



**MOVEMBER®**

## **EXECUTIVE SUMMARY**

A SCOPING REVIEW OF PREVENTION AND EARLY INTERVENTION PROGRAMS USED IN CANADA, AUSTRALIA, NEW ZEALAND, IRELAND, AND THE UNITED KINGDOM

# **VETERAN AND FIRST RESPONDER MENTAL ILL HEALTH AND SUICIDE PREVENTION**



Veteran and First Responder Mental Ill Health and Suicide Prevention: A Scoping Review of Prevention and Early Intervention Programs Used in Canada, Australia, New Zealand, Ireland, and the United Kingdom

© Copyright by Dr. Donald McCreary, 2019.

All rights reserved

Contact Information:

Dr. Donald McCreary  
British Columbia, Canada  
Email: McCrearyScientific@gmail.com

The author of this report is Dr Donald McCreary, who was contracted and paid by the Movember Foundation. The creation of this report was also supported via in-kind research assistance by the Canadian Institute for Public Safety Research and Treatment..

How to cite this report:

McCreary, D. R. (2019, August). Veteran and first responder mental ill health and suicide prevention: A scoping review of prevention and early intervention programs used in Canada, Australia, New Zealand, Ireland, and the United Kingdom. British Columbia, Canada: Donald McCreary Scientific Consulting.



# ACKNOWLEDGEMENTS

I would like to take this opportunity to thank the many people who helped with this report.

## FROM THE MOVEMBER FOUNDATION

Susan Todd

Paul Villanti

Brendan Maher

Ivy Lim-Carter

## FROM THE CANADIAN INSTITUTE FOR PUBLIC SAFETY RESEARCH AND TREATMENT

Dr. Nick Carleton

Dr. Ronald Camp

Dr. Greg Anderson

Andreanne Angehrn

Robyn Shields

## THE SUBJECT MATTER EXPERTS

### Canada

Dr. Heidi Cramm (Queen's University)

Dr. Elizabeth Donnelly (University of Windsor)

Dr. Deniz Fikretoglu (Department of National Defence)

Louis-Francis Fortin (Service de Police de la Ville de Montréal)

Gaynor Jackson (Former CEO, Military Family Resource Centre, Esquimalt, BC)

Dr. Renee MacPhee (Wilfrid Laurier University)

Dr. David Pedlar (Canadian Institute of Military & Veteran Health Research)

Steve Schnitzer (Police Academy, Justice Institute of BC)

Dr. Duncan Shields (Clinical Psychologist)



### **Australia**

Prof. Paula Brough (Griffiths University)

Prof. Tony LaMontagne (Deakin University)

Dr. Angela Martin (University of Tasmania)

Belinda Neil (Fearless)

Dr. Kathryn Page (Deakin University)

Irina Tchernitskaia (Country Fire Authority)

Assoc. Prof. Tony Walker (Ambulance Victoria)

Victoria Police, Health, Safety, & Wellbeing Division

### **New Zealand**

Alison Barnes (Fire and Emergency Service NZ)

Dr. David McBride (University of Otago)

Barry Taylor (Taylor Made Consulting)

### **Ireland**

Mark Reddy (Psychologist)

Brian Gilbert (Sub Officer, Dublin Fire Brigade)

### **United Kingdom**

Dr. Fiona Bell (Yorkshire Ambulance Service, NHS Trust)

Prof. Neil Greenberg (King's College, London)

Dr. Ian Hesketh (College of Policing/National Police Wellbeing Service)

### **ADDITIONAL THANKS**

Dr. Peter Shipley, Ontario Provincial Police College

Dr. Stephanie Hodson, Australian Department of Veterans Affairs/Open Arms – Veterans & Families Counseling



# FORWARD

Movember is one of the leading international philanthropic funders of suicide prevention and mental health early intervention initiatives. Since 2006 we have invested in innovative and evidence-based early intervention and prevention programs that work well for men.

In the countries Movember works in, three out of four suicides are men, and we are keenly aware of the need to significantly strengthen investment in gender sensitive approaches that will prevent so many men dying too young.

Our approach has been to build evidence of what works to keep men and boys mentally healthy and encourages them to take preventative action early, especially during tough times.

While the issues are complex and there are no simple solutions, we have seen great promise in many of the programs we have trialled.

Movember is now supporting the national and international scaling of initiatives targeting young men and adolescent boys, indigenous men, fathers and socially isolated men. We have also supported a number of programs addressing the needs of veterans and first responders.

In 2018, in partnership with Distinguished Gentlemen's Ride (DGR), Movember prioritised further investment in prevention and early intervention initiatives targeting these communities.

To inform our future direction, we commissioned Dr Donald McCreary to undertake a review of the available evidence for research in this area.

Having worked closely with the first responders and veteran communities over the past decade, we know that there is a strong commitment across the sector to tackle the challenges around the current lack of evidence for what works for these groups.

Movember, in partnership with DGR, now plans to invest in collaborative efforts with the veterans and first responders communities in order to build the evidence of the most promising initiatives and then mobilise the adoption of these efforts internationally.

As a global funder Movember is uniquely placed to support these efforts and ensure that men are supported to lead healthier, happier and longer lives.

We hope that this report will also inspire other mental health funders to collaborate alongside us in order to achieve the best outcomes for men.

A handwritten signature in black ink, appearing to read 'Paul Villanti'.

Paul Villanti  
Executive Director Programs  
Movember



# EXECUTIVE SUMMARY

There is growing evidence suggesting that, compared to those in the general population, military veterans and first responders are at greater risk for both mental ill health and suicide ideation/completion. The first responder community, especially, has begun to address these concerns by developing or implementing various mental ill health/suicide prevention and early intervention programs. However, what are these programs and, perhaps more importantly, what is the evidence supporting their effectiveness?

With that in mind, the overall goals of this scoping review are as follows:

1. Identify the general types of mental ill health prevention, mental ill health early intervention, and suicide prevention programs used by first responder (i.e., police, firefighter, and paramedic/emergency medical technician/ambulance) and military veteran communities in Canada, Australia, New Zealand, Ireland, and the United Kingdom.
2. Identify similar programs aimed at the families of first responders and military veterans in the same regions.
3. Once the main program types are identified, conduct a review of the available evidence supporting their effectiveness.
4. Summarize the available evidence, identifying some potentially promising programs for both employees and families.
5. Identify potential gaps in the first responder and military veteran (including families) mental ill health prevention, suicide prevention, and early intervention program spaces.

## APPROACH

To address these goals, a three-pronged approach was taken. The first approach was to identify the existing scientific research supporting prevention and early intervention programs, both in the general workforce (where applicable) and in veteran and first responder organizations. This will provide an understanding of the current level of known evidence about the existing programs. The second approach was to identify and interview a series of Subject Matter Experts (SMEs) in each country. The information gathered here will help identify the types of programs being used, some specific programs in use, whether organizations are collecting robust evidence of program validity, and SME's perceived gaps in the available knowledge. The third approach was to explore Google and three social media sites (LinkedIn, Twitter, and Facebook) to find additional program information. It is important to note that these types of programs are occurring within the context of evolving national guidelines or standards that promote the identification and management of psychological health and safety in the workplace. As such, these types of guidelines or standards also were reviewed.

## FINDINGS

Before conducting the review, I first reviewed each country's national standards or guidelines for managing psychological safety in the workplace. These guidelines are evidence-based, highlighting the importance of several types of organizational barriers as causes of poor psychological health in the workplace. Three out of five countries have official guidelines, and they are mandatory to follow in countries that are part of the European Union (i.e., both Ireland and the UK, as of this writing). Canada has a general set of guidelines and a



newer set specifically designed for paramedic organizations. Safe Work Australia recently released similar guidelines but, although they are an official government body, their guidelines appear to be neither official nor mandatory.

My review of the scientific literature examining the effectiveness of workplace mental ill health prevention programs revealed that, whether in the general workforce or in first responder communities, there is little evidence of overall effectiveness when it comes to psychoeducation and skills-based programming. When programs do improve the mental health of those taking them, the effects tend to be small and diminish over time. The program most commonly used by first responders, the Road to Mental Readiness, has no evidence supporting its ability to reduce mental health symptoms over time. Furthermore, the evidence for its ability to reduce stigma is mixed. The one type of program showing potential at improving mental health is based on the mindfulness concept. Mindfulness-based interventions appear to provide a moderate improvement in mental health, but there still needs to be a lot of research done to be sure they are being implemented effectively in the workplace and evaluated more rigorously, especially as there is evidence that poorly developed and implemented programs can cause harm. There was no evidence, at least at this stage of the review, of any mental ill health prevention programs directed towards veterans, though transition to civilian life was highlighted as a potential program focus area.

Evidence for the effectiveness of early intervention programs in first responders was mostly derived from the 2016 review by Beshai and Carleton, and supported by similar findings and guidelines from the UK's National Institute for Clinical Excellence (NICE, 2005; 2018) when it comes to preventing PTSD after trauma exposure in the general population. Beshai and Carleton identified 14 early intervention approaches to reducing mental ill health in first responders and reviewed the evidence supporting each. Their review paper noted that, when evidence existed, it tended to have a small effect size (i.e., not overly meaningful). The two NICE guidelines noted the poor quality of the research evidence and, in their most recent review (NICE, 2018) suggest that early interventions should not be used for the purpose of reducing future symptoms of PTSD. A recent paper by Richins et al. (2019), however, suggests there might be some nuance that the NICE guidelines do not address. I highlighted three early intervention programs that might show future promise.

For suicide prevention programs, the existing evidence is mixed. There are some programs that have shown evidence of effectiveness in some contexts, but not others. However, it is important to note that most workplace suicide prevention programs are not evaluated for effectiveness (Milner et al., 2015; Milner & LaMontagne, 2018a; Milner & LaMontagne, 2018b). Thus there are no systematic reviews and meta-analyses to rely on here. This is problematic because single studies tell users very little about the extent to which a program can be effectively translated from one workplace to another. It also tells users little about the magnitude of the findings and what elements of the program may be most important. As Milner and LaMontagne (2018b) noted:

*“It is also significant that there is close to a complete lack of systematic research on workplace suicide prevention activities. This point not only refers to the limited number of evaluated studies in the area (as seen in our review, only a handful of interventions had published evidence of effectiveness) but also to the fact that workplace suicide prevention efforts should (if appropriate) be aligned with current “best practice” in workplace mental health more generally ... Each of these guidelines advocates preventive (e.g., improvement of working conditions) as well as reactive (e.g., addressing mental health problems as they arise the workplace context) measures.” (p. 69)*

The SME interviews revealed a lot of concern about the lack of evidence for existing programs and the lack of sharing of information about who is doing what and what evidence they are finding to support their programs. A total of 25 SMEs participated. The SMEs identified 12 types of mental ill health prevention programs, 11 types of mental ill health early intervention programs, and 5 types of suicide prevention



programs. Most of those programs were aimed at the veterans and first responders themselves, with only 2 types of programs being directed towards families.

When my discussions with the SMEs were reviewed, a total of 6 themes emerged. They are:

- Theme 1: There Are No Validated Mental Ill Health Prevention Programs Available
- Theme 2: Everyone Appears to be Working on Their Own
- Theme 3: Organizations are Trying to Find a Balance Between Doing the Job and Protecting their People
- Theme 4: No One Seems to be Aware of the Evidence Limitations for Early Intervention Programs
- Theme 5: No One is Applying a Gendered Lens to the Programs they Develop and Implement
- Theme 6: There May be Cohort Differences in Mental Health Prevention Expectations

The reviews of Google, LinkedIn, Twitter, and Facebook identified several potential programs. Some of these had been previously identified by the SMEs, while others were new to the review. I was able to identify additional programs in all countries, except Ireland, where there seems to be a relative lack of focus on mental ill health prevention in first responders and veterans. Most additional programs were found in Canada or Australia and most of these programs appear to be focused on psychoeducation (especially website portals and phone apps), with some programs focusing on training. Finally, some programs were run by charities or not-for-profit organizations, rather than first responder organizations or governmental departments.

As part of the internet and social media review portion of this report, it became apparent that there needed to be guidelines to help define what is, and what is not, a program. Based on the inclusion and exclusion criteria from many of the systematic reviews and meta-analyses utilized in Chapter 2, I devised the following criteria:

**Inclusion criteria** (i.e., what a program is):

- A formal mental ill health- or suicide-focused prevention/early intervention program has a purpose-built curriculum that is designed to be taught or given to others, and then implemented by the learners. Potential sub-elements may include the following:
  - o It may or may not have support tools (e.g., apps, other web-based tools, pocket cards, books, peer support) built into the program;
  - o It may be a one-off training session or it may need regular, ongoing maintenance sessions, but this distinction needs to be made clear in the program design and implementation;
  - o Ideally, there should be an emphasis on program fidelity, in order to control for instructor-based effects (i.e., it should work equally well across all instructors who implement the program as instructed); all instructors must follow the same implementation approach, with nothing added or subtracted.
- It will be based on accepted scientific principles and mechanisms (e.g., cognitive behavior therapy, psychoeducation). If those scientific principles or mechanisms are being used in any way that is different from the original, supporting efficacy or effectiveness data (e.g., using clinical intervention procedures, such as diaphragmatic breathing, in a prevention approach), that program cannot be termed evidence-based until a proper evaluation is conducted.
- There will be specific outcomes built into the program (e.g., reduction in mental health symptoms), such that efficacy and effectiveness are measurable. In other words, there must be a way to determine that the program does what it says it is supposed to do.
- Peer support programs are often a common approach to mental health risks in high stress workplaces, or workplaces with the potential for traumatic experiences. These types of programs attempt to connect someone undergoing a potential mental health problem with someone who can



help. That person may or may not have lived experience in the area. The peer will act as a social support mechanism, and potentially as a connection to local health resources. These types of programs will be included only under certain conditions:

- o The peers must come from the same occupational grouping as the person experiencing problems;
- o The following elements must be included in the program: (1) there must be training provided to the peer support providers (e.g., Mental Health First Aid); (2) the roles of the peer-mentee relationship must be clearly defined; (3) there must be appropriate, clearly stated goals for the program (e.g., a reduction in mental health symptoms); and (4) those goals must be testable in order to determine if the program does what it says it is supposed to do;
- o There must be adequate support from mental health professionals.

**Exclusion criteria** (i.e., what a program is not):

- Motivational speakers are not delivering programs.
- Informal, one-off sessions by a person or persons with lived experience are not programs.
- When the foundations of what is being presented are not based on scientific principles or mechanisms, it is not a program.
- When what is being taught or presented is neither designed nor implemented in a way that can test whether the appropriate outcomes are being achieved, they are not programs.

## **IDENTIFIED GAPS**

The literature review and SME interviews revealed a wide range of gaps in our existing knowledge of mental ill health prevention/early intervention and suicide prevention programs directed at first responders, veterans, and their families.

The review of the academic and grey elements of the scientific literature (Chapter 2) identified 12 gaps:

- Gap 1: A Lack of High Quality Prevalence Data
- Gap 2: An Overly Restrictive Focus on Potentially Traumatic Events in Veteran and First Responder Research
- Gap 3: An Overly Restrictive Focus on PTSD in Veteran and First Responder Research
- Gap 4: A Lack of Sufficient Evidence Supporting Ongoing Programs
- Gap 5: An Over-Reliance on Individually-Oriented Prevention Programming
- Gap 6: Programs are Implemented Without an Appropriate Understanding of Behavior Change
- Gap 7: Relative Lack of Focus on Veterans, Especially Those Most At-Risk
- Gap 8: Relative Lack of Focus on Families, Especially Those Most At-Risk
- Gap 9: Programs that Assess the Processes or Intermediate Outcomes, But Not the Desired Outcomes
- Gap 10: Programs are Implemented Without Proper Fidelity
- Gap 11: A Lack of High Quality Evidence for the Effectiveness of Suicide Prevention Programs
- Gap 12: Prevention and Early Intervention Programs Have Not Applied a Gendered Lens

The SME interviews (Chapter 3) identified 6 gaps:

- Gap 1: We Don't Know What's Effective
- Gap 2: There's Too Much Focus on PTSD
- Gap 3: There's Too Much Focus on Individual Resilience, as Opposed to the Organizational Barriers to Well-Being
- Gap 4: We Need to Focus More on Transitions (Recruitment, Retirement) Along With Everything in Between



- Gap 5: The Stoic Organizational Culture Can Be a Barrier to Mental Health Prevention
- Gap 6: We Need More Research and Evidence Gathering

## GENERAL RECOMMENDATIONS

Based on the findings from this scoping review, I feel the following 8 recommendations are warranted:

- Recommendation 1: Better Quality Mental Health Surveillance Data
- Recommendation 2: Prioritize Evaluation and Develop Evaluation Standards
- Recommendation 3: Move Beyond the Focus on Traumatic Events
- Recommendation 4: Move Beyond the Focus on PTSD
- Recommendation 5: Institute Separate Suicide Prevention Programs
- Recommendation 6: Better Targeted Programs for Veterans
- Recommendation 7: Families Need More than Just EAP Access
- Recommendation 8: The Need for a Gendered Lens in all Prevention and Early Intervention Programming

## CONCLUSIONS

The findings emerging from this scoping review are both exciting and disappointing. The excitement comes from seeing that many first responder and veteran organizations recognize the importance of the mental health burden being faced by these groups and are acting in ways to try to mitigate the problem.

However, this is tempered by disappointment in a couple of areas. First, many organizations (especially first responders) appear to be implementing prevention programs without actually validating them (i.e., making sure they do what they say they do). This is important because some research suggests that programs that are touted as evidence-based or evidence-informed are often adapted for use by these organizations (i.e., they are not implemented in the same way they were developed) without being re-evaluated for effectiveness. For example, some organizations put in place training that is based on validated research from the area of clinical psychology. That is, they have taken concepts and applications that work in regular, one-on-one or group therapy contexts (e.g., psychoeducation) and have implemented them in a large-scale, one-off training, prevention context. And they assume that the applications will work in the same way that they do in therapy.

Second, the types of programs most commonly implemented are focused on giving individual employees resources to cope more effectively with the traumatic aspects of their jobs. This places an undue burden on the employees for maintaining their own psychological health when research shows that non-traumatic, organizational stressors are often more problematic. While trauma exposure is part of the job and will not go away, these non-traumatic aspects of the workplace are more under the control of the organizations themselves but are rarely the subject of change management initiatives. Moreover, the national standards and guidance documents often emphasize the importance of balancing the burden between the individual and the organization when creating psychological safety in the workplace.

There is a lot of room for improvement in the workplace mental health space in general, and given their increased mental health burden, first responder and veteran organizations should be leading the way. These organizations need to be properly enabled, both financially and with validated policies and procedures in place. Given the level of fiscal restraint many governments are experiencing, spending money upfront to develop and validate effective mental health prevention and early intervention programs, as well as suicide prevention programs, will actually save money in the long term. Not to mention lives.