The First, First Responder and Best Practices for Mental Health

Approved: Dr. Nancy R. Gartner
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The First, First Responder and Best Practices for Mental Health

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By

Jessie Geurts

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Abstract

Dispatchers are the first-first responders as they are the lifeline between the public and emergency resources. The job involves exposure to significant amounts of stress, which leads to the potential for disorders such as secondary traumatic stress (STS), compassion fatigue, post-traumatic stress disorder (PTSD), and burnout. The effects of these disorders and stress buildup include high turnover rates, above average use of leave, and increased sickness. To maintain workplace safety, reduce liability, and increase longevity within the career, mental health issues must be addressed. Stress can be addressed at an organizational and individual level. Organizational involves trauma informed care, organizational support, awareness, peer support groups, critical incident stress management (CISM), following national recommendations, and offering certified mental health clinicians. Individual interventions revolve around increasing resiliency by adopting different coping methods, mindfulness training, and increasing self-care. Finally, disorders can be intervened by utilizing a clinician to provide therapy such as eye movement desensitization reprocessing or cognitive behavioral therapy.

Keywords: Secondary Traumatic Stress, Post-Traumatic Stress Disorder, resiliency, Critical Incident Stress Management, peer support, Eye Movement Desensitization and Reprocessing, Cognitive Behavioral Therapy, mindfulness, dispatch, telecommunicators, 9-1-1
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“Our dispatchers talk desperate folks out of pulling triggers while simultaneously hearing those, with whom they serve alongside, enduring those high-risk scenarios in real-time,” (Von Krauskopf & Wyman, 2019, p. 20).

Emergency dispatchers are often labeled the first, first responder. First responders are those who arrive on scene first and provide medical attention or calm an active situation while maintaining citizen safety. Dispatch is involved in each of these aspects while on the phone with callers. Information is obtained, responders are sent, and dispatchers must continue with safety information while mediating issues and providing medical directions when necessary. These are the employees who answer a 911 call when a baby stops breathing, when there is an accident, if an elderly person goes missing from the home and has dementia, along with many other traumatic life experiences. Telecommunicators are frequently overlooked under the consideration of the “first responder” title in research, and currently many states are working on reclassifying the role from clerical to first responder due to the experiences in a dispatch center. When considered a first responder, mental health impacts on these individuals must become a priority as well.

What is Dispatch?

Dispatchers go by many possible titles, including telecommunicators, emergency dispatchers, public safety dispatchers, 911 dispatchers, etcetera. Each title has the same essential functions. Telecommunicators work within the communications center or Public Safety Answering Points (PSAP), looking at multiple computer screens and consistently interacting with complex technology. They manage radio traffic along with emergency phone calls. Most centers have dedicated call-takers who answer calls while others focus on radio traffic, but when
there is an abundance of calls, radio staff may also be required to answer phones. Some centers focus on one thing, such as police dispatching, and medical calls may go to another dedicated center. In other areas, the dispatch center may send police, fire, and medical responders, leaving telecommunicators responsible for monitoring all those agencies’ radio traffic. The size of the center, staffing, and dispatch responsibilities depends on the size of their jurisdiction. Time management and prioritization become a focus skill for these staff members, along with multitasking.

While in many areas dispatchers may be considered administrative or clerical staff, they are truly first responders. Many issues that impact first responders, such as compassion fatigue, burnout, secondary trauma, etcetera, also pose issues for communications center employees. The research within this paper will revolve around mental health challenges in dispatchers and best practices for the prevention and resolution of those challenges caused by the job.

Overview of the issue

Existing research on first responders highlight the many aspects that can lead to stress, burnout, and issues with mental health. Fitch and Marshall (2016) state that first responders are at risk for suicide due to traumatic stress. A survey of emergency medical services and fire responders found that respondents considered suicide at a rate ten times that of adults in other careers and have made more frequent attempts (Fitch & Marshall, 2016).

Trauma is one aspect posing problems for dispatch, but daily operations are a source of stress. Operating under minimum staffing is frequently required, as open spots do not mean dispatch can neglect any functions. Rather, staff members have to work harder to manage extra workload and potentially face mandatory overtime. Furey (2019) conducted surveys of dispatch centers and most respondents cited staffing as an issue with 37% mentioning more staff would be
helpful. Other issues include high workload, performance monitoring, limited physical movement, and negative psychological outcomes including increased emotional exhaustion. Daily operations also require dispatchers to work at an intense cognitive level. Cognitive demands involve risk assessments, quick decision making, and adaption to unexpected developments (Golding et al., 2017). Statistics show that 17.6-24.6% of emergency dispatchers have probable posttraumatic stress disorder and 23.9% have probable major depression. However, the existence of an issue does not mean it is being addressed. Mental health remains a stigma in many first responder occupations, in which employees are expected to be able to handle trauma better than an average person. Entering a helping profession does not mean that one is unaffected by the situations they encounter. Lowering stigma while putting policy in place for and offering many solutions to these issues can encourage dispatchers to reach out for help when needed.

**Outcomes**

Exposure to trauma and stress in daily operations of dispatch lead to long-term dysfunction. Lilly and Allen (2015) argue that symptoms of dysregulated emotion, neuroticism, anger, and dissociation are evidence of psychological inflexibility and pathology in dispatchers. The National Emergency Number Association (NENA, 2013) states that more than half of dispatchers feel intense fear or hopelessness when dealing with suicidal callers, death or injury to children, or injury to responders. According to Cave (2014), 32% of 911 calls cause stress in telecommunicators. This exposure leads to health risk, performance risk, acute stress disorder, posttraumatic stress disorder, and clinical secondary traumatic disorder (Von Krauskopf & Wyman, 2019; NENA, 2013). In addition to psychological risks, companies are suffering. The Association of Public-Safety Communication Officials, or APCO, (2019) states that 56% of
agencies reported a decrease in employee retention over the past three years. The issue then compounds as less retention leads to more stress for the employees that choose to stay. Further issues include poor attendance, lawsuit enticing behavior, and possible safety violations, according to Von Krauskopf and Wyman (2019).

The importance of this study emerges from a lack of combined research in dispatch mental health. First responders have recently become an academic focus as they have been expected to act unaffected by tragedies they are exposed to. While research expands to first responders and law enforcement mental health, dispatchers must be included. While dispatch may be viewed as a behind the scenes aspect of law enforcement, dispatchers are exposed to similar stresses as the first responders on scene. A summary of existing research will allow simpler access to information on the topic and prompt future studies to be conducted. In addition, the paper will bring to attention the impact of trauma on dispatchers which has been minimized historically because dispatchers remain at their console (Von Krauskopf & Wyman, 2019). Finally, recommendations for the best practices of mental health policy and procedure will give starting guidelines for dispatch management. These recommendations will lessen the negative impacts of poor mental health which include turnover, burnout, and even difficulty communicating.

**Literature Review**

**Extent of the Problem**

If trauma builds up without being addressed, outcomes can reduce job safety and decision-making strength. The worst possible outcomes include addiction and suicide (Von Krauskopf & Wyman, 2019). The rate of PTSD and depression in dispatchers is approximately 18-24 out of 100,000 which leads to a higher chance of career risking behaviors. Dispatch falls at
higher rates than law enforcement and firefighters, with the average public rate of 13. Similarly, when all public safety professionals are considered, mental health concerns reach a rate of 44.5% for these professionals in comparison to 10.1% for the average person. Symptoms increase the longer a person has a career in public safety. Fitch and Marshall (2016) state that a survey of 4,000 EMS and fire employees found that 37% contemplated suicide with 6.6% having attempted. This is about 10 times higher than the rate for the average adult. APCO (2019) also identified staffing as an issue, indicating the average retention is 71%. It is likely this retention is related to high stress levels and dispatcher quality of life. The World Health Organization suggested that workplace stress costs 300 billion dollars each year in the United States alone (NENA, 2013).

**What causes stress?**

Dispatchers are responsible for coordinating emergency responses with high levels of responsibility at the start of a call but a lack of knowledge about outcomes. In addition, these personnel hear things than can lead to secondary trauma such as the death of a caller or their family member. Golding et al. (2017) share that traumatic calls, specifically those involving children and suicide, cause fearful reactions in about 32% of respondents. Trauma is unusual for the average person, whereas in the public safety field, trauma can be seen and heard daily (Von Krauskopf & Wyman, 2019).

A stressful aspect of all public safety occupations is the feeling of inability to help. In some situations, there is no ability to intervene and help, whether it be due to uncooperative persons or otherwise (Golding et al., 2017; Luber, 2015). Dispatchers experience this feeling of helplessness when listening to an active disturbance without being able to assist the victim, and in situations where they must try to calm a caller until help arrives on scene.
Relying on caller descriptions and interrogating distressed callers is a source of stress within the emergency dispatch center (Golding et al., 2017). Aside from large traumatic events, daily stressors can add up to chronic stress. Dispatchers must be adaptable to new developments and fast in triaging and assessing situations while managing large amounts of work with an inability to physically move. Golding et al. (2017) analyzed 16 articles to determine the stressors present within a dispatch center. There is not much perception of control, as the job itself is unpredictable in number and nature of incidents. This control is lessened by inadequate training which was identified as a stress contributor. Furey (2018) surveyed dispatch centers and found that 29% had no structured learning. Furey (2018) also states that not every state has required learning requirements, meaning that different centers can vary greatly in the amount and type of education they include.

Tasks completed require hyper focus and fast decision-making, meaning training should encompass as many situations as possible so the dispatcher can decide confidently. Golding et al. (2017) share that: “[p]olice operatives were particularly concerned about their performance in handling fluid situations….in case they did not make the correct decisions” (p. 19). The stress caused by reconsidering decisions, especially when there is a bad outcome, can lead to an inability to move on from that situation. Technology is frequently updated, which can reduce stress if information gathering is simplified. However, if inadequate training falls into technological areas as well, that could negatively impact dispatch (Baseman et al., 2018; Furey, 2018; Meischke et al., 2018). In addition, there is a lack of understanding of the role by outside parties, making it difficult for dispatchers to discuss work with their existing social support.

According to Meischke et al. (2018), sedentary workstyle also presents numerous physical conditions that can lead to psychological distress such as sedentary work that requires
mental focus, and environmental conditions such as temperature, break room availability, and ergonomics. Baseman et al. (2018) discuss a survey conducted which found that 42% of dispatchers indicated their job is stressful to very stressful. In addition, 60% indicated the job was demanding. These feelings did not change based off time spent working as a dispatcher (Baseman et al., 2018). Von Krauskopf and Wyman (2019) discuss the dangers of groupthink, which is applicable within a dispatch center. Group think is the assumption that thought processes such as negativity, bias and prejudice, or stigmas, may be contagious throughout groups. The implications this has within a communication center is the potential for negative beliefs resulting from trauma to impact more than those who experienced it directly. There is potential for stress to increase overall within the center if this occurs.

In addition to all the stressors typical to the dispatch environment, Marshall and Laorenza (2018) name nine warning factors including:

- no warning before calls, lack of closure, being psychologically on scene but not physically, sending responders toward harm, limited sensory engagement, high call volume/frequency, crazy-tasking demand, no downtime, and lack of professional respect (p. 28).

While there are endless causes of stress in the dispatch workforce, stress elicits bodily reactions when not trained to do otherwise. These bodily reactions can result in many negative disorders and lowered cognitive functioning, as highlighted below.

**Stress Response**

The existence of stress in a dispatch center is apparent. That stress has the capability to cause mental health difficulties if not addressed. An important fact to remember is that stress and trauma can impact each life in a different manner. Dispatchers enter the field over the age of 18
which means there is potential for previous training or the lack thereof. Each staff member is starting with what is essentially a different foundation, leading to variety of impact potential when coming into contact with the same stressors (Von Krauskopf & Wyman, 2019). These traumatic and stressful interactions have higher potentials to lead to mental health disorders in situations where a person has faced childhood trauma.

The body exhibits a stress response by activating the hypothalamic-pituitary-adrenal axis (Von Krauskopf & Wyman, 2019). The adrenal gland releases stress hormones which results in the “fight or flight” response. Heart rate increases, pupils dilate, and airways open. Repeated activation shows up in magnetic resonance imaging (MRI) results. In addition, it may lead to an increase in the size of the brain’s amygdala, which is part of the stress response. If the amygdala is overly active, the brain will ignore the area that determines the level of threat (neocortex). Overactivation of the stress response can lead to differences in brain structure and could lead to a change in DNA. DNA has been shown to play a role in PTSD reactions (Von Krauskopf & Wyman, 2019).

Stress can cause overproduction of myelin. Too much myelin can cause brain shrinkage. Von Krauskopf and Wyman (2019) state that people with PTSD have differences in white and grey matter related to that shrinkage and decreased blood flow to the left side of the brain. Changes in blood flow can lead to lower language capacity. When dispatchers remain calm, complex brain areas can be activated. However, when emotions take control, responses focus on reactivity (such as the fight or flight response), which is a lower level of brain activity. The issues presenting themselves will then worsen if stress is not worked through.

Continuous overactivity and overreaction can lead to adrenal failure. Adrenal failure in its final stage displays with symptoms of burnout. The adrenal glands are no longer able to keep
up with required levels of hormones due to continuous overactivation of the stress response system. There are four total stages of adrenal failure leading up to the final stage, in which sufferers have fatigue, lack of sex drive, allergy flare-ups, weight change, cold or heat intolerance, and much more (Von Krauskopf & Wyman, 2019).

The stress response is notable within one’s own life. Physically, the sufferer can experience fatigue, insomnia, back pain, and nausea (Ridgen, 2017). Mentally, forgetfulness, concentration difficulty, and paranoia are symptoms of stress while emotionally one may feel irritable, depressed, experience mood swings, or be less receptive to criticism. In life, relationships can suffer due to withdrawal and intolerance and behavioral issues such as eating issues, hyperactivity, procrastination, and substance abuse may arise (Ridgen, 2017). There are many notable symptoms of stress when it reaches a level that becomes destructive on the body, and there is no surprise this destruction can lead to adrenal failure and a significant number of health problems.

**Resulting Disorders**

The various types of mental health issues that can come from stressors described above include compassion fatigue, burnout, secondary trauma, peritraumatic stress, acute stress disorder, post-traumatic stress disorder, and complex post-traumatic stress disorder. According to Miller et al. (2017), dispatchers are most at risk for secondary traumatic stress, compassion fatigue, and burnout.

Compassion fatigue occurs when traumatic stress develops from worry for others. Von Krauskopf and Wyman (2019) state this is clear in a person’s “inability to turn work off.” In dispatch, many will leave thinking about more traumatic calls long after they have gone home and sometimes for the rest of their lives. Consistently feeling overwhelmed by being empathetic
or experiencing bad aspects of human life can lead to reduced empathetic desire (Miller et al., 2017). Compassion fatigue is a buildup of incidents. Symptoms can include doubt in job ability, hopelessness, worry, hypersensitivity, and anxiety. Miller et al. (2017) conducted a survey of dispatch personnel including 186 employees in Florida. The survey showed compassion satisfaction, which is the opposite from compassion fatigue, was higher when there was more perceived organizational and peer support. Fitch and Marshall (2016) found that 16% of telecommunicators experience compassion fatigue.

If public safety employees are unable to stop thinking about ugliness in the world and instead are continuously assessing, they are considered hypervigilant (Von Krauskopf & Wyman). In a work capacity, this is expected of dispatchers. However, the inability to leave that behavior at work can cause mental distress. The symptoms include an excessive focus on work, including using off time to work, identifying yourself via your job, and only having interest in related conversations.

When a person chronically experiences stressors, they can develop burnout. Burnout can be seen with increased cynicism, disengagement, dissatisfaction, and exhaustion (Von Krauskopf & Wyman, 2019). Miller et al. (2017) state that burnout is similar to coping methods as it is meant to deal with stress. In addition, they describe a study showing burnout levels comparable between emergency medical services staff and dispatchers. According to Miller et al. (2017) survey, burnout is lower for Hispanic dispatchers in comparison with their Caucasian counterparts. Higher education also showed lower burnout scores. Specifically, dispatchers may seem on edge, isolate from coworkers, experience chronic negative thoughts, have increased bias, and much more (Miller et al., 2017). Burnout occurs when staff members have been overworked and stressed for significant periods. Burnout is categorized by “emotional
exhaustion, depersonalization, and lack of personal achievement,” (Luken & Sammons, 2016). This displays similarly to depression with decreased commitment, motivation, performance, and judgement, with possible aggression.

Secondary trauma is a buildup of the trauma dispatchers are exposed to but not directly experiencing (Von Krauskopf & Wyman, 2019; Miller et al., 2017). Symptoms can show as fear, excessive worry, and feelings of responsibility for the trauma callers have experienced. Miller et al. (2017) state that research shows hearing a traumatic event can cause secondary traumatic stress (STS). Interestingly, STS scores on the survey increased with more education.

Peritraumatic stress occurs during a traumatic incident and directly after (Meischke et al., 2018). Peritraumatic stress is reported by dispatchers higher than the rate reported by law enforcement officers (Golding et al., 2017). Acute stress disorder occurs within a month of a significant stress (Von Krauskopf & Wyman, 2019). Memories of the incident may be avoided. Symptoms can include less responsiveness, difficulty concentrating, feeling guilty, hypervigilance, etcetera. Untreated acute stress typically develops further into PTSD.

Post-traumatic stress disorder (PTSD) diagnoses typically occur 3-6 months after symptoms begin. Fitch and Marshall (2016) argue that any symptoms of that occur for longer than a month have surpassed acute stress disorder and become PTSD. PTSD disrupts life greatly, and symptoms can present as flashbacks, triggers, depersonalization, sensitivity to lights and sounds, recklessness, difficulty maintaining relationships or positive emotion, and many more (Von Krauskopf & Wyman, 2019). Lilly and Allen (2015) surveyed 808 telecommunicators and found that 17.6% scored at a rate of 50 on the Post-Traumatic Stress Disorder Checklist (PCL) which tests for PTSD. That score suggests probable PTSD, and the rate is much higher than a similar experiment for firefighters that showed 6.4%. The PTSD symptoms can continue to
develop as calls following the worst call start causing a display of symptoms (Lilly & Allen, 2015). Complex post-traumatic stress disorder (C-PTSD) is a diagnosis for repetitive traumatization (Von Krauskopf & Wyman, 2019). This diagnosis is most common for those who have been traumatized often during childhood. Emotionality within persons with C-PTSD is extreme, partnered with an inability to cope and desire to self-medicate. The difference between PTSD and C-PTSD is the ability to identify a stressor for PTSD.

Depression can occur after dealing with stressors or simply from continuously seeing the worst in people. Depression causes damage to many areas in the brain, being visible in scans after approximately 8 months (Von Krauskopf & Wyman, 2019). A decade of depression can increase inflammation by 30% which in turn leads to cell death or lessens neuroplasticity. Damage to the brain can inhibit learning ability and memory, while making emotions more difficult to manage. In relation, psychopathology consistently increases with exposure to trauma (Lilly & Allen, 2015). Psychological inflexibility is increasing in dispatch staff, which displays as ruminating thoughts and avoiding private experiences. Lilly and Allen (2015) conducted a survey of 808 telecommunicators which showed about 24% of respondents showing moderate to severe depression symptoms.

According to Von Krauskopf and Wyman (2019), when stress is not addressed, the brain becomes physically damaged. This leads to differences in behavior and can increase the risk of brain and memory diseases such as Parkinson’s. Golding et al. (2017) discuss increased stress leading to changing decision-making and more staff members desiring to leave their occupation (Baseman et al., 2018). Dispatch centers have shown higher absence and turnover rates in comparison to other emergency service jobs. Baseman et al. (2018) discuss a survey which found in 2012, 63% of managers believed turnover is related to job stress and 83% had an increase in
calls for service. This increase leads to implications that stress levels will also increase as a budget that does not allow for mental health treatment does not focus on work demand. Health-based risks can develop due to some dispatch centers revolving around shift work, which could include cancer, cardiovascular disease, and depression (Golding et al., 2017; Luber, 2015). Mental health risks include flashbacks, nightmares, and trouble sleeping. According to Von Krauskopf and Wyman (2019), more exposure to violence may lead to desensitization but consequences of such desensitization are unknown.

**Current Implementation**

There are very few agencies that currently have suicide prevention programs - only about 3-5% do, according to Von Krauskopf and Wyman (2019). Even fewer agencies attempt to train dispatchers on emotional intelligence to improve mental health. This number remains low due to the stigma that has become common in public safety professions. Mental health interactions in public safety are typically at a more extreme level, causing difficulty to identify issues with oneself as the issue may not be that extreme (Von Krauskopf & Wyman, 2019). Stigma can also be created by administrators who attempt to keep a problem hidden and solve the issue in-house. This is done in a well-meant manner to minimize career impact but instead causes several negative repercussions for employees. These repercussions include self-harm, high absence, impulsive behaviors, self-medicating, high divorce rates, and many more (Von Krauskopf & Wyman, 2019).

Budget decisions do not typically allow for significant mental health programs. According to Von Krauskopf and Wyman (2019), several agencies report their mental health budget only allows for a video that is played during training. When budgets do allow for training, time becomes a significant barrier. In a dispatch center, there is not always designated break time
or time away from the console. In turn, a mindfulness training turned into a more stressful experience for some as they were required to do it during work, while covering phone calls and radio traffic (Meischke et al., 2018).

Even when resources are available, this stigma may lead to hesitance in seeking help. Respondents in a survey conducted by the University of Phoenix in 2017 state that they believe there would be repercussions (Von Krauskopf & Wyman, 2019). Over half believe they would be treated differently by supervisors and just under half believe they would be looked at differently by co-workers as well. Respondents believed they would be passed over for promotions at a rate of 34% (Von Krauskopf & Wyman, 2019). Not only is there an existing stigma against mental health, responders are expected to maintain stoicism, depersonalization, and derealization. Stoicism is the expectation that responders are not impacted by traumatic events, while depersonalization is feeling as though an event is occurring to someone else, and derealization is the feeling that an event is not real (Luber, 2015). Each of these experiences common to dispatch could lessen the likelihood any current policy will be utilized and updated.

The importance of mental health preventative measures must be stressed for organizational leaders, who are responsible for providing proper budgets and time to participate. Dispatchers who are struggling with their mental health can put responders and the community at risk due to stress and trauma reactions that are not addressed (Von Krauskopf & Wyman, 2019). The literature highlights large issues with mental health not only in public safety but in dispatch specifically. These issues are not currently being addressed in the way they should, and if implementation does not change turnover and negative effects will compound. The National Emergency Number Association (NENA) states that when Next Generation 9-1-1 (NG9-1-1) is
implemented, the workplace stressors already seen may increase due to additional capabilities in technology, for example video connection (NENA, 2013).

Methods

Utilizing secondary research and statistics allows for a combination of best practices. Information was located by utilizing the University of Wisconsin - Platteville’s online Karrmann Library which searches books, journals, government publications, and more through numerous electronic databases. Additional references were obtained by way of searching academic references related to dispatch to locate printed texts. Government publications were located through NENA’s official website. The majority of included information will be qualitative rather than quantitative, as approaches to lessen stress must still be individualized. The data sources consist of research that has assessed dispatch center issues along with treatment of the above described mental health issues that arise from high levels of stress. Given the lack of existing research on dispatch, combining suggestions given for public safety will remain applicable.

National recommendations are provided by agencies such as APCO and NENA, which will be summarized below. A combination of both national recommendations and individualized solutions will provide many options for organizations. Prevention, resiliency, and intervention strategies are three areas which the scholarly research has ample suggestions for utilizing. Assumptions in compiling the secondary research include the nationwide existence of mental health crisis in dispatch. A secondary assumption remains that mental health approaches have generalizability to dispatch centers that may run differently, as the stressors remain consistent throughout.
Results

Potential benefits from mental health programs are numerous, and most of these can save money. For example, Von Krauskopf and Wyman (2019) suggest when mental health is cared for, there will be fewer absences, less turnover, and less disciplinary action for dispatchers. Effective policy should include required nationwide hours of preventative education with optional modules to complete, which will be expanded upon below. The interventional aspect can be utilized optionally if a dispatcher identifies trauma within themselves. Intervention might also be required if an issue is noted that causes safety issues for responders, such as PTSD causing distractibility and high stress reactions (e.g., freezing up during large incidents). The difficulty in intervention lies within an inability to identify psychological issues within oneself. McKay and Gravel (2016) state that a career as a first responder can result in 600 to 850 traumatic experiences, making mental health interventions incredibly important for dispatch agencies.

Organizational Intervention

Preventing mental health issues begins at the agency level, lessening the stigma of mental illness. By making mental health a priority, agencies can lessen liability because employees will be able to better manage interactions with the public (Von Krauskopf & Wyman, 2019). In addition, recognizing the cost effectiveness of mental health care will encourage adding preventative measures into budget allotments. Lessening stigma can be done by ensuring administration acknowledges how mental health difficulties should be handled. There is history of handling these issues internally in attempt to save careers, but that encourages hiding mental illness. If management stresses the importance of maintaining good mental health, employees will follow. McKay and Gravel (2016) suggest anti-stigma campaigns such as participating in
mental health week, involving guest speakers, or offering an awareness course. Krakauer et al. (2020) state that increasing mental health knowledge lowers stigma which in-turn increases intentions to seek help if needed in all public safety personnel, though significance levels varied. Staff members may require more assurances to seek out help, including knowledge that they can seek help without risking their employment.

Management Responsibility

McKay and Gravel (2016) state that some responsibility for staff well-being falls on middle management since they are the middle-ground member between employees and senior-level administration. These members should be trained to identify behaviors that can be indicative of mental health issues and should follow-up while supporting the employee and ensuring there is no employment risk. Training programs for middle management suggested by McKay and Gravel (2016) includes Project Safeguard which addresses monitoring those who are high-risk, and Road to Mental Readiness which intends to improve performance and mental health. Road to Mental Readiness makes middle management more aware of the risks and their responsibility for identifying possible trauma in staff members. In addition, for any staff members that are uncomfortable addressing suicidal alerts, there is a training program called “safeTALK” which provides participants with awareness to recognize and intervene when a coworker is suicidal. Other ways middle management can assist is to address difficult calls and go over them with the involved parties outside of the room (Von Krauskopf & Wyman, 2019). This can confirm that each task was completed correctly, reducing replaying “what-if’s” or addressing mistakes which could increase confidence during the next stressful event. In addition, providing follow-up on particularly difficult calls allows management to find results and provide the dispatcher with closure, addressing a main cause of telecommunicator stress. Furey (2018)
and Golding et al. (2017) argue that a lack of training is a significant cause of dispatcher stress. Increased levels of training and following up on calls can serve as continued procedure reminder, in turn raising confidence levels in dispatchers’ decision-making certainty.

**Trauma-Informed Care**

For an agency to utilize trauma informed care, Von Krauskopf and Wyman (2019) recognize the three E’s, event, experience, and effects. The event is what happened, and it is necessary to acknowledge that events can impact each person differently. Some employees may experience significant amounts of trauma while some experience none from involvement in the same incident. Agencies must recognize there is no right way to respond to emotional stimuli. However, avoiding excessive escalation can minimize disorders resulting. Experience includes everyone involved, telecommunicators, victims, responders, and what is experienced internally and externally throughout the event. Von Krauskopf and Wyman (2019) recommend self-care following this, stating that even if a person believes they are immune to trauma the brain will see an impact. Follow-up by management allowing those involved to decompress and step away if needed, or the provision of peer support that can allow them to discuss the event and receive suggestions for self-care methods can assist in considering the experience. A suggestion of irrelevant questions is given to allow the impacted person to be disrupted from replaying trauma. Recognizing effects stemming from the trauma is the final aspect of trauma informed care.

**Organizational Support**

Organizational support, or the perception that the employees’ needs are cared about, is a large part of stress levels within agencies (Miller et al., 2017). If an employee feels their needs and well-being are cared for, stress levels are lower and burnout less likely. Similar results are found with coworker support (Miller et al., 2017). According to Miller et al. (2017), increased
perception of organizational support or coworker support increased compassion satisfaction. Compassion satisfaction is the opposite of compassion fatigue, it means that employees can gain satisfaction in a field that requires high levels of compassion (Miller et al., 2017). If an agency obtains collective efficacy, or a collective goal and amount of effort put in along with the groups perception of ability to achieve said goal, employees will feel more supported. To increase organizational support, employees should be allowed to input their views when issues that include job stress are under consideration according to the Centers for Disease Control and Prevention (2018). McKay and Gravel (2016) suggest that organizational support should include families. Family members selected by the employee should be educated on existing policy and resources, as they will be the first to notice a change. At the same time, the family can be educated on what to expect and how to address challenges that can come up for the entire family unit (McKay & Gravel, 2016). This can be done during the orientation stage of hiring. Finally, an organization can highlight their support by providing designated quiet spaces for utilization as time allows (Centers for Disease Control and Prevention (CDC), 2018). These quiet spaces can be utilized for relaxation technique or other mental wellness programs as discussed below.

**Awareness**

Prior to an employee starting, they should be aware of trauma and trauma responses (McKay & Gravel, 2016). Awareness levels can reduce the difficulty in approaching coping mechanisms when the need comes up. New hires should be made aware of existing mental health policy and procedure, and resources should be thoroughly explained. This allows stigma to be addressed along with ensuring the new hires are aware of where they can turn if they experience a difficult call (McKay & Gravel, 2016). However, this cannot be the only training which addresses mental health and even senior staff members should be reminded of existing resources.
The CDC (2018) recommends brochures, videos, and flyers should be provided in order to inform staff or warning signs and resources. Staff members should be reminded frequently that if they notice someone else experiencing mental health difficulty, they are responsible for supporting the coworker and/or notifying management so follow-up can be completed.

Awareness of policy and procedure can assist staff members in seeking out resources. Inner awareness plays a role in preventing stress response at the same time. Marshall and Laorenza (2018) discuss “ChoicePoints,” in which a dispatcher is presented with a stressor and in turn a stress response. There are cues that a stress response is approaching, such as thoughts, emotions of fear, anxiety, and body sensations. The three options from there include noticing the cues, which leads to utilizing stress mediating skills, ignoring or not noticing cues which leads to chronic stress, and finally noticing and reacting which impairs responses and can cause relationships to suffer. Maintaining awareness of cues the dispatcher’s body gives them prior to a stress response can allow for immediate self-intervention (Marshall & Laorenza, 2018).

**Peer Support**

Coworker support can be displayed in the form of a formal or informal peer support group. According to Milliard (2020), peer support aims to identify at-risk peers, assist a peer in seeking help, low-level interventions, and listening. Peer support members should have a lived experience, empathy, and be in a positive growth stage (McKay & Gravel, 2016). If the peer member has not recovered from their lived experience, they could potentially harm or be unable to help the members they are meant to support. Peer support that is informal can be valid. When staff members are going through something that is investigated formally (i.e. potential violation of policy that results in injury), the employee may be more willing to speak with an informal group since it is separate from the organization. When developing formal peer support, it can be
helpful to include a nomination system. Peer support members are interviewed (if they want)
after nomination by a different staff member. This typically means that person is already trusted
and has likely been informally supporting others (McKay & Gravel, 2016). Psychological testing
should follow interviewing to ensure the supporter is ready and will not become retraumatized.
Once supporters are ready, there must be a designated peer support leader who is trusted by both
senior administrative staffing and the supporters on the team. Upon development, the team can
begin in a volunteer capacity but eventually should be compensated. Subject matter experts who
have previously developed peer support teams should be consulted with to ensure group success
(McKay & Gravel, 2016). These teams can also include chaplains, family members, senior
officers, and retired members to ensure complete support. The peer support team must then go
through extensive training.

McKay and Gravel (2016) recommend Peer and Trauma Support System (PATSS),
Applied Suicide Intervention Skills Training (ASIST), MANERS Psychological First Aid
Training, Advanced Group Crisis Intervention Course, and Community Crisis Response Team
Training. This adds on considerable budget concerns, but training must be all-inclusive to ensure
the peer support members can adequately serve the communications center.

Peer support teams work by intervening when someone has experienced a mental health
difficulty or some traumatic experience. The intervention can be via phone call, email,
voicemail, or toll-free number that staff members can utilize. The goal is to make access as easy
as possible. After contact is made, the peer support team can assist in connecting to other
resources when needed, such as a clinician, and can assess risk factors. Some agencies also
utilize peer support groups to form trauma recovery groups which can provide wellness and
recovery strategy (McKay & Gravel, 2016). Von Krauskopf and Wyman (2019) state that talking
through a trauma allows processing to occur within the hippocampus which can help avoid development of PTSD. Overall, after development maintaining awareness that the peer support team exists will encourage telecommunicators to reach out when they need. In addition, new employees should be educated on the support that can be provided by this team. Marshall and Laorenza (2018) suggest that peer support provides a space where dispatchers feel comfortable discussing a traumatic incident because participants are in the company of those who have experienced similar situations. A study conducted by Heffren and Hausdorf (2014) surveyed 421 police officers and found that they were most comfortable seeking help from peers and family members, further supporting the potential for peer support programs within dispatch.

**Critical Incident Stress Management**

The next level of support includes development of a Critical Incident Stress Management (CISM) team (McKay & Gravel, 2016). The model that is typically followed was created by the International Critical Incident Stress Foundation (ICISF). This includes seven components (McKay & Gravel, 2016; NENA, 2013). Preparation must be completed, including stress management and crisis mitigation training, for large-scale incidents there will be informal briefings or staff advising. Demobilization following an incident is whether the impacted responders will be able to take time off or are expected to work. In smaller agencies, responders who experienced this event may be expected to continue working (Luber, 2015). Defusing will occur within hours of a traumatic event and is typically completed within small groups (McKay & Gravel, 2016). Next, Critical Incident Stress Debriefing (CISD) is the structured discussion which is within 10 days of a crisis and led by a mental health professional. If needed, one-on-one counseling can follow. The sixth component includes family intervention and consulting with the organization, with the final step being follow-up with those impacted (McKay & Gravel, 2016;
Luber, 2015; NENA, 2013). For any component utilizing a mental health professional, the agency must take care to not use the same person who assists in discipline or work-related matters (McKay & Gravel, 2016). Chaplains are an additional component that can be utilized within CISM. The CISD should not be conducted without a mental health professional, as it can lead to harm rather than providing benefit to participants. McKay and Gravel (2016) recommend all training included for peer support as well as an additional training called Assisting Individuals in Crisis, conducted by ICISF.

The difference between CISM teams and peer support is that CISM teams are created to handle trauma exposure specifically and mitigate negative effects (such as PTSD), whereas peer support can provide more coverage for other issues. Some agencies may overlap these two groups, but the function remains different depending on the incident. Peer support teams can be especially useful during a follow-up stage of the CISM process, since there can be many impacted individuals (McKay & Gravel, 2016). In addition, there must be policy in place where staff members off-duty are willing to come in to allow for defusing after a traumatic event, communications centers could consider this on a voluntary basis. The debriefing and defusing should not be neglected to have impacted persons remain working, as it will increase the mental health risk. While everyone should have an option to attend CISM activities, the participation should be entirely voluntary (Marshall & Laorenza, 2018).

**NENA Recommendations**

NENA recommendations were created after an identification of the need for a baseline standard. NENA describes a Comprehensive Stress Management Program (CSMP). The program includes a required eight hours of stress management training. This training must address stress disorders, impacts, exposure, utilization of relaxation response skills, emotional regulation, and
conflict resolution. In addition to the required eight hours, the communication center must have resources to address stress risks and inform employees on the importance of wellness in prevention of disorder. Procedures must be developed to ensure participation, such as debriefing and CISM activities. Further, Employee Assistance Programs (EAP) need to be developed. Employee assistance programs (EAP) can assist in early intervention for negative mental health impacts. According to Fitch and Marshall (2016), 11% of survey respondents utilized such programs with about half finding them “very helpful.”

**Therapy-Based Interventions**

Interventions can include certified therapists in eye movement desensitization and reprocessing (EMDR) and stress inoculation therapy (SIT) along with exposure therapy (Fitch & Marshall, 2016). These therapists should specialize in trauma, and the benefit can be seen when such therapists have previous experience in public safety fields. SIT training includes educating participants on coping, and other skills such as breathing control, positive thinking, and deep muscle relaxation (NENA, 2013). Von Krauskopf and Wyman (2019) offer several other trauma-based suggestions. Cognitive Behavior Therapy (CBT) focuses on identifying goals and overcoming whatever prevents achievement, perceptions and cognitive processing are modified to improve decision making skills. Mindfulness training would fall under CBT, along with compassion-focused therapy, motivational interviewing, and more. Cognitive Processing Therapy (CPT) identifies maladaptive negative thoughts following traumatic events. Specific to telecommunicators, when a call has a bad outcome those involved may wonder if they had asked one other question or gave different instructions, things could have gone differently. This can result in spiraling thoughts about death or trauma being their fault.
EMDR attempts to reprocess memories resulting from a traumatic event and is popular for PTSD sufferers. A participant’s brain is focusing on movement or sound while going over what the traumatic memory causes emotionally and physically. EMDR has shown to be successful for PTSD sufferers and is being more frequently sought out by first responders. Luber (2015) discusses the phases of EMDR. EMDR occurs in eight phases. Phase one includes taking history, such as first and worst calls, child-related, suicides, human remains, and associations with personal life. A timeline is created of these calls as well. Phase two identifies resources aside from EMDR including resilience suggestions, and phase three is an assessment of which incident will be the target. Then the TICES (target, image, cognition, emotion, and sensation) are addressed. The fourth phase in EMDR is desensitization, to focus on the current issue, phase five is the installation phase, where the incident is associated with a positive cognition. Phase six is a body scan that assesses physiological response, then phase seven is for closure and debriefing. The final phase, eight, focuses on reevaluation and obtaining feedback or observations (Luber, 2015). Being aware of the EMDR process and what responders might expect can provide some certainty and less resistance to seeking out an unfamiliar therapy.

Prolonged Exposure Therapy (PE) is exposure to avoided thoughts and emotions in a safe environment, which can allow the participant to gain control over the event and Mindfulness-Based Cognitive Therapy (MBCT) includes mindfulness into cognitive behavioral therapy (Von Krauskopf & Wyman, 2019; NENA, 2013). Each of these have goals to assist telecommunicators in overcoming any disorders above that have resulted from traumatic exposure.

Qualified clinicians should be available within the EAP protocols. Employee assistance programs typically include a certain number of sessions per event for free. It is important that the intervention most effective for each person is available, and a wide number of providers to
ensure the employee is comfortable seeking help. The CDC (2018) recommends that businesses offer free or lowered costs clinical screenings and referrals for mental health issues, which could be supported under an EAP. In addition, health insurance should include low costs for counseling and medications when required to encourage seeking care (CDC, 2018). While clinicians can help a telecommunicator address burnout, there are suggestion for self-help in this category as well. It is the responsibility of the agency to provide access to certified clinicians, but some responsibility also falls on the individual to seek out these clinicians and be open to their assistance.

**Individual Interventions**

Psychological resiliency is the ability to utilize positive emotions and coping to recover from a negative experience (Miller et al., 2017). Those who have more resiliency still experience negative emotions but can recover at a faster rate by coping. Increased resiliency lowers the likelihood of burnout and secondary traumatic stress, while it increases compassion satisfaction (Miller et al., 2017). McKay and Gravel (2016) suggest resiliency training before a career in public safety begins. This training can occur at a community college of be addressed in pre-hire stages. This also allows stigma discussed above to be addressed before it may be seen (McKay & Gravel, 2016). Resiliency based prevention and intervention falls at an individual level. The individual has to be willing and eager to modify their internal habits, whether on their own or via agency provided optional trainings.

**Coping**

Arble and Arnetz (2016) suggest that coping methods can increase well-being. Approach coping, in which individuals confront stressors, allow for growth following trauma. This strategy can be employed and result in better communications overall as the underlying issues are
discussed. Avoidance coping, however, includes avoiding a stressor and decreases well-being. This could instead result in substance use or creation of negative reinforcement (Arble & Arnetz, 2016), leading to a fear of the emotional response experienced. Training programs can include discussion of what methodology telecommunicators more often employ and how they may more effectively utilize avoidance and approach coping together. Arble and Arnetz (2016) suggest both methods can be effective when utilized together because avoidance may provide short-term relief that allows a telecommunicator to rationally address the stressor without being in a heightened emotional state.

**Mindfulness and Lifestyle**

Kerr et al. (2019) highlight the importance of mindfulness in resiliency for telecommunicators. Mindfulness attempts to teach acceptance of a present moment without judgement (Kerr et al., 2019). The study included 323 telecommunicators participating in an online mindfulness training that focused on topics involving patience, judgement, kindness, and more. Meischke et al. (2018) developed a similar longitudinal study that utilized online mindfulness-based interventions (MBIs). The guidelines for both studies were adapted from the Mindfulness-Based Stress Reduction program, which is typically an in-person program (Meischke et al., 2018). There were seven total lessons that take approximately 30 minutes to complete (Kerr et al., 2019; Meischke et al., 2018). Results indicate that mindfulness may not reduce stress level but instead change how respondents cope with the stressor (Kerr et al., 2019). This finding highlights the important aspects of self-control that mindfulness can provide. A job within public safety will always present stressors, and traumatic calls, making coping of higher importance. Respondents had more empathy, better communication, focus, and self-awareness. Marshall and Laorenza (2018) suggest “heart focused breaths” which are conscious breaths to
slow the heart rate. This breathing can be done during an in-progress call, while the caller is talking, and allows the telecommunicator to remain in better control of stress responses by being mindful of body reactions. The CDC (2018) suggests employers get involved with mindfulness training by offering seminars or workshops that provide such training.

Luken and Sammons (2016) assessed eight articles based on mindfulness intervention for effectiveness. Seven of the studies found decreased burnout after mindfulness training, and the one remaining study showed significant effects on those who have interactive service jobs or jobs that require interpersonal interaction. These results should be similar in dispatch facilities, with the assumption that mindfulness training is being conducted correctly and that participants want to learn.

**Self-Care**

Self-care is an important aspect of prevention, resiliency, and intervention for stress impact. In addition to programs that increase mindfulness and trauma informed care, Fitch and Marshall (2016) recommend agencies encourage participation in lifestyle changes. Lifestyle changes that increase physical health, for example, can benefit mental health. Employee wellness competitions or agencies that provide reduced rates for local gyms may see increased resiliency. Arble and Arnetz (2016) state that physical fitness is found to increase well-being. Employees may be inclined to add physical methods of coping such as working out to mindfulness-based strategy. These wellness programs can also combat the sedentary nature of the dispatch center and stress that results from it.

Ridgen (2017) recommends a self-care model labeled “S.T.R.E.S.S,” which stands for “sensible eating, time to enjoy life, rest and relaxation, exercise and education, social support, and satisfying expression.” This acronym reminds dispatchers to care for themselves, especially
following high stress workdays. Sensible eating suggests one should avoid drugs and alcohol along with less healthy foods because they can amplify the negative stress effects (Ridgen, 2017; Cave, 2014). Enjoying life and keeping up with hobbies and relaxation activities can provide time for decompression, along with rest and relaxation. An improper amount of sleep is an additional potential cause for exaggerated stress responses. Another suggestion for relaxation is deep breathing. Following a critical incident, exercising can help get rid of the body’s stress while education on stress response could allow more clarity in addressing issues as they arise. Finally, support suggests that dispatchers try not to withdraw and satisfying expression could mean seeking out religious advisors or simply having proper work life balance (Ridgen, 2017). More communication centers need to focus on and remind dispatchers that self-care is imperative to reducing harmful stress impacts, whether they be from a critical incident or daily buildup of stress. Staffing levels can impact the time available for self-care, however Ridgen (2017) provides suggestions that can be done quickly on the days where time is lacking.

**Benefits of Prevention and Intervention**

The benefits of preventing and intervening when it comes to mental health issues are endless. Staff members will have better communication with the public, reduce health care claims, improved attendance, and less risky behavior that can cause liability (NENA, 2013). In addition, dispatch centers might expect fewer sick days to be taken and increased morale in the workplace if stress is reduced. McCoy (2015) shares that research has found that employees suffering from depression misses up to four days of work each month and has lowered productivity 35% of the time they are at work. When employers support mental health and lessen symptoms of depression, employees will be more productive. This increase in productivity and attendance can reduce costs for overtime, as that would be up to 32 hours of overtime that could
be prevented or reduced with effective mental health support. In total, depression costs $2.5 trillion annually when considered on a global scale (Cohen, 2019). McCoy (2015) found in four months a mental wellness program called Be Well at Work lowered call-ins collectively while raising time management and effective group work. Purcell (2016) supports these findings with research showing employees with higher well-being in comparison to those who do not have 41% lower health-related costs and 62% lower other costs. This should encourage communication centers to engage in wellness focus, both mental and physical.

When employees feel well and have better mental health, financial benefits are clear. Part of these financial benefits can offset the cost of implementing programs discussed above. The potential gain is not necessarily immediately clear, but advantages that are not directly financial also include higher employee satisfaction (Purcell, 2016). This satisfaction can reduce the chances for compassion fatigue to develop in the future. Increased satisfaction may also lead to better customer service and increased empathy to callers, leading to better crisis intervention and faster information gathering. As such a large problem is the lack of staffing in dispatch centers, the ability to make the workplace more inviting and less stressful, or at least provide tools to cope, could reduce that (Purcell, 2016). More specifically, organizations can trust that interactions between dispatchers and the public will be more effective and positive (Von Krauskopf & Wyman, 2019). This means the public will be more cooperative because the dispatcher is able to manage their stress reaction and keep the caller calm. In addition, when dispatchers have more effective communications with the public, less time is spent by supervisors to coach and correct which in-turn reduces environmental stress.

A study by Garbarino and Magnativa (2015) found that workplace stress increased the chances of metabolic syndrome, or MetS, which includes hypertension, becoming overweight,
and lowered tolerance of glucose. Research focused on a rapid response police unit, which conducts less administrative tasks but frequently handles unpredictable events. This type of police unit relates to dispatch, as they have little control over events coming in and do not follow through administratively (i.e. report writing) after-the-fact. Workplace stress can also lead to depression which further leads to MetS. Reduction of stress can lessen the impact of these significant health issues. According to the CDC (2018), those experiencing mental health issues frequently need treatment for physical issues as well. Since the research clearly shows a correlation between mental and physical health, mental wellness can significantly reduce costs since treatment of mental and physical conditions costs approximately 2-3 times more (CDC, 2018). Inclusion of mental health care could save a minimum of $37.6 billion within the United States annually, and up to $67.8 billion (CDC, 2018). Clearly, the financial benefit to businesses provides incentive to invest in employee mental health.

For dispatchers, the financial benefit is not the most significant benefit. Mental wellness programs and agencies that show a focus on telecommunicator wellness will increase dispatcher confidence, engagement, and satisfaction (Purcell, 2016). Each of these things will allow dispatchers to make continued good decisions and increase their time-management skills. In turn, projects to improve the dispatch center can be undertaken if employees are able to manage time and feel motivated. Dispatchers will be less likely to experience development of stress into a stress disorder or burnout, which will reduce changes of depression and anxiety symptoms. These symptoms are a significant hindrance to motivation and desire to be at work. Telecommunicators interact much more effectively with callers when they can maintain composure, calmness, and empathy. Mental wellness will increase emotional regulation which in turn allows this composure to be maintained (Von Krauskopf & Wyman, 2019). In turn, more
financial gain may be seen by the organization by projects that increase efficiency or knowledge in coworkers.

**Recommendations**

Numerous documents support the reliability of suggestions listed above, but difficulty lies in implementation. Organizations should be aware that support will not be given from the entire agency immediately, as they could be wary or averse to change. McKay and Gravel (2016) state that 15% will support a change, 15% will not, and 70% are waiting for more information when it comes to mental health policy. The Diffusion of Innovation Theory, which was developed by E.M. Rogers, gives several suggestions for appealing to different levels of support (LaMorte, 2019). Five categories, including innovators, early adopters, early majority, late majority, and laggards, fall on a bell curve for innovation. Early adopters can be appealed to with information on procedures, while early majority will support changes more when given information about effectiveness and successes. Those who fall in the late majority can be swayed by seeing other agencies that have had success with similar policies and procedures, while laggards may follow suit when they feel pressure from other groups to adopt the change and see statistics (LaMorte, 2019). Overall support for changes increases when the good and the bad is shared with employees. If there is a setback, including that in updates will show that difficulties are being addressed and solved as they arise (McKay and Gravel, 2016).

To increase the benefits of stress training, intervention, and resiliency increasing suggestions, agencies must dedicate time for these activities. Telecommunicators cannot fully participate if they are required to complete trainings at the console (Kerr et al., 2019). Adequate staffing would allow for short breaks in which telecommunicators could complete optional trainings, such as mindfulness lessons. Similarly, agencies need a written policy for staffing
coverage to allow all telecommunicators involved in traumatic incidents to attend debriefing or intervention, as necessary. Not only do employees need time away to complete these tasks, but resources should also be easily obtained (McKay & Gravel, 2016). Those experiencing mental distress will be less likely to obtain help when they must go through a complex, confusing process to get there.

**Budgeting**

Budgeting in a public safety agency may make mental health goals seem unobtainable. However, certain aspects likely already exist. Larger agencies typically have some type of EAP. Costs will increase for agencies that do not have existing EAP or qualified clinicians (NENA, 2013). In addition, staff members typically already go through orientation, so certain preventative measures can be included without increasing budgets. Many of the preventative and resiliency training measures will be budget friendly and can be included with little added cost. However, the larger initiatives, such as peer support, CISM teams, and qualified therapists to conduct intervention, may be more costly (NENA, 2013). Agencies should focus on seeking grants for inner agency wellness as they become available as well as making proposals for budget committees including all the benefits of increasing mental well-being (NENA, 2013). According to NENA (2013), agencies should consider the offset costs due to lowered leave, turnover, and improvements in staff productivity.

**Prospects**

It is unreasonable to believe that agencies will be able to implement all options discussed in the results at the same time. Agencies should be able to pace, to ensure each aspect is completed in a proper way. Many agencies may already have EAP and may then begin to develop other aspects of mental health policy. However, smaller agencies may not have EAP
developed yet, which will require more time. An individualized approach with a tentative timeline will allow agencies to continue progressing, while maintaining realistic expectations. As more research emerges about mental health policy and procedure effectiveness in a dispatch center, agencies should periodically review and adapt existing procedures. Development of new procedures, if needed, is also encouraged. Implementation suggestions, along with certain requirements, are included above for those larger components (peer support, CISM).

**Limitations**

While mental health has become increasingly important for responders, there is a lack of existing research for dispatchers. Since dispatch is often considered clerical, the title may not be included in first responder research. As more research emerges, this limitation can be addressed, and approaches modified to best serve dispatch. However, many mental health approaches that are utilized for first responders can also apply to dispatch. Fine-tuning these suggestions will be up to each individual agency and staff member, this document serves to provide beginning guidelines. Krakauer et al. (2020) states that currently implemented educational awareness for mental health may have limited impact because it does not consider the differences between public safety careers, which is a notable limitation of suggestions above. This further supports the modification of effective tools to be dispatch specific.

The most significant limitation in the above recommendations is a lack of clear implementation guidelines. While NENA provides suggestions of training length and possible topics, it would be helpful for PSAPs to have access to clear classroom guidelines for stress management training and implementation of EAP and other interventions. Budgetary recommendations are discussed above, with the significant limitation that agencies may budget differently for dispatch centers. In addition, some dispatch centers may run in conjunction with
the local sheriff’s office, while others are independently functioning. This changes financial structures.

Additionally, each study seemed to have similar issues with low response rates (such as 60% for Arble and Arnetz, 2016), or a lack of following instructions (i.e. mindfulness practice completed at the work console). The low response rates and neglecting certain instructions could lead to inaccurate study results. These limitations can translate directly into recommendations for future research.

**Future Research**

There is a high level of importance resting on potential future research. Currently, the focus remains on high turnover and dispatcher shortage. If this issue is to be addressed, future research should look at dispatcher mental health. Without mental health needs being a focal point, turnover levels will remain high as staff will not be supported sufficiently and rather than knowing how to work through higher workplace stress levels, find employment elsewhere. Future research might involve the positive impact that traumatic calls can have on dispatchers. The separation between employees who are positively versus negatively impacted by similar calls must be investigated to determine internal indicators of resiliency. Furthermore, an analysis of budget impact due to mental health could lead to more organizational support for suggested programs (Von Krauskopf & Wyman, 2019). Long-term financial research must be conducted to encourage mental health programs in all centers. If financial benefits become clearer, agencies can cite that research and cost efficiency in their attempt to gain grant writing positions and increasing funding for programs discussed above. Like the length of studies, an important future topic is the modification of therapeutic means to better suit a 911 center. For example, the mindfulness study by Kerr et al. (2019) focused on an online delivery method since that suits the
environment better. Research should be done to determine whether other methodology can be molded to the communications center as well.

Golding et al. (2017) suggest future research should focus on what increases resiliency and what positive job aspects increase psychological health. In addition, long-term outcomes should be researched. As noted above, this is not a large part of existing data. Research that follows long-term staff members and their psychological well-being could be beneficial in documenting what effective programs seem to increase psychological health for the longest amount of time. These programs would have the most potential for budget friendliness, increasing the potential for widespread use within public safety agencies.

Conclusion

Local PSAPs must implement better mental health policy in order to ensure dispatchers are able to maintain the high level of cognitive functioning and endure stress that is expected of them. Historically, the mental health of most responders has been neglected. Responders have been held to a higher standard and expected to remain unaffected by trauma, simply because they knew exposure was part of the job. In recent decades, responders have entered the spotlight and began to receive needed benefits, such as employee assistance programs. However, stigmas may cause a lack of utilization of available programming. As organizations work toward lessening stigma and implementing programs that can be individualized to heighten effectiveness, a reduction in dispatch turnover and increase in psychological resiliency will be clear.

When mental health prevention and intervention systems are put into place, communication centers will experience less absences, less turnover, confident employees, and a more relaxed and open workplace. Mental wellness programs can save companies large financial sums while increasing workplace morale which therefore decreases turnover. Hiring and training
new staff members is expensive within a dispatch center as training takes several months to complete before telecommunicators can work independently. Not only can mental wellness save money by increasing morale, but health issues reduction (e.g. hypertension caused by stress) can reduce health coverage claims and lead to further savings. Less absenteeism leads to fewer overtime hours in a center that must remain staffed all hours of the day. These financial benefits serve as motivation for dispatch center administrative staff members to accept wellness programs. However, the emotional benefits serve as optimal reasons for dispatchers themselves to encourage development of these programs.

There are numerous suggestions for addressing the trauma and various disorders experienced in a dispatch center. All approaches begin with lessening the stigma of mental health needs and working toward becoming a trauma-centered agency. Once this occurs, employees will be more likely to reach out for assistance which can include organizational intervention (peer support teams, therapy-based interventions), or individual intervention (mindfulness training). Each agency must take an individualized approach when implementation is considered. Timelines may change based on what policy, if any, already exists. However, based off existing data and research, there is clear support for larger focus on mental health needs for telecommunicators.
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