. Maybe it's time to consider alternatives to the alcohol and drug use so prevalent among our firefighters. Because, as they say, "if you keep doing what you're doing, you're going to keep getting what you're getting." I have come to respect the potential, as has our military, of a new paradigm using plant-based medicine for the treatment of PTSD, sleep deprivation, depression and the side effects from cancer treatments, specifically medical cannabis and micro-dosing of psilocybin mushrooms. Additionally, we are seeing incredible results from Ketamine infusion therapy as a way to reverse the effects of PTSD. But there is lots of work to be done before we can be better prepared to help our firefighters while providing safeguards for our communities.

**Abstract**

With the decriminalization of cannabis in parts of our nation and the ever-increasing demand for plant-based medicine use, it is only a matter of time before the use of medical cannabis hits the fire service. It's quite likely this issue lands on the Fire Chief's desk when a firefighter pops hot for THC and then, for the first time, produces a medical cannabis card, believing it's their "get out of jail" card. Waiting for this to happen could wreak havoc on our organizations and members.

The issues associated with medical cannabis are complex; too complex to cover within the confines of this paper, but the longest journey always starts with the first step.

The time to act is now. This is our call to action.

## **Introduction**

There is a tsunami headed for the shores of the US fire service. We created it, we asked for it but now many fire service executives are perplexed by the implications. The tsunami is medical cannabis and it's an outcropping from all of the great work we have collectively done to get cancer and post-traumatic stress disorder (PTSD) embraced and covered as work-related illnesses. Simultaneously, holistic healers, naturopathic practitioners and others have been promoting the benefits of plant-based medicine, including medical cannabis, for the treatment of chronic pain, cancer, PTSD and other maladies. Add to this the efforts of states to decriminalize cannabis and enact medical cannabis laws, and we have the perfect storm.

As fire service leaders we have a few choices. We can let our firefighters and officers navigate the world of medical cannabis individually and just hope they are getting good advice, have competent medical and mental health professionals assisting them on their journey and are doing everything necessary to operate safely in our stations, on our trucks and at our scenes. We can attempt to protect our cities and crew members by establishing a host of new policies and issuing General Orders intended to keep everyone "safe" from the potential of someone being "high" on duty, in a "just say no" orientation. We can accept what's coming and begin the process of developing and implementing best practices which embrace this emerging method of treatment, and support our members on their road to recovery.

Now, it seems impossible to have a conversation about medical cannabis without someone raising a concern about fraud. Reportedly, firefighters can "buy" a medical diagnosis of PTSD to acquire a medical cannabis card.

This paper will not attempt to address the issue of fraud as it relates to the illegal or at least unethical practice of obtaining a medical cannabis card simply for the legal entitlement to have THC in your system. Although a September 2021 case in a Texas fire department confirms this is happening, this paper focuses on supporting our members with bona fide medical diagnoses including but not limited to PTSD, chronic pain, cancer, depression and the like where state laws allow for the use of medical cannabis for the specific diagnosis.

Finally, it is the belief of the authors, due to the lack of controls and oversight and the metabolic impacts which higher concentration THC has on the human body, coupled with the high heat and high stress environment of firefighting, recreational use of cannabis must still be highly restricted in the fire service.

### **How we got here**

To the credit of the US fire service, and following the footsteps of our military, we have collectively invested millions of dollars and thousands of hours lobbying and legislating for cancer and PTSD to be considered work-place injuries for firefighters. Many states, including Texas, now recognize PTSD in their medical cannabis act. (Texas, 2015) Also, to our credit, there has been tremendous growth of support organizations, networks, peer support training opportunities and even facilities offering in-patient assistance to firefighters for these and other maladies. An outsider looking in would certainly conclude we are winning the war, if you will, for ensuring our staff has access to the services they need while protecting their jobs and income.

According to an article on the Gerber & Holder (2022) website, “at least 26 states considered new legislation addressing workers’ compensation coverage for PTSD and other “mental-only” injuries for first responders.”

However, in a recent meeting including nearly 100 Texas Fire Chiefs, it is very clear we have not prepared for the introduction of medical cannabis into our day-to-day operations, have not all developed an understanding of the medical cannabis industry or the use of cannabis as medicine and have some in our group who confuse the use of medical cannabis with “smoking a joint,” or “getting high.” In other words, we are a long way from establishing best practices when it comes to embracing firefighters and officers who choose medical cannabis to support their mental health condition, reduce the side effects from cancer treatments and to improve their quality of life with better sleep, reduced anxiety and less frequent episodes of depression.

### **A New Paradigm**

The fire service has often been presented with problems and challenges that have relatively simple answers. If a door is stuck, you break through it. If an act of disobedience occurs in the fire house or on the fire ground, you discipline for it. If the act isn’t already covered by a policy, you write one.

The use of medical cannabis, and the reasons leading to it, can seem ambiguous and unless or until we set aside existing fears, biases and programming and invest in understanding the advantages of medical cannabis, many of us are having a hard time finding our way to “yes.” In a recent conversation surrounding medical cannabis and safety with a Fire Chief from a large metropolitan agency, the Fire Chief’s view was if one of his members presented him with a medical cannabis card his reaction would be “if riding our trucks causes their PTSD, then I have an obligation to get them off of the truck. I’ll put them in the prevention division to do inspections, and then we won’t have a fireground safety issue.”

Although this approach might work, once, it will more likely teach your members to hide their medical condition and treatment lest they be appointed to the inspection division.

**Your Current Reality**

Many would agree the thread linking cancer, PTSD, overall mental health, workers' compensation and medical cannabis is a relatively new development. However, firefighters have been coping with stress, trauma, horrific images and experiences since Ben Franklin established the Union Hose Company in 1736. The question is how have they been coping? More important, how wide spread are the coping methods of today's firefighters? How many of our sworn are using pain medication, alcohol and mood altering drugs to cope with their varying degrees of mental health trauma? How many arrive for shift change already tired because they can't sleep? How many are overusing Kratom<sup>1</sup> and other easily-acquired over the counter compounds, potentially without guidance, and thereby introducing more risk, not less, into our environment?

How are cultural shifts in society impacting the issue? Is it possible some of our staff are already using cannabis, regardless of the current local legal status, for recreation or as a coping methodology? If so, do they, or their commanding officer, fully understand the physiological impact of introducing their bodies to temperatures in excess of 400 degrees under the high stress of an interior fire attack?

And, for those organizations with random drug testing, do your employees know that if they wait until 9:00 am they will know for certain whether they have been randomly selected and if not, then take their Adderall or Diazepam to make it through their shift?

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<sup>1</sup> Kratom is an herbal extract that comes from the leaves of an evergreen tree grown in Southeast Asia. Kratom leaves can be chewed, and dry kratom can be swallowed or brewed. Kratom extract can be used to as a treatment for muscle pain, or to suppress appetite and stop cramps and diarrhea. Kratom is also sold as a treatment for panic attacks.

Kratom is believed to act on opioid receptors. At low doses, kratom acts as a stimulant, making users feel more energetic. At higher doses, it reduces pain and may bring on euphoria. At very high doses, it acts as a sedative.

For some of our departments, the coping methods we don't know about should scare us far more than a disclosed medical diagnosis and an accompanying medical cannabis card.

### **What's Happening?**

According to the Texas State Law Library (2022), "In 2015, Texas passed the Compassionate-Use Act, which allowed the first legal use of low-THC cannabis products in the state for patients with intractable epilepsy. It was expanded in 2019 and 2021 to include other conditions" which now include PTSD. Low-THC cannabis is defined as less than 1% of tetrahydrocannabinols by weight. However, all indications are the Texas law will usher in higher concentrations of THC in the future as is the case in other states.

As reported by Victoria Rees of the European Pharmaceutical Review (2020), Dr. Alfonso Edgar Romero-Sandoval, Associate Professor of Anesthesiology at Wake Forest School of Medicine recently led a study involving 8,505 cannabis products across 653 dispensaries in California, Colorado, Maine, Massachusetts, New Hampshire, New Mexico, Rhode Island, Vermont and Washington. According to Rees, "The team found most of the products offered in the medical dispensaries in the study had more than 10 percent THC and many had 15 percent or more."

Having said all of this, will most fire chiefs know how to interpret or react to such data? What are the implications, if any, of a firefighter using a product under medical supervision with 1% THC? What about 10%?



These authors suggest we are currently ill-informed and therefore ill-prepared to respond well to a single member with a medical cannabis card, much less propose industry best practices.

### **Landscape Review**

To get a glimpse of the confusion and ambiguity surrounding the issue, these authors went to some of our most common sources of information when we need outside advice. Unfortunately, there isn't a lot of help. Searching the US Fire Administration website for "cannabis," "medical cannabis," "Marijuana," and "weed" produced no results. Fire Engineering (online) and other industry trade journals produced a few articles, most of which include recommendations like "use caution" and "seek qualified local legal advice" before proceeding; and many of those were leaning toward better policy development guidelines. The NFPA, as you might suspect, is working on new standards for fire protection systems in facilities which manufacture products containing THC but nothing related to firefighters' health and the use of medical cannabis.

On a federal level, all marijuana remains illegal and is classified as a Schedule I drug along with heroin and cocaine. To further complicate the issue, states and the federal government have a variety of statutory language which can be ambiguous at best and at worse, conflicting. Take this description of New York's "Marijuana Regulation and Taxation Act" provided by Timothy C. Hannigan (2022) for the Firefighters Association of New York.

"A firefighter can be disciplined under a policy if it is determined that he or she is impaired at the firehouse in violation of a district or department policy. The Act allows an employer to "take action" against a person when he or she "manifests specific articulable symptoms". While the Act does not state what such symptoms are, your policy should. According to a recent article in the International Journal of Emergency Medicine, exemplar symptoms include: elevated heart rate; bloodshot eyes; diminished tears; dry mouth; slurred speech; lack of attention; motor delay; odor; decreased concentration; confusion."

Like other states, the New York law is focused on the decriminalization of cannabis, not the use of medical cannabis as part of a holistic approach to mental health improvement; leaving departments on their own to determine how to address the issue in the workplace.

Mr. Hannigan goes on to point out that under the Federal Drug Free Workplace Act, “a fire agency who is a federal grant recipient must prohibit the possession and use of medical marijuana in the workplace. However, the Drug Free Workplace Act does not require a fire service agency to prohibit possession or firefighter off-duty medical marijuana use.” While those of us who receive grants can comply with the prohibition on the possession and use while on duty, where does this leave us with a firefighter who only uses off duty but still has trace amounts of THC in their system when they begin their next tour?

The federal Public Safety Officers’ Benefits (PSOB), which pays the surviving next of kin a death benefit in the event of a line-of-duty death, maintains a provision which allows them to “draw inference of voluntary intoxication at the time of death or catastrophic injury” if a firefighter used any drug listed as a Schedule I controlled substance, as of or near the injury date. Unfortunately, there seems to be no published guidance on blood concentration levels which might put those benefits at risk.

So where does all of this leave a fire chief? With alcohol we have had years of experience and law enforcement precedent to trust a number, .08, as the demarcation between impaired and not impaired, with many local policies establishing .02 (25% of the legal limit) being the demarcation for an acceptable blood-alcohol-concentration. With all other drugs we have made it simply; negative is good, positive is bad. However, this may not work going forward. Dr. Emily Earlenbaugh (2022) discusses how the body metabolizes cannabis and

suggests it can take 5 days for 80-90% of the THC to be metabolized. Given this information, how are we to determine whether a positive THC is a result from on-duty or off-duty use? Additionally, what concentrations of THC in their lab testing might we expect and be willing to tolerate in a firefighter being treated with medical cannabis? One would easily expect to see concentrations of more than 100 mg/mL and up to 500 mg/mL; a range previously used to justify permanent suspension.

Although many seem to be “taking shots” at the issue, it appears no one has yet to begin the process of developing real best practices and perhaps given the complexity of the issue, it’s been for good reason. The closest so far may be the State of Utah who recently passed Senate Bill 46, *Medical Cannabis Patient Protection Act (2022)*. This bill provides protection for public employees (including first responders) who are medical cannabis card holders, and provides a framework for consideration.

### **We aren’t talking about your Dad’s Pot!**

The use of the term “medical cannabis” is not synonymous with legalized cannabis use. In fact, this misnomer is a very strong reason for creating industry best practices and to separate fact from folklore. Many of our firefighters lack an understanding of what non-medical grade cannabis can do to their system, particularly under the high heat and high stress we subject them to throughout their shift. According to WebMd (2021), non-medical grade cannabis use can raise the heart rate by 20 to 50 beats per minutes for up to three hours after use and with tar and other chemicals in the drug, may raise the chance of a heart attack.” And, this is the impact to a casual or recreational user; not someone running into a burning building! We are certain, given the challenges we already face with coronary deaths, we don’t need anything that increases our

risk of a heart attack! Yet, without best practices, education and compliance, our firefighters are rolling the dice on their health, their safety and the safety of their crew members if they believe there is no difference between medical grade and non-medical grade cannabis.

In July, 2022 Texas Agriculture Commissioner Sid Miller said, “While I am not sure Texas is ready to go that far, [referring to the complete decriminalization of cannabis] I have seen firsthand the value of cannabis as medicine to so many Texans.” (KETK, 2022)

### **Evolution of Perspective**

What lies ahead involves a lot of work. Before we can even begin to expand upon the complexity of this issue, it is important for an industry-wide evolution of perspective, not only about cannabis, but about mental health in general and potential benefits of plant-based medicines. The fire service has always been revered as leaders and safe spaces in our communities, and the development and implementation of utilizing medical cannabis for service members and first responders is so important culturally for inclusion and acknowledgement of mental health and trauma recovery. If the medical cannabis conversation is divorced from the discussion pertaining to the mental health of our first responders who are witnessing devastating scenes in their day-to-day, or undergoing cancer treatments or dealing with chronic pain, then we are missing the mark. If public safety leadership and policy makers still hold an archaic view of cannabis as a “drug” then there is no point in proceeding with these efforts. In order for anyone interested or involved in this conversation to create best practices and safety guidelines for our firefighters, departments and communities, we must come to a new agreement about cannabis, and why it is proving time and again to be a far safer and healthier alternative to pharmaceutical medications or “coping mechanisms” like alcohol. It is quite fitting that the fire service would be

the first in public safety to take on this endeavor, and it is the opinion of the authors that this work could radically shift our entire culture.

Although most people signing up as firefighters understand exposure to traumatic scenes and catastrophes are part of the job responsibility, the future is trauma-informed. It is in the best interest of the fire department, which in addition to creating and implementing conversations and programs acknowledging the long-term effects repeated exposure to trauma has on the brain and body, we must also acknowledge the ever increasing emergence of alternate treatment methods. If the fire service is committed to maintaining high quality men and women in their fire stations, the shift which is happening culturally will demand these departments take good care of their people, so those good people can keep taking care of our communities.

The intent in sharing this information is to support the evolution of perspective amongst leadership in a considerably conservative industry in regards to medical cannabis and mental health; and to support the creation of industry best practices and standards which prioritize the right of firefighters to use alternative methods, including cannabis for their wellness, while acknowledging the responsible and ethical use of medical cannabis in conjunction with a high risk job, expensive equipment and community trust.

The road before us is long and unpaved. In order to shift the perspective, and to create and implement new policies and best practices, this endeavor will require the cooperation and support from leadership in fire stations, city management, and other stakeholders, in addition to the counsel and input from cannabis scientists, medical professionals, and other industry experts and innovators. In order to be successful, this conversation must also include the perspective of the firefighters; the ones using medical cannabis for their wellness and having success with it. To bring medical cannabis out of the shadows and into the light means to create more safe spaces

where people can speak up and share without fear of consequence, either to their job or their reputation.

The “boys club” mentality and toxic masculine avoidance of “feelings” within the fire service must be laid to rest. If not for our current members then for those who will come. Many newer generation firefighters have a much different world view and seem more tolerant of what others might think of as declining morality. Our communities are looking for real leadership and guidance in this mental health epidemic. Who do they trust more than the fire department?

This work is literally rewriting history. This point in time and those involved in this process will be regarded as pioneers, not only within the fire service industry but in the cultural progression in our relationship to cannabis as a nation.

### **Conclusion**

Much has changed in the forty-years since the US government declared a war on drugs, surrounding the use of medical-grade cannabis. Although cannabis is still listed as a Schedule I drug, there is growing acceptance of the use of cannabis as an alternative treatment, with ever increasing evidence of efficacy, for a variety of maladies.

Our communities need and deserve people with the ability to elicit real change in our country to step up and acknowledge what this plant can do. If the fire service declares itself an ally and advocate, not only for medical cannabis but for mental health and trauma recovery, our communities will become safer for everyone. The cultural and internalized stigma is very real, and in some cases even writing this article is a risk to reputation. With the ever-increasing nonsensical violence we are witnessing across our country, having recently emerged from a global pandemic, and now facing a forty-year high in inflation, mental “unwellness” is one of the greatest threats to individuals and to our communities, particularly our first responders. Radical change is needed. The time for change is now.

Doing nothing, or focusing only on updating policies that forbid the use of medical cannabis will likely lead to legal ramifications against the department and cities, including entanglement in issues of discrimination. Allowing the legal system to resolve this issue for us may leave departments and cities without a voice; left to accept all uses of alternative treatments without local encumbrances or creating precedent that prevents us from taking care of our people, permanently forcing them into the shadows.

The time is now to begin to educate fire service leaders in the complex issues surrounding the legal use of medical cannabis in the fire service. It’s time to engage, educate

and collaborate with stakeholders in our city halls and in our Capitol regarding this emerging issue. And, it's time to do the hard work of developing and implementing real best practices surrounding medical cannabis in the fire service. If we truly support firefighter wellness, it seems hypocritical to support the safety and wellbeing of our firefighters in PPE purchasing, annual medicals, cancer awareness programs, peer-support, station and apparatus design and then say "no" to the use of medical cannabis.



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### **About the Authors**

Ken Prillaman served as the Fire Chief in Wichita Falls, Texas; a fully-career, ISO Class 1 fire department with 163 sworn personnel, and retired from active duty on March 31, 2023. Chief Prillaman began his fire service career as a volunteer in 1978. He has served as Chief of Department in two other departments with more than 13 years' experience in the role. He graduated Summa Cum Laude from Columbia Southern University with a Bachelor's Degree in Fire Administration with a Fire Investigation major. He is a Certified Chief Officer through the Center for Public Safety Excellence and serves in a Commandant role for the Texas Fire Chief's Academy. He has written and published his first book, *"Leadership Lessons from the Fireground,"* and teaches and speaks to a variety of groups on leadership.

Collette Patricia Elosa is a cannabis educator, mentor and entrepreneur, advocating for the ethical and responsible use of plant medicine for mental, emotional and spiritual wellness. Previously, she served as the Field Marketing Manager for Dyme; a multi-state cannabis brands, distribution and delivery platform. Today, she has an online platform and community called Balancing Cannabis, centered on cannabis meditation as a modality for healing and growth. Currently in the process of publishing her first book and exploring many other creative outlets to reach more people, Collette is committed to changing the cultural stigma around cannabis consumption and supporting those who desire to use natural alternatives for mental health. An industry leader and innovator, a long-time user and believer of cannabis, she uses her work to empower wellness, joy and embodiment.

In addition to her expertise in the use of medical cannabis, Collette knows a little something about the fire service and firefighters; she is Chief Prillaman's daughter. Collette can be reached through her website at [www.balancingcannabis.com](http://www.balancingcannabis.com).

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