

# PREVENTING SUICIDE AMONG LAW ENFORCEMENT OFFICERS: AN ISSUE BRIEF











# **CONTENTS**

Introduction	2
Executive Summary	3
Prevalence	4
Risk and Protective Factors	6
Risk Factors	6
Protective Factors	8
Challenges to Suicide Prevention	10
Cultural Barriers to Help-Seeking	10
Lack of Training in Suicide Prevention	10
Department-Level Challenges	11
Suicide Prevention Strategies and Best Practices	12
Comprehensive Approaches	12
Individual Strategies and Practices	13
Knowledge Gaps	18
Suicide-Related Data	18
Effectiveness of Strategies and Practices	18
Suicide Prevention Among Subgroups	19
Other Knowledge Gaps	19
Conclusions	20
References	22

# INTRODUCTION

Suicide is the 10th leading cause of death in the United States, claiming more than 48,000 lives in 2018 alone. Suicidal thoughts and behaviors affect persons of all ages. leading to long-lasting effects on families, friends, workplaces, and communities. Law enforcement professionals are not immune to this serious public health problem. Studies suggest that suicide rates are particularly high among officers and others in public safety occupations.<sup>2,3</sup> Although the exact number of officers who die by suicide each year is not currently known, existing research suggests that officers may be more likely to die by suicide than in the line of duty.4

On a daily basis, officers experience job-related stressors that can range from interpersonal conflicts to extremely traumatic events, such as vehicle crashes, homicide, and suicide. This cumulative exposure can affect officers' mental and physical health, contributing to problems such as post-traumatic stress symptoms, substance misuse, depression, and suicidal ideation. Law enforcement agencies may help mitigate the impact of these stressors by implementing effective prevention strategies, such as building a culture of support throughout the department; ensuring access to culturally competent mental health and wellness services; and reducing barriers to help-seeking within their departments, social circles, and community, as a whole.

In 2017, Congress passed the Law Enforcement Mental Health and Wellness Act (LEMHWA), recognizing the importance of mental health and wellness to officer wellbeing and performance, supporting the expansion of and access to mental health and wellness services. Signed into law in 2018, the act recognizes that good psychological health is as essential as good physical health for law enforcement officers to be effective in keeping communities safe from crime and violence. Law enforcement agencies are increasingly incorporating these practices—such as counseling services, peer support programs, and training on stress and wellness-into their work.5,6

This issue brief is intended to inform the work of the National Consortium on Preventing Law Enforcement Suicide and other stakeholders working to prevent suicide and promote mental health and wellness among law enforcement officers. A project of the U.S. Department of Justice, Bureau of Justice Assistance National Officer Safety Initiatives Program (NOSI), the Consortium was formed in October 2018 by the International Association of Chiefs of Police (IACP), in partnership with Education Development Center (EDC) and with support from the National Action Alliance for Suicide Prevention (Action Alliance), to raise awareness of and prevent suicides among law enforcement officers. To support these efforts, this issue brief synthesizes the current state of knowledge regarding the prevention of suicide among law enforcement officers.

The brief presents research findings obtained from a broad, but not exhaustive, review of research studies relevant to the prevention of suicide in law enforcement. Contents include the prevalence of suicidal thoughts and behaviors among officers, relevant risk and protective factors, effective strategies and best practices for preventing suicide among officers, and gaps in knowledge that require additional research. These evidence-based findings are intended to inform the development of efforts aimed at preventing suicide and supporting mental health and wellness among officers.

# **EXECUTIVE SUMMARY**

This issue brief synthesizes the current state of knowledge regarding the prevention of suicide among law enforcement officers.

#### **Prevalence**

While the exact number of officers who die by suicide each year is not known, research suggests that more officers die by suicide each year than in the line of duty.4 The non-profit organization BLUE H.E.L.P. has estimated that these deaths increased from 143 to 228, from 2016 to 2019.7 However, these numbers are likely to represent an undercount, as they are derived from Internet searches and volunteer reports made by family members, friends, colleagues, and others. Moreover, suicide deaths are often unreported or misreported due to stigma and other reasons.8

#### **Risk and Protective Factors**

Law enforcement officers are vulnerable to the same risk and precipitating factors for suicide as others in the general population, such as mental illness, substance misuse, social isolation, relationship problems, and legal and financial issues. Additional factors more specific to the law enforcement profession include exposure to suicide and other traumatic events (e.g., child abuse, violence, death of a colleague), easy access to firearms and skills in their use, and organizational stressors (e.g., shift work, administrative burden). Protective factors that appear particularly relevant to preventing suicide among police officers include access to culturally appropriate mental health and wellness services, resilience (particularly skills for coping with work-related stressors), and social support.

#### **Evidence-based Strategies and Best Practices**

Research suggests that suicide prevention programs are more likely to succeed when they are comprehensive, i.e., they combine multiple strategies aimed at affecting risk and protective factors at various levels of influence (individual, interpersonal, community, societal). Examples include the 4-component Together for Life program conducted with police officers in Québec, Canada, and the 11-component U.S. Air Force Suicide Prevention Program.

Police departments nationwide are increasingly adopting practices aimed at promoting mental health and wellness and preventing suicide and related problems (e.g., EAP services, peer support, traumatic incident response).5,6 However, these practices vary dramatically across agencies.

#### **Knowledge Gaps**

No national surveillance system currently collects suiciderelated data specific to law enforcement, such as data on suicide deaths, attempts, and ideation. Although law enforcement agencies are increasingly incorporating programs and practices aimed at supporting mental health and wellness, few programs have formally evaluated the effectiveness of these efforts. In addition, not much is currently known about suicide prevention among particular subgroups of officers, such as women, racial and ethnic minorities, LGBTQ+ populations, military service members and veterans, and officers transitioning to retirement or to another career.

#### **Conclusions**

Law enforcement agencies should implement comprehensive suicide prevention programs that combine multiple strategies and practices addressing areas such as:

- Leadership and culture
- Access to culturally competent mental health services
- Peer support
- Suicide prevention training and awareness
- Event response
- Family support
- Limiting access to means of suicide
- Safe and effective messaging

Agencies should also develop or enhance their data collection systems, so that the data may be used to guide program planning, determine the effectiveness of suicide prevention efforts, identify lessons learned, and support continuous improvement.

# **PREVALENCE**

Since 2008, suicide has been the 10<sup>th</sup> leading cause of death in the United States.<sup>1, 9</sup> As suicide rates are often unreported or misreported due to various reasons, including stigma, legal issues, and limitations associated with death investigation systems, the number of actual deaths is likely to be higher.8 Recent studies have also found that the suicide rate has been increasing. From 1999 to 2016, suicide rates rose significantly in 44 states, with 25 states experiencing increases of more than 30 percent.<sup>10</sup>

Although women are more likely than men to attempt suicide, men are 3.5 times more likely to die by suicide than women.9 In part, this is because men are more likely than women to use firearms as their means of suicide. rather than poisoning or other lethal means of self-harm. Groups identified as being at an increased risk for suicide in the general U.S. population include:11

- American Indians and Alaska Natives
- Individuals who have attempted suicide
- Individuals with mental and/or substance use disorders
- Men in midlife and older men
- Members of the U.S. military and veterans
- Lesbian, gay, bisexual, transgender, queer, and other sexual minority (LGBTQ+) populations
- Individuals bereaved by suicide

The exact number of law enforcement officers who die by suicide each year is not known, as no national surveillance system currently collects this information. Estimates are available from two small non-profit organizations: Badge of Life and Blue H.E.L.P. However, these estimates are likely to represent an undercount, as they are derived from Internet searches and volunteer reports made by family members, friends, colleagues, and others. According to Blue H.E.L.P., 168 officers died by suicide in 2017, 172 in 2018, and 228 in 2019.7

Studies have also found that suicide rates are higher among law enforcement officers and others who work in public safety than among adults in other occupations.<sup>2,3</sup> For example, a study that compared suicide deaths among public safety occupations with those among the general U.S. working population found that suicide risk was particularly high among detectives, criminal investigators, and police officers.<sup>2</sup> Similarly, a study that examined suicide rates by 22 major occupational groups in 17 states using data from the 2015 National Violent Death Reporting System (NVDRS) found that these rates were higher among public safety occupations than among most other occupational groups.<sup>3</sup> This was true for both male and female officers. A similar study that analyzed 2016 NVDRS data from 32 states found that the suicide rate among females in public safety occupations (14.0 per 100,000) ranked second among all 22 occupation groups.<sup>12</sup> Among males, suicide rates in the public safety group (26.4 per 100,000) ranked eighth among all occupations. A recent Australian study that examined retrospective mortality data also found high suicide rates among emergency and protective services personnel.<sup>13</sup>

Although research suggests that suicide rates are higher among law enforcement officers than other groups, most law enforcement officers are working-age adult males—a group known to have high suicide rates.14 The extent to which increased suicide risk in this population is related to occupation, rather than other factors, is not known. 15 Law enforcement officers represent a subset of the population composed mainly of people identified as being physically and psychologically fit.16 As Ian Stanley and colleagues note, the hiring process for officers includes a pre-enlistment psychological evaluation that may screen out some individuals who may be experiencing major risk factors for suicide such as substance misuse or mental disorders.<sup>16</sup> Upon hiring, law enforcement officers may,

therefore, represent a group that is in better overall health than the general population. High suicide rates among officers suggest that exposure to risk factors post hiring may be playing a role in increasing suicide risk in this group.

Studies suggest that suicide rates may differ among police departments of different sizes. A study of 298 U.S. police departments found that suicide rates were significantly higher in smaller departments than in large ones.<sup>17</sup> The authors noted that possible reasons included lack of access to the more comprehensive mental health services that may be available at larger departments, and increased workload and community visibility.

Regarding other suicide-related outcomes, such as suicide ideation and attempts, a recent review found that although few studies measured these outcomes among law enforcement personnel, existing findings suggest that the prevalence of suicidal thoughts may be higher among law enforcement officers than in the general population.<sup>16</sup> In one study, conducted with 105 officers in an urban police department in the United States, approximately 24 percent of officers reported that they had ever thought about suicide.<sup>18</sup> In another study, conducted with 193 officers in a Midwestern state, almost 9 percent of officers reported having thoughts of suicide in the past two weeks.\*19 In comparison, estimates from the most recent National Survey on Drug Use and Health (NSDUH) indicate that, in 2017, 4.3 percent of adults reported serious thoughts of suicide in the past year.20 The review did not find any estimates of the prevalence of suicide attempts among officers.

<sup>\*</sup> Suicide ideation was measured with the "yes/no" question: "Have you ever thought about suicide?" adopted from a preliminary screening question on the Beck Suicide Ideation Scale. The question does not specify whether the person thought about his or her own suicide or someone else's suicide.

# RISK AND PROTECTIVE FACTORS

Suicide is a complex behavior influenced by risk and protective factors at multiple levels—i.e., individual, interpersonal, community, and societal. As members of U.S. society, law enforcement officers may experience many of the same risk and protective factors for suicide that affect other groups in the general population. In addition, the literature also identifies a number of relevant factors that are more unique to the law enforcement culture and environment.

## **Risk Factors**

Risk factors are characteristics that make it more likely that a person will think about suicide or engage in suicidal behaviors. Examples include:<sup>21, 22</sup>

- Previous suicide attempt
- Mental disorder (most commonly, mood disorder)
- Substance use disorder
- Access to lethal means
- Social isolation
- Chronic disease and disability
- A history of physical and/or sexual abuse
- Family history of suicide
- Exposure to traumatic events in adulthood

Also relevant are precipitating factors—stressful events that can trigger a suicidal crisis in a vulnerable person. Examples include relationship problems, recent interpersonal conflict, death of a loved one, and serious financial or legal difficulties.21, 22

Research identifies several risk factors for suicide as being particularly relevant to law enforcement officers. For example, a study that analyzed data from the Centers for Disease Control and Prevention (CDC) NVDRS identified the following variables as being closely associated with suicide among law enforcement officers, members of the U.S. Army, and firefighters:23

- Treatment for a mental health condition
- Post-Traumatic Stress Disorder (PTSD) diagnosis
- Alcohol and substance misuse
- Job problems
- Intimate partner problems

Among law enforcement officers, the association was particularly strong for job-related problems.

These and other risk factors identified in the literature are discussed next.

#### **Mental and Substance Use Disorders**

Mental disorders are among the strongest predictors of suicide attempts and deaths. A recent review estimated that a psychiatric disorder is present in 60 to 98 percent of deaths by suicide.<sup>24</sup> Some of the disorders linked to suicide ideation or behaviors include major depression, bipolar disorder, schizophrenia, and disorders that involve severe anxiety or agitation, such as PTSD.<sup>21, 25</sup> Substance misuse is second only to mental disorders as the most frequent risk factor for suicide in the general population. A review of 31 studies found evidence that alcohol use disorders significantly increased the risk of suicide ideation, attempts, and deaths.<sup>26</sup>

Research on suicide among officers suggests that drinking is an accepted bonding practice and coping strategy in the law enforcement culture, with alcohol use being common.<sup>14</sup> In a study conducted with 1,328 full-time officers in Mississippi, the most common reasons for drinking alcohol were "to celebrate and enjoy the taste," followed by "relaxing after a shift and relieving tension."27 The respondents who were most at risk for drinking problems identified "fitting in with the group" as the top rated reason for drinking.

#### **Access to Lethal Means**

Access to lethal means of self-harm, including workrelated access, is an established risk for suicide.<sup>28</sup> This risk factor is particularly relevant to law enforcement officers, who use firearms as part of their daily work, are trained on their use, and generally take their work-issued firearms home with them.5 While about half of suicides in the general population involve firearms,<sup>29</sup> research suggests that more than 80 percent of suicide deaths among law enforcement officers involve firearms-in most cases, the officer's own weapon.30

## Stressors Related to Law **Enforcement Profession**

The literature also identifies a number of stressors related to the law enforcement profession as potentially contributing to suicide risk. For example, in a study that examined sources of stress among police officers, the top concerns identified by officers involved performing dayto-day enforcement activities that put them in potentially unsafe situations, as well as responding to less frequent but more traumatic events.31

**Exposure to Traumatic Events.** Exposure to traumatic events is associated with an increased risk for suicide.<sup>21</sup> This risk factor is particularly relevant to law enforcement officers and others in protective services occupations, who are more likely than people in most other professions to be exposed to critical and traumatic incidents in their daily work, such as motor vehicle crashes, child abuse, or the violent death of a victim or coworker. In a survey with 193 officers from small to midsize departments, officers typically witnessed 188 such incidents during their careers.32

Research suggests that exposure to traumatic events may increase the risk of PTSD among law enforcement officers. The acute stress caused by these events can produce psychological and physiological reactions that may overcome a normal person's ability to cope. The constant exposure to human suffering and death can take its toll on officers, leading to a pessimistic view of life and hypervigilance.<sup>33</sup> Exposure to traumatic events has also been linked to other negative consequences among officers, including poor sleep quality, higher levels of depression and anxiety, and an increased risk for PTSD, substance misuse, and suicidal ideation.<sup>30, 33</sup> In a recent survey of 15 police departments in the state of Virginia, exposure to work-related trauma was linked to recent suicidal thoughts, particularly among respondents reporting multiple exposures to trauma.34

A study by John Violanti found that some types of traumatic exposures increase police officer risk of developing PTSD symptoms, which subsequently increase the risk of high alcohol use and suicide ideation.35 A survey of 750 U.S. police officers found that exposure to critical incidents was associated with PTSD symptoms and alcohol use.<sup>36</sup> Research also suggests that police officers have much higher rates of PTSD than the general population.<sup>37-39</sup> Among police officers, PTSD has been found to be associated with substance-related and addictive disorders, including alcohol use disorder.<sup>40</sup>

**Exposure to Suicide.** Studies suggest that exposure to suicide increases the risk for subsequent suicidal thoughts and behavior. 41-43 Law enforcement officers may see suicide up close as they may be the first on the scene as well as responsible for notifying family members. This job-related exposure to suicide has been found to impact officers' emotional and psychological well-being44 and to be associated with PTSD symptoms and persistent thoughts of a suicide scene.45

Shift Work. Another important stressor identified in the literature is shift work, which has been found to be associated with suicide ideation, particularly among officers who may already have other risk factors for suicide, such as symptoms of depression or PTSD.<sup>46</sup> Rotating shifts can also lead to inadequate sleep, which can make it harder for officers to cope with stress. Among Swiss police officers, shift work has been associated with sleep complaints, work discontent, and increased social stress.<sup>47</sup> Researchers also note that sleep deprivation and fatigue resulting from shift work may negatively affect thinking and decision-making, thereby increasing suicide risk.<sup>30</sup> Other related stressors include irregular work hours and mandatory overtime.

Social Isolation. Unpredictable schedules can limit time available for maintaining relationships with friends and family, which can contribute to social isolation. Being assigned to work on holidays and during special family (e.g., birthdays, anniversaries) and/or social occasions can make it difficult for officers to develop social relationships outside of the work environment. Research suggests that other aspects of police culture may also contribute to social isolation, such as socialization practices that promote internal solidarity but can also lead officers to mistrust outsiders, creating an "us versus them" mentality.<sup>48</sup> Violanti and colleagues note that low social integration into society may make it difficult for police officers to develop an outside network of social support that can help them during psychological crises.<sup>48</sup>

Relationship, Financial, and/or Legal Problems. Personal stressors, such as relationship problems, have been linked to serious thoughts of suicide among police officers.<sup>49</sup> In many cases, these stressors are attributed to work-related factors. For example, interviews with 110 officers found that, when asked about personal stressors, officers often referred to family problems that were either caused by the job directly or linked to the job, such as alcohol use, divorce, financial strain, unpredictable childcare needs, and inability to socialize.<sup>31</sup> Other researchers note that long hours at work and having to work during holidays and family events can contribute to or exacerbate domestic problems, placing an added stress on family relationships.33 Unaddressed work-related stress and frustrations may also spill over to the home environment,

taking a toll on officers' marriages or relationships with their significant others. Other personal stressors related to work include legal problems, such as being under criminal or administrative investigation.

Social-Political Context of Policing. Relationships with the public and the community can also be a source of stress, particularly when officers feel that their efforts are not appreciated. Research suggests that public confidence in the police has decreased in recent years due to racial tensions over the use of force.<sup>31</sup> In a recent survey conducted by the Pew Research Center, officers reported that these high profile incidents have made policing more challenging and are leading to tense interactions with African American communities.<sup>50</sup> The report also notes that the number of fatal attacks on officers has increased. As a result, more than 9 in 10 officers (93 percent) report worrying more about their personal safety than in the past.

Constant scrutiny from the media, particularly in the context of a 24-hour news cycle, is yet another source of stress.31 The increased use of social media, combined with personal videotaping, allows police actions to be presented out of context and become viral stories. Other emerging sources of stress identified by officers include cybercrime, terrorism, active shooters, drug epidemics, and responding to community members who have a mental illness.31

## Stressors Related to **Organizational Functioning**

Factors related to how the work environment is organized and functions (also referred to as "job context") may also increase stress among law enforcement officers. Researchers have noted that police departments have traditionally been hierarchical organizations that feature a rigid structure and authoritarian leadership.<sup>51</sup> Excessive formality and rigid organizational structures can limit autonomy and create stress.<sup>30</sup> Other related stressors identified in the literature include poor leadership practices, lack of support from supervisors, few opportunities for advancement, poor working conditions, arbitrary rules and regulations, and constantly changing agendas that are poorly communicated.<sup>23, 30</sup> Among female officers, lack of support from supervisors has been identified as a common organizational stressor.<sup>52</sup> Other related stressors identified in the literature include paperwork requirements,<sup>31</sup> court appearances, and the need to work a second job—all of which can take time away from officers' time off duty.52

## **Protective Factors**

The literature also identifies several factors as protecting individuals from suicidal thoughts and behaviors. These protective factors are not just opposite of or the absence of risk factors, but conditions that promote strength and resilience and ensure that vulnerable individuals are supported and connected with others during difficult times, thereby making suicidal behaviors less likely. In the general population, these factors include:21,22

- Reasons for living (e.g., responsibility for young children, future goals)
- Being married
- Extraversion and optimism
- Cultural, religious, or personal beliefs that discourage suicide
- Life skills (including problem solving and coping skills)
- Having a supportive social network
- Access to mental health care

The following are protective factors identified in the literature as being particularly relevant to law enforcement officers.

#### Resilience

Resilience—a concept applied across health topics, such as violence, trauma, substance misuse, and suicide—can be defined as "the capacity and dynamic process of adaptively overcoming stress and adversity while maintaining normal psychological and physical functioning"(p. 3).53 In the context of law enforcement, resilience can be viewed as the ability to adapt to and overcome the effects of the stress and trauma associated with police work. Resilience-building programs developed specifically for people in stress-related professions can address multiple areas, including the development of an internal locus of control, self-awareness, self-efficacy, fear response, emotion regulation, and problem solving.

Although more research is needed on the role of resilience in reducing suicide risk,<sup>54</sup> a longitudinal study with 178 Iraq and Afghanistan war veterans found that resilience at baseline predicted lower suicidality at three-year follow-up.55 While members of the military service differ from police officers in many ways, both groups may be exposed to high occupational stress. Resilience building programs may be useful in mitigating the impact of these exposures.

Coping Skills. An area of skill development particularly relevant to law enforcement is the development of skills for coping with stress and trauma in positive ways. Research suggests that the use of unhealthy coping methods—such as alcohol and other drug use, or aggressive behavior—is common in law enforcement culture and can lead to negative physical and psychological outcomes.<sup>56</sup> Coping skills can buffer the negative effects of stress on psychological well-being and help officers adjust to negative emotional situations. An active coping style—as opposed to a passive style based on avoidance, denial, self-blame, and distancing-may be particularly helpful.30,56 This style involves having the ability to identify specific sources of stress and develop a plan for reducing stress and working towards resolving the issue. Use of an active coping style has been found to reduce the risk for suicidal behavior among officers.<sup>57</sup>

## Family Support

Family relationships are known to protect individuals from suicide. A study that examined suicide mortality in the United States by marital status and other characteristics found that having a larger family was associated with a lower risk of suicide among both men and women.<sup>58</sup> Being divorced or separated, widowed, or never married was associated with increased risk among men only. In another U.S. study, marital discord was associated with increased suicide ideation and attempts.59 In a national survey of Canadian public safety personnel, participants who were in married or in common-law relationships were less likely to report suicidal behaviors than participants who reported being single or separated, divorced, or widowed.<sup>60</sup> The authors note that providing social support that can help sustain healthy family relationships may be important in increasing resilience.

## **Organizational Support**

As noted, research has found that law enforcement officers are often exposed to traumatic events as a part of their work, and that this exposure can increase the risk for suicide and other problems. Violanti and colleagues note that increased organizational support, including organizational networks, can help officers cope with stressful events in positive ways.<sup>56</sup>

Fairness. Procedural fairness—or the belief that departmental policies are applied fairly and based on facts, and that workers are treated with dignity and respect—is identified in the literature as an organizational factor that can contribute to officer well-being. A study conducted with patrol officers and sergeants in a large urban police force found that officers who worked in departments perceived as being more procedurally fair were less likely to experience psychological and

emotional distress or to be cynical and mistrustful about the communities they served. 61 Results suggested that increasing procedural justice within police departments may improve officer well-being, performance, and relationship with communities.

**Control Over Work Schedules.** Police organizations can help alleviate stressors related to shift work and irregular hours by exploring changes in work schedules (e.g., work shifts of different lengths). More flexible work schedules have been found to improve officers' ability to integrate work into their daily lives, promote better sleep, and increase overall job satisfaction, a protective factor for suicide ideation.30

Mental Health and Wellness Services. As noted, mental and substance use disorders are strong risk factors for suicide. Moreover, the stigma associated with mental illness is a known barrier to help-seeking among officers. As a result, increased access to quality mental health and wellness services delivered by culturally competent providers is fundamental to preventing suicide and supporting officer well-being and performance. Specific approaches to the provision of these services are discussed later in this paper, under Suicide Prevention Strategies and Best Practices.

Support for Positive Social Connections. Positive relationships with peers, and organizational support for these social connections, have been linked with lower stress and better coping among officers. As discussed later in this brief, police departments can play a key role in supporting the development of these connections by providing peer support programs.

# **CHALLENGES TO SUICIDE PREVENTION**

# **Cultural Barriers to Help-Seeking**

The literature identifies both professional norms and gender-related cultural norms as barriers to help-seeking among law enforcement officers.

## Norms Associated with Masculinity

Men make up the majority of law enforcement officers in the United States. According to the Federal Bureau of Investigation, in 2018, 87.4 percent of U.S. officers were male.<sup>62</sup> The literature notes that some of the norms associated with masculinity can present a barrier to seeking help for mental health problems. As noted in a recent review, traditional masculine gender roles emphasize self-reliance, invulnerability, and stoicism.63 Because negative emotions are perceived as a sign of weakness, men may be reluctant to share information about mental health issues with others. They are also more likely than women to cope with mental health problems by self-medicating with alcohol and drugs rather than seeking care.63

#### Law Enforcement Culture

The law enforcement profession emphasizes some of the same norms as traditional masculinity, including strength, self-reliance, and infallibility. Police officers are trained to see themselves as problem solvers, not people with problems.64

Seeking treatment for mental health problems runs contrary to police socialization training.<sup>30</sup> This training tends to instill in officers "a sense of superhuman emotional and survival strength to deal with adversity"65 (p. 59). Admitting that one needs help may run contrary to police culture and to the idea of what a successful police officer should be like. As noted by Stephen Wester and colleagues, "many of the tasks associated with seeking help from a mental health professional, such as relying on others, admitting a need for assistance, or recognizing and labeling an emotional problem, run contrary to those characteristics which make a successful police officer while also conflicting with their socialized gender role expectations" (p. 288).66

Research suggests that the societal stigma associated with mental illness and help-seeking may be particularly strong in law enforcement. 30, 67 Police officers rarely seek help from psychologists or psychiatrists, even when they have serious thoughts of suicide.<sup>30</sup> In the Georgia survey discussed earlier, almost three-fourths (74.5 percent) reported having ever experienced a traumatic event, and yet less than half had told their agency about it.68 Moreover, more than half indicated that if in a crisis, they would seek help outside of their agency, rather than from internal sources. In another recent study, officers reported being hesitant to ask for help with mental health problems and suicide ideation because they feared they would be perceived as weak, stigmatized, ignored by their department, ridiculed, or forced to face job-related consequences.6

Fear of consequences—including concerns about duty status changes and career implications—is identified in the literature as a critical barrier to help-seeking. These perceived consequences include stigmatization, possible negative job outcomes (e.g., modified assignment, loss of firearm, loss of opportunity for promotion), and perceived weakness.<sup>69</sup> Unclear confidentiality laws and policies, or lack of information about these policies may also prevent officers from seeking help.

# Lack of Training in **Suicide Prevention**

Although officers are routinely trained on ways to ensure the physical safety of their coworkers, they may not always receive similar training on how to identify or effectively respond to emotional trauma, mental illness, or suicidal behavior among colleagues. As a result, officers may lack access to mental health support and suicide awareness and prevention resources and may not always know where to turn before a crisis occurs.

# **Department-Level Challenges**

Some police departments may lack the capacity to provide the necessary and confidential mental wellness training and care. Law enforcement agencies are not a single employer that can provide large-scale centralized services for both active duty and retired officers. As a result, the type and quality of mental health services varies across agencies.5

Some departments may lack resources to focus on suicide prevention, particularly in the context of limited overall funding for providing core services. Data from the U.S. Department of Justice shows that from 1997 to 2016, the number of full-time sworn officers in general-purpose law enforcement agencies increased by about 52,000 (up 8 percent) to 701,000 officers.<sup>70</sup> During that same time period, the total U.S. population increased by 21 percent, leading to an 11 percent decrease in full-time sworn officers per 1,000 residents-from 2.42 in 1997 to 2.17 in 2016. In a recent survey of law enforcement officers, 86 percent of respondents indicated that their department did not have enough officers to adequately serve the community.50 Among larger agencies (with 1,000 or more officers), this number increased to 95 percent. An increased demand for services, combined with decreased resources, may make it more difficult for law enforcement agencies to focus on mental wellness and suicide prevention.

# SUICIDE PREVENTION STRATEGIES AND BEST PRACTICES

This section presents strategies and practices identified in the literature as having evidence of effectiveness in preventing suicide. The list of strategies and practices is not exhaustive and does not represent an endorsement of specific programs. We encourage the reader to research other approaches not outlined in this brief.

# **Comprehensive Approaches**

Systematic reviews identify a number of individual strategies as being effective in preventing suicide in the general population, such as providing education and training, reducing access to lethal means among people at risk, and increasing access to evidence-based care for suicide risk.70,72 Overall, this body of knowledge also suggests that suicide prevention efforts are more likely to succeed when they use a comprehensive approach that combines prevention strategies addressing risk and protective factors at multiple levels.<sup>11</sup>

## **U.S. Air Force Suicide Prevention Program**

Started in 1996, the U.S. Air Force Suicide Prevention Program (AFSPP) is a well-known example of a successful comprehensive suicide prevention program. Developed in response to an increase in suicide rates in the U.S. Air Force, the program combined 11 strategies aimed at strengthening social support, promoting the development of coping skills, and changing policies and norms to encourage help-seeking behaviors:73,74

- Leadership involvement
- 2. Addressing suicide prevention through professional military education
- 3. Guidelines for commanders on use of mental health services
- 4. Community preventive services
- 5. Community education and training
- 6. Investigative interview policy (which addresses the period following an arrest or investigative review, a time of increased suicide risk)
- 7. Trauma stress response (originally critical incident stress management)

- 8. Integrated Delivery System (IDS) and Community Action Information Board (CAIB), which provide a forum for the review and resolution of issues that impact individual and family readiness
- 9. Limited Privilege Suicide Prevention Program, which ensures that patients at risk for suicide are afforded increased confidentiality when seen by mental health providers
- 10. IDS Consultation Assessment Tool (originally the Behavioral Health Survey)
- 11. Suicide Event Surveillance System

Program evaluation suggested that the program reduced the risk of suicide among Air Force personnel by onethird.<sup>73</sup> Program participation was also linked to decreases in homicide, family violence (including severe family violence), and accidental death—other adverse outcomes that share risk factors with suicide.

#### **Zero Suicide Framework**

The Zero Suicide framework is another example of a comprehensive approach to suicide prevention that is particularly well suited to closed settings—in this case, health and health care systems. The model applies a quality improvement and safety framework to suicide care throughout the health system. It supports the adoption of "zero suicides" among patients as an organizing, aspirational, goal for health care systems and seeks to transform suicide care through changes in leadership, policies, practices, and outcome measurement.

#### The Zero Suicide framework combines seven strategies:

- Leading system-wide culture change committed to reducing suicides
- 2. Training the workforce
- 3. Identifying individuals at risk
- 4. Engaging individuals with or at risk
- 5. Treating suicidal thoughts and behaviors using evidence-based treatments and interventions
- 6. Transitioning individuals at risk safely through and out of care
- Improving policies and procedures through continuous quality improvement

## Together for Life Program, Montreal, Québec

An effective multicomponent suicide program conducted specifically for law enforcement officers is Together for Life (in French, "Ensemble pour la vie"), an initiative implemented in Montreal, Québec. Started in 1996, the program sought to prevent suicide among members of the Montreal Police Force, All 4.178 members of the Montreal police participated in the program, which combined four main suicide prevention strategies:

- Training of all police personnel on the nature of suicide, identification of suicide risk, and how to help a colleague in difficulty
- A new telephone helpline for officers, which asked callers to leave a message with their contact information so they could be called back by police volunteers trained in suicide prevention with complete discretion
- A full-day training session for supervisors and union representatives, conducted by psychologists, which focused on improving the ability to identify officers at risk of suicide and how to provide help
- 4. A publicity campaign to raise awareness of suicide prevention, which included articles in internal police newspapers, posters, and a brochure

In the 10 years before the program was started, from 1986 to 1996, the mean suicide rate among Québec police had been 30.5 per 100,000 people per year, a rate comparable to rates among groups of similar race and age in the general population. In the 12 years after the program began in Montreal, from 1997 to 2008, the suicide rate among officers decreased by 79 percent (to 6.4 per 100,000).75 During this same period, suicide rates among police officers elsewhere in the Province of Québec remained unchanged.

Factors identified as critical to program success included the fact that the suicide prevention training was provided by the Police Counseling Service, which are held in high regard by Québec police and were perceived as speaking the language of the police environment. The authors also note that another element critical to success was that the program was multi-level in nature, affecting all levels of the police environment. In this type of closed environment, the program may have helped change overall perspectives regarding suicide and awareness of sources of help. They also note that "part of the emphasis of the training was that a suicide is not an event affecting only the suicidal individual, but also involves and profoundly affects the entire community. One of the effects of this program was that suicidal behavior is seen as less acceptable because of its implications for the rest of the force" (p. 7).75

# **Individual Strategies** and Practices

Two recent studies identify suicide prevention strategies and practices currently being used by police departments in the United States. The first, by Rajeev Ramchand et al., interviewed 110 U.S. law enforcement agencies from across the country.5 The second, by Megan Thoen et al., collected data from a sample of 55 city police departments and sheriff's offices nationwide, and also conducted online surveys with 144 officers.<sup>6</sup> Findings suggest that most U.S. law enforcement agencies are concerned with officer wellness and suicide prevention and integrate them into their work. However, the type and number of services offered vary considerably across agencies. These and other individual practices identified in the literature are discussed next.

#### Mental Health and Wellness Services

Employee Assistance Programs (EAPs). In many agencies, mental health services are provided mainly by EAP or an employer-sponsored health insurance.<sup>5, 6</sup> Widely used across different industries and professions, EAPs provide counseling to employees on personal, family, or

work-related matters. However, drawbacks noted in the literature include the fact that these services may not be located where the officer is, be available 24 hours a day, or staffed by people with direct law enforcement experience.<sup>76</sup> Officers may be reluctant to provide accurate assessments of mental health symptoms if they believe the information may not be kept confidential or could affect their employment in a negative way.<sup>5</sup> In addition, Ramchand et al. (2019) also note that EAPs may use different models, and assessment of their effectiveness is limited.

Contracting with Community-Based Providers. Research suggests that some smaller agencies contract directly with one or more community-based mental health care providers as a resource available to staff. In some cases, the contracted provider is also responsible for making return-to-duty determinations.5

Embedded Chaplains. Chaplaincy programs are an important piece of wellness support. Some agencies rely on chaplains that are affiliated with the agency and often embedded within it. In most cases, the chaplains come from a variety of faith backgrounds and provide their services as volunteers. The chaplains often conduct ridealong with officers to get to know them, help respond to critical incidents, and oversee death notifications. Clear confidentiality rules are important to the success of this practice.

In-House Mental Health Care. Fewer agencies offer inhouse, free mental health counseling by licensed mental health care providers in addition to EAP services.<sup>5</sup> This is more common in agencies with more than 1,000 sworn officers. In some agencies, the service provided is an internal EAP in which mental health professionals (typically licensed social workers or psychologists) are employed to offer short-term counseling or referrals. At other agencies, mental health professionals are available to offer long-term mental health treatment.

Experts emphasize the importance of ensuring that mental health care is evidence-based and provided by professionals who have specialized competency in working with law enforcement personnel.5 Offering in-house behavioral health care can increase provider awareness of the unique experiences of law enforcement. Another approach is the provision of services by licensed physicians who are also sworn reserve officers.<sup>76</sup> This approach can increase provider understanding of the culture and climate of the department, while also allowing providers to get to know the officers they serve. Ramchand and colleagues note that mental health care providers should ideally be assigned to either offer counseling or conduct return-to-duty investigations, but not both duties, which could present a barrier to help-seeking.<sup>5</sup>

#### Special Programs to Address Substance Misuse.

Some of the larger agencies surveyed by Ramchand and colleagues reported offering specific programs to address substance misuse among officers. 5 Examples included offering direct linkages to regional outpatient and inpatient substance use services covered by the agency's insurance plan, and/or offering closed Alcoholics Anonymous meetings.

Routine Mental Health Checks. Another approach discussed in the literature is the conduct of an annual mental health check. Although this approach could potentially support the early detection of mental health issues and reduce stigma associated with help-seeking, more research is needed on the effectiveness of this practice and the best way to implement this approach (i.e., voluntary or mandatory; frequency, individual or group environment; by clinicians, peers, or supervisors).76

Wellness Services and Programs. Wellness services and programs have become more common among agencies but can vary tremendously in scope and content. Some of the larger agencies report having entire units dedicated to the health and wellness of officers and their family members.<sup>5</sup> In the Ramchand et al. 2019 study, an agency of nearly 3,000 officers had a six-member mental health unit that was primarily responsible for responding to mental health-related calls. This was in addition to the agency's in-house mental health services, volunteer-run peer support, and family assistance programs. In response to an increase in mandatory overtime, one agency reported having instituted a "restorative sleep policy" that created sleep rooms and encouraged officers to take naps during their lunch breaks. Other programs were smaller in scale. Three programs mainly disseminated messages related to health and wellness. Another program, conducted by an agency of 60 officers, focused on increasing participation in the agency's peer support team, providing training to officers and their families, and identifying appropriate specialists in the county's contracted EAP to work with officers.

# **Training Programs**

Mental Health and Suicide Prevention. Most police agencies report that they provide some type of training related to mental health and suicide prevention.5 Relevant topics include critical incident response, stress reduction, and wellness. Studies suggest that these types of programs are well-received and are linked to improvements in knowledge, attitudes, confidence.<sup>76</sup> As discussed earlier, this type of training was one of four components of the Québec program that showed evidence of effectiveness in reducing suicide rates.75

Resilience Training. Resilience training programs have been shown to increase confidence in handling stressful situations, reinforcing coping skills, and teaching officers to remain calm when faced with unknown events.<sup>78</sup> These programs allow officers to be better prepared for critical incidents by building stress reduction techniques that law enforcement can use during an event to respond more effectively and more safely. They can also promote healthy habits that police work can interfere with, such as exercising regularly, eating and sleeping well, and socializing with family and friends.

Best practices for using police training programs as a tool to develop resilience and improve health outcomes are discussed in a 2014 paper by Konstantinos Papazoglou and Judith Andersen.<sup>79</sup> The authors suggest that training curricula should incorporate mental and physical health effects of exposure to critical incidents, normal responses to trauma, and the value of peer support and other programs that can be used independently or together with formal treatment programs. They also recommend that training programs incorporate relaxation techniques and a mind-body approach to resilience training (e.g., yoga, tai chi, and mindfulness training).

Mindfulness Training. Violanti and colleagues identify mindfulness training—an approach that helps individuals bring their attention on experiences occurring in the present moment without judgment—as a new intervention that may be useful in police work.14 Benefits can include stress management and improved ability to cope with trauma and crisis. Findings from a recent review suggest that, among people at a high risk for suicide, mindfulnessbased interventions may be effective in improving attentional control, problem solving, and response to stress.80 Although few studies have focused specifically on law enforcement officers, findings are promising. In a recent study, a mindfulness-based intervention designed to address police stress was found to increase resilience and reduce stress, burnout, anger, fatigue, and sleep disturbance.81 Another study conducted with police officers found that a mindfulness-based intervention reduced psychological strain, health complaints, and negative affect; and also improved mindfulness and self-care.82

## **Identifying Persons at Risk**

Identifying individuals who may be at an increased risk for suicide and connecting them with sources of help is a well-established strategy for preventing suicide. However, doing so in a workplace setting—particularly in law enforcement—can be challenging due to the barriers to help-seeking noted earlier. Policies on how to identify officers at risk must ensure that the information is confidential and is not used in ways that will affect officers' employment.

Gatekeeper Training. Gatekeepers are individuals in one's community who can informally identify persons at risk and connect them to sources of support. In law enforcement, peers and chaplains often fulfill this role. In order to do so effectively, gatekeepers must be trained on how to identify and effectively respond to suicide risk. A recent review of gatekeeper training for suicide prevention in the U.S. military found evidence that these programs can improve knowledge, attitudes and beliefs, and self-efficacy.83 Similarly, a study conducted with police officers in three European regions found that a four-hour gatekeeper training session improved officer knowledge, attitudes, and confidence in dealing with depression and suicidal behaviors.84

Formal Screening Programs. Another approach to screening focuses on reviewing administrative data to identify officers at risk.5 In the recent survey conducted by Ramchand et al., six agencies reported having an established procedure for proactively identifying officers at increased risk for suicide and other adverse outcomes (e.g., excessive use of force). In most cases, the agencies had monitoring systems in place that alerted agency leaders when an officer reached a threshold of indicators. However, the effectiveness of this approach is not yet known.5

## **Peer Support**

Peer support is one of the oldest and most common practices used by police departments.<sup>5</sup> At first used primarily to help officers exposed to shootings and other critical incidents, peer support and mentoring programs can also help officers respond to personal stressors, such as a divorce, a death in the family, or an illness; facilitate the transition to retirement; and enhance overall health and wellness.14,76 Large agencies are more likely to offer peer support programs than small or medium ones, and the type and extent of support can vary substantially across agencies.6

In some cases, the program is overseen by an agency psychologist or other mental health professional; in others, by agency leadership. A recent report to Congress recommended that peer support programs:76

- Be led by officers whom people in the organization trust and admire, working in consultation with professional mental health specialists
- Be perceived as being independent of management
- Provide ongoing and continued training and oversight of peer mentors
- Have clear confidentiality rules

Agencies unable to support an in-house program can consider alternative models, such as regional or statewide collaborations that use volunteers from multiple departments or networks of retirees, and rank-and-file organizations and labor unions. Smaller agencies may also form strategic partnerships with local first responder agencies to offer joint services, or join with neighboring law enforcement agencies that offer a peer support program, or develop partnerships with community-based organizations that do so.5

## **Family Support**

Providing support to families is another strategy for supporting the overall health and wellness of law enforcement officers. These efforts can help officers maintain healthy relationships with their spouses or partners and provide social support systems for officers who are not in a relationship. In addition, family-centered programs can also alert family members to the warning signs of depression, substance misuse, PTSD, and suicide, so that families can identify signs of trouble and connect officers to sources of support.

Family support is still a relatively new approach among law enforcement agencies, with most existing programs focusing primarily on providing support to survivors of officers who have died in the line of duty.76 However, information on approaches for supporting families may be available from the U.S. military, which has long endorsed the concept of family readiness.85 DoD has developed extensive programs to assist families. These programs are built on the premise that ensuring that family members are supported will give service members peace of mind so they can perform their duties, particularly during deployment. The programs seek to enhance family resilience and connection to the broader support community.

#### **Crisis Lines**

Crisis lines play a key role in supporting individuals during a suicidal crisis and connecting them with services. Examples include the National Suicide Prevention Lifeline, the Crisis Text Line, the Veterans Crisis Line, and the Military Crisis Line, a resource offered jointly by the DoD and the U.S. Department of Veteran Affairs. Although it is difficult to measure the effectiveness of crisis lines because the calls are anonymous and often consist of a single session, research suggests that crisis lines can reduce distress among suicidal and non-suicidal callers.85,87 Most recently, a study conducted in the United Kingdom found that a telephone crisis line was effective in reducing suicidal ideation among callers.88

Several publicly available crisis lines staffed by law enforcement officers are currently operational, including Cop2Cop, Copline, and Safe Call Now.<sup>76</sup> Launched in 1998 by the State of New Jersey Department of Human Services Division of Mental Health and Rutgers University, the Cop2Cop hotline is staffed by retired officers, and available to officers and their families. The program has been expanded to include all first responders. A nonprofit organization, Copline, was started in 2006 as a way to make the Cop2Cop approach national. It is operational 24/7, and also staffed by retired law enforcement personnel. Established in 2009, Safe Call Now is another non-profit organization that provides a confidential 24-hours crisis referral service for police officers and other public safety personnel and their families nationwide.

## **Limiting Access to Lethal Means**

Although limiting access to lethal means is an effective strategy for suicide prevention,89 implementing this approach in a law enforcement context can also be challenging. When asked about restricting access to lethal means, agencies reported providing annual training to officers on proper use and storage of firearms, rather than temporarily transferring the firearms to someone legally authorized to receive them.5

The DoD has protocols in place that allow leaders to arrange for military and civilian-issued weapons to be sequestered in armories for individuals under treatment for behavioral health conditions, or for any person who is showing behaviors of concern.90 However, any effort to restrict access to lethal means among officers should consider potential negative consequences, including psychological distress. Removing an officer's firearm should be a temporary measure and should not represent the end of one's career.

# **Event Response Protocols**

The recent study by Ramchand and colleagues (2019) found that many police departments have policies, procedures, and/or teams mobilized to respond to critical incidents. A related area that is particularly relevant to suicide prevention is postvention, or the response to the aftermath of a suicide death. All of these event response efforts should be trauma informed—that is, be based on an understanding of trauma and its far-reaching implications.

Traumatic Incident Response. This strategy involves having policies, procedures, and/or teams in place that can mobilize in response to a traumatic incident, such as an officer-involved shooting or a fatal car crash involving a child. Traumatic response protocols are often led by a contracted mental health professional, EAP

provider, chaplain, or a senior-ranking officer. One of the elements of traumatic incident response is a mandatory psychological debriefing following a traumatic incident to process the event and reflect on its impact. Although this is considered a best practice in law enforcement, police departments may use different approaches, in terms of who should attend, how long it should last, what it entails, and whether or not mental health professionals are included.31

Postvention. Postvention, or the organized response to the aftermath of a suicide, is also an important strategy for suicide prevention. As noted, exposure to suicide has been found to increase suicide risk, and also has been found to increase the risk for related problems, such as complicated grief, major depression, and PTSD. This exposure also increases the risk for contagion—an increase in suicides that can be linked to a suicide-promoting influence, such as the suicide death of someone close or of a media personality.91

To prevent and address these problems, postvention efforts should provide support to all survivors of a suicide loss, including family members, friends, and colleagues, to help them process the loss into their lives.

Components of postvention include:92

- Protocols for reporting the death
- Funeral protocols for officers who die by suicide
- Agency-held psychological debriefings, information sessions by mental health professionals, and plans for preventing future suicides
- Support to bereaved family members

Relevant examples include a suicide postvention protocol developed for the fire service,93 and postvention recommendations for the U.S. military, developed in response to findings from a survey of suicide loss survivors.94

## **Messaging About Suicide**

Another key element of suicide prevention is ensuring that messages related to suicide and mental wellness are conveyed in ways that support safety, help-seeking, and healing. Studies suggest that the way we communicate about suicide and mental wellness can contribute to positive (e.g., help-seeking) or negative outcomes, such as increased suicide risk and contagion.95,96 A recent spike in suicide deaths among police officers in New York City from an average of five deaths per year to 10 deaths by mid-October of 2019—has called attention to the risk for possible suicide contagion among officers.97

Suicide prevention efforts should ensure that all communication about suicide adheres to established guidelines regarding messaging. Resources available online include recommendations for reporting on suicide (https://reportingonsuicide.org) and the framework for appropriate messaging about suicide-related content (https://suicidepreventionmessaging.org) developed by the National Action Alliance for Suicide Prevention.

# **KNOWLEDGE GAPS**

The literature identifies a number of remaining knowledge gaps regarding suicide prevention among law enforcement officers.

## Suicide-Related Data

One of the major knowledge gaps identified in the literature is the lack of suicide-related data, including data on suicide deaths, attempts, and ideation, as well as on risk and protective factors, and other relevant variables. As noted, no national system currently collects information on suicide deaths among law enforcement officers in the United States. Although some estimates of police officer suicides are available from non-profit organizations, the data is based on voluntary reports, social media, personal communications, and monitoring of the news.

The Federal Bureau of Investigation (FBI) currently tracks line-of-duty deaths among law enforcement officers through its Law Enforcement Officer Killed and Assaulted report. Congress is currently discussing legislation, introduced in July 2019, that would require the FBI to also collect data on suicide deaths and attempts among current and former officers. The Law Enforcement Suicide Data Collection Act would establish a Law Enforcement Officers Suicide Data Collection Program that would collect this data at local, state, and federal levels.98 The legislation would require the FBI to submit a report to Congress each year and publish the report on its website. An existing surveillance system that could inform the development of this suicide surveillance effort is the Department of Defense Suicide Event Report, which collects and provides similar information regarding military personnel.

# **Effectiveness of Strategies** and Practices

Another critical gap in knowledge concerns the effectiveness of particular strategies and practices for preventing suicide among law enforcement officers. Although a recent review found 44 articles published from 1997 to 2016, many of these papers were case studies, case series, surveys, literature reviews, and summaries of expert opinion, rather than experiments assessing the effectiveness of particular prevention strategies or programs.14

A recent review that focused on emergency and protective services employees (i.e., military personnel, police personnel, and firefighters) found only 13 studies that met review criteria.99 Three of the included studies focused on law enforcement officers: the Québec program described earlier,75 the U.S.-based Badge of Life Psychological Survival for Police Officers program (not formally evaluated),100 and a five-month program conducted in South Africa.<sup>101</sup> Based on a meta-analysis of six studies that provided quantitative data on suicide deaths, the review concluded that, on average, the programs were associated with an almost 50 percent reduction in suicide rates over five years. However, the authors note that study quality was poor and none of the included studies provided data on other suicide-related outcomes, such as attempts and ideation. The review concluded that "given the limited number of eligible programs identified, and the relative lack of data on longterm outcomes following the implementation of these programs, there is currently a lack of firm evidence on which to ground occupational policy with respect to the prevention of suicide in these occupational groups" (p. 405).99

As noted, recent studies indicate that law enforcement agencies are adopting a wide range of wellness and mental health practices but that these efforts are often not formally evaluated.<sup>5, 6</sup> Barriers to evaluation include lack of funding and evaluation expertise, challenges involved in designing a formal evaluation that can detect changes in suicide-related outcomes, and ethical concerns associated with addressing a sensitive topic. Most of the existing evidence comes from studies that conducted retrospective analyses of existing data.16

Experts note that more research is needed to understand:5,14

The effectiveness and cost of individual suicide prevention strategies and practices, such as peer support, regular mental health checks, use of EAPs for suicide prevention, and providing inhouse versus external mental health services

- How to best implement each practice—e.g., essential elements, lessons learned—and whether the increased intensity of services and/or combination of strategies are associated with improved outcomes related to mental health and suicide prevention
- How to adapt suicide prevention strategies and programs that have been shown to be effective in the general population or among similar groups to best meet the needs of law enforcement officers

# **Suicide Prevention Among Subgroups**

Research suggests that more research is needed regarding particular groups of officers who may be at a greater risk for suicide or have unique needs regarding suicide prevention. Examples include:

- Officers transitioning to retirement or to another career. Among these officers, the separation from peer networks could potentially increase the risk of social isolation and suicide. Efforts that support the development of social connections—such as allowing officers to make use of departmental peer support programs post retirement—may potentially help protect these officers from suicide risk.<sup>16</sup> More research is needed on the effectiveness of these approaches and on other ways to engage these officers, such as opportunities to volunteer with the department.
- Military service members and veterans. Studies suggest that suicide rates are high among veterans and military service members.<sup>102</sup>, <sup>103</sup> Experts have also noted that some law enforcement officers who are former service members may have experienced more trauma than their peers who come from different backgrounds.104
- **Female officers.** Existing research suggests that female officers may be more likely than their male peers to experience depression, a risk factor for suicide.<sup>14, 39, 46</sup> Social stressors may also differ. For example, day shifts may increase concerns with childcare and other family obligations. Some female officers may also experience a culture of sexism and bullying that provides limited support for women.<sup>23</sup> More research is needed to understand the unique needs of female officers and how to best address those needs.

- **Ethnic and racial minorities.** In 2013, more than a quarter (27 percent) of full-time local police officers were members of a racial or ethnic minority, with about 130,000 minority local police being employed.<sup>105</sup> However, few studies have focused on non-white officers. For example, although Asian police officers are the fastest growing racial demographic of officers in the United States, information specific to this group is lacking.14 Other groups of interest include American Indian and Alaska Native populations. which have been found to have high rates of suicide—both in the general population and among military service member and veterans.<sup>106</sup>
- LGBTQ+ officers. Research suggests that LGBTQ+ persons may be at an increased risk of dying by suicide.<sup>107</sup> Sexual minorities also have increased rates of substance use disorders—a major risk factor for suicide.<sup>108</sup> However, few studies have focused on LGBTQ+ officers, particularly regarding the prevention of suicide and related problems.

Research also suggests that suicide prevention needs may vary across departments of different sizes and locations. Most of the existing research has focused on larger departments, such as the NYPD.<sup>16</sup> Although research is limited, existing studies suggest that officers working in smaller police departments may be at a greater risk for suicide due to more job demands and fewer mental health resources.14

# **Other Knowledge Gaps**

Other knowledge gaps identified in the literature include:

- An assessment of the quality of care that in-house mental health providers offer to police officers<sup>5</sup>
- The role of families as risk and protective factors for suicide.16
- The role of resilience in reducing suicide risk and improving mental health outcomes<sup>54</sup>
- Murder-suicide among police officers<sup>109</sup>

# CONCLUSIONS

This issue brief synthesizes research findings relevant to the prevention of suicide among law enforcement officers. Much of the existing literature has focused on risk factors for suicide in this population. Some of these factors are similar to factors affecting the general population (e.g., mental illness, substance use disorders, social isolation, relationship problems), while others appear to be more closely related to the law enforcement profession. Examples include exposure to daily stressors (e.g., interpersonal conflict) and traumatic incidents (e.g. child abuse, death of a colleague), work schedules that may increase personal stress; and issues related to how the police agency functions (e.g., management styles, administrative burden). In addition, the literature also identifies several work-related barriers to help-seeking, including stigma associated with mental illness and the fear of negative consequences.

Findings from two recent studies suggest that law enforcement agencies are increasingly incorporating suicide prevention practices into their work.<sup>5, 6</sup> Examples include a wide range of mental health and wellness services, peer support, critical incident response, and support for bereaved family members. Although the types and amount of services vary across police departments, these efforts may be helping to decrease the stigma associated with mental health care in the police profession.

In a study that interviewed 110 officers from law enforcement agencies across the United States, more than 85 percent of respondents noted that this stigma has decreased over the last few years.<sup>31</sup> Participants also noted that the police culture is becoming more supportive of officers' mental health needs and presenting fewer barriers to accessing care. As one officer noted:

Particularly over the past 5-8 years, the approach has changed significantly. It used to be the mentality of suck it up, do your job, you need to be tough. Now it's shifted more toward you [still] have to be tough, but want to make sure that you have the resources you need to go through it. Our stance is someone in our department has probably been through what you're going through, so if you let us know what's going on, we don't need to know the details, but let us know so we can get you help.<sup>31</sup> (p. 45)

Participants attributed this change to a generational shift in the workforce, as well as deliberate efforts from command staff.

Research on suicide prevention suggests that efforts are more likely to succeed when they combine multiple strategies. A relevant example from law enforcement is the Canadian Together for Life program, which combined four key strategies for suicide prevention: training, a crisis line, identifying officers at risk, and increasing awareness via a communication campaign. The program was found to reduce suicide rates by 79 percent.75

Findings suggest that law enforcement agencies should identify and implement a combination of suicide prevention strategies that address risk and protective factors at multiple levels of influence. Strategies and practices to consider include:

#### **Leadership and Culture**

Engagement of leadership in suicide prevention and in the promotion of overall mental health and wellness. This includes developing policies and systems related to mental health, wellness, and suicide prevention, and considering ways to reduce work-related sources of stress among officers.

#### **Access to Mental Health Services**

Increased access to mental health and wellness services—at a minimum through an EAP; ideally by in-house mental health providers who are trained in suicide prevention and understand police culture. Services should include substance misuse prevention and treatment, as well as stress reduction. It is important to ensure confidentiality and that there are no repercussions for seeking mental health services.

#### **Peer Support**

Peer support programs that train peers to recognize and respond to signs of suicide risk by connecting officers to appropriate sources of help, including crisis lines and mental health professionals.

#### **Training**

Training on mental health, wellness, and suicide prevention for all employees, including warning signs and sources of help. Resilience training for officers that supports the development of active coping skills.

#### **Event Response**

Event response protocols, including critical incident response, and policies and protocols for postvention (response in the aftermath of a suicide) that are trauma-informed.

#### **Family Support**

Engaging officers' families and providing support to them on an ongoing basis, rather than only in response to a critical event.

#### **Limiting Access to Lethal Means**

Identifying appropriate ways to limit access to lethal means among officers who may be experiencing a suicidal crisis.

#### Messaging

Ensuring that all communication related to suicide is conveyed in ways that prevent contagion and support safety, help-seeking, and healing. Communication efforts should also raise awareness of mental health and wellness programs and supports.

Key knowledge gaps identified in the literature include the lack of a national surveillance system for suicide-related data on the law enforcement workforce, and the lack of evaluation data regarding the effectiveness of particular strategies and practices. Law enforcement agencies should consider ways to collect and analyze data related to suicide prevention so that this information may be used for program evaluation and quality improvement.

# REFERENCES

- Xu J, Murphy SL, Kochanek KD, Arias E. (January 2020). Mortality in the United States, 2018. NCHS Data Brief. 355. Retrieved from <a href="https://www.cdc.gov/nchs/products/">https://www.cdc.gov/nchs/products/</a> databriefs/db355.htm.
- Violanti JM, Robinson CF, Shen R. (2013). Law enforcement suicide: A national analysis. International Journal of Emergency Mental Health, 15(4), 289-297.
- Peterson C, Stone DM, Marsh SM, et al. (2018). Suicide rates by major occupational group - 17 states, 2012 and 2015. Morbidity and Mortality Weekly Report, 67(45), 1253-1260. doi: 10.15585/mmwr.mm6745a1
- Heyman M, Dill J, Douglas R. (April 2018). The Ruderman white paper on mental health and suicide of first responders. Boston, MA: The Ruderman Family Foundation. Retrieved from https://rudermanfoundation.org/white papers/policeofficers-and-firefighters-are-more-likely-to-die-by-suicidethan-in-line-of-duty.
- Ramchand R, Saunders J, Osilla KC, et al. (2019). Suicide prevention in U.S. law enforcement agencies: A national survey of current practices. Journal of Police and Criminal Psychology, 34(1), 55-66. doi: 10.1007/s11896-018-9269-x
- Thoen MA, Dodson LE, Manzo G, Pina-Watson B, Trejos-Castillo E. (2019). Agency-offered and officer-utilized suicide prevention and wellness programs: A national study. Psychological Services, [Epub ahead of print]. doi: 10.1037/ ser0000355
- Blue H.E.L.P. (2019). Honoring the service of law enforcement officers who died by suicide. Retrieved from <a href="https://bluehelp.">https://bluehelp.</a>
- Stone DM, Holland KM, Bartholow B, et al. (2017). Deciphering suicide and other manners of death associated with drug intoxication: A Centers for Disease Control and Prevention consultation meeting summary. American Journal of Public Health, 107(8), 1233-1239. doi: 10.2105/ AJPH.2017.303863
- Centers for Disease Control and Prevention. (2017). Leading Causes of Death Reports, 2017. Web-based Injury Statistics Query and Reporting System (WISQARS). Retrieved from https://webappa.cdc.gov/sasweb/ncipc/leadcause.html.
- 10. Stone DM, Simon TR, Fowler KA, et al. (2018). Vital Signs: Trends in state suicide rates - United States, 1999-2016 and circumstances contributing to suicide - 27 states, 2015. Morbidity and Mortality Weekly Report, 67(22), 617-624. doi: 10.15585/mmwr.mm6722a1
- U.S. Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention. (2012). 2012 National Strategy for Suicide Prevention: Goals and objectives for action. Washington, DC: HHS. Retrieved from https://www.hhs.gov/surgeongeneral/ reports-and-publications/suicide-prevention/index.html.
- 12. Peterson C, Sussell A, Li J, Schumacher PK, Yeoman K, Stone DM. (2020). Suicide rates by industry and occupation-National Violent Death Reporting System, 32 States, 2016. Morbidity and Mortality Weekly Report, 69(3), 57-62.
- 13. Milner A, Witt K, Maheen H, LaMontagne AD. (2017). Suicide among emergency and protective service workers: A retrospective mortality study in Australia, 2001 to 2012. Work, 57(2), 281-287. doi: 10.3233/wor-172554

- 14. Violanti JM, Owens SL, McCanlies E, Fekedulegn D, Andrew ME. (2019). Law enforcement suicide: A review. Policing: An International Journal, 42(2), 141-164. doi: 10.1108/ PIJPSM-05-2017-0061
- 15. Violanti JM. (2018). Police officer suicide: Oxford University Press; 2018. Retrieved from https:// oxfordre.com/criminology/view/10.1093/ acrefore/9780190264079.001.0001/acrefore-9780190264079-e-87.
- 16. Stanley IH, Hom MA, Joiner TE. (2016). A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. Clinical Psychology Review, 44, 25-44. doi: 10.1016/j.cpr.2015.12.002
- 17. Violanti JM, Mnatsakanova A, Burchfiel CM, Hartley TA, Andrew ME. (2012). Police suicide in small departments: A comparative analysis. International Journal of Emergency Mental Health, 14(3), 157-162.
- Violanti JM, Fekedulegn D, Charles LE, et al. (2009). Suicide in police work: Exploring potential contributing influences. American Journal of Criminal Justice, 34, 41-53. doi: 10.1007/ s12103-008-9049-8
- 19. Chopko BA, Palmieri PA, Facemire VC. (2014). Prevalence and predictors of suicidal ideation among U.S. law enforcement officers. Journal of Police and Criminal Psychology, 29(1), 1-9. doi: 10.1007/s11896-013-9116-z
- 20. Substance Abuse and Mental Health Services Administration. (2018). Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health. Rockville, MD: Center for Behavioral Health Statistics and Quality, SAMHSA. Retrieved from https:// www.samhsa.gov/data/sites/default/files/cbhsq-reports/ NSDUHFFR2017/NSDUHFFR2017.pdf.
- 21. Turecki G, Brent DA. (2016). Suicide and suicidal behaviour. Lancet, 387(10024), 1227-1239. doi: 10.1016/S0140-6736(15)00234-2
- 22. Steele IH, Thrower N, Noroian P, Saleh FM. (2018). Understanding suicide across the lifespan: A United States perspective of suicide risk factors, assessment & management. Journal of Forensic Sciences, 63(1), 162-171. doi: 10.1111/1556-4029.13519
- 23. Roberts KA. (2019). Correlates of law enforcement suicide in the United States: A comparison with Army and Firefighter suicides using data from the National Violent Death Reporting System. Police Practice and Research, 20(1), 64-76. doi: 10.1080/15614263.2018.1443269
- 24. Bachmann S. (2018). Epidemiology of suicide and the psychiatric perspective. International Journal of Environmental Research and Public Health, 15(7). doi: 10.3390/ijerph15071425
- 25. Nock MK, Hwang I, Sampson NA, Kessler RC. (2010). Mental disorders, comorbidity and suicidal behavior: results from the National Comorbidity Survey Replication. Molecular Psychiatry, 15(8), 868-876. doi: 10.1038/mp.2009.29
- 26. Darvishi N, Farhadi M, Haghtalab T, Poorolajal J. (2015). Alcohol-related risk of suicidal ideation, suicide attempt. and completed suicide: a meta-analysis. PLoS One, 10(5), e0126870. doi: 10.1371/journal.pone.0126870

- 27. Lindsay V, Shelley K. (2009). Social and stress-related influences of police officers' alcohol consumption. Journal of Police and Criminal Psychology, 24(2), 87-92. doi: 10.1007/ s11896-009-9048-9
- 28. Milner A. Witt K. Maheen H. LaMontagne AD. (2017). Access to means of suicide, occupation and the risk of suicide: A national study over 12 years of coronial data. BMC Psychiatry, 17(1), 125. doi: 10.1186/s12888-017-1288-0
- 29. Centers for Disease Control and Prevention. (2017). Fatal Injury Reports, National, Regional and State, 2017. Webbased Injury Statistics Query and Reporting System (WISQARS). Retrieved from https://webappa.cdc.gov/ sasweb/ncipc/mortrate.html.
- 30. Chae MH, Boyle DJ. (2013). Police suicide: Prevalence, risk, and protective factors. Policing: An International Journal of Police Strategies & Management, 36(1), 91-118. doi: 10.1108/13639511311302498
- 31. Saunders J, Kotzias V, Ramchand R. (2019). Contemporary police stress: The impact of the evolving socio-political context. Criminology, Criminal Justice, Law & Society, 20(1), 35-52.
- 32. Chopko BA, Palmieri PA, Adams RE. (2015). Critical incident history questionnaire replication: Frequency and severity of trauma exposure among officers from small and midsize police agencies. Journal of Traumatic Stress, 28(2), 157-161. doi: 10.1002/jts.21996
- 33. Violanti JM, Charles LE, McCanlies E, et al. (2017). Police stressors and health: A state-of-the-art review. Policing, 40(4), 642-656. doi: 10.1108/PIJPSM-06-2016-0097
- 34. Fairfax County Police Department and United States Marshals Service. (2019). 2019 Virginia public safety mental health pilot survey. Fairfax, VA: Fairfax County Police Department.
- 35. Violanti JM. (2004). Predictors of police suicide ideation. Suicide and Life-Threatening Behavior, 34(3), 277-283. doi: 10.1521/suli.34.3.277.42775
- 36. Ménard KS, Arter ML. (2013). Police officer alcohol use and trauma symptoms: Associations with critical incidents. coping, and social stressors. International Journal of Stress Management, 20(1), 37-56. doi: 10.1037/a0031434
- 37. Austin-Ketch TL, Violanti J, Fekedulegn D, Andrew ME, Burchfield CM, Hartley TA. (2012). Addictions and the criminal justice system, what happens on the other side? Post-traumatic stress symptoms and cortisol measures in a police cohort. Journal of Addictions Nursing, 23(1), 22-29. doi: 10.3109/10884602.2011.645255
- 38. Maia DB, Marmar CR, Metzler T, et al. (2007). Post-traumatic stress symptoms in an elite unit of Brazilian police officers: prevalence and impact on psychosocial functioning and on physical and mental health. Journal of Affective Disorders, 97(1-3), 241-245. doi: 10.1016/j.jad.2006.06.004
- 39. Darensburg T, Andrew ME, Hartley TA, Burchfiel CM, Fekedulegn D, Violanti JM. (2006). Gender and age differences in posttraumatic stress disorder and depression among Buffalo police officers. *Traumatology, 12*(3), 220-228. doi: 10.1177/1534765606296271
- 40. Brunault P, Lebigre K, Idbrik F, et al. (2019). Posttraumatic stress disorder Is a risk factor for multiple addictions in police officers hospitalized for alcohol. European Addiction Research, 25(4), 198-206. doi: 10.1159/000499936

- 41. Maple M, Cerel J, Sanford R, Pearce T, Jordan J. (2017). Is exposure to suicide beyond kin associated with risk for suicidal behavior? A systematic review of the evidence. Suicide and Life-Threatening Behavior, 47(4), 461-474. doi: 10.1111/sltb.12308
- 42. Hedström P, Liu K-Y, Nordvik MK. (2008). Interaction domains and suicide: A population-based panel study of suicides in Stockholm, 1991-1999. Social Forces, 87(2), 713-740. doi: 10.1353/sof.0.0130
- 43. van de Venne J, Cerel J, Moore M, Maple M. (2017). Predictors of suicide ideation in a random digit dial study: Exposure to suicide matters. Archives of Suicide Research, 21(3), 425-437. doi: 10.1080/13811118.2016.1211044
- 44. Koch BJ. (2010). The psychological impact on police officers of being first responders to completed suicides. Journal of Police and Criminal Psychology, 25(2), 90-98. doi: 10.1007/ s11896-010-9070-v
- 45. Cerel J, Jones B, Brown M, Weisenhorn DA, Patel K. (2018). Suicide exposure in law enforcement officers. Suicide and Life-Threatening Behavior. doi: 10.1111/sltb.12516
- 46. Violanti JM, Charles LE, Hartley TA, et al. (2008). Shiftwork and suicide ideation among police officers. American Journal of Industrial Medicine, 51(10), 758-768. doi: 10.1002/ ajim.20629
- 47. Gerber M, Hartmann T, Brand S, Holsboer-Trachsler E, Pühse U. (2010). The relationship between shift work, perceived stress, sleep and health in Swiss police officers. Journal of Criminal Justice, 38(6), 1167-1175.
- 48. Violanti JM, Ma C, Gu J, Fekedulegn D, Mnatsakova A, Andrew M. (2018). Social avoidance in policing: Associations with cardiovascular disease and the role of social support. Policing: An International Journal, 41(5), 539-549. doi: 10.1108/PIJPSM-02-2017-0017
- 49. Berg AM, Hem E, Lau B, Loeb M, Ekeberg O. (2003). Suicidal ideation and attempts in Norwegian police. Suicide and Life-Threatening Behavior, 33(3), 302-312.
- 50. Pew Research Center. (2017). Behind the badge: Amid protests and calls for reform, how police view their jobs, key issues and recent fatal encounters between blacks and police. Retrieved from http://assets.pewresearch.org/wpcontent/uploads/sites/3/2017/01/06171402/Police-Report FINAL\_web.pdf.
- 51. Herrington V, Colvin A. (2015). Police leadership for complex times. Policing 10(1), 7-16.
- 52. Violanti JM, Fekedulegn D, Hartley TA, et al. (2016). Highly rated and most frequent stressors among police officers: Gender differences. American Journal of Criminal Justice, 41(4), 645-662.
- 53. Sher L. (2019). Resilience as a focus of suicide research and prevention. Acta Psychiatrica Scandinavica, 140(2), 169-180. doi: 10.1111/acps.13059
- 54. Rocklein-Kemplin K, Paun O, Godbee DC, Brandon JW. (2019). Resilience and suicide in Special Operations Forces: State of the science via integrative review. Journal of Special Operations Medicine, 19(2), 57-66.
- 55. Youssef NA, Green KT, Beckham JC, Elbogen EB. (2013). A 3-year longitudinal study examining the effect of resilience on suicidality in veterans. Annals of Clinical Psychiatry, 25(1), 59-66.

- 56. Violanti JM, Ma CC, Mnatsakanova A, et al. (2018). Associations between police work stressors and posttraumatic stress disorder symptoms: Examining the moderating effects of coping. Journal of Police and Criminal Psychology, 33(3), 271-282.
- 57. Burke RJ, Mikkelsen A. (2007). Suicidal ideation among police officers in Norway. Policing: An International Journal of Police Strategies & Management, 30(2), 228-236. doi: 10.1108/13639510710753234
- 58. Denney JT, Rogers RG, Krueger PM, Wadsworth T. (2009). Adult suicide mortality in the United States: Marital status, family size, socioeconomic status, and differences by sex. Social Science Quarterly, 90(5), 1167-1185. doi: 10.1111/j.1540-6237.2009.00652.x
- 59. Robustelli BL, Trytko AC, Li A, Whisman MA. (2015). Marital discord and suicidal outcomes in a national sample of married individuals. Suicide and Life-Threatening Behavior, *45*(5), 623-632.
- 60. Carleton RN, Afifi TO, Turner S, et al. (2018). Suicidal ideation, plans, and attempts among public safety personnel in Canada. Canadian Psychology, 59(3), 220-231. doi: 10.1037/ cap0000136
- 61. Trinkner R, Tyler TR, Goff PA. (2016). Justice from within: The relations between a procedurally just organizational climate and police organizational efficiency, endorsement of democratic policing, and officer well-being. Psychology, Public Policy, and Law, 22(2), 158-172. doi: 10.1037/ law0000085
- 62. Federal Bureau of Investigation. (2018). 2018 Crime in the United States. Table 74: Full-time law enforcement employees. Retrieved from https://ucr.fbi.gov/crime-in-theu.s/2018/crime-in-the-u.s.-2018/topic-pages/tables/table-74.
- 63. Sagar-Ouriaghli I, Godfrey E, Bridge L, Meade L, Brown JSL. (2019). Improving mental health service utilization among men: A systematic review and synthesis of behavior change techniques within interventions targeting help-seeking. American Journal of Men's Health, 13(3), 1557988319857009. doi: 10.1177/1557988319857009
- 64. Violanti JM. (2007). Introduction. In: Violanti JM, Samuels S, eds. Under the blue shadow: Clinical and behavioral perspectives on police suicide. Springfield, IL: Charles C. Thomas Publishers; 3-6.
- 65. Violanti JM. (2007). Police suicide: Epidemic in blue (2nd ed.). Springfield: Charles C. Thomas.
- 66. Wester SR, Arndt D, Sedivy SK, Arndt L. (2010). Male police officers and stigma associated with counseling: The role of anticipated risks, anticipated benefits and gender role conflict. Psychology of Men & Masculinity, 11(4), 286-302. doi: 10.1037/a0019108
- 67. Copenhaver A, Tewksbury R. (2018). Predicting state police officer willingness to seek professional help for depression. Criminology, Criminal Justice, Law & Society, 19(1), 60-74.
- 68. Fleischmann MH, Strode P, Broussard B, Compton MT. (2018). Law enforcement officers' perceptions of and responses to traumatic events: A survey of officers completing Crisis Intervention Team training. Policing and Society, 28(2), 149-156. doi: 10.1080/10439463.2016.1234469
- 69. Dowling FG, Moynihan G, Genet B, Lewis J. (2006). A peerbased assistance program for officers with the New York City Police Department: report of the effects of Sept. 11, 2001. American Journal of Psychiatry, 163(1), 151-153. doi: 10.1176/ appi.ajp.163.1.151

- 70. Hyland S. (2018). Full-time employees in law enforcement agencies, 1997-2016. Statistical Brief. Retrieved from https:// www.bjs.gov/content/pub/pdf/ftelea9716.pdf.
- 71. Mann JJ, Apter A, Bertolote J, et al. (2005). Suicide prevention strategies: A systematic review. Jama, 294(16), 2064-2074. doi: 10.1001/jama.294.16.2064
- 72. Zalsman G, Hawton K, Wasserman D, et al. (2016). Suicide prevention strategies revisited: 10-year systematic review. Lancet Psychiatry, 3(7), 646-659. doi: 10.1016/s2215-0366(16)30030-x
- 73. Knox KL, Litts DA, Talcott GW, Feig JC, Caine ED. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: Cohort study. British Medical Journal, 327(7428), 1376. doi: 10.1136/bmj.327.7428.1376
- 74. Knox KL, Pflanz S, Talcott GW, et al. (2010). The US Air Force suicide prevention program: Implications for public health policy. American Journal of Public Health, 100(12), 2457-2463. doi: 10.2105/ajph.2009.159871
- 75. Mishara BL, Martin N. (2012). Effects of a comprehensive police suicide prevention program. Crisis, 33(3), 162-168. doi: 10.1027/0227-5910/a000125
- 76. Spence DL, Fox M, Moore GC, Estill S, Comrie NEA. (2019). Law Enforcement Mental Health and Wellness Act: Report to Congress. Washington, DC: U.S. Department of Justice. Retrieved from <a href="https://cops.usdoj.gov/lemhwaresources">https://cops.usdoj.gov/lemhwaresources</a>.
- Marzano L, Smith M, Long M, Kisby C, Hawton K. (2016). Police and suicide prevention: Evaluation of a training program. Crisis, 37(3), 194-204. doi: 10.1027/0227-5910/ a000381
- 78. McCraty R, Atkinson M. (2012). Resilience training program reduces physiological and psychological stress in police officers. Global Advances in Health and Medicine, 1(5), 44-66. doi: 10.7453/gahmj.2012.1.5.013
- 79. Papazoglou K, Andersen JP. (2014). A guide to utilizing police training as a tool to promote resilience and improve health outcomes among police officers. Traumatology, 20(2), 103-111. doi: 10.1037/h0099394
- 80. Chesin M, Interian A, Kline A, Benjamin-Phillips C, Latorre M, Stanley B. (2016). Reviewing mindfulness-based interventions for suicidal behavior. Archives of Suicide Research, 20(4), 507-527. doi: 10.1080/13811118.2016.1162244
- 81. Christopher MS, Goerling RJ, Rogers BS, et al. (2016). A pilot study evaluating the effectiveness of a mindfulness-based intervention on cortisol awakening response and health outcomes among law enforcement officers. Journal of Police and Criminal Psychology, 31(1), 15-28. doi: 10.1007/s11896-015-9161-x
- 82. Krick A, Felfe J. (2019). Who benefits from mindfulness? The moderating role of personality and social norms for the effectiveness on psychological and physiological outcomes among police officers. Journal of Occupational Health Psychology, advance online publication. doi: 10.1037/ ocp0000159
- 83. Burnette C, Ramchand R, Ayer L. (2015). Gatekeeper training for suicide prevention: A theoretical model and review of the empirical literature. Rand Health Quarterly, 5(1), 16.

- 84. Arensman E, Coffey C, Griffin E, et al. (2016). Effectiveness of Depression-Suicidal Behaviour Gatekeeper Training among police officers in three European regions: Outcomes of the Optimising Suicide Prevention Programmes and Their Implementation in Europe (OSPI-Europe) study. International Journal of Social Psychiatry, 62(7), 651-660. doi: 10.1177/0020764016668907
- 85. National Academies of Sciences, Engineering, and Medicine. (2019). Strengthening the military family readiness system for a changing American society. Washington, DC: The National Academies Press. Retrieved from <a href="https://doi.">https://doi.</a> org/10.17226/25380.
- 86. Gould MS, Kalafat J, Harrismunfakh JL, Kleinman M. (2007). An evaluation of crisis hotline outcomes. Part 2: Suicidal callers. Suicide and Life-Threatening Behavior, 37(3), 338-352. doi: 10.1521/suli.2007.37.3.338
- 87. Kalafat J, Gould MS, Munfakh JL, Kleinman M. (2007). An evaluation of crisis hotline outcomes. Part 1: Nonsuicidal crisis callers. Suicide and Life-Threatening Behavior, 37(3), 322-337. doi: 10.1521/suli.2007.37.3.322
- 88. Tyson P, Law C, Reed S, Johnsey E, Aruna O, Hall S. (2016). Preventing suicide and self-harm. Crisis, 37(5), 353-360. doi: 10.1027/0227-5910/a000390
- 89. Yip PS, Caine E, Yousuf S, Chang SS, Wu KC, Chen YY. (2012). Means restriction for suicide prevention. Lancet, 379(9834), 2393-2399. doi: 10.1016/S0140-6736(12)60521-2
- 90. U.S. Department of Veterans Affairs and U.S. Department of Defense. (2019). VA/DoD clinical practice guideline for the assessment and management of patients at risk for suicide. Version 2.0. Retrieved from <a href="https://www.healthquality.va.gov/">https://www.healthquality.va.gov/</a> guidelines/MH/srb/.
- Cheng Q, Li H, Silenzio V, Caine ED. (2014). Suicide contagion: A systematic review of definitions and research utility. PLoS One, 9(9), e108724. doi: 10.1371/journal. pone.0108724
- 92. International Association of Chiefs of Police. (2017). Breaking the silence on law enforcement suicides: IACP National Symposium on Law Enforcement Officer Suicide and Mental Health. Washington, DC: Office of Community Oriented Policing Services. Retrieved from https://www.theiacp.org/ resources/document/law-enforcement-suicide-preventionand-awareness.
- 93. Gulliver SB, Pennington ML, Leto F, et al. (2016). In the wake of suicide: Developing guidelines for suicide postvention in fire service. Death Studies, 40(2), 121-128. doi: 10.1080/07481187.2015.1077357
- 94. Ho TE, Schneider KG, Wortman JA, et al. (2018). Postvention in the U.S. military: Survey of survivors of suicide loss from 2010-2014. Seaside, CA: Defense Personnel and Security Research Center. Retrieved from https://apps.dtic.mil/docs/ citations/AD1048434.
- 95. Sinyor M, Schaffer A, Nishikawa Y, et al. (2018). The association between suicide deaths and putatively harmful and protective factors in media reports. Canadian Medical Association Journal, 190(30), E900-e907. doi: 10.1503/ cmaj.170698
- 96. Ortiz P, Khin Khin E. (2018). Traditional and new media's influence on suicidal behavior and contagion. Behav Sci Law, 36(2), 245-256. doi: 10.1002/bsl.2338
- 97. Romine T, Hanna J. (October 16, 2019). The number of NYPD officer suicides this year rises up to 10 CNN.

- 98. U.S. Congress. (2019). H.R.3735 Law Enforcement Suicide Data Collection Act. Retrieved from https://www.congress. gov/bill/116th-congress/house-bill/3735/text.
- 99. Witt K, Milner A, Allisey A, Davenport L, LaMontagne AD. (2017). Effectiveness of suicide prevention programs for emergency and protective services employees: A systematic review and meta-analysis. American Journal of Industrial Medicine, 60(4), 394-407. doi: 10.1002/ajim.22676
- 100. Levenson RL, Jr., O'Hara AF, Clark R, Sr. (2010). The Badge of Life Psychological Survival for Police Officers Program. International Journal of Emergency Mental Health, 12(2), 95-101.
- 101. Welch J. (1998). Life Savers: A suicide prevention programme helping South African Police Service (SAPS) to cope with post-apartheid era. People Management, 4, 46-48.
- 102. Kang HK, Bullman TA, Smolenski DJ, Skopp NA, Gahm GA, Reger MA. (2015). Suicide risk among 1.3 million veterans who were on active duty during the Iraq and Afghanistan wars. Annals of Epidemiology, 25(2), 96-100. doi: 10.1016/j. annepidem.2014.11.020
- 103. Department of Defense. (2018). DoDSER suicide event resport: Calendar year 2017 annual report.
- 104. Hartley TA, Violanti JM, Mnatsakanova A, Andrew ME, Burchfiel CM. (2013). Military experience and levels of stress and coping in police officers. International Journal of Emergency Mental Health, 15(4), 229-239.
- 105. Reaves BA. (2015). Local police departments, 2013: Personnel, policies, and practices. Bureau of Justice Statistics Bulletin. Retrieved from https://www.bjs.gov/content/pub/ pdf/lpd13ppp.pdf.
- 106. O'Keefe VM, Reger GM. (2017). Suicide among American Indian/Alaska Native military service members and veterans. Psychological Services, 14(3), 289-294. doi: 10.1037/ ser0000117
- 107. Haas AP, Eliason M, Mays VM, et al. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. Journal of Homosexuality, 58(1), 10-51. doi: 10.1080/00918369.2011.534038
- 108. Chaudhry AB, Reisner SL. (2019). Disparities by sexual orientation persist for major depressive episode and substance abuse or dependence: Findings from a national probability study of adults in the United States. LGBT Health, 6(5), 261-266. doi: 10.1089/lgbt.2018.0207
- 109. Violanti JM. (2007). Homicide-suicide in police families: aggression full circle. International Journal of Emergency Mental Health, 9(2), 97-104.

## ABOUT THE BUREAU OF JUSTICE ASSISTANCE

The Bureau of Justice Assistance (BJA) helps to make American communities safer by strengthening the nation's criminal justice system: BJA s grants, training and technical assistance, and policy development services provide government jurisdictions (state, local, tribal, and territorial) and public and private organizations with the cutting edge tools and best practices they need to support law enforcement, reduce violent and drug-related crime, and combat victimization.

BJA is a component of the Office of Justice Programs, U.S. Department of Justice, which also includes the Bureau of Justice Statistics, National Institute of Justice, Office of Juvenile Justice and Delinquency Prevention, Office for Victims of Crime, and Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking.

#### **BJA Mission**

BJA provides leadership and services in grant administration and criminal justice policy development to support local, state, and tribal law enforcement in achieving safer communities. BJA supports programs and initiatives in the areas of law enforcement, justice information sharing, countering terrorism, managing

offenders, combating drug crime and abuse, adjudication, advancing tribal justice, crime prevention, protecting vulnerable populations, and capacity building. Driving BJA's work in the field are the following principles:

- Emphasize local control.
- Build relationships in the field.
- Provide training and technical assistance in support of efforts to prevent crime, drug abuse, and violence at the national, state, and local levels.
- Develop collaborations and partnerships.
- Promote capacity building through planning.
- Streamline the administration of grants.
- Increase training and technical assistance.
- Create accountability of projects.
- Encourage innovation.
- Communicate the value of justice efforts to decision makers at every level.

To learn more about BJA, visit www.bja.gov, or follow us on Facebook (www.facebook.com/DOJBJA) and Twitter (@DOJBJA). BJA is part of the Department of Justice's Office of Justice Programs.

#### **ABOUT THE IACP**

The International Association of Chiefs of Police (IACP) is the world's largest and most influential professional association for police leaders. With more than 30,000 members in over 160 countries, the IACP is a recognized leader in global policing. Since 1893, the association has been speaking out on behalf of law enforcement and advancing leadership and professionalism in policing worldwide.

The IACP is known for its commitment to shaping the future of the police profession. Through timely research, programming, and unparalleled training opportunities, the IACP is preparing current and emerging police leaders and the agencies and communities they serve—to succeed in addressing the most pressing issues, threats, and challenges of the day.

The IACP is a not-for-profit 501c(3) organization headquartered in Alexandria, Virginia. The IACP is the publisher of The Police Chief magazine, the leading periodical for law enforcement executives, and the host of the IACP Annual Conference, the largest police educational and technology exposition in the world. IACP membership is open to law enforcement professionals of all ranks, as well as non-sworn leaders across the criminal justice system. Learn more about the IACP at www.thelACP.org.

## ABOUT THE EDUCATION DEVELOPMENT CENTER

Education Development Center (EDC) is a global nonprofit organization that advances lasting solutions to improve education, promote health, and expand economic opportunity. Since 1958, EDC has been a leader in designing, implementing, and evaluating powerful and innovative programs in more than 80 countries around the world. With expertise in areas such as suicide prevention, early childhood development and learning, and youth workforce development, EDC collaborates with public and private partners to create, deliver, and evaluate programs, services, and products. This work includes:

- Creating resources such as curricula, toolkits, and online courses that offer engaging learning experiences
- Conducting formative and summative evaluations of initiatives
- Applying expertise in capacity building, professional development, and training and technical assistance
- Providing policy advisement, information documents, and research and analysis
- Conducting qualitative and quantitative studies to inform our programs and assess their impact

For decades, EDC has offered evidence-based support and resources to prevent and address violence, suicide, and trauma across the U.S. and around the world. EDC houses several leading centers and institutes focused on suicide prevention, including the National Action Alliance for Suicide Prevention, the Suicide Prevention Resource Center, and the Zero Suicide Institute. Drawing on this expertise, EDC leads initiatives and consults with national and local law enforcement agencies and departments in examining the complex issues underlying suicide among public safety workforces, identifying threats, and designing proactive and comprehensive solutions. EDC brings extensive program development expertise, quantitative and qualitative research skills, and training and curriculum development experience, as well as content expertise in suicide prevention, violence prevention, trauma-informed approaches, and substance use. Learn more about the work of EDC at www.edc.org.

## ABOUT THE NATIONAL ACTION ALLIANCE FOR SUICIDE PREVENTION

The National Action Alliance for Suicide Prevention (Action Alliance) is the public-private partnership working to advance the National Strategy for Suicide Prevention and make suicide prevention a national priority. The Substance Abuse and Mental Health Services Administration provides funding to EDC to operate and

manage the Secretariat for the Action Alliance, which was launched in 2010. Learn more at theactionalliance.org and join the conversation on suicide prevention by following the Action Alliance on Facebook, Twitter, LinkedIn, and YouTube.

