

here has been a recent surge of concern regarding suicide rates in the American fire service. Suicides are devastating losses that leave a wake of grief and guilt among those who surrounded the victim. This is felt very deeply in the fire service, where camaraderie, commitment to one another and a sense of family connection define the very nature of station life.

Understanding suicide is a critical part of any effort to avert these tragic deaths. Suicide is a complex and difficult problem, our understanding of which remains quite limited. As pressing as it is to do all we can to help, it is important that we first make very certain to fully, critically and objectively understand what we know, what we do not know, what can actually help, and what, despite our best intentions, may not.

Digging into the research

Forbes recently published an article with the provocative headline, "More Firefighters Committed Suicide In 2017 Than Died in Line of Duty." The article opens by reporting a finding that rates of suicidal ideation (thinking about suicide) and

actual attempts are 10 times those of the general population. Are these statements really true? What do they really mean?

First, one must understand the statistics here are invariably riddled with complexity. Based on population epidemiology, firefighters—who are still quite predominantly white males with an aging overall demographic—would be expected to experience more suicides than line-of-duty deaths (LODDs). While this indeed means that firefighters are at greater risk from suicide than from LODD, it does not mean or even necessarily imply that being a firefighter is a risk factor for death by suicide.

Suicide rates and patterns vary quite significantly across demographics such as age, gender and race. White males are distinct in that their suicide rate rises pretty much consistently as they age. They are also more prone to utilize firearms in their suicidal actions, resulting in a much greater likelihood of a single, instantly lethal attempt. By the time they reach midlife, suicide becomes an unfortunately frequent mode of death. But is the suicide rate for firefighters significantly greater than that of the demographically comparable population?



This is not a simple question. Death records do not consistently or reliably report occupation, and most U.S. firefighters are volunteers, whose principal occupation would likely be listed as something else. The few studies we hold of solid cross-sectional cohorts, such as a recently reported study of the Philadelphia Fire Department, suggest that rates among active firefighters are no greater than, and may actually be somewhat less than, the demographically comparable general population.

Firefighting might ultimately provide more protection than risk, at least while the firefighter remains active in good standing and hence part of a strong support system. That is important to examine and understand because, if that's true, our first and best defense may be to accentuate and amplify those aspects of the occupation that lend this protection. So what might explain the seemingly radical differences between the Philadelphia study and the survey reported in Forbes? They were actually conducted by the same research program and some of the same researchers. The Philadelphia study looked at what we call a structured

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or strategic sample of all member deaths within a single, large, metropolitan department across a broad expanse of time. As such, it yielded an excellent cross section of all firefighters in that organization but is limited to that specific organization and circumstance.

The survey reported in Forbes instead utilized what is known as a convenience sample, drawn from persons who chose to visit a set of web pages that dealt with issues related to firefighter behavioral health. As such, it was not conducted on a representative cross section of firefighters in general (called a probability sample) but a sample of persons who, for whatever reasons, were looking for information on these topics and chose to look in one particular place. It is certainly possible-maybe even likely-that their personal interests and experiences might differ from the remainder of the firefighting population. Accordingly, we need to be very cautious about extrapolating responses from either study to the firefighter population as a whole.

There are other reasons to remain cautious. Still another study, again involving the same research group, conducted what is known as a systematic review of studies addressing this question over time. Firefighters are often lumped in these studies into a broader category dubbed "protective services." While the professions included share certain commonalities, the largest number of individuals included are typically military and law enforcement personnelpopulations whose characteristics and exposures differ radically from our own. Their suicide rates and their implications can differ radically as well.

While there has been a sizable number of studies examining law enforcement suicide, even there the rates of suicide are equivocal and do not necessarily exceed those expected in comparable cohorts of the general population. Studies addressing firefighter suicide have been more limited. What few have reported occupationally specific

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suicide rates have shown firefighters to be at or below rates for similarly situated demographic cohorts. While there is some cause to suggest that firefighters may think about suicide more frequently than others—not necessarily unexpected, given the likelihood that they will confront suicides during their careers—the evidence does not suggest that those thoughts necessarily lead to suicide outcomes and may even suggest that being a firefighter can lend a protective element despite those exposures.

Moving forward carefully and cautiously

Firefighting is a tough and demanding job and it can add a lot of baggage to a person's life. It also, however, adds immeasurable rewards. We're just beginning to understand this at more serious levels. We must keep in mind that these relationships and impacts can be very complex and very dynamic, often being different between individuals and varying over the course of an individual's career. One very reasonable hypothesis now under scrutiny is that the experience of being a firefighter generates a lot of exposures that remain mitigated by the strong social support and belongingness that the profession providesbut when one is removed from that supportive context by retirement, injury, separation or such, that mitigation might be negated and risk could then become amplified. Perhaps the most important message is this: The problem of suicide is very complex and what data we hold are limited, ambiguous and often misunderstood or misstated. We need to move forward carefully and cautiously while striving to provide all the solid support we can to those who take up this vital protective role in our communities. Overstating or mischaracterizing the problem can risk paradoxical impacts that can be anything but helpful.

It is a natural tendency to overstate a problem when trying to emphasize its importance and stimulate needed action. In this case especially, it should not be necessary. Suicide is a pressing public health concern throughout the population, and it deserves to be treated just as seriously among firefighters, regardless of relative or absolute rates. We should address it because we are committed to our service, our colleagues and our mission of service and protection. It is simply the right thing to do.

We spend a considerable amount of time, money and effort preparing for and dealing with LODDs. It is reasonable that we should. LODDs are devastating, recovery is difficult for both co-workers and their organization, and most are ultimately preventable through behavioral actions. Suicides are similarly devastating, sometimes perhaps even more so, but for far too long we failed to acknowledge or address them in our ranks.

Epidemiologically, we would predict from general population data for similar demographic cohorts that a

department would be about thrice as likely to experience this disruption as to experience a LODD in any given year. It is right and reasonable that we give serious thought and attention to how to address these when they occur, how to recognize evolving risk in those around us, how to help prevent that risk from ripening into tragic and irreversible action, and most importantly, how to prevent it wherever and however we can. Building on the supportive factors inherent in the profession may, for now, be the single most effective thing we can do. It is certainly an important first step.

Resources for help

Resources such as *Stress First Aid* (available through the First Responder Center of Excellence associated with the National Fallen Firefighters Foundation) can help cement those supportive relationships within the daily workings of your department. Resources such as the International Association of Fire Fighters' peer support team training can provide a trusted resource at the station level to bolster resilience and help those in need take the sometimes-difficult step of seeking professional help when necessary. Effective behavioral health or employee assistance programs can ensure that resources are always available to address daily problems in living as well as major disruptions and concerns. They should be a part of every fire service organization.

Still, the things that matter most may well be things that lie at our disposal daily. They are hallmarks of well-structured, well-run, effective organizations: sound, responsive and effective management of the organization and its sub-units; reliable, structured, functional incident command; competent, consistent and compassionate supervision; leadership at all levels. A sound, well-run organization will find its way through even the most challenging of situations and emerge stronger, pretty much regardless of what we do or do not do after the fact. A struggling, dysfunctional organization will fray and fragment after even minor challenges, again pretty much regardless of what we do or do not do after the fact. The best prediction of how you'll be two years after a major disruption, whether as an organization or as an individual, is how you were doing two days before. Build on the basics.

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