Saving Our Own - Overland Park Fire Department Suicide Awareness and Prevention Training

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Certification Statement

I hereby certify that this paper constitutes my own work product, that where the language of others is set forth, quotation marks indicate and that appropriate credit is given where I have used the language, ideas, expressions or writings of others.

Signed: ___________________________________________
Abstract

The problem was that the Overland Park Fire Department did not provide suicide awareness and prevention training to address the mental health and emotional well-being of its emergency response personnel. The purpose of this applied research project was to identify a suicide awareness and prevention training program that can be utilized by the Overland Park Fire Department for the education of its emergency response personnel. The descriptive research method was used to answer the following questions: (a) what are identifiable and/or contributing factors that place firefighters at a higher risk for suicide (b) what are the objectives and/or goals of a suicide awareness and prevention training program, (c) what suicide awareness and prevention training programs are available to members of the fire service profession, (d) what national organizations and/or resources are available to aid emergency responders suffering from suicidal ideation? The procedures utilized to answer the afore-mentioned research questions consisted of a literature review, extensive personal communications with multiple subject matter experts in the field of suicidology and data analysis related to national suicide statistics and demographics compared to that of the fire service profession. The results of this applied research project included confirmation by statistical analysis that a significant percentage of firefighters are categorized within the identifiable at-risk group for suicide, outlined specific elements associated with a firefighter’s increased capability for suicide, defined objectives related to a suicide awareness and prevention training program, reviewed suicide awareness and prevention training programs currently being utilized by members of the fire service profession and recognized qualified national organizations able to aid emergency responders suffering from suicidal ideation. Recommendations included the development of a comprehensive firefighter suicide awareness and prevention training program through collaborative efforts with the
following organizations: Carson J. Spencer Foundation, Alternatives Employee Assistance Program, Clinical Associates, and KU Health Mid-West.
Table of Contents

Certification Statement........................................................................................................2
Abstract.................................................................................................................................3
Introduction..........................................................................................................................6
Background and Significance.............................................................................................7
Literature Review................................................................................................................10
Procedures..........................................................................................................................27
Results................................................................................................................................31
Discussion............................................................................................................................38
Recommendations...............................................................................................................48
References............................................................................................................................52
Appendix A – Personal Communication Outline...............................................................54
Appendix B – Mental Health Assessment Tool.................................................................55
Appendix C – Firefighter’s Suicide Assessment Instrument................................................57
Appendix D – Trauma Screening Questionnaire.................................................................58

List of Tables and Figures

Table 1 – Firefighter Suicide Deaths by Year in the United States.................................9
Figure 1 – Thomas Joiner’s Predisposing Conditions for Suicidal Desire.....................14
Table 2 – Effective Suicide Awareness and Prevention Utilizing the
Upstream, Midstream, and Downstream Model...............................................................18
“A fire department is three times more likely to experience a suicide in any given year than a line-of-duty death” (National Fallen Firefighters Foundation [NFFF], 2014, p. 1). In May of 2015, the Overland Park (KS) Fire Department experienced a near miss as it pertains to the suicide of a twenty-two year veteran firefighter. The problem is that the Overland Park Fire Department provides no suicide awareness and prevention training to address the mental health and emotional well-being of its emergency response personnel. The purpose of this applied research project is to identify a suicide awareness and prevention training program that can be utilized by the Overland Park Fire Department for the education of its emergency response personnel.

The descriptive research method was used to answer the following questions: (a) What are identifiable and/or contributing factors that place firefighters at a higher risk for suicide (b) what are the objectives and/or goals of a suicide awareness and prevention training program, (c) what suicide awareness and prevention training programs are available to members of the fire service profession, (d) what national organizations and/or resources are available to aid emergency responders suffering from suicidal ideation?
Background and Significance

The Overland Park Fire Department is a combination fire department. The Overland Park Fire Department is located in the greater Kansas City Metropolitan area. The Overland Park Fire Department is the 3rd largest fire department in the state of Kansas with 180.75 paid firefighters, emergency medical technicians, paramedics and support personnel staffed throughout seven stations and one nomadic peak-time service unit. The Overland Park Fire Department services 187,730 residents and covers 79.92 square miles of Johnson County, Kansas (Overland Park Fire Department Annual Report, 2014). The population expands to just over 200,000 during the daytime hours due to a large number of retail shopping areas and corporate business parks (Overland Park Fire Department Annual Report, 2014). In the 2014 calendar year, the Overland Park Fire Department responded to 19,689 calls for service that ranged from structure fires to hazardous material incidents to emergency medical incidents (Overland Park Fire Department Annual Report, 2014). Emergency medical incidents account for approximately 82.7% of the Overland Park Fire Department’s annual call volume (Overland Park Fire Department Annual Report, 2014).

In May of 2015, the Overland Park Fire Department experienced a near miss as it pertains to the suicide of one of its employees. The Overland Park Fire Department was informed that a 22 year veteran of the fire department intended to take his life on fire department property with a personally owned firearm. This incident marked the first time the Overland Park Fire Department had knowingly been exposed and/or faced with the potential suicide of one of its members. Prior to this incident, the Overland Park Fire Department was ill-informed as to the scope and/or extent to which the issue of firefighter suicide was impacting the fire service profession.
In March of 2004, the National Fallen Firefighters Foundation hosted a Firefighter Life Safety Summit, which produced 16 Life Safety Initiatives (National Volunteer Fire Council [NVFC], 2012). The 13th initiative emphasized the importance of firefighter behavioral health and is titled “Psychological Support” (NVFC, 2012). The subject and/or problem of firefighter suicide is addressed in the subsection of the thirteenth initiative and is titled “Depression & Suicide in the Fire Service” (NVFC, 2012). The education and promotion of the thirteenth initiative within the fire service profession has resulted in the publication of numerous incidents involving fire departments and their firsthand accounts and experiences in dealing with firefighter suicide. An article titled the “Trouble in Mind” published in the National Fire Protection Association Journal referenced that in 2008 both the Chicago (IL) Fire Department and the Phoenix (AZ) Fire Department had experienced a total of fourteen firefighter suicides in a period of eighteen and seven months respectively (Wilmoth, 2014). The motivation for publishing this information was to address the question of, is the fire service being impacted by firefighter suicides?

In 2011, a non-profit organization identified as the Firefighter Behavioral Health Alliance was created by retired Fire Captain Jeff Dill (Dill, 2012). The goal of the Firefighter Behavioral Health Alliance is to collect self-reported verified statistical data as it pertains to firefighter suicide. The Firefighter Health and Behavioral Alliance estimates that the number of firefighter suicides that are self-reported represents an estimated thirty percent of the actual number of suicides taking place annually among fire service personnel (Stephenson, 2015). In addition, the Firefighter Behavioral Health Alliance promotes the education of fire service professionals as to the extent to which firefighter suicide is impacting the profession and provides awareness and prevention training resources. Statistical data on firefighter suicides was not readily collected
and analyzed prior to the development of the Firefighter Behavioral Health Alliance organization (Firefighter Behavioral Health Alliance website, 2015). The number of firefighter (FF) suicides verified by the Firefighter Behavioral Health Alliance for the calendar years of 2013, 2014 and 2015 is represented in Table 1. For the purposes of comparison, Table 1 additionally outlines the total number of firefighter line of duty deaths (LODD) for the corresponding calendar years.

Table 1 – Firefighter Suicide Deaths by Year in the United States

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF Suicides</td>
<td>69</td>
<td>109</td>
<td>112</td>
</tr>
<tr>
<td>LODD</td>
<td>107</td>
<td>93</td>
<td>86</td>
</tr>
</tbody>
</table>

(Firefighter Behavioral Health Alliance website, 2015) (Centers for Disease Control and Prevention website, 2015)

This applied research project is important to the Overland Park Fire Department to assist in establishing recommendations for a suicide awareness and prevention training program. The purpose of these recommendations as it pertains to firefighter suicide is to educate all members of the Overland Park Fire Department in an effort to raise awareness, prevent future incidents and provide psychological support to those individuals struggling with mental health issues.

This research supports the Executive Fire Officer Program course Executive Leadership (United States Fire Administration [USFA], 2015) by addressing a critical issue in the fire service profession. The problem of firefighter suicide cannot be solved by applying a technical solution. Suicide is the tenth leading cause of death in the United States with over forty-thousand incidents reported annually (American Foundation for Suicide Prevention [AFSP], 2015). As it pertains to the fire service profession, firefighter suicide is not widely understood or addressed. Firefighter suicide is an adaptive challenge that will take strong fire service
leadership to evolve a culture of long standing tradition into accepting mental health and psychological support as an accepted practice within the fire service profession.

This research relates to the United States Fire Administration’s first and fourth goals. The United States Fire Administration’s first goal addresses the reduction of “life safety risks through preparedness, prevention and mitigation” (United States Fire Administration [USFA], 2014, p. 10). The United States Fire Administration further addresses life safety by both the “development of partnership organizations at the federal, state and local levels to assist identified high-risk groups” as well as “working with stakeholders to identify and promote training to encourage prevention” (USFA, 2014, p. 10). Fire service professionals afflicted by thoughts of suicide are an identifiable high-risk group of internal stakeholders in need of assistance that pose a direct threat to their personal safety.

The United States Fire Administration’s fourth goal addresses the constant improvement of the fire services professional development as it pertains to the encouragement and implementation of educational curriculum to address the ever-evolving needs of the fire service (USFA, 2014). The importance of firefighter suicide has not fully impacted the fire service as a profession even though an identifiable need for education and leadership has been established.

Literature Review

Suicide is the tenth leading cause of death in the United States with over forty-thousand incidents reported annually (AFSP, 2015). Suicide is defined as the death of an individual from “causes arising external to his or her own bodily systems by his or her hand with the primary intent to cause death” (Gist, Taylor, & Raak, 2011, p. 2). In the United States, 57% of all suicides are completed using a firearm (Suicide Prevention, Awareness, and Support website, 2015). In 2013, 70.3% of all suicide deaths were white males between the ages of 20 and 55.
In 2013, suicide was the 2nd leading cause of death for white males between the ages of 20 and 55 (Suicide Prevention, Awareness, and Support website, 2015). According to the National Fire Protection Association, 73.4% of the United States fire service labor force in 2011 was comprised of individuals between the ages of 20 and 55 (United States Fire Department Profile, 2011). In 2011, white males accounted for 80.4% of the fire service labor force ("Firefighting Occupations by Women and Race," 2012). Based on suicide statistical data related to gender, identified race and associated age ranges evaluated against demographics related to the labor force of the fire service profession, statistical analysis confirms that a significant percentage of firefighters are categorized within the identifiable at-risk group for suicide.

Thomas Joiner, a clinical psychologist, published an article in 2009 that established the interpersonal-psychological theory of suicidal behavior. Thomas Joiner theorized that three critical components must exist simultaneously in order for an individual to develop the impulse for suicidal behavior and the ability to act on this established motivation (Joiner, 2009). The interpersonal-psychological theory establishes that when an individual “holds two specific psychological states in their mind simultaneously for a period of time they develop the desire for death” (Joiner, 2009, p. 10). The two specific psychological states that must exist simultaneously are:

1. **Perceived Burdensomeness** - Perceived burdensomeness is the belief that one’s existence is a burden to family, friends, and society (Joiner, 2009). This belief is grounded in the thought that those I am a burden to are better off without my presence.
2. Thwarted Belongingness - Thwarted belongingness is the belief that one is alienated from others and their presence is without meaning or purpose (Joiner, 2009).

The culture of the fire service is established in a steep tradition of brotherhood and a sense of commitment and/or a calling for those individuals that choose to serve. The sense of purpose institutionalized by the fire service profession provides meaning, an identity and a sense of belongingness rarely found in other professions. It is for these reasons that disequilibrium and/or threats that pertain to a firefighter’s professional life amplifies the potential impact on an individual’s perceived belongingness and sense of burdensomeness.

The sustained and concurrent presence of both perceived burdensomeness and thwarted belongingness leads to suicidal ideation. Suicidal ideation is defined as the desire and/or thought of an individual to take one’s life (Joiner, 2009). Suicidal ideation often includes the planned method as to how an individual will accomplish taking his or her life. The third component of Thomas Joiner’s interpersonal-psychological theory of suicidal behavior is:

3. Acquired Ability to Enact Lethal Self Injury - Acquired ability to enact lethal self-injury is the ability of an individual to defeat the natural instinct of self-preservation that results in suicidal ideation moving from a thought process to a sequence of action (Joiner, 2009).

Acquired ability to enact lethal self-injury is found where “some combination of experience and disposition becomes sufficient to overcome one’s natural aversion to pain and annihilation” (Gist et al., 2011, p. 13). In a personal communication with Sarah Gaer, the First Responder Suicide Prevention Specialist with the Riverside Trauma Center located in Needham Massachusetts, an open-ended semi-structured list of interview questions were asked for the purposes of guiding the conversation as listed in Appendix A. The purpose of this personal
communication was to solicit information as it pertains to firefighter suicide specific to learned behavior and those factors that are attributed to a firefighter’s ability to overcome the human instinct of self-preservation and enact lethal self-injury. First Responder Suicide Prevention Specialist Sarah Gaer stated that “in addition to being in a high-risk demographic, firefighters have an increased capability for suicide based on identifiable and/or contributing factors that increase their associated probability” (S. Gaer, personal communication, December 17, 2015). First Responder Suicide Prevention Specialist Sarah Gaer identified five distinct elements associated with a firefighter’s increased capability for suicide unique to the acquired ability to enact lethal self-injury:

1. Members of the fire service understand the risks related to their profession that often includes injury and/or death. This type of associated acceptance of injury and/or death is based on an individual’s understanding or willingness to predispose themselves to harm.

2. Continued exposure to violent and traumatic events desensitizes and/or distorts an individual’s perception of pain and potential outcomes or consequences. Research in the area of post-traumatic stress disorder has shown that repeated exposure to traumatic events has a cumulative effect on the exposed individual as it pertains to stress and mental illness.

3. Repeated exposure to suicides and suicide attempts during the course of one’s fire service career provides awareness and knowledge of the action.

4. Trained fire service professionals have an educated knowledge of human systems which results in the ability to conceive and execute a plan with greater lethality.
5. Fire service professionals have greater access than the general public to lethal means including medication and equipment (S. Gaer, personal communication, December 17, 2015).

Thomas Joiner’s interpersonal-psychological theory of suicidal behavior identifies the three elements that must be present concurrently in order for an individual to progress from ideation to action as it pertains to suicide. Figure 1 provides a graphic representation of the three predisposing conditions needed to accomplish and/or attempt the act of suicide.

Figure 1 – Thomas Joiner’s Predisposing Conditions for Suicidal Desire

(Note: Adapted from The Interpersonal-Psychological Theory of Suicidal Behavior, p. 12 by T. E. Joiner, 2009, American Psychological Association.)

According to a publication issued by the National Fallen Firefighters Foundation, a “public health approach should be utilized to educate and promote suicide awareness and prevention more broadly as part of a mental health program” (NFFF, 2014, p. 6). This style of approach allows for a more comprehensive methodology and permits greater access to all levels of the social-ecological model including individual, interpersonal, community, and societal (NFFF, 2014). In a personal communication with Dr. Paul Quinnet, the Chief Assistant
Professor at the University of Washington School of Medicine and Chief Executive Officer of the Question Persuade Refer Insitute of Suicide Prevention, an open-ended semi-structured list of interview questions were asked for the purposes of guiding the conversation as listed in Appendix A. The purpose of this personal communication was to solicit information specific to the intended target audience and application as it pertains to a firefighter suicide awareness and prevention training program. Dr. Quinnett stated that a suicide awareness and prevention training program should be applied at all levels of the social-ecological model as part of a “community saturation initiative designed to create many layers of awareness in an effort to decrease the frequency of which suicidal behavior goes unnoticed” (P. Quinnett, personal communication, December 13, 2015). Dr. Quinnett further stated that individuals in the fire service profession represent themselves differently “on duty among their work family compared to when they are off duty among their home family” (P. Quinnett, personal communication, December 13, 2015). This “dual personality role” increases and/or reinforces the need for a suicide awareness and prevention training program that includes “all levels of the community that surrounds an individual” (P. Quinnett, personal communication, December 13, 2015). The persons that comprise an individual's immediate family have a much greater likelihood of recognizing a concerning behavior change in the home environment than co-workers in the work environment. The goal of a suicide awareness and prevention training program is to save lives and a community saturation model “gives us the greatest opportunity to achieve that” (P. Quinnett, personal communication, December 13, 2015).

In a personal communication with Dr. Sally Spencer-Thomas, Chief Executive Officer and co-founder of the Carson J. Spencer Foundation for Suicide Prevention, an open-ended semi-structured list of interview questions were asked for the purposes of guiding the conversation as
listed in Appendix A. The purpose of this personal communication was to solicit information as it pertains to firefighter suicide and the objectives associated with a suicide awareness and prevention training program. Dr. Spencer-Thomas stated that while the purpose and/or objectives of a suicide awareness and prevention training program are multifaceted, one of the foremost principles is to “challenge myths and stigmas associated with suicide and behavioral health through education” (S. Spencer-Thomas, personal communication, December 17, 2015).

In a report published in 2013 by the Fire Department of New York addressing behavioral health, operations personnel identified the top three contributing factors as to why they do not seek assistance in dealing with mental health issues:

1. Eighty-three percent of the operations personnel at the Fire Department of New York identified a lack of trust and/or confidentiality as a deterrent when seeking assistance with mental health issues due to the perceived impact it would have on their employment.

2. Seventy-two percent of the operations personnel at the Fire Department of New York identified the stigma associated with someone that seeks assistance with mental health issues as a deterrent.

3. Seventy-two percent of the operations personnel at the Fire Department of New York identified a lack of education regarding mental health and the unknown and/or unidentified availability of mental health resources as a deterrent (Morrison, 2013).

Dr. Spencer-Thomas stated that the stigma associated with mental health will not be removed “until individuals treat mental health like that of their physical health. If you have a toothache, you go to the dentist. If you are struggling with your thoughts or emotions, see a mental health professional” (S. Spencer-Thomas, personal communication, December 17, 2015).
Dr. Spencer-Thomas further stated that for an organization to change the stigma associated with mental health the “the educational aspect of a suicide awareness and prevention training program must become a priority and be promoted and accepted at all organizational levels” (S. Spencer-Thomas, personal communication, December 17, 2015). Dr. Spencer-Thomas identified the effective elements and/or objectives of a suicide awareness and prevention training program from an all inclusive upstream, midstream and downstream approach (S. Spencer-Thomas, personal communication, December 17, 2015). The objectives and/or goals associated with a suicide awareness and prevention training program are outlined in Table 2 utilizing the upstream, midstream and downstream model.
Table 2 – Effective Suicide Awareness and Prevention Utilizing the Upstream, Midstream, and Downstream Model

<table>
<thead>
<tr>
<th>Upstream</th>
<th>Midstream</th>
<th>Downstream</th>
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<tbody>
<tr>
<td>Prevent problems from happening in the first place.</td>
<td>Identify problems early and connect them to people that can help.</td>
<td>Safe and compassionate responses to mental health crisis.</td>
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**Shift Workplace and Cultural Perspective:** Make mental health and suicide prevention safety priorities. Leadership must model this, clearly communicate benefits and answer questions regarding concerns. Regularly promote mental health practices and a range of resources. – e.g., new employee orientation, benefits renewal, and annual physicals.

**Develop Life Skills:** Offer training in conflict resolution, stress management, communication skills, financial planning, goal setting.

**Improve Mental Health and Addiction Knowledge:** Deliver regular toolbox talks and awareness communication on mental health topics and how to improve wellness. Consistently link mental health with wellness and safety programs.

**Promote Social Network:** Create a healthy community and foster genuine workplace support.

**Identify People at Risk:** Educate individuals to recognize the warning signs so they can detect early symptoms of depression, anxiety, substance abuse and anger.

**Promote Help-Seeking:** Promote resources like the National Suicide Prevention Lifeline 1-800-273-TALK (8255), provide peer assistance training and normalize help-seeking behavior.

**Increase Access to Quality Care:** Provide affordable mental health services well-versed in state-of-the-art suicide risk assessment, management, and support.

**Promote Worker Use of Mental Health Services:** When workers are struggling, supervisors can take the lead in connecting employees to immediate mental health and crisis services.

**Restrict Access to Potentially Lethal Means:** When the potential for suicide is high remove access to guns, pills and other means of suicide.

**Provide Support After Suicide:** Follow crisis management procedures and longer-term support in the aftermath of a suicide.

(Note: Adapted from the *A Construction Industry Blueprint: Suicide Prevention in the Workplace*, p. 12 by the Carson J. Spencer Foundation, 2015, Denver, CO: Author)
In a personal communication with Dr. Sarah A. Jahnke, Director and Principle Investigator for the Center for Fire, Rescue and EMS Health Research, an open-ended semi-structured list of interview questions were asked for the purposes of guiding the conversation as listed in Appendix A. The purpose of this personal communication was to solicit information as it pertains to firefighter suicide and the objectives associated with a suicide awareness and prevention training program. Dr. Jahnke stated that a firefighter suicide awareness and prevention training program should provide individuals with basic identification and intervention skills as it pertains to those displaying at-risk behaviors (S. A. Jahnke, personal communication, December 15, 2015). Dr. Jahnke stated that a mental illness diagnosis like that of post-traumatic stress disorder, depression, and suicidal ideation “should only be performed by a trained clinician. However, firefighters should be trained to identify the warning signs associated with suicide and possess the knowledge of what mental health resources are available” (S. A. Jahnke, personal communication, December 15, 2015). Dr. Jahnke identified specific behaviors and emotions like that of anger, anxiety, isolation, changes in sleep patterns, substance abuse and reckless behavior as warning signs associated with suicide (S. A. Jahnke, personal communication, December 15, 2015). In addition, Dr. Jahnke stated that a comprehensive behavioral wellness program utilizes assessment instruments regularly to evaluate the mental health and wellbeing of the participants. An assessment instrument provides both the fire department employee as well as the assigned medical professional with information pertaining to an individual's mental health and wellbeing. Dr. Jahnke stated that a mental health assessment instrument should be a “standard piece of a firefighter’s annual physical evaluation and should be considered part of their fit for duty evaluation” (S. A. Jahnke, personal communication,
December 15, 2015. Dr. Jahnke provided three detailed examples of mental health and wellbeing assessment instruments as outlined below:

1. **Appendix B – The University of Texas Health and Science Center, Mental Health Assessment Tool** is to be administered and interpreted by a qualified medical professional. An assessment tool of this design evaluates several possible areas of concern as it pertains to mental health and wellbeing. The University of Texas Health and Science Center, Mental Health Assessment Tool is an example of a mental health evaluation instrument that could be used as part of a firefighter’s annual “fit for duty evaluation” (S. A. Jahnke, personal communication, December 15, 2015).

2. **Appendix C – The Firefighter Behavioral Health Alliance, Firefighter’s Suicide Assessment Instrument** is an evaluation tool that specifically targets suicidal ideation and depression (Firefighter Behavioral Health Alliance website, 2015). The Firefighter Behavioral Health Alliance, Firefighter’s Suicide Assessment Instrument is an example of a mental health evaluation tool that is available to firefighters as a suicide self-assessment medium. In the event that a firefighter is “struggling with their thoughts this instrument provides them with guidance based upon their answers” (S. A. Jahnke, personal communication, December 15, 2015).

3. **Appendix D – The Trauma Screening Questionnaire** is utilized by the United States Department of Veterans Affairs as part of a post-traumatic stress disorder screening process (S. A. Jahnke, personal communication, December 15, 2015). Dr. Jahnke identified the necessity “of a mental health assessment instrument to be utilized for those individuals who have been exposed to a potentially traumatic event” (S. A. Jahnke, personal communication, December 15, 2015). The Trauma Screening
Questionnaire is designed to evaluate the mental health and wellbeing of an individual three to four weeks post-traumatic event so as to allow the normal coping and recovery process to take place and assess for effectiveness (NVFC, 2012).

While there has been significant interest placed on the issue of firefighter suicide throughout the fire service profession, there are a limited number of awareness and prevention programs available that are designed and/or intended to educate fire service professionals. For the purposes of this applied research project, a significant focus will be placed on the Question Persuade Refer suicide awareness and prevention training program. Question Persuade Refer is a suicide awareness and prevention training program developed for fire service professionals. The Question Persuade Refer suicide awareness and prevention training program was developed by Dr. Quinnett, Chief Executive Officer of the Question Persuade Refer Institute of Suicide Prevention and is predicated on the “community saturation initiative designed to create many layers of awareness in an effort to decrease the frequency of which suicidal behavior goes unnoticed” (P. Quinnett, personal communication, December 13, 2015). The Question Persuade Refer suicide awareness and prevention training course “teaches members of the fire service and their families to recognize early and respond positively to someone exhibiting suicide warning signs and behaviors based upon the chain of survival approach, early recognition and early intervention” (Van Orden, 2013, p. 6). The course is centered on the Question Persuade Refer technique that is defined as “Question their meaning to determine suicide intent or behavior, Persuade them to seek help, and Refer the person to the appropriately identified resources” (Van Orden, 2013, p. 6). The learning objectives identified for the Question Persuade Refer suicide awareness and prevention training program are as follows:

a. “Increase a person's ability to identify an individual who may be at risk for suicide.”
b. “Increase a person's ability to intervene effectively with those at risk for suicide.”

c. “Increase a person’s ability to refer someone to an appropriate resource” (P. Quinnett, personal communication, December 13, 2015).

The Question Persuade Refer suicide awareness and prevention training course in its current pre-packaged format is only available online and is self-paced with a total completion time of eight hours. First Responder Suicide Prevention Specialist Sarah Gaer with the Riverside Trauma Center located in Needham Massachusetts is currently working with Dr. Quinnett in developing an onsite Question Persuade Refer suicide awareness and prevention training course that is customized to the needs of the end user and incorporates the mental health resources available to that specific fire department (S. Gaer, personal communication, December 17, 2015).

In the fall of 2014, the Carson J. Spencer Foundation partnered with the Denver (CO) Fire Department in the development of a firefighter suicide awareness and prevention training program. The partnership between the two organizations was directly attributed to the leadership of the Denver Fire Department and the willingness to improve the mental health and wellbeing of their employees after experiencing the loss of three firefighters by suicide in a span of six years (S. Spencer-Thomas, personal communication, December 17, 2015). The Denver Fire Department’s suicide awareness and prevention training program incorporates the Question Persuade Refer core course content in combination with the Carson J. Spencer’s Working Minds: Suicide Prevention in the Workplace (S. Spencer-Thomas, personal communication, December 17, 2015). The learning objectives identified for the Working Minds: Suicide Prevention in the Workplace training program are as follows:

a. “Participants will have an increased awareness of suicide prevention.”
b. “Participants will have an increased capacity for dialogue and critical thinking about workplace mental health challenges.”

c. “Participants will have an increased ability to promote help-seeking and help-giving in the workplace” (Carson J. Spencer Foundation, 2015, p. 2).

The Denver Fire Department’s suicide prevention and awareness training program is designed to “provide the tools and resources to identify and respond to friends, family members, and co-workers who may be experiencing suicidal thoughts or feelings” (S. Spencer-Thomas, personal communication, December 17, 2015). According to Dr. Spencer-Thomas, the partnership with the Denver Fire Department allowed us “to develop a suicide awareness and prevention training program that utilized experiences unique to their fire department which assisted in breaking down the stigma associated with the tough-guy bravado of fire department culture” (S. Spencer-Thomas, personal communication, December 17, 2015). Dr. Spencer-Thomas further stated that the Denver Fire Department’s suicide awareness and prevention training program “is a true, lived experience that resulted in the development of a suicide awareness and prevention training program that was embraced by fire department personnel as part of a total wellness program” (S. Spencer-Thomas, personal communication, December 17, 2015).

The St. Petersburg College Center for Public Safety Innovation (CPSI) developed a firefighter suicide awareness and prevention training program titled *The Fire That Burns Within* (St. Petersburg College, 2011). The *Fire That Burns Within* course curriculum incorporates the *Question, Persuade, Refer* course content in combination with the United States Navy’s AID-LIFE suicide awareness and prevention campaign (St. Petersburg College, 2011). The AID-LIFE suicide prevention and awareness mnemonic stands for “ask, intervene immediately, don’t
keep it a secret, locate help, inform your chain of command, find someone, and expedite” (St. Petersburg College, 2011, p. 1). The learning objectives identified for the *Fire That Burns Within* eight-hour onsite course are as follows:

a. “Understand the stress, pressure and culture in the fire service that can lead to suicidal ideation.”

b. “Identify suicidal behaviors and communication.”

c. “Develop strategies to train fire service personnel in suicide prevention.”

d. “Recognize the importance of establishing department policy and procedures related to suicide prevention and postvention.”

e. “Convey the importance of all of the above when providing future fire service suicide prevention training” (St. Petersburg College, 2011, p. 1).

In a personal communication with Marcia Epstein, a specialist in suicide prevention and current member of the State of Kansas Mental Health Services Council, an open-ended semi-structured list of interview questions were asked for the purposes of guiding the conversation as listed in Appendix A. The purpose of this personal communication was to solicit information as it pertains to firefighter suicide and the mental health resources available to those individuals in need of assistance. Mrs. Epstein stated that the most easily accessible resource to support those in need of assistance with a mental health concern is an employee assistance program (M. Epstein, personal communication, December 2, 2015). An employee assistance program is a “worksite-based program designed to help employers, employees and their families with personal problems and other issues that may have an impact on job performance” (Miller, 2016, p. 1). Mrs. Epstein further stated that specific to suicide and suicidal ideation, “90% of the employee assistance program counselors do not have the proper training to deal with those
individuals suffering from thoughts of suicide” (M. Epstein, personal communication, December 2, 2015). The minimum qualifications related to an employee assistance program counselor vary by state (Miller, 2016). However, the majority of employers require a minimum of a master’s degree in a mental health-related field (Miller, 2016). In addition, Mrs. Epstein stated that “the majority of employee assistance program counselors are not trained to deal with firefighters due to the unique attributes of the fire service culture and the nature of the traumatic events experienced by fire service professionals” (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein stated that many “fire departments make the mistake of sending a person to an employee assistance program counselor assuming they are getting help but, in the end, that person may not have the proper training to offer the appropriate assistance” (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein recommended that fire department leadership collaborate with their assigned employee assistance program coordinators to verify and/or identify those counselors who have been appropriately trained in the subject of suicidality and who have experience in counseling firefighters (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein provided the following contact information for national organizations that are available 24 hours a day and are trained in assisting firefighters who are suffering from suicidal ideation:

a. The National Suicide Prevention Hotline – 1-800-273-TALK (8255)

b. Safe Call Now – 1-206-459-3020

c. Share the Load – 1-888-731-FIRE (3473)

d. National Programs on Suicide – 1-800-SUICIDE (784-2433) (M. Epstein, personal communication, December 2, 2015).
In summary, the findings discovered during the literature review process exclusive to this applied research project influenced the author by providing credibility in substantiating the need for a suicide awareness and prevention training program specific to the education of fire service professionals. Those literary influences included but are not limited to the following: (a) suicide statistical data related to gender, identified race and associated age ranges evaluated against demographics related to the labor force of the fire service profession confirms that a significant percentage of firefighters are categorized within the identifiable at-risk group for suicide, (b) First Responder Suicide Prevention Specialist Sarah Gaer’s identification of five distinct elements associated with a firefighter’s increased capability for suicide unique to the acquired ability to enact lethal self-injury.

While there has been significant interest placed on the issue of firefighter suicide throughout the fire service profession, there are a limited number of awareness and prevention programs available that are designed and/or intended to educate fire service professionals. As previously noted in the Literature Review section a significant focus will be placed on the Question Persuade Refer suicide awareness and prevention training program. While efforts were made to identify multiple suicide awareness and prevention training programs specific to fire service professionals on a national level, it was discovered that of those programs recognized the core content and/or curriculum was founded on the Question Persuade Refer suicide awareness and prevention training program.
Procedures

This applied research project utilized the descriptive research method to answer the following questions: (a) What are identifiable and/or contributing factors that place firefighters at a higher risk for suicide (b) what are the objectives and/or goals of a suicide awareness and prevention training program, (c) what suicide awareness and prevention training programs are available to members of the fire service profession, (d) what national organizations and/or resources are available to aid emergency responders suffering from suicidal ideation? The procedures utilized to prepare this applied research project included the development of research questions, a literature review, the analysis of statistical data pertaining to suicide demographics and extensive personal communications with multiple subject matter experts in the field of suicidology.

The Literature Review portion of this applied research project began at the National Fire Academy’s Learning Resource Center in November of 2015. The portion of the literature review process that was conducted at the National Fire Academy’s Learning Resource Center included an evaluation of journal, magazine and published materials related to the subject matter of both firefighter suicide and suicide awareness and prevention training programs. The literature review process continued via the internet and included extensive topic searches during the period of November 2015 through January of 2016. The search of internet resources was accomplished utilizing the Google search engine and included the following keywords and/or phrases: suicide statistics, suicide awareness, suicide prevention, firefighter suicide, fire department suicide prevention and suicidology. The literature review process was utilized to established a foundation on the subject matter of firefighter suicide and suicide awareness and prevention training programs. Requests for the printing of specific documentation as it applies to the subject
matter of suicide and suicide awareness and prevention training programs was submitted to the following agencies: the National Fire Academy, the Carson J. Spencer Foundation, the Fire Department of New York, The University of Texas Health and Science Center, the National Fallen Firefighters Foundation, the National Volunteer Fire Council and the United States Fire Administration.

An open-ended semi-structured list of interview questions (Appendix A) was developed for the purposes of guiding conversations with subject matter experts in the field of suicidology. The questions were developed with the intention of gathering information that would be used to provide clarification and answers to the four questions (a, b, c and d) outlined in this applied research project. The personal communication with subject matter experts in the field of suicidology were scheduled during normal business hours at a time that was mutually agreed upon by all parties. The personal communications were conducted over the course of one to two hours depending on the depth to which the questions were answered. All of the individuals that agreed to participate in these scheduled communications received the complete list of open-ended questions via email several days prior to the appointment. In addition, subject matter expertise unique to a given individual selected as part of this procedure was applied where appropriate in answering specific questions outlined in Appendix A of this applied research project. All of the conversations took place via telephone or electronic video conferencing with the exception of one. Multiple email correspondences between all parties took place prior to and post communication for the purposes of clarifying both the intent and/or purpose of a given question and answer. All information gathered as it pertains to the multiple personal communications was analyzed for use in this applied research project.
To provide a comprehensive result for question (a), data analysis related to national suicide statistics and demographics compared to that of the fire service profession was completed. In addition, a personal communication was conducted with Sarah Gaer, the First Responder Suicide Prevention Specialist with the Riverside Trauma Center located in Needham Massachusetts, via telephone. The communication was organized around an open-ended semi-structured list of interview questions for the purposes of guiding the conversation as outlined in Appendix A. This personal communication was conducted on December 17th of 2015.

To provide a comprehensive result for both questions (b) and (c), a personal communication was conducted with Dr. Paul Quinnet, the Chief Assistant Professor at the University of Washington School of Medicine and Chief Executive Officer of the Question Persuade Refer Insitute of Suicide Prevention via telephone. The communication was organized around an open-ended semi-structured list of interview questions for the purposes of guiding the conversation as outlined in Appendix A. This personal communication was conducted on December 13th of 2015.

To provide a comprehensive result for both questions (b) and (c), a personal communication was conducted with Dr. Sally Spencer-Thomas, Chief Executive Officer and co-founder of the Carson J. Spencer Foundation for Suicide Prevention via telephone. The communication was organized around an open-ended semi-structured list of interview questions for the purposes of guiding the conversation as outlined in Appendix A. This personal communication was conducted on December 17th of 2015.

To provide a comprehensive result for question (c), a personal communication was conducted with Dr. Sarah A. Jahnke, Director, and Principle Investigator for the Center for Fire, Rescue and EMS Health Research. The communication was carried out in a face to face format
and organized around an open-ended semi-structured list of interview questions for the purposes of guiding the conversation as outlined in Appendix A. This personal communication was conducted on December 15th of 2015.

To provide a comprehensive result for question (d), a personal communication was conducted with Marcia Epstein, a specialist in suicide prevention and current member of the State of Kansas Mental Health Services Council, via electronic video conferencing. The communication was organized around an open-ended semi-structured list of interview questions for the purposes of guiding the conversation as outlined in Appendix A. This personal communication was conducted on December 2nd of 2015.

Limitations identified during the course of this applied research project were related to the following areas:

1. Obtaining printed material from the Fire Department of New York and The University of Texas Health and Science Center proved to be difficult due to the specific nature of the request. Multiple attempts to obtain the requested information were made which resulted in unforeseen delays. The requested printed materials were successfully acquired prior to the completion of this applied research project.

2. While there has been significant interest placed on the issue of firefighter suicide throughout the fire service profession, there is a limited number of awareness and prevention programs available that are designed and/or intended to educate fire service professionals. As previously noted in the Literature Review section a significant focus was placed on the Question Persuade Refer suicide awareness and prevention training program. While efforts were made to identify multiple suicide awareness and prevention training programs specific to fire service professionals on a
national level, it was discovered that of those programs recognized the core content and/or curriculum was founded on the *Question Persuade Refer* suicide awareness and prevention training program.

3. The limited number of awareness and prevention training programs available resulted in an increased need for communication with subject matter experts in the field of suicidology. Those individuals that were contacted to participate as part of the personal communication process were recommended by members of both the fire service profession as well as the mental health profession. The personal communications documented in this applied research project make the assumption that they are qualified by position and experience to have accurate information related to the subject matter and questions utilized during the course of the communication. There also existed a potential for personal bias in each answer as it pertains to both the personal and professional experience of a specific individual.

Results

The results of this applied research project were acquired through a combination of statistical analysis and personal communications with multiple subject matter experts in the field of suicidology.

The first research question (a) asked: What are identifiable and/or contributing factors that place firefighters at a higher risk for suicide? The research contained in this applied research project provided the following comprehensive results:

In 2013, 70.3% of all suicide deaths were white males between the ages of 20 and 55 (Suicide Prevention, Awareness, and Support website, 2015). In 2013, suicide was the 2nd leading cause of death for white males between the ages of 20 and 55 (Suicide Prevention,
Awareness, and Support website, 2015). According to the National Fire Protection Association, 73.4% of the United States fire service labor force in 2011 was comprised of individuals between the ages of 20 and 55 (United States Fire Department Profile, 2011). In 2011, white males accounted for 80.4% of the fire service labor force ("Firefighting Occupations by Women and Race," 2012). Based on suicide statistical data related to gender, identified race and associated age ranges evaluated against demographics related to the labor force of the fire service profession, statistical analysis confirms that a significant percentage of firefighters are categorized within the identifiable at-risk group for suicide.

Thomas Joiner theorized that three critical components must exist simultaneously in order for an individual to develop the impulse for suicidal behavior and the ability to act on this established motivation (Joiner, 2009). The interpersonal-psychological theory establishes that when an individual “holds two specific psychological states in their mind simultaneously for a period of time they develop the desire for death” (Joiner, 2009, p. 10). The two specific psychological states that must exist simultaneously are perceived burdensomeness and thwarted belongingness (Joiner, 2009).

The culture of the fire service is established in a steep tradition of brotherhood and a sense of commitment and/or a calling for those individuals that choose to serve. The sense of purpose institutionalized by the fire service profession provides meaning, an identity and a sense of belongingness rarely found in other professions. It is for these reasons that disequilibrium and/or threats that pertain to a firefighter’s professional life amplifies the potential impact on an individual’s perceived belongingness and sense of burdensomeness.

The sustained and concurrent presence of both perceived burdensomeness and thwarted belongingness leads to suicidal ideation. Suicidal ideation is defined as the desire and/or thought
of an individual to take one’s life (Joiner, 2009). Suicidal ideation often includes the planned method as to how an individual will accomplish taking his or her life. The third component of Thomas Joiner’s interpersonal-psychological theory of suicidal behavior is the acquired ability to enact lethal self injury (Joiner, 2009).

First Responder Suicide Prevention Specialist Sarah Gaer stated that “in addition to being in a high-risk demographic, firefighters have an increased capability for suicide based on identifiable and/or contributing factors that increase their associated probability” (S. Gaer, personal communication, December 17, 2015). First Responder Suicide Prevention Specialist Sarah Gaer identified five distinct elements associated with a firefighter’s increased capability for suicide unique to the acquired ability to enact lethal self-injury:

1. Members of the fire service understand the risks related to their profession that often includes injury and/or death. This type of associated acceptance of injury and/or death is based on an individual’s understanding or willingness to predispose themselves to harm.

2. Continued exposure to violent and traumatic events desensitizes and/or distorts an individual’s perception of pain and potential outcomes or consequences. Research in the area of post-traumatic stress disorder has shown that repeated exposure to traumatic events has a cumulative effect on the exposed individual as it pertains to stress and mental illness.

3. Repeated exposure to suicides and suicide attempts during the course of one’s fire service career provides awareness and knowledge of the action.

4. Trained fire service professionals have an educated and/or intimate knowledge of human systems which results in the ability to conceive and execute a plan with greater lethality.
5. Fire service professionals have greater access than the general public to lethal means including medication and equipment (S. Gaer, personal communication, December 17, 2015).

The second research question (b) asked: What are the objectives and/or goals of a suicide awareness and prevention training program? The research contained in this applied research project provided the following comprehensive results:

The goal of a suicide awareness and prevention training program is to save lives and a community saturation model “gives us the greatest opportunity to achieve that” (P. Quinnett, personal communication, December 13, 2015). A suicide awareness and prevention training program should be applied at all levels of the social-ecological model as part of a “community saturation initiative designed to create many layers of awareness in an effort to decrease the frequency of which suicidal behavior goes unnoticed” (P. Quinnett, personal communication, December 13, 2015). The “dual personality role” increases and/or reinforces the need for a suicide awareness and prevention training program that includes “all levels of the community that surrounds an individual” (P. Quinnett, personal communication, December 13, 2015). The persons that comprise an individual's immediate family have a much greater likelihood of recognizing a concerning behavior change in the home environment than co-workers in the work environment.

Objectives of a suicide awareness and prevention training program are multifaceted, one of the foremost principles is to “challenge myths and stigmas associated with suicide and behavioral health through education” (S. Spencer-Thomas, personal communication, December 17, 2015). To change the stigma associated with mental health “the educational aspect of a suicide awareness and prevention training program must become a priority and be promoted and
accepted at all organizational levels” (S. Spencer-Thomas, personal communication, December 17, 2015)

A suicide awareness and prevention training program should provide individuals with basic identification and intervention skills as it pertains to those displaying at-risk behaviors (S. A. Jahnke, personal communication, December 15, 2015). Firefighters should be trained to identify the warning signs associated with suicide and possess the knowledge of what mental health resources are available (S. A. Jahnke, personal communication, December 15, 2015). A comprehensive behavioral wellness program should utilize assessment instruments regularly to evaluate the mental health and wellbeing of the participants. A standardized health assessment instrument should be incorporated into “a firefighter’s annual physical evaluation and should be considered part of their fit for duty evaluation” (S. A. Jahnke, personal communication, December 15, 2015)

The third research question (c) asked: What suicide awareness and prevention training programs are available to members of the fire service profession? For the purposes of providing a thorough list of results for the identified suicide awareness and prevention training programs currently being utilized in the fire service, the learning objectives associated with each identified training program is provided. The research contained in this applied research project provided the following comprehensive results:

*Question Persuade Refer* is a suicide awareness and prevention training program developed for fire service professionals. The *Question Persuade Refer* suicide awareness and prevention training program was developed by Dr. Quinnett, Chief Executive Officer of the Question Persuade Refer Institute of Suicide Prevention and is predicated on the “community saturation initiative designed to create many layers of awareness in an effort to decrease the
frequency of which suicidal behavior goes unnoticed” (P. Quinnett, personal communication, December 13, 2015).

The learning objectives identified for the Question Persuade Refer suicide awareness and prevention training program are as follows:

a. “Increase a person's ability to identify an individual who may be at risk for suicide.”

b. “Increase a person's ability to intervene effectively with those at risk for suicide.”

c. “Increase a person’s ability to refer someone to an appropriate resource” (P. Quinnett, personal communication, December 13, 2015).

The Denver Fire Department’s suicide awareness and prevention training program incorporates the Question Persuade Refer core course content in combination with the Carson J. Spencer’s Working Minds: Suicide Prevention in the Workplace (S. Spencer-Thomas, personal communication, December 17, 2015).

The learning objectives identified for the Working Minds: Suicide Prevention in the Workplace training program are as follows:

a. “Participants will have an increased awareness of suicide prevention.”

b. “Participants will have an increased capacity for dialogue and critical thinking about workplace mental health challenges.”

c. “Participants will have an increased ability to promote help-seeking and help-giving in the workplace” (Carson J. Spencer Foundation, 2015, p. 2).

The St. Petersburg College Center for Public Safety Innovation (CPSI) developed a firefighter suicide awareness and prevention training program titled The Fire That Burns Within (St. Petersburg College, 2011). The Fire That Burns Within course curriculum incorporates the
Question, Persuade, Refer course content in combination with the United States Navy’s AID-LIFE suicide awareness and prevention campaign (St. Petersburg College, 2011). The AID-LIFE suicide prevention and awareness mnemonic stands for “ask, intervene immediately, don’t keep it a secret, locate help, inform your chain of command, find someone, and expedite” (St. Petersburg College, 2011, p. 1).

The learning objectives identified for the Fire That Burns Within eight-hour onsite course are as follows:

a. “Understand the stress, pressure and culture in the fire service that can lead to suicidal ideation.”

b. “Identify suicidal behaviors and communication.”

c. “Develop strategies to train fire service personnel in suicide prevention.”

d. “Recognize the importance of establishing department policy and procedures related to suicide prevention and postvention.”

e. “Convey the importance of all of the above when providing future fire service suicide prevention training” (St. Petersburg College, 2011, p. 1).

The fourth research question (d) asked: What national organizations and/or resources are available to aid emergency responders suffering from suicidal ideation? The research contained in this applied research project provided the following comprehensive results:

Mrs. Epstein stated that the most easily accessible resource to support those in need of assistance with a mental health concern is an employee assistance program (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein further stated that specific to suicide and suicidal ideation “90% of the employee assistance program counselors do not have the proper training to deal with those individuals suffering from thoughts of suicide” (M. Epstein, personal
communication, December 2, 2015). In addition, Mrs. Epstein stated that “the majority of employee assistance program counselors are not trained to deal with firefighters due to the unique attributes of the fire service culture and the nature of the traumatic events experienced by fire service professionals” (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein stated that many “fire departments make the mistake of sending a person to an employee assistance program counselor assuming they are getting help but, in the end, that person may not have the proper training to offer the appropriate assistance” (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein recommended that fire department leadership collaborate with their assigned employee assistance program coordinators to verify and/or identify those counselors who have been appropriately trained in the subject of suicidality and who have experience in counseling firefighters (M. Epstein, personal communication, December 2, 2015).

Mrs. Epstein provided the following contact information for national organizations that are available 24 hours a day and are trained in assisting firefighters who are suffering from suicidal ideation:

a. The National Suicide Prevention Hotline – 1-800-273-TALK (8255)
b. Safe Call Now – 1-206-459-3020
c. Share the Load – 1-888-731-FIRE (3473)
d. National Programs on Suicide – 1-800-SUICIDE (784-2433) (M. Epstein, personal communication, December 2, 2015).

Discussion

The findings of this applied research project were supported by the literature review process for the purposes of answering the following questions: (a) What are identifiable and/or
contributing factors that place firefighters at a higher risk for suicide (b) what are the objectives and/or goals of a suicide awareness and prevention training program, (c) what suicide awareness and prevention training programs are available to members of the fire service profession, (d) what national organizations and/or resources are available to aid emergency responders suffering from suicidal ideation?

In 2013, 70.3% of all suicide deaths were white males between the ages of 20 and 55 (Suicide Prevention, Awareness, and Support website, 2015). In 2013, suicide was the 2nd leading cause of death for white males between the ages of 20 and 55 (Suicide Prevention, Awareness, and Support website, 2015). According to the National Fire Protection Association, 73.4% of the United States fire service labor force in 2011 was comprised of individuals between the ages of 20 and 55 (United States Fire Department Profile, 2011). In 2011, white males accounted for 80.4% of the fire service labor force ("Firefighting Occupations by Women and Race," 2012). Based on suicide statistical data related to gender, identified race and associated age ranges evaluated against demographics related to the labor force of the fire service profession, statistical analysis confirms that a significant percentage of firefighters are categorized within the identifiable at-risk group for suicide. The application of this statistical analysis in relation to the Overland Park Fire Department’s employee demographics, categorizes greater than 85% of the first responders employed by the Overland Park Fire Department as within the identifiable at-risk group for suicide.

The culture of the fire service is established in a steep tradition of brotherhood and a sense of commitment and/or a calling for those individuals that choose to serve. The sense of purpose institutionalized by the fire service profession provides meaning, an identity, and a sense of belongingness rarely found in other professions. It is for these reasons that disequilibrium
and/or threats that pertain to a firefighter’s professional life amplifies the potential impact on an individual’s perceived belongingness and sense of burdensomeness. According to Thomas Joiner the sustained and concurrent presence of both perceived burdensomeness and thwarted belongingness leads to suicidal ideation (Joiner, 2009). Suicidal ideation often includes the planned method as to how an individual will accomplish taking his or her life. The acquired ability to enact lethal self-injury is the ability of an individual to defeat the natural instinct of self-preservation that results in suicidal ideation moving from a thought process to a sequence of action (Joiner, 2009).

First Responder Suicide Prevention Specialist Sarah Gaer stated that “in addition to being in a high-risk demographic, firefighters have an increased capability for suicide based on identifiable and/or contributing factors that increase their associated probability” (S. Gaer, personal communication, December 17, 2015). First Responder Suicide Prevention Specialist Sarah Gaer identified five distinct elements associated with a firefighter’s increased capability for suicide unique to the acquired ability to enact lethal self-injury:

1. Members of the fire service understand the risks related to their profession that often includes injury and/or death. This type of associated acceptance of injury and/or death is based on an individual’s understanding or willingness to predispose themselves to harm.

2. Continued exposure to violent and traumatic events desensitizes and/or distorts an individual’s perception of pain and potential outcomes or consequences. Research in the area of post-traumatic stress disorder has shown that repeated exposure to traumatic events has a cumulative effect on the exposed individual as it pertains to stress and mental illness.
3. Repeated exposure to suicides and suicide attempts during the course of one’s fire service career provides awareness and knowledge of the action.

4. Trained fire service professionals have an educated and/or intimate knowledge of human systems which results in the ability conceive and execute a plan with greater lethality.

5. Fire service professionals have greater access than the general public to lethal means including medication and equipment (S. Gaer, personal communication, December 17, 2015).

The culture of the fire service is unique compared to that of other professions in the United States. It is for this reason that the various aspects like that of tradition, teamwork, sense of duty, and brotherhood are understood so that they can be used as a catalyst to assist in addressing the problem of firefighter suicide collectively as a profession. In addition to acknowledging that a significant percentage of firefighters are categorized within the identifiable at-risk group for suicide, education as to the elements associated with a firefighter’s increased capability for suicide is paramount. Understanding key factors that increase a firefighters capability for suicide above that of the identified at-risk group will assist organizations like the Overland Park Fire Department in providing the resources necessary to support those individuals in need. When an organization takes the time to understand the causes related to a problem, they can begin the process of implementing an appropriate solution.

According to a publication issued by the National Fallen Firefighters Foundation, a “public health approach should be utilized to educate and promote suicide awareness and prevention more broadly as part of a mental health program” (NFFF, 2014, p. 6). This style of approach allows for a more comprehensive methodology and permits greater access to all levels
of the social-ecological model including individual, interpersonal, community and societal (NFFF, 2014).

Dr. Quinnett stated that a suicide awareness and prevention training program should be applied at all levels of the social-ecological model as part of a “community saturation initiative designed to create many layers of awareness in an effort to decrease the frequency of which suicidal behavior goes unnoticed” (P. Quinnett, personal communication, December 13, 2015). Dr. Quinnett further stated that individuals in the fire service profession represent themselves differently “on duty among their work family compared to when they are off duty among their home family” (P. Quinnett, personal communication, December 13, 2015). This “dual personality role” increases and/or reinforces the need for a suicide awareness and prevention training program that includes “all levels of the community that surrounds an individual” (P. Quinnett, personal communication, December 13, 2015). The persons that comprise an individual's immediate family have a much greater likelihood of recognizing a concerning behavior change in the home environment than co-workers in the work environment. The goal of a suicide awareness and prevention training program is to save lives and a community saturation model “gives us the greatest opportunity to achieve that” (P. Quinnett, personal communication, December 13, 2015).

Due to the stigma associated with the topic of suicide, establishing a platform to promote suicide awareness and prevention training to the immediate family members of emergency response personnel is a complex and sensitive issue. The need for multiple layers of recognition related to suicidal behavior is essential in providing the most comprehensive solution. The elements related to this particular concern will require significant direction from subject matter
experts in the field of suicidology to assist in guiding the Overland Park Fire Department towards a proposed solution.

In addition to educating individuals on the warning signs associated with suicidal behavior, the integration of mental health assessment instruments by the Overland Park Fire Department provides additional methods for identifying an individual in need. A standardized health assessment instrument should be incorporated into “a firefighter’s annual physical evaluation and should be considered part of their fit for duty evaluation” (S. A. Jahnke, personal communication, December 15, 2015). In addition to being utilized in conjunction with a firefighter’s annual physical, as it pertains to the Overland Park Fire Department, a greater emphasis should be placed on an assessment instrument that can be distributed following a traumatic incident. Although the Overland Park Fire Department does advocate for the use of critical incident stress debriefing in the aftermath of a traumatic incident, the process is underutilized and the literature is varied on its effectiveness. This particular topic will be referenced further in the Recommendations section of this applied research project.

Dr. Spencer-Thomas stated that while the purpose and/or objectives of a suicide awareness and prevention training program are multifaceted, one of the foremost principles is to “challenge myths and stigmas associated with suicide and behavioral health through education” (S. Spencer-Thomas, personal communication, December 17, 2015). In a report published in 2013 by the Fire Department of New York addressing behavioral health, eighty-three percent of the operations personnel at the Fire Department of New York identified a lack of trust and/or confidentiality as a deterrent when seeking assistance with mental health issues due to the perceived impact it would have on their employment (Morrison, 2013).
Based on the results associated with this applied research project, specifically relevant to the Overland Park Fire Department, overcoming both the lack of trust from the employee towards the organization as well as the stigma associated with an individual who asks and/or seeks assistance with a mental health issue will present the two greatest challenges related to the development and adoption of a firefighter suicide awareness and prevention training program. The nearly tragic events that took place in May of 2015 as it pertains to the suicide of a twenty-two year veteran firefighter initiated a significant amount of discussion among fire department employees that could be interpreted as both polarizing and concerning. Subsequent to the identified events in May of 2015, numerous informative sessions were held with senior officers, the following observations, and/or concerns were voiced both in the context of large and small group settings:

1. Individuals expressed a fear in asking for assistance with a mental health issue due to the possibility being categorized as unfit for duty in the framework of a mental health evaluation that in turn could result in the loss of employment.

2. Individuals expressed concern with being labeled as weak or broken by other individuals within the department if they were to ask for assistance with a mental health issue. This concern was predominantly expressed among those individuals assigned to a position of authority.

3. Individuals expressed concerns with their own mental health and wellbeing based upon the warning signs that were presented in reference to preceding events related to the incident that took place in May of 2015. In addition, individuals stated that they were unsure as to whom they should contact in the event they elected to seek assistance.
4. Individuals expressed emotional anger and disapproval with the thought and/or actions of suicidal behavior.

As referenced previously in this applied research project the Question Persuade Refer suicide awareness and prevention training course provides the foundational curriculum for which all other courses are built. The Question Persuade Refer suicide awareness and prevention training course “teaches members of the fire service to recognize early and respond positively to someone exhibiting suicide warning signs and behaviors based upon the chain of survival approach, early recognition and early intervention” (Van Orden, 2013, p. 6). The course is centered on the Question Persuade Refer technique that is defined as “Question their meaning to determine suicide intent or behavior, Persuade them to seek help, and Refer the person to the appropriately identified resources” (Van Orden, 2013, p. 6). The learning objectives identified for the Question Persuade Refer suicide awareness and prevention training program are as follows:

a. “Increase a person's ability to identify an individual who may be at risk for suicide.”

b. “Increase a person's ability to intervene effectively with those at risk for suicide.”

c. “Increase a person’s ability to refer someone to an appropriate resource” (P. Quinnett, personal communication, December 13, 2015).

Based on the literature review process and the findings of this applied research project the Denver Fire Departments collaborative efforts with the Carson J. Spencer Foundation produced a firefighter suicide awareness and prevention training program that allowed the Denver Fire Department’s members to embrace their challenges and experiences to create an environment in which individuals recognized the importance of mental health and wellbeing. The challenge moving forward for the Overland Park Fire Department will be the willingness to embrace the
example set by the Denver Fire Department in utilizing past experiences in the development of a suicide awareness and prevention training program. This particular model will be referenced further in the Recommendations section of this applied research project.

The Denver Fire Department’s suicide awareness and prevention training program incorporates the Question Persuade Refer core course content in combination with the Carson J. Spencer’s Working Minds: Suicide Prevention in the Workplace (S. Spencer-Thomas, personal communication, December 17, 2015). The learning objectives identified for the Working Minds: Suicide Prevention in the Workplace training program are as follows:

a. “Participants will have an increased awareness of suicide prevention.”

b. “Participants will have an increased capacity for dialogue and critical thinking about workplace mental health challenges.”

c. “Participants will have an increased ability to promote help-seeking and help-giving in the workplace” (Carson J. Spencer Foundation, 2015, p. 2).

The Denver Fire Department’s suicide prevention and awareness training program is designed to “provide the tools and resources to identify and respond to friends, family members, and co-workers who may be experiencing suicidal thoughts or feelings” (S. Spencer-Thomas, personal communication, December 17, 2015). According to Dr. Spencer-Thomas, the partnership with the Denver Fire Department allowed us “to develop a suicide awareness and prevention training program that utilized experiences unique to their fire department which assisted in breaking down the stigma associated with the tough-guy bravado of fire department culture” (S. Spencer-Thomas, personal communication, December 17, 2015). Dr. Spencer-Thomas further stated that the Denver Fire Department’s suicide awareness and prevention training program “is a true, lived experience that resulted in the development of a suicide
awareness and prevention training program that was embraced by fire department personnel as part of a total wellness program” (S. Spencer-Thomas, personal communication, December 17, 2015).

Mrs. Epstein stated that the most easily accessible resource to support those in need of assistance with a mental health concern is an employee assistance program (M. Epstein, personal communication, December 2, 2015). Mrs. Epstein recommended that fire department leadership collaborate with their assigned employee assistance program coordinators to verify and/or identify those counselors who have been appropriately trained in the subject of suicidality and who have experience in counseling firefighters (M. Epstein, personal communication, December 2, 2015). Based on the literature review process and the findings of this applied research project new insights and/or information was provided as it pertains to the qualifications for counselors provided through an employee assistance program. This information was found to be of significant educational value as it pertains to the Overland Park Fire Department and the current employee assistance program provider Alternatives. According to the Alternatives informational website, suicide awareness and prevention is not listed under the services offered. This particular topic will be referenced further in the Recommendations section of this applied research project.

Pertaining to the Overland Park Fire Department, the organizational implications associated with the results of this applied research project are related to the commitment and willingness of an organization to collaborate with mental health professionals for the purposes of addressing an identified need. While the immediate purpose would be the development of a firefighter suicide awareness and prevention training program, the greater challenge is altering the culture and stigma related to the subject of mental health within the fire department.
Changing behavior or altering cultural beliefs will not be accomplished quickly and it will not be achieved without the complete support of the fire department administration. The promotion of mental health education will need to be adopted in all aspects of the Overland Park Fire Department and in time, should become as ingrained as any other safety initiative. As firefighters, we are taught that without all three of the required elements, fire cannot survive. As an individual, a firefighter has three essential elements that must be monitored, addressed and supported in order to ensure a healthy and successful career in the fire service profession—physical ability, knowledge/training, and mental health. In the late 1980’s the fire service profession identified physical fitness as an essential component in the reduction of firefighter injuries and deaths, firefighter mental health must be recognized and addressed with that same level of significance.

Recommendations

Based on the literature review process, original research including data analysis related to national suicide statistics and demographics compared to that of the fire service profession and extensive personal communications with subject matter experts in the field of suicidology; the author of this applied research project has developed specific recommendations to assist in solving the problem and purpose statements of this applied research project. The recommendations presented to the Overland Park Fire Department are broken down into the classifications of immediate, short term and long term for the purposes of providing a practical outline to serve as a guiding document to be referenced during the development phase of this complex process. All recommendations referenced in this applied research project represent initial informational, educational and/or collaborative sessions due to the complexities related to
the development of a comprehensive firefighter suicide awareness and prevention training program. The recommendations are as follows:

Immediate Recommendations –

1. Schedule an informational and/or educational session with the senior administration of the Overland Park Fire Department. The identified material presented during this informational and/or educational session would focus on the questions presented in this applied research project and their associated results.

2. Post the following suicide assistance contact information on the message boards located within all fire department properties:
   a. The National Suicide Prevention Hotline – 1-800-273-TALK (8255)
   b. Safe Call Now – 1-206-459-3020
   c. Share the Load – 1-888-731-FIRE (3473)
   d. National Programs on Suicide – 1-800-SUICIDE (784-2433) (M. Epstein, personal communication, December 2, 2015).

Short Term Recommendations –

1. Schedule an initial meeting with the administrative staff of Alternatives the Overland Park Fire Department’s assigned employee assistance program provider. The purpose of this meeting will be to outline the results of this applied research project specific to the qualifications related to employee assistance program counselors as it pertains to suicide awareness and prevention. The identification of qualified counselors in the subject matter of suicide awareness and prevention shall be discussed and/or accomplished. In addition, the exploration of further collaborative efforts between
the two organizations as it pertains to the development of a firefighter suicide awareness and prevention training program shall be outlined.

2. Schedule an initial meeting with Dr. Cappo of Clinical Associates the assigned workers compensation mental health evaluator and Dr. Jones of KU Health Mid-West the assigned physical fitness evaluator for the Overland Park Fire Department respectively. The purpose of this meeting will be to outline the results of this applied research project specific to the feasibility of including a mental health assessment instrument to be utilized during the Overland Park Fire Departments annual physical evaluation process. The application of additional mental health assessment instruments like that of the Trauma Screening Questionnaire and the Firefighter Behavioral Health Alliance, Firefighter’s Suicide Assessment Instrument will also be discussed. In addition, the exploration of further collaborative efforts between the three organizations as it pertains to the development of a firefighter suicide awareness and prevention training program shall be outlined.

Long Term Recommendations –

1. Contact Dr. Spencer-Thomas and discuss the development of a firefighter suicide awareness and prevention training program based on the Question Persuade Refer and Working Minds: Suicide Prevention in the Workplace courses. The intention would be to model it after the Denver Fire Departments collaborative efforts with the Carson J. Spencer Foundation and customize it to the experiences and needs of the Overland Park Fire Department. The intended target audience would be the first responders employed by the Overland Park Fire Department as well as their immediate families.
2. Due to the limited development and/or information on firefighter specific suicide awareness and prevention training programs, the Overland Park Fire Department will continue to collaborate with subject matter experts in the field of suicidology in an effort to stay informed of information related to firefighter suicide and the fire service profession.
References


*Overland Park Fire Department annual report.* Unpublished manuscript. (2014).


The University of Texas Health and Science Center. (2013). *Mental health assessment tool* [Assessment tool]. Tyler, TX: Texas University Press.


Appendix A – Personal Communication Outline

Name –

Title and/or Position –

Years of Experience –

1. What are identifiable and/or contributing factors that place firefighters at a higher risk for suicide?

2. What are the objectives and/or goals of a suicide awareness and prevention training program?

3. What suicide awareness and prevention training programs are available to members of the fire service profession?

4. What national organizations and/or resources are available to aid emergency responders suffering from suicidal ideation?
## Appendix B – Mental Health Assessment Tool

### Depression Disorder

**Patient Health Questionnaire (PHQ-2)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you feel down, depressed, or hopeless?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you lack interest in activities, hobbies, and what is happening around you?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** If the patient answers “yes” to either of these questions, it may be an indicator that further assessment is needed.

### Suicide Assessment

**Suicide Self Harm**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you feel hopeless about the present or future? If yes move to question 2 if no, go to question 4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have you had thoughts about taking your own life? If yes, move to question 3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. When did you have these thoughts and do you have a plan to take your own life?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have you ever attempted to harm yourself or attempted suicide?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** If the patient answered “yes” to any of the questions, seek immediate attention from trained clinician.

### Bipolar Disorder

**Black Dog Institute’s Self-Test**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you been depressed to work, or only able to work with difficulty?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you experience with “ups” and “downs” with your mood?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Are your ups “wired” or “hyper” – more than when you are just happy?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** If the patient answered “yes” to all three questions, seek a referral. If all three answers were not “yes”, then the patient may have another condition such as depression or Attention Deficit Hyperactivity Disorder (ADHD). Adjustment of the care plan may be needed. If in question, it is always best to seek a referral to a trained clinician.

### Substance Abuse and Drug Abuse

**CAGE-AID (CAGE questions adapted to include drugs)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever felt that you should cut down on your drinking or drug use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have people annoyed you by criticizing your drinking or drug abuse?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Have you ever felt bad or guilty about your drinking?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have you ever had a drink or used drugs first thing in the morning, to steady your nerves, or to get rid of a hangover?</td>
<td></td>
<td></td>
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</tbody>
</table>

**Interpretation:** Yes = 1 pt, No = 0 pts, A higher score is a stronger indication of an alcohol or drug problem. A total score of 1 or greater is considered significant and suggests a referral to a professional addiction counselor or clinician.

### Miscellaneous Drug and Alcohol Questions
1. What do you think it looks like if someone has an alcohol or drug problem?
2. What are your reasons for drinking or using drugs?
3. What do you think would happen if you decreased or stopped your alcohol or drug use?

Interpretation: The previous questions may be effective as they allow a method for the patient to be more open in discussing their substance abuse.

<table>
<thead>
<tr>
<th>Provider Observation of Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>This section is completed through observations made by assigned medical staff.</td>
</tr>
</tbody>
</table>

The following observations represent behaviors and/or thoughts that identify the need for further assessment and referral to a mental health professional:

- The patient gives inappropriate responses to normal questions.
- The patient does not exhibit a grasp of reality.
- The patient indicates that they are a person of authority or power.
- The patient exhibits an inappropriate or unusual facial expression.
- The patient exhibits unusual behavior.

Additional Observations Noted:

(Note: Adapted from The Mental Health Assessment Tool, p. 3, by The University of Texas Health and Science Center, (2013), Tyler, TX: Texas University Press.)
### Appendix C – Firefighter’s Suicide Assessment Instrument

Below is a self-screening for suicide ideation for firefighters. Please answer yes or no to the following questions. Please review your score at the conclusion of the screening.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you feeling like a burden to your family, friends or fire crew?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you feel the world would be a better place without you in it?</td>
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<tr>
<td>3. Have you started to isolate yourself from others in the firehouse or at home?</td>
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<tr>
<td>4. Have you found yourself turning to alcohol or other addictive behaviors to make yourself feel better?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Have you or someone close to you noticed that your sleeping habits have changed?</td>
<td></td>
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<tr>
<td>6. Are you thinking “what is the use” when going to the firehouse and responding to calls?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do you find yourself thinking about or performing unnecessary risks while at a fire scene or at an emergency incident?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Have you found an increased or new interest in risky activities outside the firehouse such as sky-diving, reckless motorcycle riding or purchasing guns?</td>
<td></td>
<td></td>
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<tr>
<td>9. Are you displaying unexplained angry emotions or been disciplined recently for anger towards other firefighters, officers, or the public?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Have you been told that you have changed by family or friends?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Does your family have a history of suicide?</td>
<td></td>
<td></td>
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<tr>
<td>12. Do you have a history of feeling depressed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Do you have feelings of hopelessness?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Do you feel like killing yourself?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Have you created a plan to kill yourself?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Have you recently attempted to kill yourself?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total the amount of the answer yes given –

If you circled question 15 or 16, then please seek help immediately from a trusted friend, chaplain, counselor, dial 911 or call the National Suicide Prevention Lifeline 1-800-273-TALK (8255) or 1-800-SUICIDE (1-800-784-2433).

Firefighter Behavioral Health Alliance (FBHA) recommends that if a person answers YES to at least three of these questions, it would be recommended that you contact a local Mental Health Care Professional that deals with firefighters who suffer from suicidal ideations and depression. If you need assistance, please contact FBHA for further information at 847-209-8208.

(Note: Adapted from The Suicide Questionnaire - ffbha. (2015). Retrieved from http://ffbha.org/Suicide_Questionnaire.html)
Appendix D – Trauma Screening Questionnaire

<table>
<thead>
<tr>
<th>If you have recently been exposed to a potentially traumatic event here is a tool that may help you to identify whether or not you should seek additional help in recovering from its effects. Have you recently experienced any of the following:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Upsetting thoughts or memories about the event that have come into your mind against your will?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Upsetting dreams about the event?</td>
<td></td>
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<tr>
<td>3. Acting or feeling as though the event were happening again?</td>
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<tr>
<td>4. Feeling upset by reminders of the event?</td>
<td></td>
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<tr>
<td>5. Bodily reactions? (Such as fast heartbeat, stomach churning?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Difficulty falling asleep or staying asleep?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Irritability or outbursts of anger?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Difficulty concentrating?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Heightened awareness of potential dangers to yourself and others?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Feeling jumpy or being startled by something unexpected?</td>
<td></td>
<td></td>
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</tbody>
</table>

It is recommended that the Trauma Screening Questionnaire be offered three to four weeks post trauma to allow time for the normal recovery processes to take place. If an individual has six or more yes answers, a referral to a behavioral health practitioner is indicated.

(Note: Adapted from *Suicide in the Fire and Emergency Services*, p. 29, by The National Volunteer Fire Council, (2012), Washington, DC: Government Printing Office.)